

St. Francis Xavier University

**Oncology Self-Management Support Education in a Baccalaureate Nursing Program:
An Exploratory Case Study**

By

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Abstract

Background: As the largest cancer care workforce, nurses are well situated through daily interactions to provide effective oncology self-management support to improve the quality of life and health outcomes for cancer survivors. Self-management support education for nurses is very limited, and international oncology nursing experts have implored an urgent need for research in baccalaureate nursing education to ensure nursing students have the requisite knowledge, skills, and competencies when entering the workforce to enable persons with cancer to better manage the effects of cancer as a chronic disease.

Aim: Grounded in Caring Theory, Self-Directed Adult Learning Theory, Social Cognitive Learning Theory, and guided by the Self- and Family Management Framework and the Competency Framework for Cancer Nurses Providing Self-Management Support, this study aimed to explore the extent and impact of oncology self-management support education being taught and learned in a baccalaureate nursing program.

Design: A qualitative exploratory case study was conducted at a baccalaureate nursing program.

Methods: Purposeful sampling technique recruited three faculty professors with teaching responsibilities, two nurse educators, and five fourth-year nursing students, for one-on-one semi-structured interviews. Additional data sources included documents (course syllabi, class lectures, textbook(s), readings) from four courses within the nursing program, and reflective journaling notes. Inductive thematic analysis was used to analyze the participant interview data to identify themes that represented the data and a deductive analysis approach was used to analyze the course documents.

Results: Three overarching data interpretations emerged from the study: 1. The inadequate curriculum coverage of critical performance criteria and requisite competencies to prepare nursing students to provide oncology self-management support. 2. The need for curriculum and instruction on cancer as a disease, cancer being considered a unique chronic illness, and self-management support for persons with cancer and 3. The need for the integration of oncology self-management support teaching and learning across all program areas (i.e. classroom curricula, lab simulations, and clinical preceptors).

Conclusion: This study makes a novel contribution by exploring oncology self-management support education in undergraduate nursing education. The study has shown that undergraduate nursing oncology self-management support education is insufficient and makes the following recommendations: 1. Integrate curriculum on cancer as a unique chronic disease. 2. Integrate self-management support performance criteria. 3. Integrate oncology self-management support and coaching curricula program. 4. Prepare academic educators in oncology. 5. Collaborate and coordinate oncology clinical preceptors and 6. Collaborate with nursing organizations to build oncology education capacity.

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Glossary of Terms

Cancer Survivor

An individual is considered a cancer survivor from the time of diagnosis through the balance of life. There are many types of survivors, including those living with cancer and those free of cancer. This term is meant to capture a population of those with a history of cancer rather than to provide a label that may or may not resonate with individuals (National Cancer Institute, 2024).

Cancer Survivorship

Cancer survivorship is a state of being, including the perspectives, needs, health, and the physical, psychological, social, and economic challenges experienced by people and caregivers after a cancer diagnosis (National Cancer Institute, 2024).

Cancer Self-Management Education

Cancer self-management education for persons with cancer is considered as the ongoing process of facilitating the knowledge, skills, and confidence necessary to enable effective self-management of the biological, physical, and psychological effects of cancer and its treatment (Howell et al., 2017; Powers et al., 2015).

Cancer Self-Management Health Coaching

Cancer self-management health coaching is a person-centered, collaborative approach for providing self-management support that educates, engages, and motivates patients to take a more prominent role in managing specific cancer problems and adopting health behaviors to reduce acute, long-term and late effect risks, reduce morbidity and optimize health (Howell et al., 2019; D. Howell, personal communication, October 14th, 2019).

Coaching

Coaching is considered a patient education method that guides and prompts patients to be active participants in behaviour change. Coaching directs patients through an activity in an effort to improve outcomes. This direction may include education, goal setting, encouragement, and support of activities to reach personal objectives (Bandura, 1997a).

Competencies

Competencies are defined as the skills, abilities, knowledge, attitudes, and behaviors that are instrumental in the delivery of desired results and for evaluating job performance (Fukada, 2018).

Curriculum

Curriculum, in the service of educating the public, “is characterized by spirited and informed communication” (Pinar, 2012, p. 1). Curriculum theory is defined as “the scholarly effort—inspired by theory in the humanities, arts, and interpretive social sciences - to understand the curriculum, defined as “complicated conversation” (Pinar, 2012, p. 2). Curriculum theory is the complicated conversation between teachers and students and is focused on the educational experience (Pinar, 2012).

Health Coaching

Health coaching refers to the self-management support delivered by health care providers trained in behavior change theory, motivational strategies, and communication techniques that are used to assist patients to obtain skills and develop intrinsic motivation and has shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Howell et al., 2017; Wolever et al., 2013; Wolever et al., 2010).

Interventions

Healthcare interventions are considered “any act carried out to prevent harm to patients or to improve, promote, or enhance their physical, mental or spiritual well-being” (Weller & Pratt, 2009, p. 215). Nursing interventions refer to any actions or activities that nurses take with the aim of improving the well-being of people with cancer (Richards & Hallberg, 2015). The word *intervention* is subsumed with terms such as *activities* or *actions*. These actions might also be taken by informal caregivers or by patients themselves in the form of self-care interventions directed at improving symptoms due to a diagnosis or treatment of cancer (Richards & Hallberg, 2015).

Performance Criteria

Performance criteria are defined as the required level of performance in terms of a set of outcomes that need to be achieved to be deemed competent (Fukada, 2018).

Self-Management

Self-management is considered an individual’s ability to manage the symptoms, treatment, physical, psychological, and social consequences, and lifestyle changes inherent in living with a chronic condition (Barlow et al., 2002 p. 178).

Self-Management Support

Self-management support is considered the systematic provision of education and supportive interventions to increase patients’ skills and confidence in managing their health problems, including regular assessment of progress and problems, goal setting, and problem-solving support (Adams et al., 2004).

Self-Management Support Interventions

Self-management support interventions are defined “interventions that are systematically delivered to increase patients’ knowledge, skills, and confidence in their ability to manage chronic conditions. Their purpose is to actively engage patients and informal caregivers where appropriate, in the management of their conditions. Interventions usually combine several techniques as this is more effective than carrying out a single technique in isolation” (World Health Organization, 2023, p. 6).

Preface

Although the incidence of cancer continues to rise, improvements in treatment and early detection have thankfully resulted in improved survival rates. Persons with cancer, however, are often left with tremendous life altering physical, psychosocial, and lifestyle changes inherent with a diagnosis and treatment of the disease. Ultimately, it is patients and families that bear the burden for the self-management of the implications of the disease. Through 24 years of clinical experience as an oncology nurse, I have experienced the tremendous difference nurses can make through the provision of self-management support strategies to improve the quality of life for persons with cancer at each phase of the cancer trajectory. It was through my personal experience and research initiatives that I began to understand and believe that nurses should be equipped with self-management support knowledge and skills to meet the unique needs of a growing population of individuals with cancer. Validating this notion, leading experts from the international oncology nursing community implored that research be conducted on preparing nurses with baccalaureate and graduate curricula to provide self-management support for those impacted by cancer. It is through my own experiences, a gap in scholarly literature on oncology self-management support, and the recent call to action from the international nursing community, that this important, foundational research study was conducted.

In what follows, the thesis is organized into eight chapters. The first chapter provides a background on cancer survivorship, why and how this topic for research was developed, including a brief overview of my personal experience providing care to persons with cancer, the research question and specific objectives. Lastly, I describe my ontological and constructivist viewpoint that provides context for the study and situates my interpretation of the research. Chapter two introduces the theoretical framework and discusses its suitability and relevance to

guide the study. Chapter three provides three literature reviews for the study. The first is an integrative literature review that identified nurses' self-management support interventions for persons with cancer, the resulting impact of self-management support interventions on health outcomes for persons with cancer, and identifies health coaching by nurses as a self-management support intervention. The second is a narrative literature review identifying literature pertaining to cancer self-management support with nurse involvement in the realm of social justice. The third is a narrative literature review on self-management support education for nurses in undergraduate and graduate programs. Chapter four provides the rationale for the methodology and describes the study methods including data collection, data analysis, and ethical considerations. Chapter five provides the study results from ten semi-structured participant interviews and chapter six provides the study results from systematically reviewing the course documents. Chapter seven discusses the emergent themes from participants shared experiences and my interpretation of findings stemming from the interviews and course documents. In chapter eight, I offer a conclusion of the study and include the study's limitations, implications, recommendations for implementation, plan for disseminating study findings, and future research recommendations. The terms "cancer" and "oncology" are used interchangeably in the thesis, as are the terms "self-management support" and "supported self-management".

This thesis is original research work by Carrie MacDonald-Liska. No part of this thesis has been previously published. The study received research ethics approval from the St. Francis Xavier University Research Ethics Board, study title: "Exploring Oncology Self-Management Support Education in Baccalaureate Nursing Curriculum: A Case Study", No. 26241, on March 24th, 2023 and received protocol change approval on March 13th, 2024. This thesis makes an important and novel contribution by advancing knowledge of curricula in undergraduate

education to prepare nursing students in self-management support and coaching in cancer populations. It is my great hope that this study will provide a foundation to heighten a greater awareness of this topic and influence future research initiatives to build oncology self-management support capacity in baccalaureate nursing education, ultimately to help ensure nurses are prepared to care for the unique needs and growing number of cancer survivors.

Chapter 1: Introduction and Background

It is estimated that approximately two in five Canadians will develop cancer in their lifetime, however due to early detection and treatment advances, 64% will survive the disease at least five years after their diagnosis (Canadian Cancer Society Statistics, 2023). Cancer is now considered a chronic disease and individuals with cancer struggle to manage the physical, psychosocial, and lifestyle changes because of cancer and its treatment. An improvement in patient education and self-management engagement is required to provide optimal cancer care to reduce the effects of cancer and its treatment (Howell et al., 2018).

Self-management is defined as “an individual’s ability to manage the symptoms, treatment, physical and psychosocial consequences and lifestyle changes inherent in living with a chronic condition” (Barlow et al., 2002, p. 178). Self-management support is considered the systematic provision of education and supportive interventions that increase patients’ skills and confidence in managing their health problems including regular assessment of progress and problems, goal setting, and problem-solving support (Adams et al., 2004). For a person living with cancer, effective self-management engagement may involve adherence to treatment regimens, monitoring and managing symptoms and signs of illness, managing the impacts of illness on functioning, emotions, and interpersonal relationships, and adopting healthy lifestyle behaviours that protect and promote health (Adams & Corrigan, 2003; Chan et al., 2023). Cancer self-management can be overwhelming and patients may not possess disease self-management skills or health behaviours to effectively self-manage their disease and health and therefore may require self-management support to build capacity and self-efficacy (Howell et al., 2023). Healthcare providers who are skilled in systematically providing self-management support and

coaching for behavioural change can empower and enable patients in the self-management of their cancer and health (Howell et al., 2023).

Nurses educated and skilled in self-management support of chronic diseases such as diabetes have been shown to improve disease control, reduce symptom severity, improve patients' overall wellness, and lower health care utilization and costs (Hammer et al., 2015; Health Council of Canada, 2013; Levit et al., 2013). Evidence is emerging that self-management support in cancer care benefits patients by reducing the severity of physical and psychosocial symptoms and improving overall quality of life (Hammer et al., 2015; Howell et al., 2017, 2018, 2019; McCorkle et al., 2011). Routinely providing self-management support is now recommended to enable patients to play a central role in the management of their cancer care (Howell et al., 2017, 2019; Levit et al., 2013; McCorkle et al., 2011). Nurses are uniquely positioned through routine interactions to provide self-management support and health coaching (Bandura, 1997a; Fahey et al., 2008; Given et al., 2004; Health Council of Canada, 2013; Sikorskii et al., 2007). However, a paucity in the literature reflects the need for healthcare providers to recognize the importance of engaging and educating cancer survivors through effective communication skills, caring, and knowledge translation practices to be partners in the ongoing management of their follow-up care (Chan et al., 2020; Howell et al., 2019). Duprez et al. (2017) reported that final year nursing students were unprepared to provide self-management support for patients with chronic illnesses and that nursing curricula should be attuned to the complexity of self-management support competency. As the largest cancer care workforce, nurses are well situated to provide effective oncology self-management support to ultimately improve behavioural health outcomes for all cancer survivors, and the inclusion of self-management support knowledge and skill development in undergraduate curricula must be

advocated (Chan et al., 2020, 2023). An urgent need for research in baccalaureate nursing education is required to ensure nursing students are prepared when entering the workforce to support patients with cancer in the self-management of their cancer as a chronic disease (Chan et al., 2020, 2023; Duprez et al., 2017; Howell et al., 2019; van Hooft et al., 2018).

Research Study Purpose and Objectives

The literature recommends oncology self-management support research in baccalaureate nursing education (Chan et al., 2020, 2023). Based on this recommendation, acquiring a foundational understanding of the extent and impact of self-management support education, currently being provided to nursing students, is a prudent first step. There is limited evidence that discusses whether, how, or why nursing students are prepared to effectively support cancer patients self-manage cancer as a chronic disease. A research study guided by case study methodology would allow an in-depth exploration of current oncology self-management curricula within a baccalaureate nursing program.

Therefore, the aim of this study was to gain an understanding of the extent, if any, that educational approaches of oncology self-management support, including health coaching, exist and the impact, if any, upon baccalaureate nursing curriculum, its educators, and students. Specifically, the purpose of this qualitative case study was to explore the *what*, *how*, and *why* a baccalaureate nursing program educates nursing students on oncology self-management support to enable persons with cancer in the self-management of cancer and their health. Specific objectives of the study were:

1. To gain an in-depth understanding of the current oncology self-management support education being taught to nursing students in a baccalaureate nursing program.

2. To gain an understanding and report on the extent and impact of faculty and nurse educators knowledge and understanding of oncology self-management support interventions in a baccalaureate nursing program.
3. To gain an understanding and report on the extent and impact of nursing students understanding of oncology self-management support interventions in a baccalaureate nursing program.
4. To make recommendations to inform the development of a self-management support education and curricula for baccalaureate nursing programs in Canadian universities.

Researcher's Personal and Professional Background

Researchers position themselves in qualitative research study and convey their background that includes their cultural history and experiences and work experiences, and how it informs an interpretation of the information in a study (Creswell, 2013). My positionality is therefore influenced by the culture into which I was born and raised, the nursing culture within which I worked, and the cultural context within which I live. I will therefore provide a contextual background from which my positionality has been formed and from which my passion for oncology self-management support research was ignited.

I was raised in a small town by married, Caucasian, Catholic, educated, and hardworking parents. During the summer months, my family enjoyed rural living next to the ocean. I was fortunate to be encouraged by my parents to participate in many extracurricular activities. I was extremely involved in sport, particularly equestrian riding which nurtured my innate competitive drive and cultivated a strong work ethic. A small town and summer rural living provided me with a wonderful sense of community and opportunities to be greatly involved in many sport and art endeavors with friends and family. Respect and courtesy of all

others were always apparently displayed by my parents and these traits were taught and expected from my siblings and me. Although a small town provided a wonderful upbringing surrounded by the goodness and generosity of a warm community, my parents unselfishly encouraged us to live curiously and to seek greater and broader experiences of understanding the world and all those who live within it, by traveling and living elsewhere.

My family frequently visited extended family in a nearby town, including my maternal grandparents. My maternal grandmother was a registered nurse and a 1933 graduate of St. Martha's School of Nursing. Without question, she had a profound influence on my faith, my education, and my interest to enter nursing school. I proudly graduated from my beloved St. Martha's School of Nursing in 1987 from which the Sisters of St. Martha's deeply influenced my capacity to love others, understand empathy authentically, and above all *care* for the sick and needy. Higher learning was encouraged by my parents, not as a means to prosperity, but rather to gain a better understanding and appreciation for the diversity of all individuals and things in our world.

The importance of higher learning remained with me and in 1993, I graduated from the University of Ottawa with a Bachelor of Science in Nursing. It was at this point, that although caring and empathy remained at the core of my personal nursing philosophy, I gained an appreciation for the importance of ongoing research and clinical education. I became interested in women's health while working in obstetrics, and later reproductive endocrinology, while simultaneously completing my baccalaureate nursing degree. A women's health centre was being planned at the Ottawa Hospital; however, the centre would not be built, and it was suggested by a nursing leader that I apply for a position in the Women's Breast Health Centre, a diagnostic facility for women newly diagnosed with breast

cancer that was being constructed. I was one of three primary nurses hired for the centre and it was at this time in 1997 that my career in oncology nursing began. I spent a decade of my career dedicated to the provision of supportive care to women newly diagnosed with breast cancer before moving to be the Care Facilitator for the Ottawa Hospital Regional Cancer Program in 2007. As the Care Facilitator, I worked with the Senior Advisor for Regional Cancer Operations on program development initiatives. I was also the liaison between the Ottawa Hospital Cancer Centre and regional community hospitals and community home care services. Most gratifying during this time was the experience of working within a multi-disciplinary team to lead the development and launch of chemotherapy satellites in regional community hospitals and enhancing the Chemotherapy Home Infusion Pump Program, in an effort to improve access and quality of care for regional oncology patients. After five years of successful program development, coordination, and provision of educational services with the Regional Cancer Program, I entered a new arena of oncology by working with the Regional Program Senior Advisor to plan, develop, and launch in 2012 the Wellness Beyond Cancer Program (WBCP), the Ottawa Hospital's cancer survivorship program.

I paused from graduate studies to raise twin daughters and a son. Professional learning and development significantly continued with me however, which included the pursuit and contribution to research and educational endeavors, numerous scientific presentations at peer reviewed conferences, and mentoring many clinical nurses and nursing students. It was during my full-time position with the WBCP that I completed a Master of Nursing Degree in 2016 and focused my learnings and writing on the provision of survivorship care for oncology patients. Ongoing mentoring of PhD Psychology students, a Master of Nursing student, contributing to research and grant proposals, publications, and continued presentations at

conferences, all contributed to my quest of contributing further to the academic community, my wonderful profession of nursing, and ultimately to compassionate and evidenced-based oncology care.

During my time working within the WBCP, a collision of events occurred which included: understanding clinically the need for better preparing cancer patients to self-manage their disease and health, completing a Master of Nursing degree with research in patient empowerment, supervising graduate students, and the thirst for academia. This intersection of events brought my thoughts full circle to my time at St. Martha's, and a lecture provided by Sister Marie Simone Roach in 1986 on The Theory of Caring. Sister Marie Simone Roach was a nursing scholar and educator who left a rich and robust legacy of practical and theoretical work in the concepts of care, caring, and nursing ethics (Villeneuve, 2016). Unequivocally, her presentation on caring I attended in 1986 left me profoundly enriched and engrained with the notion to adapt her subject of care from a theory to a way of being. Sister Roach's research led her to recognize that caring is simply the human mode of being to all humanity but is uniquely expressed in the profession of nursing (Villeneuve, 2016). Now, at a much later time in my career, I recognize the critical importance of maintaining caring, compassion, and empathy in the presence of healthcare and ensuring that it remains centrally integral in oncology survivorship care. Without hesitation, my previous research in patient empowerment, Sister Simone's Theory of Caring, and the importance of higher learning instilled in me by my family ignited and motivated my pursuit of a PhD with a research interest and quest to further explore oncology self-management care.

***Gap in Oncology Self-Management Support and Potential Contribution of New Knowledge:
Researcher's Personal Reflection***

Cancer is expected to affect 28.4 million people worldwide by 2040 (Sung et al., 2021). In Canada, nearly half of our population will develop cancer during their lifetime (Collier, 2017). Cancer is considered a complex chronic illness that individuals and their families are expected to manage as an acute and chronic disease. Yet, cancer care lags behind other chronic diseases that integrate principles of self-management support into routine daily care (Howell et al., 2021). Health coaching is a core component of self-management support and facilitates cancer survivors' uptake of self-management behaviour and behaviour change. Health coaching as an intervention has shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Wolever, 2010). Therefore, I felt that investigating health coaching specifically as a self-management support strategy was important in this study.

I have been an oncology nurse for 25 of my 34-year nursing career. For the past 7 years, I have initiated and coordinated national initiatives in cancer survivorship care as a co-chair for the Canadian Association of Nurses in Oncology Survivorship Special Interest Group (MacDonald-Liska et al., 2025; Canadian Association of Nurses in Oncology, 2020). During my time as an oncology nurse, I spent eight years dedicated to planning, implementing, providing, and evaluating oncology survivorship care within the WBCP at The Ottawa Hospital (Rushton et al., 2015). Providing survivorship care to breast and colorectal cancer patients transitioning back to the care of their Primary Care Provider, offered me a first-hand understanding of the pivotal difference the provision of self-management support can make to enable persons with cancer to participate in the self-management of their cancer as a chronic disease. This provision of survivorship care included conducting education classes to groups of cancer survivors

transitioning from the cancer centre back to the care of their primary care provider and the attendance of these classes ranged between approximately 25 to as large as 120 patients at each session. On the evaluation of these education classes, cancer survivors reported a high significance of improved knowledge ($p < .001$) and intent to participate in the self-management of their follow-up care ($p < .001$) after attending an education class (Mutsaers et al., 2021). I also had the experience and privilege of providing direct clinical survivorship care in my own one-on-one survivorship clinics, and intermittently, providing survivorship care clinics to groups of patients, transitioning from the cancer centre. During either an individual or group discharge clinic visit, patients were provided with an individualized survivorship care plan document (Rutkowski et al., 2021) that included their treatment summary, follow-up testing recommendations, symptom management education to assist with late and long-term side effects due to their cancer treatment, and lifestyle recommendations (e.g., exercise guidelines to reduce the risk of recurrence, what to look for and when to report new symptoms, nutrition etc.) (Mutsaers et al., 2024).

Patients transitioning from the cancer centre and back to the care of their primary care provider very often expressed to me their concerns about fear of recurrence, symptoms to watch for, timing of follow-up testing, and how they could expedite access to their oncology team should that be required in the future. I recognized during patient interactions following the education classes, meeting with patients individually or in groups to provide their survivorship care plan, discussing symptom management strategies to meet their individualized physical and psychosocial needs, and discussing follow-up care, the importance of empathy, trust, strong communication skills, and possessing oncology survivorship knowledge, empowered patients to participate in their care (Liska et al., 2018). During interactions with patients over the years,

many patients shared with me the tremendous value in receiving education and support from the self-management interventions that I employed. I recall one breast cancer survivor thanking me after the completion of a class, and said to me “I am a teacher, where did you learn to speak and teach like that?” I will always recall during a one-on-one clinic visit with a patient and her husband, and while reviewing the chemotherapy treatment summary on the survivorship care plan document, the patients husband saying to me, “where have you been?” After so many of these patient interactions, I felt it was critical to have survivorship care begin at the time of diagnosis and provided throughout the continuum of cancer care, as opposed to only at the end of active treatment when transitioning from the cancer centre and back to the care of their primary care provider. I also felt strongly that when patients understood *why* it is critical to be part of their care and *how* to care for themselves, they became engaged as active participants in the self-management of their cancer and health.

I also recognized over the years, the varying degrees of self-management support being provided by clinical oncology nurses as I engaged with many members of the oncology nursing team in diagnostic centers, treatment areas, and outpatient oncology clinics. When conducting and publishing my research on the empowerment of cancer survivors during my Master of Nursing program, I realized further research was required in this new and emerging important area of oncology care (Liska et al., 2018; Liska & Stacey, 2016). I felt compelled to explore and gain a better understanding of oncology patient self-management education being taught to clinical nurses and nursing students. My instinct on the importance of educating nurses on the provision of self-management support for persons with cancer was validated during the tenure of my doctoral studies when international oncology nursing experts published a consensus call to action paper imploring for further research and the inclusion of self-management support

knowledge and skill development in undergraduate and graduate curricula (Chan et al., 2020).

This document provided great validation to support my passion and instinct on the importance of foundationally preparing nursing students on requisite competencies for self-management support and coaching for persons with cancer.

In response to the international calls for oncology self-management support research and curricula (Chan et al., 2020, 2023), the unique self-management support needs of persons with cancer reported in the scholarly literature (Howell et al., 2019, 2021), and my own clinical experiences and research (Liska et al., 2018; Liska & Stacey, 2016; Mutsaers et al., 2021, 2024; Rushton et al., 2015, Rutkowski et al., 2021), I felt drawn to conduct this research study. I also realized the importance of not being presumptuous by assuming education on self-management support was absent in baccalaureate nursing programs. Instead, as a first step I felt it was important to conduct an exploratory case study to understand what currently exists. I was confident that this study would provide a baseline understanding of the essential performance criteria for nurses to achieve the requisite competencies for self-management support and coaching for persons with cancer that currently exist in baccalaureate nursing curriculum, how cancer education is situated within these curricular criteria, and recommendations that could be made for baccalaureate nursing programs in Canadian universities.

Researcher's Positionality

My positionality has been influenced by the appreciation for learning, the strong work ethic culture from which I was raised, and from my multiple unique experiences with patients over my nursing career. I have learned through my life journey how respect for others, caring and compassion, community awareness and engagement, and quality education, have positively influenced the quality of my nursing care. At the core of my personal nursing

philosophy is my belief that caring and empathy are the foundation of the nursing profession. I continue to believe that physical and technical skills can be learned and mastered. However, communication skills, caring, and empathy should be nourished and nurtured within baccalaureate nursing programs. My personal learning experience at St. Martha's School of Nursing taught me this. I have witnessed and personally experienced the provision of quality oncology nursing self-management support when educational resources and communication skills are nestled within a caring, empathetic environment care. This quality care engages patients in the participation of their cancer care, ultimately improving their wellbeing and outcomes (Liska et al., 2018; Rushton et al., 2015).

Through my PhD journey, I became more enlightened which resulted in a refinement of my research topic and movement between research paradigms. I began my journey as a post-positivist, moved to a participatory paradigm, and I am now steadfast as a constructivist. As a constructivist, I believe that those who participate within the research inquiry are knowledge holders and can contribute vast and valuable information that is unbeknownst to me (Goertz & Mahoney, 2012; Guba & Lincoln, 1994). My understanding and belief as a constructivist was important to my research because I would explore the lived experiences and perceptions of nursing students on the extent and impact of their preparedness to enable persons with cancer to self-manage. Further, I would explore the lived experiences and perceptions of nurse educators and faculty on the extent and impact of preparing nursing students to support patients with cancer to self-manage. Through engagement and dialogue, the participants as collaborators of this study would be involved in the construction of knowledge on the extent and impact of nursing students' preparedness to provide oncology patients self-management support.

As a qualitative researcher, I am situated with a set of beliefs, ideas, and framework (theory, ontology) asking specific questions (epistemology) and from which to examine particular ways of post-positive understanding of data (methodology, analysis) (Denzin & Lincoln, 2018). My ontology view is concerned with the nature of reality and existence (Creswell, 2013; Hart, 2018). From an ontology perspective, I have adopted a relativist position and believe that each participant's mental constructs are socially shaped (Guba & Lincoln, 1994). Subsequently, the focus of my research is not solely on the extent and impact of nursing students' oncology self-management preparedness or the extent and impact of knowledge and experiences of faculty and nurse educators on oncology self-management. Rather, the focus is on the constructivist nature and relationship between them. My epistemological view is concerned with how we can know anything (Hart, 2018). I believe as the researcher that I am linked with the participants (Guba & Lincoln, 1994). The epistemology of the research is positioned as individual subjective views and my interactions with participants (or knowledge holders) are highly valued in driving the research outcomes (Creswell, 2013). My axiology view is that I believe all researchers bring and make known in the study, their values, morality, and ethics (Creswell, 2013; Hart, 2018). I believe health care providers have a moral obligation to address patients outstanding physical and psychosocial needs and that oncology self-management support is required to help meet patients outstanding needs. I believe caring and empathy are integral elements in the provision of required and effective oncology nursing self-management support (Howell et al., 2017). My goal is to assist in the development of valuing the importance of effective oncology self-management support education that includes elements of caring, empathy, and social justice.

Chapter One Summary and Conclusion

This introduction chapter of the dissertation has highlighted the study's contextual background, my positionality, and how I am situated as a nurse and PhD candidate. In the chapters that follow, I discuss the theoretical framework underpinning this research study and provide three literature reviews relevant to oncology self-management support nursing education. The methodology, methods of recruitment and data collection are described, and an analysis of all data sources is provided. I discuss three overarching interpretations from the study findings, and the implications, recommendations, and concluding thoughts of the study are shared in the final chapter of this dissertation. The next chapter, chapter two, provides the theoretical framework of the study.

Chapter 2: Theoretical Framework

To ensure a rigorous study, the interplay for robust qualitative research includes the approach to the inquiry, research design procedures, and theoretical frameworks (Creswell, 2013; Patton, 2002). The theoretical framework is the “blueprint” or guide for research inquiry and offers the foundation for establishing its credibility (Adom et al., 2018; Creswell, 2013; Patton, 2002). The framework is based on existing theory that is related to and/or reflects the hypothesis of a study and provides “a map” to guide the researchers’ path in contributing to new scholarly knowledge (Adom et al., 2018). My theoretical framework was the blueprint that provided the foundation from which my research was constructed and provided the map that guided my study. This chapter provides an overview of defining theoretical frameworks and theories, discusses the theoretical position for selecting the methodology, and provides the theoretical framework that guided my research study.

Theories

A theory is considered a set of propositions that are logically related. In other words, “a theory is an abstract description of the relationships between concepts that help us to understand the world” (Varpio et al., 2020, p. 990). There are often multiple theories that help to inform a researchers’ understanding of the phenomenon under investigation. The researcher selects the theory, or theories, and they are operationalized to create a framework that supports the research question and direct the analytic approach (Varpio et al., 2020).

Theoretical Frameworks

A theoretical framework is considered a logically developed and connected set of concepts for one or more theories to create the “scaffolding” of the study (Merriam & Tisdell, 2016; Varpio et al., 2020). In developing a theoretical framework, the researcher is required to

define the concepts and theories that will provide the foundation of the research, unite them through logical connections, and relate the concepts to the study being conducted (Merriam & Tisdell, 2016; Varpio et al., 2020). Overall, the theoretical framework is considered a reflection of the *work* the researcher engages in to apply theory in a particular study (Varpio et al., 2020).

Conceptual Frameworks

A conceptual framework is considered as “a structure which the researcher believes can best explain the natural progression of the phenomenon to be studied” (Adom et al., 2018, p. 439). A conceptual framework justifies why a study should be conducted (Varpio et al., 2020). A conceptual framework “(1) describes the state of known knowledge, usually through a literature review; (2) identifies gaps in our understanding of a phenomenon or problem; and (3) outlines the methodological underpinnings of the research project” (Varpio et al., 2020, p. 990).

Research Methodology

The theoretical framework guides the researcher’s choice of methodology design for the study (Adom et al., 2018). Theory is often spoken about as it relates to the epistemological underpinnings of the methodology the researcher uses (Merriam & Tisdell, 2016). A qualitative case study methodology is a mode of social science inquiry that seeks to investigate a contemporary phenomenon in depth and within its real-world context. Exploratory case studies are appropriate to address the question of *what*, meaning it is also relevant for evaluating the presence or absence of relevant information central to the case (Yin, 2018). A description of how self-management support is being taught to nursing students is absent in the international literature (van Hooft et al., 2018) and self-management support related knowledge and skills for nurses are rarely integrated into undergraduate and graduate curricula (Chan et al., 2020). This qualitative exploratory case study aimed to explore the extent and impact of oncology self-

management support education being taught and learned in a baccalaureate nursing program. A qualitative exploratory case study methodology was therefore appropriately selected for this study.

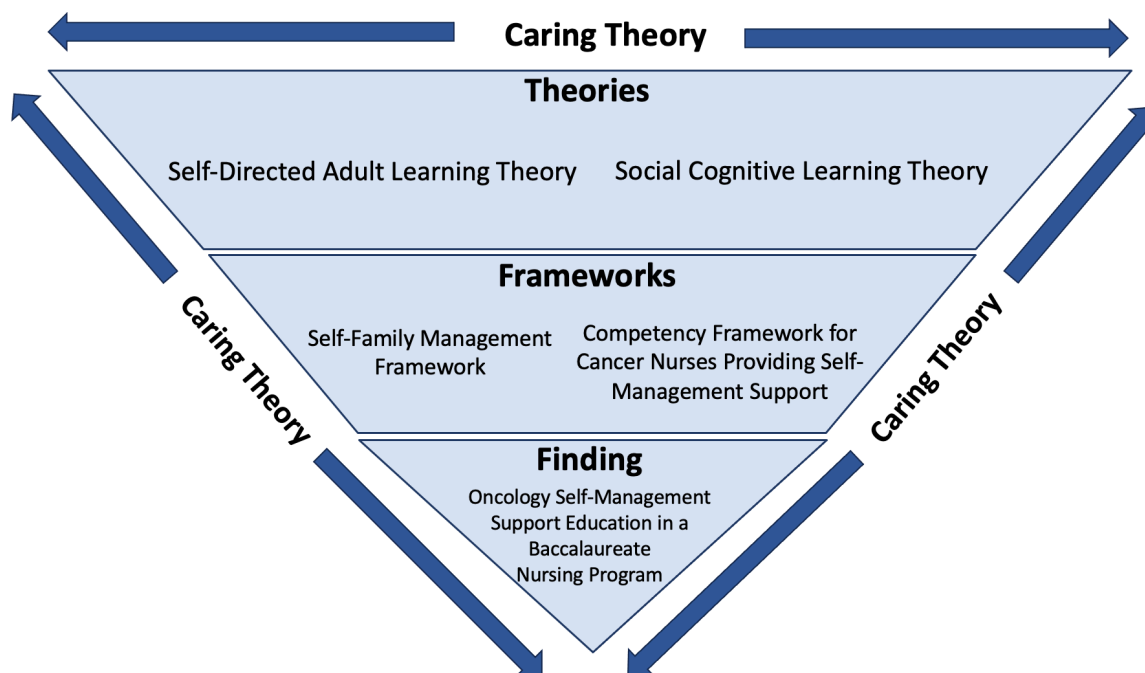
The Theoretical Framework for the Study

The theoretical framework for this study was developed using three theories and two conceptual frameworks. The theories and frameworks that constructed the research and informed my thinking to guide the research process of this study were: Caring Theory (Roach, 2002), Self-Directed Adult Learning Theory (Knowles, 1975), Social Cognitive Learning Theory (Bandura, 1997b), Self- and Family Management Framework (Grey et al., 2015), and the International Competency Framework for Cancer Nurses Providing Self-Management Support (Chan et al., 2023).

As shown in Figure 1, Caring theory (Roach, 2002) provides an overarching construct. Together and connected with Adult Learning Theory (Knowles, 1975), Social Cognitive Learning Theory (Bandura, 1997b), Self- and Family Management Framework (Grey et al., 2015) and the International Competency Framework for Cancer Nurses Providing Self-Management Support (Chan et al., 2023), the theoretical framework is synergistic and reciprocal. This framework supported and challenged my assumptions of faculty, nurse educators, and nursing students' knowledge and experiences of oncology self-management support education in a baccalaureate nursing program. In what follows, each theory and framework is reviewed within the context of faculty, nurse educators, and nursing student's teaching and learning experiences of oncology self-management support education in a baccalaureate nursing program.

Figure 1

Theoretical Framework: Oncology Self-Management Support Education in a Baccalaureate Nursing Program



Caring Theory

Sister Simone Roach's theory, *Caring, the Human Mode of Being* is central to the philosophy of the Human Mode of Being (Roach, 2002). The framework of human caring in the truest sense does not imply subservience, subordination, or oppression, but rather is regarded as a path for living that promotes the freedom of humankind in every relationship they may establish (Roach, 2002; Villeneuve, 2016). Care has always been a main objective in nursing; however, Sister Simone detailed what this meant in clinical practice. She recognized that caring is simply *the human mode of being* common to all humanity, but uniquely expressed through nursing

(Bailey, 2009; Baillie; 2017; Roach, 2002; Villeneuve, 2016). A true researcher, Sister Simone listened and learned, and in this way moved her subject of care from a theory to a *way of being*.

Through her research Sister Simone asked, what is the nurse doing when he or she is caring? The attributes that emerged are organized under *The Six Cs of Caring*, a broad framework with categories of human behavior within which professional caring is to be understood (Bailey, 2009; Baillie; 2017; Villeneuve, 2016). The Six C's of Caring are: 1. Compassion: Living with awareness of a relationship to all living creatures: a quality of presence that enables one to share with others and make room for them. 2. Competence: Having the knowledge, skills and experience to respond to professional responsibility. 3. Confidence: A quality that fosters relationships. 4. Conscience: A state of moral awareness: a compass directing one's behavior. 5. Commitment: A convergence between one's desires and obligations and a deliberate choice to act in accordance with them; and 6. Comportment: Maintaining the harmony between beliefs about self and others; dress and language are symbols of communication in a caring presence (Roach, 2002, pp. 43–49).

Cancer patients have reported the important role that nurses play in providing psychosocial and relational support to help self-manage their disease (Paterson et al., 2018). Relational support, sympathetic listening, and communication when receiving information from nurses, have been reported by patients as being important to manage the symptoms resulting from a chronic disease (Dwardswaard et al., 2016; Hammer et al., 2015; Paterson et al., 2018; Peeters et al., 2018). An individual's capacity to meet the cancer and non-cancer demands of health care and life is increased through health coaching, particularly when they encounter kindness or empathy about their disease (Barakat et al., 2018). Caring translates into empathy as the powerful health coaching skill during conversations and within the coaching relationship.

Empathetic concern is a critical skill of health coaching that builds a rapport between the individual and the healthcare provider and leads to improved coaching outcomes (Weinberg, 2022). Using a caring theory lens, I wanted to understand the extent to which caring and empathy being taught and/or mentored by faculty, nurse educators, or healthcare providers in clinical settings, influenced nursing students' learning experiences of oncology self-management support requisite knowledge and skills, including in the context of health coaching.

Self-Directed Adult Learning Theory

Self-directed adult learning is a process whereby individuals take the initiative with or without the help of others to understand their learning needs, to formulate their learning goals, to identify resources for learning, to choose and implement appropriate learning strategies, and to evaluate their learning outcomes (Knowles, 1975). Adult learners are self-directed, have deep experiences, are problem centered, internally motivated, and want to know why it is necessary to learn something in particular (Cervero & Daley, 2018). The specific adult learning approaches that may be helpful for learners to have from health care provider adult educators include (a) integrating principles of critical thinking and self-reflection into health professions curriculum, (b) activities of active learning that engages learners in what they are learning, (c) transformative learning focused on self-examination of personal socio-cultural assumptions that allows for an open gateway to new learning, (d) establishing presence, empathy, and (e) awareness of student needs in the delivery of an ever increasing age of electronic learning (Cervero & Daley, 2018).

Faculty and nurse educators are usually clinical experts and are often educated in nursing theory. As such, they may have limited exposure with the principles of adult learning theory, which may impact their pedagogy when teaching nursing students (Curran, 2014a) and influence how nursing students learn about topics in the clinical setting, such as oncology patient self-

management support. Increasingly, due to the changing health care climate, nursing students are expected to develop independent learning skills, a sense of accountability, responsibility, and assertiveness (Levett-Jones, 2005). Nursing students may have limited life experiences with individuals with chronic diseases. Adult learning concepts of informal learning (Marsick & Watkins, 1990) and transformative learning (Mezirow, 2018) deepen the understanding of how people learn and cope in response to illness. As a result, these concepts provide a foundational basis for developing strategies to support adults learning about their health and how to live well with illness (Coady, 2019). As such, adult learning concepts and guidance from Self-Directed Learning Theory helped to determine nursing students understanding of oncology self-management support, the importance to which they felt about the topic, and their intention to acquire more information on the topic. In other words, using an adult learning theory lens, I wanted to understand the extent to which teaching styles employed, and information shared, by faculty and nurse educators influenced the extent to which nursing students took the initiative, with or without the support of educators, to self-direct their learning needs on oncology self-management support requisite knowledge and skills. Further, I wondered about the role of extraneous sources (e.g., clinical placements, lived experiences of family and friends with cancer, clinical healthcare providers, motivation to learn) in deepening nursing students' knowledge and that they would share these thoughts as data in interviews.

Social Cognitive Learning Theory

Self-efficacy is an important concept in self-management and refers to the confidence that is necessary to reach a desired goal (Bandura, 1997b). Patient education using cognitive-behavioral approaches to build patient self-efficacy has been recommended and social cognitive learning theory is considered fundamental for effective health coaching (Bandura, 1997a; Howell

et al., 2018). The provision of self-management support through health coaching and the use of motivational interviewing techniques, enhances patient's self-efficacy to meet their intended health goals (Bandura, 1997b; Fahey et al., 2008; Given et al., 2004; Health Council of Canada, 2013; Sikorskii et al., 2007). Self-efficacy is considered a proximal outcome and a key mechanism of patient application of self-management strategies and behaviours. Moreover, it is critical for nurses' learning and in the development of their own self-efficacy in delivering self-management support. Social Cognitive Learning Self-Efficacy Theory identifies four essential approaches to patient education that collectively support self-efficacy and facilitates learning (Bandura, 1985). The four essential approaches to patient education to support self-efficacy are: 1. Observation, 2. Self-regulation 3. Self-efficacy, and 4. Reciprocal determination (Bandura, 1985). Nabavi and Bijandi (2012) report that people with high self-efficacy are more likely to view difficult tasks as something to be mastered, rather than something to be avoided. Whereas people with weak self-efficacy are more likely to avoid challenging tasks and focus on personal failings and negative outcomes. Social Cognitive Learning Theory (Bandura, 1997b) provided structure to understand specifics that build confidence. Using a Social Cognitive Learning Theory lens, I wanted to understand the extent and impact of teaching and learning self-management support strategies, such as health coaching and motivational interviewing, that influence nursing student's self-efficacy to provide self-management support and potentially patients self-efficacy to self-manage in the clinical setting.

Considerations of Life-long Learning Theories. Much of life-long learning and health provider education literature is concerned with adults who have completed basic undergraduate education and are continuing within their clinical specialty role. These learners as clinical experts and/or graduate students have assumed social roles and responsibilities and are defined within a

particular context (Cervero & Daley, 2018). Because these health provider clinicians have made education the focus of their professional role, health profession education programs are dedicated in supporting this professionalization by creating career tracks such as the clinical educator and or scholar (Cervero & Daley, 2018). An adult learning approach to health care provider education is the notion that through a reflective analysis and thinking process, the adult integrates new knowledge with what they already know (Cervero & Daley, 2018). This may have implications in setting a foundational knowledge of self-management support criteria and requisites from which the nursing student can build upon in clinical placement or clinical employment practice. The connections between adult and continuing education and healthcare provider as educators give rise to two major implications. First, it is critical that health provider educators identify the foundational adult education concepts to be addressed in master's and doctoral programs. Second, these foundational concepts need to be linked to the classroom context and clinical health area context (Cervero & Daley, 2018, p. 14). Adult education and continuing education in theory and practice have much to offer a new climate of health delivery system in which health professionals require being dually prepared as experts in clinical practice as well as educators who are teaching health professionals (Cervero & Daley, 2018). Professions develop their own signature pedagogies in the way they transmit knowledge to learners. Health profession education programs can draw from adult education theories to assist in developing pedagogies (Cervero & Daley, 2018). These implications are important to consider when conducting a study on educating practicing clinical nurses on oncology self-management support. Self-directed learning opportunities where learners have control over the content, pace, structure, and assessment are recommended to help learners take more mindful action when they are faced with uncertainty. When developing course designs, self-directed opportunities for

nursing students as learners to explore how they learn within action in a social context are recommended (Bierema, 2018). Nursing students' responses in the study exposed important information to consider in the potential development of oncology self-management support curriculum.

Nurse educator and nursing student participants in the study were asked if self-management support education is offered, and if not, whether it should be offered and what approaches they feel should be included in teaching and learning. Nurses in professional practice construct a personal knowledge base in their clinical practice by linking concepts of new knowledge with their practice experiences (Daley & Cervero, 2016). The participants responses to these questions were helpful informing and designing potential future oncology self-management support curriculum.

Self- and Family Management Framework

In addition to applying theory to guide my thinking, two conceptual frameworks assisted me in identifying and understanding the phenomenon (oncology self-management support education) being investigated. Conceptual frameworks provide a frame of reference for members of a discipline by telling them what to look at and speculate about (Grey et al., 2006). The Self- and Family Management Framework was developed to guide research to understand, develop, and test interventions to enhance self and family management in persons with chronic conditions (Grey et al., 2006). This framework is appropriate to guide research aimed at advancing new knowledge on self and family management of chronic conditions by providing biobehavioral moderators (facilitators and barriers) of self and family management and mediators (proximal and distal outcomes) (Grey et al., 2015). This framework guided and informed my thinking by providing the structure to understand faculty, nurse educators, and nursing students' knowledge

and understanding of how self-management facilitators and barriers (e.g., financial resources, home and/or community environments) impact patients' capacity to engage in self-management strategies or behaviours that may translate into outcomes (e.g., pain symptoms, physical activity, access to health care) (Grey et al., 2015). Thus, I needed to explore faculty, nurse educators, and nursing students, teaching and learning facilitators and barriers as individual concepts, and also individual concepts within a coordinated, comprehensive approach to self-management support with measurable patient and system outcomes.

International Framework for Nurses in the Provision of Self-Management Support to Persons with Cancer

Conceptual frameworks accentuate the reasons why a research topic is worth studying and are useful to researchers if theory is not sufficient in creating a firm structure for the study (Adom et al., 2018). The International Society of Nurses in Cancer Care developed an evidenced-based, comprehensive, competency and performance criteria framework to guide oncology nurses in providing cancer self-management support and coaching in behavior change (Chan et al., 2023). The framework consists of a total of 52 items: 42 performance criteria and ten competencies. Performance criteria are defined as “the required level of performance in terms of a set of outcomes that need to be achieved to be deemed competent (Chan et al., 2023, p. 3). Competencies are defined as “the skills, abilities, knowledge, attitudes, and behaviors that are instrumental in the delivery of desired results and for evaluating job performance. The identified competencies and performance criteria are categorized into six distinct domains: 1. person-centered and motivational interviewing communication skills. 2. whole-person assessment of self-management support needs and capacity for self-management. 3. health promotion knowledge theories and interventions, 4. coaching for behavior change tailored to the

individual's phase in the cancer continuum, 5. monitoring and evaluating change in patients' use of self-management behaviors and health outcomes. 6. quality improvement for integration of self-management support in cancer care (Chan et al., 2023). This framework provided the structure to identify, understand, and measure the extent to which the requisite performance criteria and competencies for oncology self-management support were being taught and learned in the baccalaureate nursing program. Applying this framework, I wanted to determine the extent the performance criteria and competencies were being taught by faculty and nurse educators and learned by nursing students. Thus, I needed to explore the extent to which faculty and nurse educators taught performance criteria (e.g., person centered care) for nursing students to meet the requisite competencies to be prepared to provide self-management support to persons with cancer. Further, I needed to explore the extent to which nursing students learned performance criteria (e.g., basic communication skills) to be equipped with the requisite competencies to provide self-management support to persons with cancer.

Inductive Research Approach

Inductive research approach involves theories at the outset of the study and each phase of the study process are justified in relation to how the phase aligns with the theory. The researcher does not begin with a hypothesis, but rather with the desire to understand and explain the phenomenon being studied. Data is collected about the phenomenon and the researcher observes for patterns emerging from the data to understand the phenomena being investigated (Varpio et al., 2020). Applying a theory informed inductive approach, the researcher chooses the theory to use as a lens and transform the theory into a framework that articulates how theory shapes the question and all phases of the study design. As such, the researcher develops the theoretical framework prior to the study being conducted but may be adjusted in response to developing

insights and understandings during the research process (Varpio et al., 2020). Caring theory (Roach, 2002), Self-Directed Learning Theory (Knowles, 1975), and Social Cognitive Learning Theory (Bandura, 1997b) guided the inductive approach to this study.

Deductive Research Approach

Deductive research approach involves a top-down approach that involves the researcher starting with theory by using general, abstract concepts moving towards more observable, measurable data and a hypothesis is formulated (Varpio et al., 2020). Applying a deductive approach to the theoretical framework, the researcher puts the theory “into action” by providing the context for the current area of study, reporting assumptions of the research question and situating the approach in the analysis. I applied the Grey et al. (2015) framework and the Chan et al. (2023) framework to formulate assumptions that needed to be explored and guide a deductive approach to the study.

Chapter Two Summary and Conclusion

This chapter described the theoretical framework that guided the study. Reviewing theories while reflecting on my assumptions and engaging with my research purpose and objectives led me to embrace three theories and two frameworks. Three theories were Caring Theory (Roach, 2002), Self-Directed Adult Learning Theory (Knowles, 1975), and Social Cognitive Learning Theory (Bandura, 1997b). The two frameworks were Self- and Family Management Framework (Grey et al., 2015) and The International Competency Framework for Cancer Nurses Providing Self-Management Support (Chan et al., 2023). The theoretical framework guides each phase of this study’s research process to explore the extent and impact of oncology self-management support education on faculty, nurse educators, and nursing students

teaching and learning experiences in a baccalaureate nursing program. The next chapter, chapter three, provides the literature reviews for this study.

Chapter 3: Literature Review

Cancer is a complex chronic disease and is an important issue to consider. The incidence of cancer is projected to increase globally from 12.7 million cancer cases in 2008 to 21.4 million cancer survivors in 2030 (Soerjomataram et al., 2012). In 2024, 247,100 Canadians are expected to be diagnosed with cancer and 88,100 deaths will occur due to the disease (Brenner et al., 2024). Cancer survivors struggle to manage the physical, psychosocial, and lifestyle changes as a consequence of cancer and its treatments. Like other chronic diseases, the burden is tremendous for patients and its related costs unsustainable in the current health care system (Howell et al., 2017; Wong-Rieger, 2011). While education for cancer patients from health care providers is a necessary component, on its own, it is insufficient in impacting long-term behaviour changes of patients (Health Council of Canada, 2013; Pearson et al., 2007). Self-management support complements traditional patient education to improve knowledge of the disease. It also differs by aiming to motivate patients to be active participants in their care, to focus on patients' personal preferences, to improve their problem-solving skills, and to build their self-confidence as ways to enable them to effectively self-manage their disease (Health Council of Canada, 2013; Howell et al., 2019). Supporting self-management of illnesses in other chronic diseases, such as diabetes, has been shown to improve disease control, reduce symptom severity, improve overall quality of life, and lower health care utilization and costs (Hammer et al., 2015; Health Council of Canada, 2013). Evidence is emerging in cancer care that self-management interventions and/or self-management support programs have beneficial effects on reducing the severity of physical and psychosocial symptoms and improve overall quality of life (Hammer et al., 2015; Howell et al., 2017, 2018, 2019; McCorkle et al., 2011). Greater emphasis is now focused on the routine provision of self-management support to enable and empower cancer survivors to play a central

role in the management of their cancer care and recovery of health (Howell et al., 2017, 2019; Levit et al., 2013; McCorkle et al., 2011).

The literature was reviewed broadly to acquire an understanding of self-management support provided by nurses. Further, because self-management is enabled through an individualized approach within a sociocultural context (Lovell et al., 2014), the self-management support literature was reviewed in the context of social justice. Lastly, recognizing that it may be best to foundationally prepare nurses to support the growing number of cancer survivors, the literature was reviewed on self-management support curriculum in baccalaureate nursing programs. This dissertation therefore provides three distinct literature review sections to address the broad scope and unique aims on oncology self-management support, and each will be discussed separately as follows: 1. An integrative literature review was conducted to gain an understanding of the self-management support interventions, including health coaching, provided by clinical nurses for persons with cancer. 2. A traditional literature review was conducted to gain an understanding of social justice as a concept that exists in self-management support literature. 3. A traditional literature review was conducted to determine if self-management support education is provided to students in baccalaureate nursing curriculum.

Nursing Interventions to Support Cancer Patient Self-Management: An Integrative Literature Review

Patients cannot self-manage on their own and require support from healthcare professionals, relatives, and peers (Dwarswaard et al., 2016). Self-management support, also labelled as supported self-management, is reported as the systematic provision of education and supportive interventions to increase patients' skills and confidence in managing their health problems, including regular assessment of progress and problems, goal setting, and problem-

solving support (Adams et al., 2004). Due to the growth in cancer survivors, it is expected that a growing number of nursing interventions will be directed towards patients with cancer (Tuominen et al., 2019). An urgent need for research exists to better understand how to enable patients to self-manage the effects of cancer as a chronic disease in routine cancer care (Howell et al., 2019). It is important to first understand the self-management support interventions that are currently provided by nurses, and the effectiveness of these interventions to enable oncology patients in the self-management of their disease. To facilitate this process, an integrative literature review on oncology patient self-management support interventions delivered by nurses and their impact on health outcomes, was conducted.

Integrative Literature Reviews

The integrative literature review is a distinctive form of research that generates new knowledge about the topic reviewed. It reviews, critiques, and synthesizes literature on a topic in an integrated way that results in the generation of new frameworks and perspectives on the topic (Torraco, 2016). The integrative literature review method is defined as that which includes both empirical and theoretical publications (Hopia et al., 2016 as cited in Evans, 2007) and are widely used in nursing research (Hopia et al., 2016). The literature is considered the data of an integrative literature review; learning about literature, and how it was obtained, is of particular interest to readers (Torraco, 2005). Whitemore and Knafl (2005) outline five stages used to guide the design of an integrative literature review that are:

1. A clearly defined research question and purpose.
2. A comprehensive literature search strategy.
3. An evaluation of the data that focuses on the quality, informational value, and representativeness of the available primary studies.

4. A data analysis that includes a data reduction display.
5. A presentation of the synthesizes findings in a model that comprehensively portrays the integration process that describes implications for practice, policy, and research.

An integrative review addresses new or emerging topics that benefit from holistic conceptualization and synthesis of the literature to date (Torraco, 2005). Therefore, conducting an integrative literature review was suitable in the new and emerging area of oncology self-management support and health coaching.

Research Purpose and Objectives

When conducting an integrative literature review, it is imperative that a clear research purpose is articulated due to the high number of variables in integrative reviews (Hart, 2018; Whitemore & Knafel, 2005). The overall purpose of this integrative literature review was to identify interventions provided by nurses to support patients in the self-management of cancer as a chronic disease. Specific objectives were:

1. To identify specific oncology self-management support interventions provided by nurses.
2. To identify if self-management interventions impacted the health outcomes of persons with cancer.
3. To identify if health coaching by nurses as a self-management support intervention positively impacted behaviour change for persons with cancer.

Research Question and Search Method

The aim of my search was to identify peer-reviewed literature pertaining to cancer self-management support provided by nurses, including health coaching self-management support. The grey literature was not searched, and unpublished thesis documents and working papers

were not included. Health coaching is referred to the self-management support delivered by health care providers trained in behavior change theory, motivational strategies, and communication techniques that are used to build patients capacity to obtain skills and develop intrinsic motivation. Health coaching has shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Wolever, 2010). All articles considered for the review included self-management intervention studies with nurse involvement.

To synthesize the literature in an appropriate manner (Torraco, 2016) a systematic approach was undertaken. Establishing search parameters began with my research question (Hart, 2018). Using the Population, Intervention, Professionals, Outcomes, Health care setting and Contexts (PIPOH) tool to develop clinical questions and form the basis of the search strategy (Amer et al., 2015; Collaboration Adapte, 2009), the integrative literature review question was: What is known in cancer populations (P-Population) about self-management support and/or coaching (I-Intervention) provided by nurses (P-Profession) on adult (>18) patients' ability to self-manage their cancer and care, resultant lifestyle changes, and health outcomes (O-Outcome) on all in-patient and out-patient areas (H-Health Care Setting).

A librarian was consulted and supported my conduction of the search using their academic database resources and expertise on health care concepts. The librarian felt searching the data base CINHALLComplete (Cumulative Index to Nursing and Allied health Literature), would be most appropriate and suffice to address literature review question. Two separate searches were performed of the electronic database CINHALLComplete (1982 to present) to broadly determine the kinds of self-management support nurses provide to persons with cancer. The searches were performed on September 30th, 2019 and October 4th, 2019. The first search on September 30th, 2019 was performed using the following combination of text words and subject

headings: “cancer survivors”, “oncologic care” and “cancer patients” as subject terms while the word “cancer” was searched in the article’s title and the words “oncology nursing” or “cancer nursing” were searched in the journal’s title. The results of this set were combined with “self-management” and then further refined with a broad search of nursing anywhere in the record, yielding 224 references. The second search conducted October 4th, 2019 looked at self-management in cancer survivors, using the previous search terms, and combined with “coaching”, yielding 18 references. Eleven duplicates were removed for a remaining 231 references. Titles and abstracts from the first search were reviewed using search words *self-management and support and nursing* to understand self-management supports other than coaching being provided by nurses, narrowing the search result to 26 references. Full-text articles of the 26 references and the 18 references that included “coaching” were reviewed for inclusion and exclusion criteria (see Appendix A) and elimination of full-text articles were based on the exclusion criteria. From the first search, two articles were eliminated due to being non-English, one article was eliminated due to the study participants being less than 18 years of age, and two articles were removed as they focused on nurses’ perceptions of self-management support, rather than the provision of self-management interventions. In the second search pertaining to coaching, four articles were removed due to the studies not involving nurses. The reference lists of articles meeting inclusion criteria were then searched manually for additional relevant empirical and theoretical published literature, which yielded one reference. After applying the exclusion criteria, and adding the article from the hand search, the remaining full-text articles considered for thematic analysis was 33 references (see Appendix B). The ten qualitative, nineteen quantitative, and four mixed-methods studies, were comprised of

descriptive or exploratory literature reviews, systematic literature reviews, and randomized controlled studies.

Thematic Analysis

The value of synthesising qualitative research in the evidence base to facilitate effective and appropriate health care has garnered considerable recognition, and one approach to the synthesis of qualitative research findings is thematic synthesis (Thomas & Harden, 2008). Thematic analysis is considered a process that can be used with most, if not all, qualitative methods (Thomas & Harden, 2008). While searching for studies for inclusion in a quantitative study may aim to locate all relevant studies, qualitative searching results in a sample that is purposive rather than exhaustive because the purpose is interpretive explanation, not prediction. Reading and reviewing the 33 references allowed me to become familiar with the data. Inductive coding occurred while reviewing the references to generate themes and highlight significant findings. Thematic analysis for coding and analyzing the qualitative data occurred over three steps: 1. Familiarizing and coding of key concepts of the studies. 2. Organization of these free codes into related areas to construct theme development and refinement. 3. The development and writing of the analysis (Braun & Clark, 2006; Braun et al., 2016; Thomas & Harden, 2008).

Four Emergent Self-Management Support Intervention Themes

Four self-management support nursing intervention themes emerged from the 33 studies in this integrative review:

- Educational cancer self-management interventions by nurses (n = 7).
- Electronic platforms for nurses to provide educational cancer self-management interventions (n = 8).

- Coordinated education programs with healthcare providers, including nurses, that use education materials (n = 5).
- Health coaching provided by nurses using educational materials (n = 13).

One study (Reb et al., 2017) fit into two different intervention themes (coordinated self-management programs and health coaching themes) and were evaluated in each theme category for the purposes of this integrative literature review. The remaining 32 studies fit into one of the four intervention themes. All studies involved cancer patients and nurses providing an intervention for patients to better self-manage their cancer and care. Intertwined and connecting the four themes as underlying commonalities were concepts that included communication, support, caring, empathy, motivational interviewing, and self-efficacy as an outcome indicator of self-management (see Appendix C).

Theme 1: Patient Education as a Self-Management Support Intervention

The major commonalities found in the research literature describing cancer patient self-management education interventions provided by nurses were instructional education, provision of disease information and materials, and counselling (Dwarswaard et al., 2016; Hammer, 2015; Howell et al., 2017; Paterson et al., 2018; Peeters et al., 2018; Reb et al., 2017; Van Hecke et al., 2017). Howell et al. (2017) describes eight effective and essential core components felt to be fundamental to self-management education interventions and that target physical and psychosocial symptoms (e.g., fatigue, pain, depression, anxiety). The essential core components of education interventions reported by Howell et al. (2017) are (a) tailoring the intervention to the individual patient's needs, (b) facilitating mastery and patients self-confidence (self-efficacy), (c) supporting patients to communicate with healthcare providers, (d) assessing patients understanding and confidence of illness management to facilitate tailoring of self-

management, (e) teaching and coaching by an individual specially trained in self-management knowledge and skills to facilitate patients behaviour change, (f) collaborating and guiding support from the health care team, (g) facilitating patients uptake of health behaviours through goal setting and action planning, and (h) supporting the development and practice of patients problem solving skills. Howell et al. (2017) reports that the main goals of self-management education interventions are managing symptoms and medical regimes, managing roles and relationship changes, and managing the emotional impact of cancer. The authors identified that when at least one of the eight core elements were used with any type of traditional teaching strategies (didactic lectures, discussion, written materials, audiotapes, videotapes) and with any mode of teaching delivery (group based, individual-based, structured, unstructured), outcome measures of physical (particularly pain and fatigue) and emotional symptoms (most common being depression, anxiety, coping, and quality of life) improved. Although a combination of multiple educational interventions such as informational materials, instructional demonstrations by health care providers, and didactic group-based self-management seminars, support patients' ability to self-manage (Paterson et al., 2018), no specific mode of educational instruction or information material was recommended to support patient's self-management (Hammer, 2015; Van Hecke et al., 2016.). This supports Howell et al. (2017) reporting the necessity of essential components, in combination with educational interventions of instruction and materials, to support cancer patients self-manage their disease.

Cancer patients reported wanting disease information from health care providers (Dwardswaard et al., 2016) and the important role that nurses play in providing psychosocial and relational support to help them self-manage their disease (Paterson et al., 2018). Cancer patients value professional's expert knowledge. However, patients reported a collaborative professional-

patient relationship as being essential in their ability to self-manage (Dwarswaard et al., 2016; Peeters et al., 2018). Relational support, sympathetic listening, and communication when receiving information and instruction from nurses and when addressing questions in open forums, were reported as being important to improving patient's self-management support by enabling patients to manage the symptoms resulting from a chronic disease (Dwardswaard, 2016; Hammer et al., 2015; Paterson et al., 2018; Peeters et al., 2018).

Counselling provided by nurses to oncology patients was reported as a beneficial technique. Counselling offers patients emotional support to assist with coping with fears, positively looking to the future, encouraging them to ask their healthcare providers questions, and establishing partnerships (Hammer et al., 2015; Peeters et al., 2018). Positive effects on patients' ability to self-manage their disease were reported when using education/cognitive counselling interventions informed by established cognitive behavioral therapy techniques, and when those delivering the sessions had specialized training (Hammer et al., 2015; Howell et al., 2017).

Although effective communication and a collaborative partnership between patients and healthcare providers were reported as being important to improving self-management support for patients (Dwarswaard, 2016; Peeters et al., 2018), researchers have also found that nurses lack sufficient training and practical interventions and that they require practical tools and training (Peeters et al., 2018). To support patients in recovering autonomy and self-confidence, scholars argue that nurses require tools and training on the importance of communication during the provision of the tools to best provide patient self-management support (Peeters et al., 2018). Finally, the studies in the educational inventions theme reported a need for further research on

the effectiveness of interventions that enable patients to self-manage their disease (Howell et al., 2017; Van Hecke et al., 2016).

Theme 2: Using Healthcare Technology as a Self-Management Support Intervention

The number of technology self-management support systems used to enhance how people live with chronic health conditions has increased in the last decade. Such systems offer new opportunities by facilitating telemonitoring, enhancing symptom management, and improving quality of life (Børøsdund et al., 2014; Hochstenbach et al., 2015). Healthcare technology is used by nurses to provide patients with cancer self-management interventions through sharing disease knowledge, communication of logistics around treatment, symptom support, and integrating patient self-management and professional care (Børøsdund et al., 2014; Hochstenbach et al., 2015).

Three of the eight studies within the theme of healthcare technology as a self-management support intervention were quantitative and described the web-based health system technology, *WebChoice* (Børøsdund et al., 2014; Ruland et al., 2013a, 2013b). *WebChoice* is a web-based interactive health system that enhances patient-centered care and supports a provider-patient communication and partnership by facilitating nurses to provide cancer patients with timely individually tailored self-care advice and the resources to support self-management of cancer related symptoms and illness-related problems (Børøsdund et al., 2014). *WebChoice* also provides an electronic forum for group discussion with other cancer patients (Børøsdund et al., 2014; Ruland et al., 2013a, 2013b). Researchers reported *WebChoice* as reducing outcomes of anxiety, depression, and distress symptoms (Børøsdund et al., 2014). Despite these benefits however, the study showed no difference in patient's self-efficacy, which is a critical component of patient self-management (Børøsdund et al., 2014; Ruland et al., 2013a). Self-efficacy is

considered a key mechanism for self-management behavior change (Bandura 1997b; Lorig et al., 2001). Børøsdund et al. (2014) and Ruland et al. (2013b) reported that what patients valued most about WebChoice was e-mail communication with nurses. Nurse's involvement as monitors and contributors in the discussion forum may have contributed to positive feedback received from participants regarding the information they received (Ruland et al., 2013b). Researchers found that the electronic health platform WebChoice met educational support and informational needs and tailored to individual patients needs that promoted health behavior change and self-efficacy (Ruland et al., 2013a).

Three of the eight studies within the theme of healthcare technology were quantitative studies examining a self-management support intervention for mobile electronic applications. This healthcare technology intervention delivered by nurses facilitates patient-provider communication services and supports cancer patients' self-management (Hochstenbach et al., 2015, 2016, 2017). Hochstenbach et al. (2016, 2017) examined nursing self-management support for patients with uncontrolled pain who used a mobile application to communicate with nurses who accessed a web application and were specialized in pain and palliative care. The researchers compared the technology based self-management support intervention with usual care to explore pain intensity and quality of life as primary outcomes and self-efficacy, knowledge, anxiety, depression, and pain medication use as secondary outcomes. Monitoring and advising by nurses, as well as their collaboration with treating physicians, was reported as impacting patient experiences positively, which emphasizes the importance of involving nurses in the delivery of self-management support while integrating these interventions into routine clinical practice (Hochstenbach et al., 2015, 2016). Patients emphasized the added value of the application in self-managing their pain and pain medication and demonstrated the feasibility of the electronic

intervention in everyday practice to enable patients with cancer pain to practice self-management and nurses to remotely support these patients (Hochstenbach et al., 2016). Improvements in symptoms and patient's ability to manage symptoms through interaction between the nurses and electronic device was reported (Ruland et al., 2013b).

Two of the eight studies within the technology intervention theme were quantitative systematic reviews. Hernandez-Silva et al. (2019) conducted a systematic review to determine if technology applications support cancer patient self-management of pain, distress, fatigue, or sleep. The study determined that mobile electronic application technology supports patient self-management. The review reported that technology health interventions demonstrated the strongest improvement in cancer patients' fatigue outcomes, had mixed results for their pain management, and showed promise for psychological distress and sleep outcomes in adult cancer survivors (Hernandez-Silva et al., 2019). Cancer patients are using the internet for information and supportive care and evidence supports the internet as a worthwhile tool for effective patient engagement and self-management of chemotherapy related symptom. However, studies on the effectiveness of internet technology as an intervention examining cancer chemotherapy-related symptoms are limited, and the researchers concluded that further research is required (Hernandez-Silva et al., 2019).

The second systematic literature review conducted by Moradian et al. (2018) examined internet-based interventions for health care providers to share tailored information and provide education and self-management support to cancer patients. This systematic review aimed to (a) examine the effectiveness of internet-based interventions on cancer chemotherapy-related physical symptoms (severity and/or distress) and health-related quality of life outcomes and, (b) identify design elements and processes for implementing these interventions into oncology

practice. Self-management support by nurses was found as a common element of the studies in the review. An improvement in cancer patients' physical symptoms were demonstrated in most of the studies, and of the three studies that measured health related quality of life, two studies reported an improvement in quality of life. Researchers reported that improvement in symptom distress was statistically significant, and overall, the evidence supported the use of technology as effective for patient engagement and self-management of chemotherapy-related symptoms (Moradian et al., 2018). However, the researchers reported that further well-planned and quality research is recommended before these interventions can reach their full potential (Moradian et al., 2018).

Overall, studies within the theme of using healthcare technology as a self-management support intervention have identified the valuable role nurses play with technology interventions to enable cancer patients in the self-management of their disease and health care (Børøsdund et al, 2014; Hernandez Silva et al., 2019; Hochstenbach et al., 2015, 2016, 2017; Moradian et al., 2018; Ruland et al., 2013a, 2013b). Researchers reported however, that further research is required to investigate particular components that are required to support patients with personal, social, and cultural needs (Ruland et al., 2013a, 2013b). Although research is required, health care technology systems may become an important tool to support nursing care in enabling persons with cancer to improve self-management of their disease (Ruland, 2013a). Moreover, if clinicians recognize web-based technology support as an effective and easy-to-access resource for their patients' self-management support and outcomes, there may be better "buy in" by health care providers to utilize these types of interventions (Børøsdund et al., 2014).

Theme 3: The Impact of Cancer Patient Self-Management Support Programs

Self-management support programs are considered multicomponent interventions that include information-based materials and learning strategies to facilitate patients' use of core skills and specific self-management behaviors to build self-efficacy (Howell, 2018). Self-management program components are coordinated education programs with selected healthcare providers as staff, including nurses, that use education materials such as survivorship care plans, disease specific education materials, and health coaching (Howell, 2018).

Evidence is emerging in cancer care that self-management support programs have beneficial effects on reducing the severity of physical and emotional distress and improving quality of life (Howell, 2018; Howell et al., 2019). Howell et al. (2019) reports however, that cancer healthcare systems lag other chronic diseases, such as diabetes, asthma, arthritis, chronic obstructive pulmonary disease, in the provision of self-management support in routine care, leaving cancer patients at risk of becoming sicker and having poorer survival outcomes. Due to the complex, multi-faceted, dynamic (fluctuating disease course) nature of cancer as a chronic condition, implementing self-management support programs that simply mirror the approaches taken in other chronic disease programs would likely prove to be unsuccessful (Howell, 2018; Howell et al., 2019). Rather, it is felt that self-management cancer support programs require entire cancer system changes that include the training and guidance of patients in self-management and the development of clinician's skills to effectively provide cancer patients self-management support throughout the trajectory of cancer care (Chan et al., 2020; Howell, 2018; Howell et al., 2019).

One of the five studies within the theme of cancer self-management programs was a mixed methods study examining the effects of a nurse-led medication self-management program

for breast cancer patients receiving oral anticancer treatment (Komatsu et al., 2016). Usual care was provided in the control group (oral teaching of chemotherapy, instructions on taking the medications, resources with whom to contact with drug toxicities, psychological support). While the intervention group (self-management support program) consisted of information given by nurses using the teach-back method, helping patients set a goal based on their personal preferences, and solving any problems patients may encounter through a follow-up by a nurse. The primary outcome measurement of the program was patient's adherence to medication and secondary outcome measurements included self-efficacy, symptom severity, and patient satisfaction. A more recent hand search of Komatsu et al. (2020) revealed there was no significant difference in the primary outcome of adherence to medication between the study groups. However, there was a significant difference in the intervention nurses perceived improvement in the patient's self-efficacy of taking and self-managing any symptom side effects of their breast cancer medication, ability to anticipate the impact of the treatment and adjust to life, and avoidance of loneliness (Komatsu et al., 2020).

A second of the five studies within the theme of self-management support programs was a qualitative literature review conducted by Odom-Forren and Wesmiller (2017). The review explored the most common postoperative symptoms experienced by patients following cancer surgery that include pain, nausea and vomiting, constipation, blood clots, infections, and fatigue. The authors suggest that nurses equipped with successful strategies to support self-management of postoperative symptoms can ensure that patients have a positive post-operative experience (Odom-Forren & Wesmiller, 2017).

The third of the five studies within the theme of self-management support programs by Reb et al. (2017) was a mixed methods study that also overlaps in the fourth theme of health

coaching as a self-management intervention. Reb et al (2017) discuss the use of survivorship care plan documents provided to cancer survivors that include a treatment summary and follow-up recommendations. The study examined survivorship care plans provided and reviewed with colorectal and lung cancer survivors' patients by nurses using self-management skill building to engage the survivors. Behavioral approaches such as goal setting, problem solving skills building, and self-monitoring training for late and long-term effects skills were used to support survivor self-efficacy. The researchers reported that patients demonstrated a positive effect on measurable outcome indicators of depression, anxiety, self-efficacy, quality of life, and satisfaction when nurses incorporated self-management skills. These skills included coaching patients about problem solving, symptom management, communication with health care providers, and goal setting when reviewing the survivorship care plans and engaging patients during their cancer survivorship phase (Reb et al., 2017).

Two of the five articles in the self-management support program theme are literature reviews, a qualitative literature review (Howell, 2018) and a quantitative systematic literature review (Howell et al., 2019). Through these reviews, the researchers identified the need for self-management support across the trajectory of cancer care (Howell, 2018; Howell et al., 2019). Until self-management support programs can be realized, pilot programs during the time that patients are undergoing active treatment, such as during chemotherapy treatment, should be considered due to the intensity of this treatment resulting in safety health concerns (e.g., febrile neutropenia) and high symptom management needs of cancer patients. According to Howell (2018), self-management support programs should include patient education in disease and treatment effects that use cognitive-behavioral approaches that aid in teaching patients both action planning and problem-solving skills, target learning strategies for mastery for managing

specific problems, and build coping or problem-specific self-efficacy as a mechanism to change patients' behavior and adherence to behaviors. The self-management programs should include patient education, intense training in management of disease specific problems, facilitated action through behavior change, adherence to behaviors using cognitive approaches, and building problem-solving specific self-efficacy (Howell, 2018). Researchers suggest that commonalities of implementation components among successful self-management programs are felt to include (a) staff selection, (b) preservice and in-service training, (c) ongoing coaching and consulting, (d) staff evaluation, (e) decision support data, (f) facilitative administrative support, and (g) systems interventions (Howell et al., 2019).

The lack of references on comprehensive self-management programs from the integrative literature review is evident. However, studies that were conducted at points along the cancer care trajectory, such as post-operative cancer surgery, survivorship care, and with patients receiving oral chemotherapy, demonstrated improved symptom management and outcomes (Komatsu et al., 2016; Odom-Forren & Wesmiller, 2017; Reb et al., 2017). Further, self-management programs that included patient self-management skills and nursing abilities in other chronic diseases have demonstrated to improve symptom management, which reflects the lack of comprehensive self-management support programs in cancer care and the need for further research on the effectiveness of self-management programs on patient outcomes (Howell, 2018; Howell et al., 2019). Researchers reported that although patients received information for symptom management, they believed that they did not have the knowledge or resources to self-manage symptoms (Odom-Forren & Wesmiller, 2017) and did not want the information as a substitute for a discussion (Reb et al., 2017), making the participation of nurses to enable patients in the self-management of their disease and health important to consider.

Theme 4: Health Coaching as a Self-Management Intervention

Cancer patient health coaching delivered by health care providers as a self-management support intervention is becoming increasingly recognized as being necessary to education-based initiatives to better change patient's health behavior (Pearson et al., 2007). Health coaching is referred to as the self-management support delivered by health care providers trained in behavior change theory, motivational strategies, and communication techniques that are used to enable patients to obtain skills and develop intrinsic motivation. Health coaching has been shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Wolever, 2010). Health care professionals act as coaches by engaging in interactions with patients who have chronic diseases and who are focused on the patient's concerns. As coaches, health care professionals listen to patients articulate their concerns and help them to work through issues (Wong-Rieger, 2011). Rather than the unidirectional transfer of knowledge and acting in a traditional "expert role" of informing, directing, and deciding, health care professionals must change to a collaborative role of joint goal setting, problem solving, and follow-up (Wong-Reiger, 2011). Apart from providing information and building skills, cancer health coaching is an important intervention that nurses can provide to support and improve symptoms due to treatment, function related daily activities, and self-efficacy (Coolbrandt et al.; Koller, 2013b).

Thirteen articles related to cancer health coaching by nurses as a self-management intervention for persons with cancer were found. Six articles were quantitative studies (Coolbrandt, 2018; Davis et al., 2019; Edbrooke et al., 2017; Koller et al., 2012a, 2012b; Koller et al., 2017), one mixed methods study (Reb et al., 2017), and six articles were qualitative studies (Beck et al., 2017; Fahey et al., 2008; Lewis & Zahlis, 1997; Lovell et al., 2014; Mooney et al.,

2019; Petite et al., 2014). The mixed methods study (Reb et al., 2017) overlaps with the theme of self-management support programs with nurses providing survivorship care plans combined with the intervention of health coaching. Five articles include providing education with cancer coaching as an intervention (Davies et al., 2019; Koller, 2013a, 2013b, 2017; & Lovell et al., 2014). Three articles include electronic devices with cancer coaching as an intervention (Beck et al., 2017; Mooney et al., 2019; Petite et al., 2014). One article incorporates patients' beliefs and preferences with cancer coaching as an intervention (Fahey, 2008). One article discusses the benefit of exercise with cancer coaching as an intervention for patients with recently diagnosed inoperable lung cancer (Edbrooke et al., 2017). One article discusses nurse coaching as an intervention for reducing chemotherapy-related symptom distress (Coolbrandt et al., 2018), and Lewis and Zahlis (1997) provide an overview of nurse coaching as a conceptual framework for clinical practice.

Researchers reported that the importance of nurse coaching to enable patients with their self-management is based on the patient's personal preferences including performing self-care and monitoring and reporting symptoms to health care providers (Coolbrandt et al., 2018; Fahey, 2008; Koller et al., 2017; Reb et al., 2017). Nurses operationalize patient education through coaching that is derived from the patients frame of reference to support patient-centered care and add to the patient's and family's repertoire of behavioral self-management skills that includes self-care skills and cognitive control (Lewis & Zahlis, 1997; Lovell, 2014). Using a patient-centered approach during self-management coaching conversations, that includes the provision of patient education, results in patients having greater adherence to treatment and follow-up recommendations and achieving optimal positive outcomes (Coolbrandt et al., 2018; Fahey et al., 2018; Lovell, 2014).

Motivational interviewing is reported as being an effective communication strategy of self-management coaching to strengthen a person's own motivations (Coolbrandt et al., 2018; Fahey et al., 2018). Researchers found that nurse coaching that incorporates techniques of motivational interviewing and is provided through a collaborative nurse-patient relationship, rather than through lecturing or giving advice, is more likely to induce change and can improve treatment adherence and symptoms (Fahey et al., 2018). Nurses providing self-management coaching using motivational interviewing, can support cancer patients during high risk of symptom distress due to chemotherapy (Coolbrandt et al., 2018;), with cancer related pain (Fahey et al., 2008; Koller et al., 2013a), to benefit from exercise (Edbrooke et al., 2017), and when provided with a survivorship care plan to fulfill the unmet needs of colorectal and lung cancer patients (Reb et al., 2017).

Nurse coaching using electronic aids, such as telephone and web-based computer systems by using patient-reported outcomes to improve care in real time, was reported as improving the symptom management experience of cancer patients during high-risk times, such as when receiving chemotherapy (Beck et al., 2017). Significant improvement in symptom severity of patients receiving chemotherapy suggests that coaching as an intervention led to improved self-management, and consequently better symptom relief (Coolbrandt et al., 2018). Researchers reported that electronic aid's provide information, and when combined with nurse coaching and motivational interviewing communication, helped to develop patients' self-management skills (Petitte et al., 2014). This helped to communicate cancer survivorship information using survivorship care plans to address ongoing cancer surveillance along with late and long-term symptom management (Davis et al., 2019) and decreased overall symptom severity compared to usual care without coaching (Mooney et al., 2019).

Overall, researchers reported that oncology nurses are advised to consider incorporating coaching with motivational interviewing as a self-management intervention into their communications with patients (Fahey et al., 2008; Koller et al., 2017). However, researchers also note important limitations of their studies on health coaching. Researchers have argued, that larger studies are required (Lovell, 2014; Koller et al., 2013a), an explicit description of the nurse's role and the communication that is used when providing health coaching, (Davies et al., 2019; Lovell, 2014), consider further health coaching studies using an electronic device (Petitte, et al., 2014), conduct studies during specific phases of the cancer trajectory, such as the survivorship phase (Reb et al., 2018), and conduct studies during the treatment phases of the cancer trajectory when symptom management needs are greatest (Howell, 2019).

Regardless of the limitations, the research is promising, and it is felt that nurses as health care providers should be formally taught coaching techniques, that includes motivational interviewing, to integrate in their clinical practice to educate and empower patients to self-manage the impact of cancer and cancer treatment (Coolbrandt et al., 2018; Fahey et al., 2018; Lewis & Zahlis, 1997; Lovell, 2014; Reb et al., 2017).

Limitations of the Integrative Literature Review

A number of limitations must be noted with this integrative literature review. First, only one electronic database, CINAHL Complete, was searched, limiting the comprehensiveness of this review. When replicating the study, a broader search could be considered to ensure pertinent literature has not been missed. Further, although the literature review process is iterative in nature and the search terms should be refined over time (Arksey & O'Malley, 2005; Braun & Clark, 2006, 2019), this literature review has not included recent references and therefore the extent since of the literature since 2019 to the present date is absent. Second, some references

were narrative descriptions of pending trials and therefore did not have reported outcomes. Excluding articles without reported outcomes should have been a consideration. While this does not indicate reporting error for this review, they do not provide outcome merit to provide direction. Third, as the author, I was the only individual who reviewed the articles. This decreases the rigor of the search process. Fourth, a theoretical framework was absent and is suggested in future self-management research.

Lastly, this integrative review was conducted as a requirement for my doctoral coursework. The scope of my research has narrowed significantly since then. However, the inclusion of the integrative review in this dissertation provides a foundational understanding for those reviewing the study. Further, I found the four self-management interventions and connecting concepts emergent from this integrative literature review important when exploring self-management curriculum for the study, and particularly interesting as an oncology nurse.

Conclusion: Nursing Interventions to Support Cancer Patient Self-Management

This integrative literature review sought to identify the nursing interventions provided to support persons with cancer in the self-management of their disease and health, if the self-management interventions impacted their health outcomes, and if health coaching as an intervention positively impacted patients' behaviour change. Four self-management support intervention themes emerged and were (1) educational (instructional or informational), (2) electronic healthcare technology, (3) cancer self-management support programs, and (4) health coaching. Very interestingly, intertwined and woven linking the four themes and reported by patients as being essential to self-manage were caring, empathy, and communication, including motivational interviewing.

In the majority of studies, researchers reported patient self-efficacy as being an important outcome measurement of self-management. All four interventions yielded a level of support to enable persons with cancer in the self-management of their disease and improved physical and / or psychosocial symptoms due to a diagnosis and treatment of cancer.

Health coaching was reported as an important self-management intervention that nurses can provide to support and improve symptoms due to treatment, function related daily activities, and self-efficacy. Coaching has improved health behaviour change in other chronic diseases and it was reported that nurses should be formally taught coaching techniques, including the provision of relational support (Dwardswaard et al., 2015).

Several limitations are noted with this integrative review. Limitations include using only one electronic data base for the literature search, a search date to 2019, narrative descriptive references of pending trials and therefore did not have reported outcomes, only one researcher reviewing the references, the absence of reporting the level of nurse providing the interventions and the countries in which the studies occurred, and the absence of a theoretical framework.

The cancer system lags in self-management programs and leaves patients at risk for suboptimal health and survival. Planning and development of self-management programming that is comprehensive and holistic with elements of strong communication, caring, empathy, and nursing support (Coolbrandt et al., 2018; Davis et al., 2019; Dwarswaard et al., 2015; Fahey et al., 2008; Hochstenbach et al., 2015, 2016, 2017; Howell, et al., 2017, 2019; Lewis & Zahlis, 1997; Lovell et al., 2014; Paterson et al., 2018; Peeters, et al., 2018; Petite et al., 2014; Ruland et al., 2013a, 2013b; Van Hecke et al., 2016) and including patients and family perspectives (Howell et al., 2019) is recommended. Researchers reported that patients cannot self-manage solely on their own and require support from healthcare professionals, relatives, and peers.

Coaching and consultation have been identified as a core implementation component to include in cancer self-management programs (Howell, 2019). Coaching cancer patients in symptom monitoring and self-care reduces the severity of cancer treatment side effects (Given et al., 2004), particularly if the intervention has focused on enhancing self-efficacy (Sikorski, 2007). Nurses are uniquely positioned throughout the cancer trajectory and educating nursing students and current practicing nurses in the fundamentals of cancer health coaching is recommended to include in their repertoire of skills (Chan et al., 2020; Howell et al., 2019). This will help to meet a growing number of cancer patients manage the acute effects of cancer as a chronic disease and adopt healthy behaviors to improve survival and overall quality of life (Howell et al., 2019).

Traditional (Narrative) Literature Reviews

The traditional method of summarising a field of research is referred to a traditional or narrative literature review (Britten et al., 2002). An author may conduct this type of review for reasons that include; to present general knowledge on a topic, demonstrate the history of development of knowledge on a topic, identify where evidence may be lacking, identify characteristics or relationships between key concepts from existing studies that are relevant to the topic, and justify why a topic as a problem should be investigated further (Aromataris & Pearson, 2014).

While the traditional (narrative) literature review provides a broad overview of a research topic, it is done so with no clear methodological approach (Baethge et al., 2019). In such a review, the selection of earlier literature may not adhere to a high standard of quality assessment and the author(s) summarize the work to make an informed judgement about the current state of knowledge (Arksey & O'Malley, 2005; Britten et al., 2002). A traditional literature review can therefore be considered subjective and are at risk for bias or systematic error (Aromataris &

Pearson, 2014). In conducting this type of literature review I had to maintain reflexivity because the review may have relied substantially on my pre-existing knowledge and experience.

Despite potential limitations, traditional literature reviews have utility in terms of providing an overview of a topic or issue and describing its underlying concepts and theories (Aromataris & Pearson, 2014; Munn et al., 2018). I therefore felt there was merit in their use to review qualitative and quantitative studies, grey literature including, expert opinion papers and reports on the topics of (a) social justice in the context of oncology self-management support, and (b) self-management support curriculum in baccalaureate nursing education.

Social Justice and Oncology Self-Management Support Nursing Curriculum: A Traditional Literature Review

Although there have been significant global advances, humanity continues to face disparities in levels of economic and social development, health, and well-being (Canadian Nurses Association, 2010). The World Health Organization's 2008 commission on the social determinants of health reported that social injustice is killing people on a large scale (World Health Organization, 2008). The Canadian Nurses Association defines social justice,

as equity in society. It is the equitable, or fair, distribution of society's benefits, responsibilities, and their consequences. Social justice focuses on the relative position of social advantage of one individual or social group in relationship to others in society, as well as on the root causes of inequities and what can be done to eliminate them.

(Canadian Nurses Association, 2010, p. 22)

Health equity refers to social justice in health. Health disparities are the measurable outcome or result of health inequities and are used to measure progress toward achieving health equity (i.e., populations with higher rates of cancer). Health disparities are not only unnecessary

and avoidable but are also considered unfair and unjust (Reutter & Kushner, 2010). Social inequities are the underlying determinant of health disparities and reflect a value orientation of social justice. Social inequities explicitly expose the cause of health disparities as being rooted in societal structures, institutions, and routines that create or sustain unfair differences between individuals or between social groups that result in unequal chances in life (Canadian Nurses Association, 2010; Reutter & Kushner, 2010).

The Canadian Nurses Association (2010) describes 10 key attributes used to define and assess social justice. These 10 attributes are: equity (including health equity), human rights (including the right to health), democracy and civil rights, capacity building, just institutions, enabling environments, poverty reduction, ethical practice, advocacy, and partnerships.

Social Determinants of Health (SDOH) refer to the nonmedical factors that influence health, including health-related knowledge, attitudes, beliefs, and behaviors (such as smoking) (National Academy of Medicine, 2021). The Canadian Nurses Association (2010) reports that SDOH are mostly responsible for health and access to health inequities. Examples of SDOH include education, employment, health systems and services, housing, income and wealth, the physical environment, public safety, the social environment (including structures, institutions, and policies), and transportation (Canadian Nurses Association, 2010). Health equity is achieved at the population level by addressing the SDOH, which addresses the underlying issues that prevent people from being healthy (National Academy of Medicine, 2021).

The nursing community has long focused on the social needs of people and communities (Kirkham & Browne, 2006; National Academy of Medicine, 2021). Caring is the essence of nursing, and health disparities are fundamentally the result of a lack of caring within society (Reutter & Kushner, 2010). Social justice is achieved through recognizing and acknowledging

social oppression and inequity and nurses' caring actions toward social reform (Matwick & Woodgate, 2017). Social justice nursing ensures that nurses keep central to their work the rights of the individuals, families, communities, and populations (van Daalen-Smith, 2019). Social justice is a core value underlying the nursing profession as a fundamental requirement of health for both the individual and society (Elliott & Sandberg, 2021; Matwick & Woodgate, 2016). Nurses witness the outcomes of health inequities everyday (Cohen, 2010) and have opportunities to affect social change through practice, leadership, policy, research, and education (van Daalen-Smith, 2019). Nurses must understand that effective self-management support is enabled through an individualized tailored approach and in the sociocultural context of each patient (Lovell et al., 2014). Given the emphasis on social justice, it was essential that I was knowledgeable about social justice in nursing education prior to entering the field for data collection.

Oncology Patient Self-Management Support and Social Justice: Do They Intersect?

A search was conducted with the aim of identifying literature pertaining to cancer self-management support with nurse involvement and in the realm of social justice. A broad search of the electronic database, CINAHL Complete (Cumulative Index to Nursing and Allied health Literature, 1982 to present) was conducted in May 2022. The following combination of text words and subject headings: "self-management" and "nursing" and "social justice" and "cancer" were used to search abstracts and full text articles. The search yielded no results. A second search was conducted using the following combination of text words and subject headings: "self-management" and "equity" and "cancer" and "nursing", again yielding no results. A third search was conducted using the following combination of text words and subject headings "self-management" and "equity" and "cancer", yielding four full text articles (Baade et al., 2010; Cohen et al., 2020; Fenlon et al., 2015; Hamel et al., 2021). None of the four articles include

nurses. Hamel et al. (2021) are conducting a longitudinal randomized controlled trial to test the effectiveness of the electronic app, DISCO (DIScussions of Cost App) on the outcomes of economically and racially/ethnically diverse cancer patients' populations. One outcome measure includes self-efficacy. The researchers aimed that that the DISCO App will increase the frequency and quality of patient-initiated cost discussion, which will increase social work/financial navigation referrals, social work/financial navigation referral uptake, and patient self-efficacy for managing treatment cost which will in turn reduce financial toxicity and improve adherence. A limitation of this study is that the focus is on oncologists, rather than nurses, who are critical in helping patients navigate financial issues related to treatment and survivorship. The second article, Cohen et al. (2020), reviewed ambulatory oncology gynecologic topics such as safety and mental health, reproductive life planning, sexually transmitted infections, and routine screening for breast and cervical cancer. The researchers recognized that the COVID-19 pandemic afforded ambulatory clinicians with opportunities, such as telephone visits and telemedicine, to expand care to vulnerable populations to improve health equity. The third article, Baade et al. (2010), conducted a longitudinal study investigating the association between prostate cancer diagnostic and treatment outcomes and key area-level characteristics and individual-level demographic, clinical, and psychosocial factors. Information about the diagnostic and treatment patterns of men diagnosed with prostate cancer is felt to be crucial for rational planning and development of health delivery and supportive care services to ensure equitable access to health services, regardless of geographical location and individual characteristics. Lastly, Fenlon et al. (2015) provide an overview of the effectiveness of key interventions that could assist patients to help themselves after treatment. The researchers recognize that there is a need to prioritize the funding of these financially viable self-

management strategies to ensure equity of access to ensure the interventions are available to those in need.

Exploring Social Justice in Self-Management Support Literature

It is important for nurses to provide individualized self-management support to patients with cancer (Howell et al., 2019; Lovell et al., 2014). Because the literature in the area of social justice and cancer nursing self-management support was extremely limited, the literature on diabetes as a chronic disease was reviewed. The diabetes literature was selected because it had the most published literature on social justice in the context of a chronic disease. Gonzalez et al. (2016) reported factors as barriers to self-management of individuals with diabetes who are socially disadvantaged, and which affected their treatment outcomes and control and risk for complications. Barriers included individuals experiencing low-income, low education levels, cultural beliefs and norms, and individuals belonging to an ethnic minority. Socio-demographic factors (age, sex, race/ethnicity, marital status, education, income) are underestimated influences on diabetes patients' self-management engagement (Adjei Boakye et al., 2016). Although cultural factors may influence diabetes self-management and treatment outcomes among ethnic minorities, researchers have reported that the widest cultural gap is between patients and their diabetes care providers (Gonzalez et al., 2016) and prioritizing the social determinants of health in diabetes self-management education programs is recommended (Brewer et al., 2019).

Understanding that it is important for nurses to provide individualized self-management support to persons with cancer (Howell et al., 2019; Lovell et al., 2014), it was felt prudent to explore if the 32 articles (Reb et al., 2017 overlapped in two themes) revealing four nursing self-management interventions, included self-management support with a social justice lens. Drawing upon the diabetes self-management literature (Adjei Boakye et al., 2018; Brewer et al., 2019;

Gonzalez et al, 2016) and seminal pieces of literature on nursing social justice (Canadian Nurses Association, 2010; National Academy of Medicine, 2021; World Health Organization, 2008), key words used to search the 32 references included, but are not limited to: social justice, health equity, health disparity, health inequality, social determinants of health, marginalization, poverty, socio-cultural, cultural norms, socio-economic status, income, race, ethnicity, ethnic minorities, age/aged, old, marital status, and education level.

As reported in section 2.1 of this literature review, 33 full-text articles revealed four themes of self-management support provided by nurses to patients with cancer. Reb et al. (2017) overlapped in two themes. Therefore, the 32 full text articles on self-management support interventions by nurses were reviewed to determine if social justice was considered and discussed by the researchers (see Appendix D). Eight articles (25%) did not include any of the key search words. Twelve articles (38%) reported the key words socio-cultural, cultural norms, socio-economic status, income, race, ethnicity, ethnic minorities, age/aged, old, marital status, and education level in participant demographics of the studies (9 of 12 articles) or in the body of the article (3 of 12 articles) but did not mention any key words in the discussion on the implications of self-management support by nurses. Twelve of the 32 articles (38%) included in the discussion one or more of the key words: socio-cultural, cultural norms, socio-economic status, income, race, ethnicity, ethnic minorities, age/aged, old, marital status, and education level.

Within the first theme of *Traditional Self-Management Educational Interventions*, key words were discussed as implications for nursing self-management support in four of the six articles (Dwarswaard et al., 2015; Howell et al., 2017; Paterson et al., 2018; Van Hecke et al., 2017). Self-management support education was felt that it should be tailored to the patients'

individual needs, characteristics, and cultural diversity (Howell et al., 2017). Dwarswaard et al. (2016) recognized cultural appropriateness but reported that Western and English countries demonstrated a superficial understanding of the issues. The inclusion of family and partners in validated questionnaires (Paterson et al., 2018) and the integration of self-management support interventions in low socio economic chronically ill patients was reported as lacking (Van Hecke et al., 2017). Within the second theme of *Electronic Platform Educational Interventions*, key words were discussed as implications for nursing self-management support in three of eight articles (Hernandez Silva et al., 2018; Ruland et al., 2013a, 2013b). The systematic review conducted by Hernandez Silva et al. (2018) aimed to assess the effectiveness of an electronic app on self-management. The researchers reported that no sociodemographic data was revealed and recognised that the data should be assessed to identify characteristics associated with improved outcomes and populations most likely to benefit (Hernandez-Silva et al., 2018). Patients with higher education and socioeconomic status were recognized to be more likely to have internet access and were reported as not being representative of the general population (Ruland et al., 2013a). Further, it was recognized that future research is needed to investigate the different components required to support patients with different personal, social, cultural, and illness characteristics (Ruland et al., 2013b). Within the third theme of *Coordinated Self-Management Programs*, key words were discussed as implications for self-management in one of five articles (Howell et al., 2019). The researchers included family in their systematic review question about populations being targeted for the implementation of self-management support and reported that no scoping review of implementation studies on self-management support in cancer care was found (Howell et al., 2019). Within the fourth theme of *Health Coaching Self-Management Intervention*, key words were discussed as implications in four of thirteen articles (Beck et al.,

2017; Koller et al., 2013b; Lovell et al., 2014; Petite et al., 2014). Researchers reported patients and their caregivers as the key persons in interventions that support pain self-management (Koller et al., 2013b) and coaching could be tailored to the patient or family (Beck et al., 2017). Petite et al. (2014) reported that the study participants were of a higher socioeconomic status and were less willing to participate in the study when there was no financial benefit. Although the researchers felt the potential impact of nurse coaching to develop self-management skills of patients with lung cancer, they recommended that research should offset financial limitations and address social needs for the participation support of patients (Petite et al., 2014). Clinicians need to be aware of both the internal and external resources of each individual and consider his or her sociocultural context (Lovell et al., 2014).

It is important to note that none of the 32 articles included the key words: social justice, health equity, health disparity, health inequality, marginalization, social determinants of health, or poverty. I believe the absence of these social justice key words warrants further investigation in the context of self-management support interventions for persons with cancer. To ensure oncology nurses and nursing students provide effective self-management support, it will be critical to apply a social justice lens for each patient to achieve a sociocultural individualized tailored approach.

Social Justice in Nursing Curriculum

An assessment of an individual's social determinants of health is an essential component of holistic patient care. Each factor can contribute to or detract from an individual's or family's health, and therefore, can be a major contributor to health disparities. Social justice is an idea that many professions, especially those related to health care, identify as necessary to incorporate into practice (Hellman et al., 2018). At a fundamental grass roots level, nursing has always

adopted social justice in its education. Social justice has been identified as a professional value by the Canadian Nurses Association, and the development of a professional value such as social justice is a long-term process that starts with professional nursing education (Habibzadeh et al., 2021; Matwick & Woodgate, 2016). Teaching social justice concepts is necessary to prepare undergraduate nursing students to address health care disparities (Elliott & Sandberg, 2021). Nurse educators must approach social justice in the context that every nursing student will most likely encounter patients from vulnerable populations, such as those living in poverty and with health disparities (Hellman et al., 2018). Social justice as a professional value is suggested to be incorporated throughout the curriculum (Einhellig et al., 2015; Elliott & Sandberg, 2021; Porter et al., 2020) using traditional and non-traditional teaching strategies (Elliott & Sandberg, 2021). Students can be further immersed in the concept with each subsequent semester (Einhellig et al., 2015). I feel that immersion of social justice in the context of oncology patient self-management support by nurses should be considered.

Oncology Patient Self-Management Support in Baccalaureate Nursing Curriculum: A Traditional Literature Review

Nurses educated and skilled in self-management support of chronic diseases such as diabetes, have shown to improve disease control, reduce symptom severity, improve patients' overall wellness, and lower health care utilization and costs (Hammer et al., 2015; Health Council of Canada, 2013; Levit et al., 2013). However, self-management support education for nurses is rarely offered as professional development in cancer programs and is very limited in undergraduate and graduate curricula (Chan et al., 2020; Duprez et al., 2017).

A search was conducted in CINAHL (Cumulative Index to Nursing and Allied health Literature) Plus with Full Text, 2012 to present, to broadly identify full text articles pertaining to

nursing self-management support education in undergraduate nursing curriculum. The following combination of text words were used: “oncology” or “cancer” and “nurse” or “nursing” in the article title and “self-management” or “self-management support” and “baccalaureate curriculum” or “undergraduate curriculum” in the article text. The search yielded five results, four of which were excluded due to being publications of abstracts or poster presentations from conference presentations only. The one remaining full text article (Rose, 2018) was excluded because the search term “undergraduate curriculum” does not refer to nursing education curriculum and was only found in the reference list. A hand search identified one publication on the need for curriculum development of cancer nursing self-management support education (Chan et al., 2020). A hand search identified four articles pertaining to nursing self-management support education of chronic diseases (Duprez et al., 2017; McCleary et al., 2016; Sinclair et al., 2020; van Hooft et al., 2018).

Cancer is a complex chronic disease projected to affect 21.4 million individuals worldwide by 2030 (Soerjomataram et al., 2012). Cancer patients struggle to manage the physical, psychosocial, and lifestyle changes as a consequence of cancer and its treatment, and like other complex chronic diseases, the burden for patients is tremendous and its related costs are unsustainable in the current health care system (Howell et al., 2017; Wong-Rieger, 2011). Greater emphasis is therefore now focused on the routine provision of cancer self-management support to enable and empower cancer patients to play a central role in the management of their disease and recovery of their health (Howell et al., 2017; 2019; Levit et al., 2013; McCorkle et al., 2011). Self-management is integral to person centered cancer care and is reported as an individual’s ability to manage the physical and psychosocial consequences and lifestyle changes inherent with a chronic condition (Barlow et al., 2002). Self-management support is reported as

complementing traditional patient education by health care providers to improve knowledge of the disease but differs by aiming to motivate patients to be active participants in their care. Further, self-management support focuses on patients' personal preferences, improves problem-solving skills, and builds self-confidence that helps them to effectively self-manage their disease (Adams et al., 2004; Barlow et al., 2002; Health Council of Canada, 2013; Howell et al., 2019). Health coaching is reported as self-management support delivered by health care providers trained in behavior change theory, motivational strategies, and communication techniques that are used to assist patients to obtain skills and develop intrinsic motivation (Howell et al., 2017; Wolever et al., 2013) and has shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Wolever et al., 2010, 2013). Oncology nurses are ideally positioned through daily patient interactions to provide self-management support through health coaching and the use of motivational interviewing techniques to enhance patient's self-efficacy to meet their intended health goals (Bandura, 1997b; Fahey et al., 2008; Given et al., 2004; Health Council of Canada, 2013; Sikorskii et al., 2007). An urgent need for research in baccalaureate nursing education exists to foundationally prepare students for the future to enable patients in the self-management of cancer as a chronic disease (Chan et al., 2020; Duprez et al., 2017; van Hooft et al., 2018).

Chapter Three Summary and Conclusion

Chapter three presented findings from an integrative literature and two traditional literature reviews on three important areas of cancer nursing self-management support. The review of the literature aimed to (a) gain an understanding of the nursing self-management support interventions being provided by clinical nurses, (b) identify if scholarly literature existed

on social justice in the context of oncology self-management support, and (c) understand if an evidence gap existed on baccalaureate nursing self-management support curriculum.

Section 3.1: This integrative literature review aimed to identify interventions provided by nurses to support patients in the self-management of their cancer as a chronic disease and sought to determine if a greater opportunity should exist for nurse's health coaching as a self-management intervention. Four themes emerged and were, educational (instructional or informational) interventions, electronic device interventions, self-management support programs, and health coaching. Intertwined and linking the four themes and reported by patients as being important were caring, empathy, communication, motivational interviewing, and self-efficacy as an outcome indicator of self-management. All interventions provided by nurses to patients with cancer yielded a level of support. Health coaching was identified as one of the four interventions. Self-management health coaching is felt to be an imperative core implementation component for nursing students to include in their repertoire of skills to meet the growing number of cancer patients who manage their chronic disease (Howell et al., 2019). Although limitations are noted, this integrative literature review provided a foundation for my research by identifying the types of self-management support interventions being provided by oncology clinical nurses.

Section 3.2: This traditional literature search aimed to determine if social justice is included in the literature on cancer self-management support provided by nurses. The review revealed that social justice is very limited in self-management literature and no articles were identified in the realm of social justice and oncology self-management support provided by nurses. Further, the 32 articles from the systematic review revealing cancer self-management support interventions by nurses, were reviewed. None of the 32 articles included the key words: social justice, health equity, health disparity, health inequality, marginalization, social

determinants of health, or poverty. This absence warrants further investigation in the context of social justice and self-management support for persons with cancer. Social justice is reported as being a fundamental professional nursing value, and as such, researchers suggest it be incorporated throughout nursing curriculum. To ensure student nurses and oncology nurses provide effective self-management support, it will be critical that they apply a social justice lens to achieve a sociocultural individualized tailored patient approach.

Section 3.3: This traditional literature review aimed to broadly identify and review scholarly literature on nursing self-management support education in undergraduate nursing curriculum. The search yielded no literature. A hand search identified one article reporting the need for curriculum development of cancer nursing self-management support education (Chan et al., 2020). This review identified an evidence gap in preparing nursing students to enable persons with cancer the self-management of their chronic disease and has recommended the need for curriculum development of cancer nursing self-management support education (Chan et al., 2020).

This review of the literature revealed four self-management interventions provided by oncology nurses and a significant evidence gap for the need of cancer self-management support nursing education was revealed. Nurses are uniquely positioned to provide self-management support care throughout the cancer trajectory. It is imperative that oncology nurses include cancer self-management health coaching in their repertoire of skills to meet the growing number of cancer patients manage their chronic disease. Integrating or developing self-management support curriculum for student nurses, including enhanced communication, motivational interviewing techniques, and self-efficacy and caring theories, is recommended. Research is required to explore what, if anything, is being taught in nursing baccalaureate programs to

potentially ensure nursing students are equipped to assist a growing number of cancer survivors. When exploring if self-management curriculum exists in baccalaureate nursing programs, determining if social justice is embedded in the curriculum is required. An urgent need for research in baccalaureate nursing education exists to foundationally prepare students for the future by building patients' capacity to self-manage the effects of cancer as a chronic disease (Chan et al., 2020; Duprez et al., 2017; Howell et al., 2019; van Hooft et al., 2018). This will allow for strategies for patients to actively manage the acute effects of cancer and adopt healthy behaviors to improve survival and overall quality of life. The next chapter, chapter four, provides the philosophical underpinnings and research methodology of the study.

Chapter 4: Research Methodology

Qualitative research is a form of social inquiry centered on understanding and interpreting how participants in their natural setting make sense of their experiences in the world to gain a strong understanding of the research questions and topics (Creswell, 2013; Merriam & Tisdell, 2016). This qualitative research study focused on looking for common themes or trends across the experiences and perspectives of the study participants (Creswell, 2013) to gain an understanding of the extent and impact of their understanding and experiences of oncology self-management support education in a baccalaureate nursing program.

An exploratory single case study design was selected as the methodology for this qualitative research study. Yin (2018) reports that as a research question increasingly seeks to explain some contemporary circumstances of *how* and *why* of a social phenomenon, the use of case study research becomes increasingly relevant. Exploratory case studies are appropriate to address the question of *what*, meaning it is also relevant for evaluating the presence or absence of relevant information central to the case (Yin, 2018). The rationale for using a single case as an appropriate design is the *common case*, where the objective was to capture the circumstance and conditions of an everyday situation because of the lessons it provided (Yin, 2018) about faculty, nurse educators, and nursing students' experiences of teaching, learning, and their understanding oncology patient self-management support. For this qualitative research project, the use of an exploratory single case study approach provided a meaningful way to answer the research question. The research question being, *what, how, and why* does a baccalaureate nursing program provide oncology self-management support education, including health coaching as a self-management support intervention?

Prior to data collection, a gap was identified in the scholarly literature on oncology self-management support in nursing education. This study aimed to gain an understanding of the extent, if any, that pedagogical approaches of oncology self-management support interventions, including health coaching as an intervention, exist and the impact, if any, upon baccalaureate nursing curriculum, its faculty, educators, and students. Specifically, the purpose of this qualitative case study is to explore *what*, *how*, and *why* does a baccalaureate nursing program educate nursing students on oncology self-management support interventions to enable oncology patients with the self-management of their cancer as a chronic disease.

This chapter of my dissertation discusses the philosophical underpinnings of qualitative research and case studies, and how a qualitative case study design was appropriately suitable to gain an in-depth understanding of the extent, if any, of oncology self-management support education in a baccalaureate nursing program. The chapter also describes the research methods used to conduct the research study, including participant and artifact sampling, data collection, data analysis, and how methodological rigour and trustworthiness and principles of ethics were addressed.

Paradigmatic Approach

This exploratory case study was grounded in a constructivist paradigm (Merriam & Tisdell, 2016; Patton, 2002). The constructivist methodology enabled me to appreciate the unique individual constructions made through my interactions as the researcher and the study participants (Patton, 2002). As a qualitative constructivist researcher, I recognized that the faculty, nurse educators, and nursing student research participants were knowledge holders who could contribute vast and valuable information that was unknown to me (Creswell, 2013). Through the investigation of the study, insights were gained from the participants and course

documents about the extent of oncology self-management support education in a baccalaureate nursing program. The semi-structured conversations that occurred within the interview discussion allowed me as the researcher, and the participant, to actively engage in the construction of knowledge about themselves and the social world (Smith & Sparkes, 2016; Sparkes & Smith, 2014). Through the conversations, new knowledge could be analyzed to allow “coming to know” participants’ experiences and insights about the complexity of their decisions, perceptions, values, beliefs, and motivations (Smith & Sparkes, 2016) on oncology self-management support education as part of undergraduate nursing curriculum.

Researchers arrive at truth by an interaction of comparing, and contrasting, participants shared lived experiences and through dialectical reasoning (Guba & Lincoln, 1994; Patton, 2002). My goal was to establish understanding through consensus construction, where the findings were better informed than previous constructions, and as the researcher, I contextually appreciated and respected the culture and language from which the faculty, nurse educators, and nursing student participants embodied (Guba & Lincoln, 1994). This construction of new knowledge and information from the participants’ realities provided novel insights into their lived experiences (Daly, 2007; Yin, 2018) and allowed me to gain an understanding of the extent of oncology self-management support education in the baccalaureate curricula.

Researcher’s Positionality

The researcher’s choice of paradigm lays down the intent, motivation, and expectations for the research to be conducted (Mackenzie & Knipe, 2005). This research inquiry was conducted according to the values, world beliefs, and assumptions that I held as the researcher, as I understood that I was situated behind the theoretical paradigms and assumptions and approached my research study with my own cultural competence and socioeconomic

perspectives (Denzin & Lincoln, 2018). This research was grounded in a constructivist paradigm, as the research sought to understand the world of oncology survivorship self-management care in which I lived (Creswell, 2013). As such, I recognized that the study participants held knowledge and could contribute to vast and valuable information of which I was unaware. Additionally, the different constructions of my own social realities allowed for the creation and interpretation that I assigned to objects through the interactions I had with the study participants (Sparkes & Smith, 2013). Through these interactions and my own interpretations of the data, research findings on oncology self-management support curricula were co-created and constructed (Guba & Lincoln, 1994). My clinical experience of providing survivorship care to breast and colorectal cancer patients demonstrated to me an understanding that the delivery of nursing self-management support builds capacity for cancer survivors to self-manage their cancer as a chronic disease. Recognizing my positionality, and the selection of a qualitative methodology for this study, the research findings provided information and opportunities to gain an understanding from those directly engaged with teaching and learning of oncology self-management support curricula.

Qualitative Research Design Rationale

Qualitative research data is collected in natural settings and a qualitative researcher makes sense of the phenomena in terms of the meanings that people make of them (Denzin & Lincoln, 2018). It is appropriate to use qualitative research when a problem or issue needs to be explored to obtain a complex, detailed understanding that can be established by talking directly with people, rather than using predetermined information from the literature (Creswell, 2013). A positivist approach assumes that reality is observable, stable, and measurable (Merriam & Tisdell, 2016) and in my study there was no single, observable reality. The rigid perspective of a positivist approach would not allow for the reality to be socially constructed through faculty,

nurse educators, and nursing students shared experiences. Qualitative researchers are interested in understanding the meaning people have constructed (Merriam & Tisdell, 2016). They use an emerging qualitative approach to inquiry by collecting data in a natural setting and then use data analysis that is both inductive and deductive to construct knowledge by establishing patterns and themes (Creswell, 2013). This aligns with my own view as a researcher grounded within a constructivist paradigm because I recognized that those participating within the research inquiry held knowledge and could contribute information that I was unaware of (Creswell, 2013; Sparkes & Smith, 2014).

This qualitative methodology research study allowed for deeply exploring and gaining a detailed understanding of the ways that the participants made sense of their experiences with teaching and learning self-management support education in their setting of a baccalaureate nursing program (Creswell, 2013). As a qualitative researcher, I conducted the data collection by examining the course documents and by interviewing participants using an interview guide that I designed with open-ended questions and further guided by a theoretical framework (Chan et al., 2023) and current literature (Creswell, 2013). Having several data collection methods allowed for a comprehensive exploration as to *what*, *how*, and *why* nursing students are educated in a baccalaureate nursing program on oncology self-management support. This inductive and deductive process of qualitative research generated rich, robust, descriptive data and assisted me in gaining a better understanding of the commonalities of participants' experiences (Merriam & Tisdell, 2016) in my study.

Exploratory Case Study Methodology Rationale

A qualitative exploratory single case study design was selected as the methodology for this research project. Yin (2018) defines case study methodology as “an empirical method that

investigates a contemporary phenomenon (the case) in depth and within its real-world context, especially when the boundaries between the phenomenon and context may not be clearly evident” (p. 15). A case study design focuses on a single phenomenon within its real-life context, allowing for an in-depth exploration from multiple perspectives, and revealing the complexity and uniqueness of a particular project, policy, or system (Smith & Sparkes, 2016; Yin, 1999). A case study was an appropriate mode of inquiry because as a researcher I wanted to gain a deep and meaningful understanding of the extent of oncology self-management support education in a baccalaureate nursing program as a single phenomenon within its real-world context (Smith & Sparks, 2016; Yin 1999; Yin 2018). Research informed by theories of social constructivism align with the use of case study methodology because case studies utilize multiple sources of data that aid in the construction of new knowledge (Yin, 2018). As the researcher, I was interested in understanding the meaning of this phenomenon and meanings are not discovered but rather constructed by human beings as they engage with the world they are interpreting (Merriam & Tisdell, 2016). The theoretical framework of social constructivism aligned well with this case study because the study utilized three groups of participant interviews, course documents, and journal notes as multiple sources of data evidence that constructed a detailed description of what was being studied within its context.

Evidence acquired through this exploratory case study allowed for the development of a relevant stance about the limited information that was available to date about oncology self-management support education in a baccalaureate program (Yin, 2018). The rationale for using a single case as an appropriate design is the *common case*, where the objective was to capture the conditions and circumstances of the everyday situation of study participants (Yin, 2018). The study participants could provide experiential insights on the teaching, learning, and

understanding of oncology patient self-management support education and how this translates into nurses' application of self-management support in clinical practice. Exploratory case studies address the question of *what*, which is a form of *to what extent*, and is relevant for evaluating the presence, or absence, and prevalence of relevant information central to the case (Yin, 2018).

The researcher's selection of a methodology considers the dimensions of the topic and substance, voice, and text (Mills & Birks, 2014). A qualitative research study guided by case study methodology allowed for an in-depth exploration of current oncology self-management curricula at a baccalaureate nursing program in eastern Canada. Further, the research, utilizing an exploratory case study as a methodological approach, has contributed to closing a gap in the scholarly literature by: (a) comprehensively exploring and reporting on the extent of teaching, learning, and understanding of oncology self-management support education in a baccalaureate nursing program to develop nursing students specific competencies that translate into the application of self-management support in clinical practice (Chan, 2020; van Hooft et al., 2018; Yin, 2018), and (b) the resultant impact on a baccalaureate nursing program, its nursing students, and the educators (Chan et al., 2020, 2023).

Setting for the Research Case Study

This study was conducted at one university baccalaureate nursing program in eastern Canada. The school of nursing was purposely chosen based on the following inclusion criteria: (1) the program received accreditation from the Canadian Association of Schools of Nursing; (2) the program provided theoretical oncology curriculum content; and (3) the program provided clinical rotations in diagnostic oncology, or surgical oncology, or systemic therapy, or radiation therapy, or primary care settings. The university selected as the case for this study met the inclusion criteria. The undergraduate nursing program was established in 1926 and has evolved

from a small department to a flourishing school with approximately 1000 students engaged in campus and distance education programs. Employed within the school of nursing at the time of the study were, twenty-two nurse educators, one director of nursing, one associate director of nursing, and sixteen professors. National awards of excellence and top accreditations have demonstrated the school's commitment to student development and the delivery of exceptional learning experiences (C. MacDonald, personal communication, April 21st, 2023). The baccalaureate program was therefore an ideal case for studying the phenomena.

Bounding the Case

A case is “bounded” by the specific selection of the time, place, and entity of the phenomenon (Sparkes & Smith, 2014). The bounded case is a specific group or program that engages with the phenomenon being investigated (Merriam & Tisdell, 2016). Creating boundaries frees the researcher from exploring all content surrounding the case's experiences, helps to identify relevant information, and allows for greater investigative depth (Smith & Sparkes, 2016; Yin, 2018). “The unit of analysis, not the topic of investigation, characterizes a case study” (Merriam & Tisdell, 2016, p. 38). Therefore, the bounded case assists in determining the scope of data collection and how to distinguish data about the subject of the case study (the phenomenon) from data external to the case (the context) (Yin, 2018).

In this study, data pertaining to the case was bounded by the uniqueness of the population which enabled a focused analysis (Merriam & Tisdell, 2016). Because I was exploring oncology self-management support education in a baccalaureate nursing program, I bounded the case as being distinguished from the outside through conditions, such as participants who taught oncology and/or self-management support curriculum (faculty and nurse educators) and participants who learned oncology and/or self-management support curriculum (nursing

students). I also bounded the case by examining documents (syllabi, lectures, textbooks, readings) within four courses that offered teaching and learning in oncology and/or self-management support.

Plausible Rivals

Yin (2018) supports the integration of rival positions in all case study research. As the researcher, it was important to consider plausible rival explanations to bolster the quality of the case study (Yin, 2018). While looking at the study design and when analyzing the data (Yin, 2018), existing literature was used as rivals as counter arguments, as the literature could suggest different positionalities of oncology self-management support education. I compared my case study (the target) with nursing education programs (plausible rivals) to support my proposition, which was to explore the extent and impact of oncology self-management support education in a baccalaureate nursing program. I remained attentive to the literature in the context of other diseases, such as diabetes or other chronic diseases. I also explored plausible rivals within the baccalaureate program being studied. Examples of doing this included identifying potential self-management strategies (e.g., communication techniques) that are taught for other chronic diseases such as diabetes.

Methods and Plan

This section of chapter four provides an overview of the research methods for data collection utilized to conduct the study on exploring self-management support curriculum in a baccalaureate nursing program. This section discusses the study participants and accrual, data collection sources (semi-structured interviews, course syllabi, course lectures, textbooks, readings), self-reflective journaling, data analysis, and rigour and validity.

Methods

Data collection methods can help to gain an insightful perspective from the participants, illustrate new dimensions and information about the topic, and address key events pertaining to the research question (Yin, 2018). My goal of conducting this study was to fill the identified gap in the literature by answering my research question; *What, how, and why* are nursing students prepared in a baccalaureate nursing program on oncology self-management support, including health coaching as a self-management support intervention? The data collection methods helped to determine the commonalities that existed and as such, data could be organized through a deductive and inductive process into themes that cut across all the data sources to obtain a deep understanding (Creswell, 2013).

A strong case study relies on as many sources as possible, as the use of multiple sources of evidence allows for an in-depth study to understand a phenomenon in its real-world context (Yin, 2018). The multiple data sources for the study were: Ten semi-structured interviews across three groups of study participants (faculty, nurse educators, nursing students), approximately 562 course documents (syllabuses, lectures, textbook, and required and optional readings) across four courses, and 35 reflective journal entries. These multiple data sources were used to record the real-world events and delve deep to explore personal accounts and participants lived experiences (Yin, 2018). On June 22nd, 2023, my supervisor and I met onsite with the Director of the school of nursing to discuss the research study. The Director felt that the case study was feasible and granted permission to conduct the study at the school of nursing.

Participants

A purposeful and snowball sampling technique was used to recruit a sample of ten participants who met inclusion criteria, consisting of three faculty lecturing professors, two nurse

educators, and five nursing students to achieve maximum variation (Creswell, 2013; Merriam & Tisdell, 2016). According to Creswell and Plano Clark (2011), purposeful sampling involves identifying and selecting individuals or groups of individuals who are especially knowledgeable about or experienced with a phenomenon of interest. In snowball sampling, research participants are asked if there is anyone else who might be interested participating in the study (Gillis & Jackson, 2002). Inviting three participant groups that included faculty, nurse educators, and nursing students, allowed for a robust, “real world” representation to explore *what, how, and why* a baccalaureate nursing program provides education to nursing students on oncology patient self-management support interventions (Yin, 2018).

Table 1

Three Participant Groups for The Research Study

Role in the BScN Program	Number of Years Teaching (Faculty, Nurse Educator) Or Year of Program Study (Nursing Students)
Faculty Member	35 years
Faculty Member	7 years
Faculty Member	>20 years
Nurse Educator	2 years
Nurse Educator	2 years
Nursing Student	Fourth Year
Nursing Student	Fourth Year
Nursing Student	Fourth Year
Nursing Student	Fourth Year
Nursing Student	Fourth Year

As shown in Table 1, this study included ten participants from three participant groups. Participants met the following inclusion criteria: Participants were English speaking adults (18 years and older), agreed to participate in the study, provided study consent, and met specific criteria for each of their respective participant groups. Lecturing faculty professors were purposively selected as participants for this study if they were employed and working on campus

full-time for at least one year between February 2023 and January 2024. Lecturing faculty professors were selected if they taught theoretical oncology curricula and/or self-management support curricula, if they understood how the curriculum is selected for the baccalaureate program, and if they understood the accreditation process for baccalaureate nursing curriculum. These lecturing faculty professor participants could share their experiential insights and perspectives on the extent and impact of teaching oncology self-management support curriculum in the program.

Nurse educators were purposively selected as participants for this study if they were employed full-time for at least one year and working on campus between February 2023 and January 2014. The nurse educator participants were selected if they provided clinical education within the simulation labs, were responsible for overseeing nursing students in clinical areas, had knowledge about nursing student's interactions with patients (e.g., post clinical huddle discussions). These nurse educator participants could share their experiential insights and perspectives on the extent and impact of teaching oncology self-management support in the program.

Nursing students were purposively selected for this study if they were an undergraduate nursing student registered full-time, pursuing studies on campus, received instructional theoretical oncology content, and completed clinical time in an area of cancer (i.e., diagnostic imaging or clinic, surgery (operative or post-operative), chemotherapy, radiation, and/or community primary care clinics). The nursing students were in third or fourth year. The rationale for recruiting nursing student participants in the third or fourth year, rather than being first or second-year students, was because they had a longer duration of time in their program to have received the theory and/or clinical experience to potentially understand oncology patient self-

management. These nursing student participants could share their experiential insights and perspectives on the extent and impact of learning oncology self-management support in the program.

Clinical nurses working in the clinical environments and acting as preceptors to nursing students as potential influencers of nursing students' application of self-management support, were not approached for recruitment for this study. The rationale for excluding clinical nurses from selection was because employees within the clinical environment are not concerned with, or aware of, the curriculum being taught in a baccalaureate program. Moreover, interviewing participants this broadly goes beyond the scope of this study. Rather, the purposively selected participants could provide experiences and insights to address the research question of this study.

Following Research Ethic Board (REB) approval from the university (see Appendix E), participants who met inclusion criteria were accrued for the study. The Administrative Assistant to the Director of the school of nursing emailed the Invitation to Participation (see Appendix F) to faculty, nurse educators, and nursing students within the school of nursing. There were 186 third and fourth-year nursing students, approximately 20 faculty, and 18 nurse educators at the baccalaureate school of nursing (M. Alex, personal communication, June 22nd, 2023) from which participants were accrued. I contacted each of the ten participants via email. Signed consent (see Appendix G) and a completed demographic form (see Appendix H-Appendix J) were returned to me via email prior to each participant's interview, and this was acknowledged as an agreement to participate in the study. Convenient interview times were confirmed and scheduled, and calendar invitations were sent via email to the ten participants. For the seven interviews conducted virtually, a secure link using Microsoft Teams was included within the calendar invite. Three

interviews conducted in-person were audio-taped recorded using Microsoft Teams. The seven remaining interviews were virtually conducted and audio-taped using Microsoft Teams.

Semi-Structured Interviews

Semi-structured interviews require a pre-planned interview guide consisting of open-ended questions (Yin, 2018). The interview guide provided structure to the interview by guiding the conversations but also allowed each participant to feel a degree of flexibility when engaging with me as the researcher to ensure details that support the research questions were revealed (Yin, 2018). The semi-structured pre-planned interview guide for the faculty, nurse educators, and nursing students in this study were designed with open-ended questions and probes. The open-ended questions were organized in relation to the topic of conversation specific to the interview and in an effort to draw upon the distinct experiences and insights of the participant. The interview guide was designed using the theoretical framework, scholarly literature, and the 10 competencies and 42 performance criteria across six domains outlined in the Chan et al. (2023) Competency Framework for Cancer Nurses Providing Self-Management Support. Interviews invited participants to tell stories, accounts, or descriptions about their perspectives, insights, and experiences in relation to the research question(s) (Smith & Sparkes, 2014, 2016). The interviews were the primary source of data collection because I was exploring and collecting information on faculty, nurse educators, and nursing students' experiences on the extent and impact of oncology self-management support education in their baccalaureate nursing program.

The three lecturing faculty participants were interviewed to gain insight on their experiences of teaching self-management support education curriculum to nursing students (see Appendix H). One of the three lecturing faculty participants was a curriculum leader in the baccalaureate program who could also provide an understanding of their experiences of self-

management support education curriculum from the perspective of national accreditation expectations. The nurse educator participants were interviewed to gain insight on their experiences of teaching self-management support education during simulation labs and knowledge about nursing student's interactions with patients (see Appendix I). The nursing student participants were interviewed to gain insight on their experiences of being educated and learning about oncology self-management support curricula (see Appendix J). This sample of participants supported the intention of the case study on understanding common experiences across participants by obtaining similar experiences, and repeating them over and over (Yin, 2018).

Course Documents

Various sources of evidence for case study research are highly complementary and therefore, good case study research relies on as many sources as possible (Yin, 2018). To gain an in-depth exploration on *what*, *how*, and *why* self-management support education was provided, course documents were examined. Four documents as data sources were the course (a) syllabus, (b) class lectures, (c) textbook readings, and (d) required and optional readings.

On July 5th, 2023, the Director of the school of nursing reviewed this case study with nursing faculty during a faculty meeting. Following the meeting, the Director reported that four courses were identified and agreed upon by faculty members as having oncology, chronic disease, and/or self-management and self-management support content, and therefore suitable for the study. Three of four professors granted me access to their university Moodle portal where the course documentation is housed, and I accessed for review. The fourth professor provided their course syllabi, but not Moodle access to review the remaining documents of their course. The publishing company Wolters Kluwer granted me electronic access to their textbooks

(approximately half of the textbooks for the four courses) to complete an electronic search. The library provided hardcopies of the remaining textbooks for me to conduct a hand search. The applicable chapter readings for each textbook to review were identified on the course syllabi.

The Chan et al. (2023) International Competency Framework guided the creation of an electronic chart to organize and record the document data collected from each of the four courses. The framework identifies the requisite knowledge and skills for nursing practice in the provision of self-management support for cancer survivors and their families and was developed by an international panel of experts on the concept of self-management (Chan et al., 2023). This comprehensive framework consists of 52 items; 10 competencies and 42 performance criteria, umbrellaed across six domains. The practice implication is that the framework is a first step in the development of training program curricula to prepare nurses in the requisite skills and knowledge competencies for self-management support and coaching in cancer populations, and the associated performance criteria needed to be achieved to be deemed competent (Chan et al., 2023).

Using the Chan et al. (2023) framework, I created an electronic data extraction chart for each of the four courses to search, record, and organize each of the course documents (syllabi, textbooks, course lectures, readings). Each chart contained in the first column the competency's (skills) a nurse should possess when providing self-management support. The second column listed performance criteria (the expected criteria to perform self-management) a nurse should perform when providing self-management support. The headings for the four remaining columns were for each of the respective course documents (course syllabi, textbooks, lectures, readings). I also included a final column for any potential additional comments. These seven column headings were organized and situated under each of the frameworks overarching six domains.

When searching each course document, I electronically recorded applicable findings adjacent to the competency and performance criteria within their respective columns.

To understand the extent of essential skills of self-management support (e.g., communication skills, patient teaching) that existed, within or outside the realm of oncology, each of the performance criteria and competencies were electronically searched using three levels of key words and screening. The first level were the key words of the competency and performance criteria. If the first level criteria requisite or performance criteria was found, second level search words of “self-management” and “self-management support” were added to the first level words and searched. If the first and second level search words were found, third level search words “cancer” and “oncology” were added and searched. This comprehensive data extraction allowed for an in-depth exploration of the essential skills and requisite competencies for self-management support and identified where oncology content on self-management support was situated within the curriculum (see Appendix K).

Journaling

Reflexivity is the process of reflecting critically on oneself as a researcher and is central to the construction of knowledge in qualitative research (Peddle, 2021). During the research process, researchers should engage in reflexive observations to critically reflect on how their own ontological and epistemological assumptions inform the conduct and approach of their research (Smith & Sparkes, 2016). The hallmark of good research, regardless of the paradigm, is methodological rigour and being reflexive is a strength and critical factor in that rigour (Barrett et al., 2020). Because self-reflexivity is considered a tool of rigour in qualitative studies, it was critical to remain reflexive while conducting the research at various stages (Peddle, 2022). Yin (2018) reminded me that ontologically as a constructivist researcher, I was aware of the

knowledge that study participants brought. I was also aware of my positionality and the formulated thoughts and ideas about self-management support education I had from my clinical experiences with persons with cancer. The researcher's beliefs about a topic have the potential to skew their understanding if they are not mindful. Therefore, it is important that the researcher examine their own thoughts, actions, and assumptions to allow for these to be brought to a conscious level to know how these may influence the research process (Darawsheh, 2014 as cited in Peddle 2022). As such, it was important that I developed an awareness of how my thoughts, actions, and assumptions may influence the research process, and journaling allowed me to reflect on how my views could influence my understanding.

Peshkin (1988) reports, that although subjectivity is inevitable, simply acknowledging that subjectivity is not enough. Rather, researchers should systematically seek out their subjectivity while the research is actively in progress to enable themselves to be aware of how their subjectivity may influence their research inquiry and its subsequent outcomes. In doing so, the voice of subjectivity takes an "I" (Glesne & Peshkin, 1992). *The Peshkin Approach* is a systematic approach of reflection that focuses on the subjective "I" (Bradbury-Jones et al., 2009) and healthcare researchers can use this approach to explore their subjectivity as a means of enhancing rigour (Bradbury-Jones, 2007a). To achieve this, researchers record their thoughts and feelings and then systematically analyse what they have written (Bradbury-Jones, 2007b; Peshkin, 1988). Drawing upon Bradbury-Jones (2009) and Peshkin (1988), I recorded my thoughts and feelings and then systematically analyzed them for subjectivity within this qualitative research context. For example, I noted my *Social Justice "I"* (the distress I felt when hearing a participant describe how a patient with cancer made long distance drives to have

bloodwork completed, and understanding how self-management support of coordinating care closer to home could have been provided).

Drawing upon Peshkin (1988), I systematically searched for my subjectivity throughout the study process to monitor my subjectivity in operation. To capture the emergence of my subjectivity, I kept an electronic reflexive journal as a means of regularly recording my emotions, as I explored course syllabi, lectures, textbooks, and readings, and while I interviewed faculty, nurse educators, and nursing students. This documentation occurred prior to each interview, and to a greater extent after the completion of each interview and documentation review and when new information was gained, drawing attention to new insights and stimulating new reactions for further reflection. As previously reported in this chapter, this resulted in approximately 35 reflective journal entries.

Being a clinical nurse for 34 years and having my own nurse-led clinics in an oncology survivorship program for 8 of those years, afforded me an instinctive ability to identify the learning needs of individual patients and the strategies that work best to engage and provide education to meet their needs. I felt it was important for me to (a) not “assume” nurse educators and nursing students have this ability I gained through years of oncology practice experience, and (b) focus on the research study question of exploring *what*, *how*, and *why* a nursing baccalaureate program educates their nursing students to enable oncology patients to self-manage their disease and health. To help with this process, and using the systematic Peshkin Approach (Peshkin, 1988), I used four simple questions as prompts to guide my thinking: 1. Today I felt . . . ? 2. Today, I am thinking of . . . ? 3. Today, I am thinking of my clinical experiences with patients as . . . ? 4. The potential consequences of thinking and feeling this way are . . . ? (Bradbury-Jones et al., 2009). I read and re-read my journal entries to systematically

analyze my thoughts and emotions (Bradbury-Jones, 2007a, 2007b; Bradbury-Jones et al., 2009; Peshkin, 1988). A reflexive researcher ensures the careful consideration of the choices that are made at each stage of the research process and they consider alternative perspectives that may be at odds with their own (Barrett et al., 2020). By using the systematic Peshkin Approach (Peshkin, 1988), I was able to systematically analyze my thoughts and emotions, ultimately to strengthen the methodological rigour of this study.

Interview Reflexivity. Yin (2018) reports that reflexivity may occur during the interview, as the conversation between myself as the interviewee and the participant being interviewed may lead to mutual and subtle influences. Drawing upon Yin (2018), my experience, perspective, and view on clinically understanding the importance of self-management support in oncology survivorship care may have unknowingly influenced participants' responses, but those responses also unknowingly may have influenced my line of inquiry, and an undesirable coloring of the interview material may have occurred. Researchers may not be able to fully overcome this threat but being sensitive to its potential existence allows for better interviews (Yin, 2018). Although I never revealed that I was an oncology nurse, there was risk that participants may have assumed that I understood their thoughts and feelings and therefore may have chosen not to express themselves as deeply. To help address this, I probed participants by asking them to provide more detail to ensure I captured their thoughts and ideas, and paraphrasing was used to confirm I understood their responses.

Data Analysis

Data analysis is the process of making sense of the data collected (Yin, 2018). In a qualitative study, data collection and analysis are inductive, recursive, and ongoing during data collection (Merriam & Tisdell, 2016). Data collection and data analysis occurs simultaneously,

and researchers can start the case study analysis by searching for patterns, insights, or concepts that seem promising (Leedy & Ormond, 2013; Merriam & Tisdell, 2016). Ultimately, as the researcher I must look for convergence (triangulation) of the data, as many separate pieces of information must all point to the same conclusion (Leedy & Ormond, 2013; Yin, 2018).

Yin (2018) outlines four specific analytic techniques that could be considered for use for effective, high-quality case studies: (a) pattern matching, (b) explanation building, (c) time-series analysis, and (d) logic models. A fifth technique, cross-case synthesis, applies to the analysis of multiple-case studies and was therefore not applicable to my single case study design (Yin, 2018). Upon reflective consideration, pattern matching and explanation building were the two most appropriate techniques for my study. Pattern matching is analyzing case study data by comparing or matching the pattern based on the collected data (Yin, 2018). Explanation building is analyzing case study data by using the data to develop an explanation about the occurrences in a case. The goal is not to conclude a study, but rather to develop ideas for further study (Yin, 2018). The goal was to analyze my data by building an explanation about the case. The specific method taken to analyze the data to allow for pattern matching and explanation building was by following Braun and Clark (2006) six phases of reflective thematic analysis.

Data Analysis of Participant Interviews

Data analysis of the participant interviews was guided by my theoretical framework and reflecting upon the Chan et al. (2023) framework requisite competencies and performance criteria. An inductive thematic analysis was conducted for coding and analyzing the qualitative data from the participant interview transcripts that were electronically recorded through Microsoft Teams. The data software program NVivo 14 was used for data management and coding of the transcribed data. Reflective inductive thematic analysis occurred following Braun

and Clark (2006) six phases: (1) familiarizing myself with the data by reading and rereading the data and jotting down initial thoughts and ideas; (2) continuously reflecting on the research question and systematically generating initial codes of the data; (3) synthesizing and/or expanding upon further codes and constructing my initial thoughts on how the different codes may be combined to form themes; (4) reviewing and refining the entire list of codes and combining and sorting codes to ensure the candidate themes reflected a coherent pattern; (5) continuing to read and review each theme, analyzing the data within each theme and identifying the essence of what each theme is about, and lastly defining each of the themes; and (6) writing the discussion chapter of the dissertation allowed for selecting vivid, compelling extract examples relating back to the analysis, the research question, and literature, resulting in the construction of new knowledge.

Data Analysis of Course Documents

Deductive thematic analysis was conducted on each of the four charts that contained the collected data belonging to the corresponding course, to better understand the range of knowledge and skills participants are taught about oncology patient self-management. First, I familiarized myself with the entirety of the data collected by reading the chart documents for each of the four courses. While reading the documents, I concerned myself with thinking about the essentials of self-management and the skills training that are included in the curriculum, based on the Chan et al. (2023) International Framework for Cancer Nurses. Then, I reflected on how these essentials of self-management and skills training are situated or applied in oncology populations. Second, I became closer to the data by reading and focusing close attention on self-management, chronic disease, and cancer, all within the context of the six domains of Chan et al. (2023). I reviewed my research question over and over as I systematically and methodically

conducted the electronic search. As I found data on competency(s) or performance criteria curricula being taught, I electronically populated codes using comment bubbles titled “R1” in the chart margins. In the R1 comments, I entered text as codes related to the curricula found and in relation to my research question. Third, I became closer to the framework and data by reviewing the extracted data codes and focusing on my research question. When doing so, I expanded upon or synthesized, the R1 comments and created a second level of comments titled “R2”. During this third step, and creating R2 comment texts, I homed in on the concept of the domain (Chan et al., 2023) from which I was analyzing to narrow my critical thinking. I also reviewed my journal notes taken during document data extraction and triangulated these journal notes with the R2 comments. Fourth, I created an electronic results chart that consisted of six columns for each of the six overarching domains from the Chan et al. (2023) framework, and for each of the four courses. I reflected on the domain (theme) in relation to my research question on oncology patient self-management support education, including health coaching as a self-management support intervention in a baccalaureate nursing program. The six domains of the Chan et al. (2023) international framework are the themes that represented the data (e.g., Domain 1 - Theme 1, Domain 2 - Theme 2, Domain 3 – Theme 3, Domain 4 - Theme 4, Domain 5 – Theme 5, Domain 6 – Theme 6). For example, the findings from the electronic search for domain 1 *Person-Centered Care and Motivational Interviewing Communication Skills* created an applicable theme based on the data extraction findings, such as *Basic Essential Communication Skills*. (see Appendix K).

Findings from the inductive themes (participant interviews) and deductive themes (course documents) were triangulated to allow for interpretive results and subsequent guidance for suggested research implications and recommendations.

Methodological Rigor and Trustworthiness

Methodological rigor is what a qualitative researcher with a constructivist worldview aims to achieve to ensure the trustworthiness of a study (Merriam & Tisdell, 2016). It is an individual researcher's responsibility to enhance the rigor and trustworthiness (Fusch et al., 2018; Nowell et al, 2017) of a study, and qualitative researchers can assure themselves and readers that their research findings are trustworthy by engaging in procedures that show their decision making (Carnevale, 2002; Fusch et al., 2018; Lincoln & Guba, 1985). Carnevale's (2002) four criteria for evaluating qualitative research were used to address methodological rigour and validity for this study, and include: (a) credibility, (b) confirmability, (c) saturation, and (d) transferability. These four criteria encompass the most widely recognized criteria for critiquing qualitative research and were chosen for this study due to their comprehensiveness and mutual exclusiveness in assessing methodological rigor (Carnevale, 2002).

Credibility

Credibility refers to the believability or trustworthiness of the study. More specifically, credibility reflects the extent to which the researcher's findings are faithful to participants' experiences (Carnevale, 2002). In qualitative case study research, credibility addresses how well the findings reflect participants' construction of reality (Merriam & Tisdell, 2016). Theory provides guidelines for action and explanations of phenomena (Knowles et al., 2015). To support the credibility of this research, I used multiple theoretical lenses of my theoretical framework to guide identifying and understanding the extent and impact of faculty, educators, and nursing students experience of teaching and learning oncology self-management support. Moreover, drawing from Carnevale (2002), Denzin et al. (2024), and Stahl and King (2020), I addressed the credibility of the study using data triangulation and member check strategies.

Triangulation is the first strategy I used as a qualitative researcher to increase the credibility of study findings and to help increase internal validity (Denzin et al., 2024; Merriam & Tisdell, 2016). A case study using two or more data sources is an example of methodological triangulation (Fusch et al., 2018) and triangulation of multiple data sources adds depth to the data collected, increases the research findings credibility, and assists in mitigating bias (Fusch et al., 2018; Merriam & Tisdell, 2016). Data triangulation was used to strengthen construct validity of the case study by ensuring one or more of the multiple sources of evidence (interviews and course documents) converged on the same findings (Carnevale, 2002; Yin, 2018), thereby addressing that the findings were more likely to be representative of the phenomenon under study (Merriam & Tisdell, 2016; Yin, 2018).

Denzin (1978) first reported four types of triangulation that included: “1. Data triangulation (the use of multiple data sources in a single study). 2. Investigator triangulation (the use of multiple investigators/researchers studying a particular phenomenon). 3. Theory triangulation (the use of multiple perspectives to interpret the results of a study). 4. Methodological triangulation (the use of multiple methods to conduct a study)” (Denzin et al., 2024, p. 257). Methodological triangulation is an appropriate triangulation type for case study design (Fusch, 2018). Denzin’s (1978) methodological triangulation can be used within a method or between methods, which is also known as across method, by triangulating a combination of qualitative techniques. For my study, I conducted methodological triangulation within (a) the ten participants interviews, and within (b) the four course documents (syllabi, textbooks, course lectures, and readings). I also conducted triangulation between method (or across methods) by looking for patterns across the data sources (participant interviews, course documents, journaling). Inherent flaws and deficiencies can occur within one method and therefore may

impact the data (Fusch et al., 2018). However, by conducting between method triangulation I became confident that I had overcome potential weaknesses within singular use method triangulation and gained a greater in-depth understanding of the extent, and impact, of oncology self-management support curriculum being explored in my case study.

Drawing from Carnevale (2002), member checking was a second strategy I employed to foster credibility. This technique for establishing validity is considered to be a crucial technique for establishing credibility (Guba & Lincoln, 1985). Member checking is where the researcher seeks verification from the research informants (participants) who understood the experience being explored (Carnevale, 2002; Stahl & King, 2020) and provides assurance that the research accounts depicted are an accurate interpretation of events (Sparks & Smith, 2014). I ensured the interview data was accurate, complete, and participants had an opportunity to share any further thoughts or experiences by emailing the audiotaped transcriptions to each participant. In the email, I asked each participant to verify their responses and if there was anything they would like to add, remove, or clarify. Of the ten participants, three responded: two faculty participants and one nursing student. All three responding participants reported reviewing and verifying their transcript, and had nothing they wanted to add, remove, or clarify.

By conducting methodological triangulation within data sources (participants and course documents) and between data sources (participant interviews, course documents, journaling), I became confident that I gained a greater in-depth understanding of findings and overcame a potential weakness of only using a singular use of method triangulation on exploring the extent and impact of oncology self-management support curriculum in my case study. Data sources must point to the same conclusion (Leedy & Ormond, 2013; Yin, 2018) and as the researcher I am required to look for convergence (triangulation) of the data. Credibility refers to the

believability or trustworthiness of the study and reflects the extent to which the researcher's findings are faithful to participants' experiences (Carnevale, 2002). Through an in-depth exploration and self-reflective journaling, I observed convergence across multiple sources of data that ultimately provided depth and strength to increase the research findings credibility, ultimately mitigating bias and providing overall confidence in my study findings. Triangulated interpretation across all data sources is reported in the discussion chapter of this thesis.

Confirmability

Confirmability refers to the assurance the researcher can provide to the readers that the data was collected and analyzed in a neutral manner and that findings are clearly derived from the data (Carnevale, 2002; Lincoln & Guba, 1985). In doing so, this requires the researcher to demonstrate how conclusions and interpretations have been reached (Carnevale, 2002; Nowell et al., 2017). The consistency of the data sources I utilized for participant interviews and for document data collection ensured that the stated research process was well established and trackable, thereby confirming the dependability of the data. Upon completion of the audiotaped transcriptions and course documents data collection, my research supervisor and committee members were critical friends by reviewing the data collection process and documents and the position and interpretation of the research to ensure qualitative rigor. Although software programs for qualitative research do not "do" the data analysis, the software provides a major function of helping to organize the analysis (Merriam & Tisdell, 2016). The data software program NVivo 14 was used for organizing and coding the transcribed data for this study. The objectiveness of data management that NVivo provided allowed for assurances of neutrality and therefore supported overall methodological rigor. As per Peshkin (1988), I remained reflexive through the entirety of the research inquiry by journaling personal thoughts and experiences.

These reflexive processes ensured confirmability by receiving verification of the recorded data and my interpretation as the researcher from critical friends.

Saturation

Saturation refers to the thoroughness of the data collected (Carnevale, 2002). Data was collected and adequately engaged with until an emergence of redundancy occurred (Carnevale, 2002; Merriam & Tisdell, 2016), and I was confident that additional data would not significantly contribute to a further understanding of the extent and impact of self-management support education being provided in a baccalaureate nursing program. Continuous analysis of data sources is necessary to glean further findings (Carnevale, 2002; Merriam & Tisdell, 2016). Beyond data collection, I analyzed the interview transcripts and the document data sources from the four courses repeatedly until I was unable to garner any new information or findings. Lastly, a direct link exists between the richness and depth of triangulated data and data saturation (Fusch et al., 2018), and I enhanced data saturation through triangulating multiple sources of data.

Transferability

Transferability refers to the extent to which inferences extend beyond the research findings to “fit” with the experiences of individuals in similar contexts (Burke, 2016; Carnevale, 2002). I verified transferability by seeking comments and feedback from individuals with an understanding of the research question and context. The channels from which this was done was by presenting my research proposal to, and seeking experiential comments and feedback from, my committee members and peers at a national conference (MacDonald-Liska et al., 2024). Drawing from Creswell (2023) and Carnevale (2002), I compared the emergent themes to the current literature on oncology nursing self-management support and I also recognized that true

transferability may not be supported until further studies of additional contexts demonstrate a “fit” with this study.

Transferability of the research findings can be conveyed through rich, robust, thick descriptions (Creswell, 2014; Merriam & Tisdell, 2016). Rich descriptions that contribute to transferability include a detailed description of the study setting, participants (particularly when collected from more than one participant), findings, and the presence of excerpts from interview transcripts (Merriam & Tisdell, 2016). These rich descriptions offer the reader an understanding of how the researcher arrived at their claims and how they may transfer these claims to other contexts (Creswell, 2013). The excerpts from this study allow the reader to gain an understanding of how I arrived at the results and my interpretation and transferability of the data to make recommendations for future research. Interview transcript excerpts from this study are included in the results and discussion chapters and support the themes that emerged.

Transferability of the study is also enhanced through maximum variation of the study sample. Maximum variation involves the purposeful selection of a variety of participants to enable readers to apply the study findings to their situation (Merriam & Tisdell, 2016). This study accrued ten participants that represented three participant groups (faculty, nurse educators, nursing students) which enhanced maximum variation and offers transferability of the study results.

The combination of criteria evaluations ensured the upmost rigor of the data, allowing for rich and robust results central to the research question to be contextualized. The results in chapter five present information that allows inference, or transferability, beyond the findings reported in this study.

Methodology Generalizability and Limitations

Generalizability is understood in qualitative research as the extent to which the reader or user of the study may apply the findings to their own situation (Merriam & Tisdell, 2016). This study provides strategies for transferability through thick description and maximum variation that offer the reader or user of this study generalizability confidence.

An in-depth case study design drawing from multiple data sources was used for this study and allowed for richness and depth in the collection of robust qualitative data (Yin, 2018). Three literature reviews supported an evidence gap in the scholarly literature and recommended that research on self-management support curricula be conducted. Throughout the study, I remained reflexive as the researcher interpreting the study findings. However, my own social, academic, economic, personal, and nursing backgrounds had the potential to unknowingly influence my perceptions when collecting and analyzing the data. Although I did not reveal to the participant that I was an oncology nurse, my experience of providing oncology self-management support to cancer survivors may have unknowingly focused on particular participant statements when developing study themes or when drawing conclusions, making recommendations, or reporting study implications.

Ethical Considerations

All formal procedural requirements as outlined by the Research Ethics Board at the university were followed for this study. The Director of the School of Nursing provided the Research Ethics Board Committee with a letter of support to conduct this study on March 10th, 2023 (see Appendix L). The research study application to the university Research Ethics Board was approved on March 23rd, 2023: ROMEO File #: 26241 (see Appendix E). A Protocol Change Request was submitted to the REB to report two funding sources that I was awarded

since the initial REB approval in March 2023. This request regarding a protocol change was approved by the REB on March 13th, 2024 (see Appendix M).

Ethical research study considerations of ensuring participants were provided informed consent, anonymity and confidentiality were upheld, privacy was respected, and there was no intent to do harm. There were no financial costs to participate in the study and remuneration for time was not offered. Study participants were clearly informed on the Invitation to Participate form (see Appendix F) and at the beginning of the interview about the purpose of the study. Participation in the study was strictly voluntary. Participants who chose to participate were asked to sign an informed consent for participation (see Appendix G) and were informed that their participation may end at any point during the research process. Further, participants were informed that their voice recordings, the use of their comments, and the research results would be disseminated for oral presentations and written publications. Participants were also informed that the results of the research process would not be individually shared; however, all participants were provided written notification on how to access the completed dissertation on the consent form. As the researcher, I provided my contact details and the contact details of my dissertation advisor, who is a professor at the university where the study was conducted.

All personal data obtained throughout the study was treated confidentially. Participant confidentiality was safeguarded by using nominal identification and both physical and personality traits of the study participants were not disclosed. Confidentiality was maintained using strategies such as, meeting participants individually and in private, discrete locations, not sharing information across study participants, and the use of pseudonyms on all written materials. Participant confidentiality was also ensured between and amongst the participant groups (faculty, nurse educators, and students), and the number of study participants was not

disclosed. Using the exact wording of professional titles was reframed. Anonymity of the university will be ensured when disseminating results. Access to information was limited to only me as the researcher. Consents, demographic forms, and my journal notes are safeguarded in a locked filing cabinet and will be destroyed two years following the completion of my dissertation.

The faculty and nurse educator participants were university graduates. Nursing student participants were high school graduates and in fourth year of university. Although participants had academic literacy levels, the consent, demographic, and invitation to participant study forms were written in plain language.

Emotional or psychological issues from the study were not anticipated, however, the tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) was adhered to. The study concept of oncology self-management support is new to the scholarly literature to assist oncology patients with their overall quality of life and outcomes and is a non-controversial topic such as, for example, workplace toxicity. Although it was not expected, potential concern of the faculty feeling they are not adequately preparing nursing students for the future workforce, and nursing students potentially feeling unprepared to enter the workforce, was considered during participant interviews. It was not required of me to stop at any point during the ten participant interviews, nor did any study participant request to withdraw from the study due to emotional or mental distress. The study participants were not informed of my professional nursing background and there were no power imbalances between me as the researcher and the study participants.

Interview Setting

The three in-person interviews were conducted on campus and in the university's school of nursing. The interviews took place individually in a quiet, confidential, available room selected by the Director of Nursing's Administrative Assistant. The room provided was a quiet, one-on-one space that was optimal for recording and maintained confidentiality. The remaining seven interviews were conducted from my home office in Ottawa over Microsoft Teams. My office was private, and I used earphones, ensuring the participants responses were heard by only myself. Each of the seven participants was alone and in a private location.

Chapter Four Summary and Conclusion

This chapter of the dissertation discussed the methodological considerations and techniques used in this qualitative case study research study. Rationale for qualitative research and the methods that were used to conduct the case study were provided. The chapter described the research methods used to conduct the research study, including participant and artifact sampling, data collection, data analysis, and how rigour, trustworthiness, and ethical considerations were addressed. The next chapter, chapter five, provides key findings from the participant interviews and the emergent themes from the data source are presented.

Chapter 5: Results of Participant Interviews

This chapter provides a summary of the data from the participant interviews as one of the data sources utilized to address my research question of *what, how, and why* oncology self-management support education is provided in a baccalaureate nursing program, including health coaching as an intervention. An overview of participant interview data is provided, inductive thematic data analysis is described, and the resulting identified emergent themes are reported. Triangulation within the participant interviews, triangulation within the course documents, and triangulation between participant interviews and course documents (Denzin, 1978) will be shared in the discussion chapter.

Theory provides guidelines for action and explanations of phenomena (Knowles et al., 2015). I used multiple theoretical lenses as a framework to examine the data to identify and understand the extent and impact of faculty, educators, and nursing students' experiences of teaching and learning oncology patient self-management support. The theories and frameworks that informed my interpretation of the data were: Caring Theory (Roach, 2002), Adult Learning Theory (Knowles, 1975), Self- and Family Management Framework (Grey et al., 2015), and the International Competency Framework for Cancer Nurses Providing Self-Management Support (Chan et al., 2023). Theory guided my thinking by applying Caring Theory (Roach, 2002) when reviewing and interpreting findings from interviews and course documents on faculty, educators, and nursing students' knowledge and understanding of person-centered care as a criterion for oncology self-management support. I applied Adult Learning Theory (Knowles, 1975) to understand how faculty and nurse educators' teaching styles influenced nursing students' self-directed learning and self-management support learning outcomes (Curran, 2014b). I applied Self- and Family Management Framework (Grey et al., 2015) to assess faculty, educators, and

nursing students' knowledge and understanding of how self-management interventions impact patient's abilities to engage in self-management. In addition, the application of the International Competency Framework for Cancer Nurses Providing Self-Management Support (Chan et al., 2023) provided an organizational structure for the participant interview data and course document data. Chan et al.'s (2023) framework provided the requisite knowledge and skills for nurses to provide self-management support in cancer care. These requisites guided the development of the interview guides, which subsequently allowed me to gain an understanding of the participants knowledge and experiences on oncology self-management support. The requisite knowledge and skills criteria and six overarching domains from Chan et al. (2023) also provided the organizational structure for the data collected from the course documents from which to organize, and glean, the extent to which self-management support curriculum content exists and is provided to nursing students. The six overarching domains from the Chan et al. (2023) framework provided the lens for identifying the themes for the data collected from the four courses.

Overview of the Results Chapter

Data collection occurred over a total period of four months. Specifically, participant interviews were conducted between December 2023 and March 2024 and course document data collection occurred between November 2023 and February 2024. Participants are described within the text and within Table 2 of this chapter. Self-reported sociodemographic results (see Appendix N) and skill training results (see Appendix O) are reported in the appendices of this dissertation. Seven themes emerged through reflective inductive thematic analysis of the participant interviews and deductive thematic analysis of the course documents (Braun & Clark, 2006). The results from the participant interviews are presented under the seven identified

themes and the results from course documents are presented under the six overarching domains of the Chan et al. (2023) framework as to *what*, *how*, and *why* oncology patients' self-management support education is provided in a baccalaureate nursing program, including health coaching as an intervention.

Participants

Of the ten participants interviewed, three were faculty members, two were nurse educators, and five were nursing students. Interviews were conducted after receiving each participants signed consent and completed demographic forms. The demographic forms included self-reported sociodemographic and self-management skills training information (see Appendix H-Appendix J). Signed consents and demographic forms were received in-person from three participants and via email from seven participants.

Faculty Members (FM)

One of the three faculty member participants also had the role of curriculum leader at the school of nursing. All three faculty member participants were female and between the ages of 50 to 69 years of age. One faculty member reported their education at a PhD level, two faculty members reported their education at the master level. The total length of time faculty members reported providing clinical care as a registered nurse was 45 years. The total length of time faculty members reported a role in lecturing oncology curriculum was 24 years.

Nurse Educators (NE)

The two nurse educator participants were female, between the ages of 21-39 years, and had a master prepared education level. The total length of time of university teaching experience nurse educator participants reported having was four years. The total length of time providing clinical care as a registered nurse the nurse educator participants reported having was 19 years.

One nurse educator reported having peri-operative experience with persons with cancer and one nurse educator reported having experience with family members passing away at home. Neither of the nurse educators reported having any classroom lecturing oncology curriculum experience.

Nursing Students (NS)

The five nursing students were female, between the ages of 20 to 29 years, and in fourth year of the baccalaureate nursing program. One participant had personal experience having cancer, one participant cared for an aunt with cancer, one participant observed an uncle and grandparents with cancer, and one participant reported observing the effects that cancer had on many loved ones.

Participant Interviews

A summary of participants' interview date, length of time, and method is shown in Table 2. In-person interviews were planned for six participants. However, due to a snowstorm that resulted in the university shutting down, three of the six planned in-person interviews were moved to a virtual format. Two interviews were conducted in-person on December 1st, 2023, and one interview was conducted in-person on December 4th, 2023. In-person interviews were audio-taped recorded using Microsoft Teams. The remaining seven interviews were conducted and audiotaped recorded using Microsoft Teams. Of the seven interviews, three interviews were conducted on December 5th, 2023, one interview was conducted on December 21st, 2023, one interview was conducted on January 3rd, 2024, one interview was conducted on February 21st, and one interview was conducted on March 5th. The overall mean length of time for the ten interviews was 61 minutes. All ten-participant's audio-taped recorded interviews and electronically generated interview transcriptions using Microsoft Teams, were saved to a password protected secured hard drive.

Table 2*Summary of Participant Interviews*

Participant Interview Information				
Participant	Participant Type	Date	Interview Length of Time	Method of Interview
1	NE 1	December 1 st , 2023	37 min	IP
2	NS 1	December 1 st , 2023	61 min	IP
3	FM 1	December 4 th , 2023	73 min	IP
4	NE 2	December 5 th , 2023	53 min	VI (Due to Storm)
5	NS 2	December 5 th , 2023	44 min	VI (Due to Storm)
6	FM 2	December 5 th , 2023	66 min	VI (Due to Storm)
7	NS 3	December 21 st , 2023	78 min	VI
8	FM 3	January 3 rd , 2024	109 min	VI
9	NS 4	February 21 st , 2024	55 min	VI
10	NS 5	March 5 th , 2024	54 min	VI

Legend
FM: Faculty Member
NE: Nurse Educator
NS: Nursing Student
VI: Virtual Interview
IP: In-person Interview

Mean Interview Length of Time
FM: 82 Min
NE: 45 Min
NS: 58 Min
Overall Mean Interview Length of time: 61 Min

Participant Interview Themes

As shown in Figure 2, seven themes from the ten participant interviews emerged through reflective inductive thematic analysis (Braun & Clark, 2006). These themes are: 1. Oncology curriculum. 2. Partial coverage of self-management support competencies and performance

criteria requisites. 3. Person-centered care teaching and learning. 4. Essential communication skills. 5. Patient education interventions for self-management support. 6. Social justice. 7. Gaps and program needs in oncology self-management support education curriculum. The reported participant results in this chapter of the document are lengthy. This is due to having ten participants from three different participant groups being interviewed for the study. I felt it was important to report findings from the three groups of participants, and when available and applicable, provide supporting quotes from faculty, nurse educator, and nursing student participants.

Figure 2

Seven Themes Emerging From Participant Interviews



Theme One: Oncology Curriculum

Faculty members, nurse educators, and nursing students described the ways in which oncology curriculum was taught and learned in the baccalaureate program. Faculty participants described how they follow the Canadian Association of Schools of Nursing (CASN) standards and The National Council Licensure Examination for Registered Nurses (NCLEX-RN) as an entry to practice examination requirement and as guides when developing or revising program curriculum. Nurse educators also described how they obtained theoretical oncology concepts to reinforce when teaching in the simulation lab and when overseeing nursing students in clinical settings. Oncology teaching and learning perspectives from faculty, educators, and nursing students will now be described.

Oncology Curriculum Teaching Infused Across Courses. The three faculty member participants described oncology curriculum not being taught in a specific course and as a specific disease entity. Rather, faculty participants described oncology curriculum content being taught using a concept-based curricula framework. A concept-based teaching approach is introducing a concept in a variety of settings, populations, and experiences without needing to explicitly present content in every course (Repsha et al., 2020). Faculty members described how concepts were applied in curriculum and the curriculum not being specific to cancer or other disease entities. This perspective was shared when faculty member said, “So, we’re a concept-based curriculum . . . it isn’t really based on . . . pathophysiology as much as it is based on principles . . . so concepts flow from within threads, within courses, across courses, where they’re supposed to be leveled from beginning level to advanced” (FMP8). This was reiterated when another faculty member shared, “so no, we don’t have a course called cancer” (FMP3). A faculty member, described the oncology curriculum content when she stated,

Well, I would call it content more so than curriculum . . . so this is a concept-based program, so we don't really teach like to a particular field or a body system or area of practice . . . we teach conceptually, so the whole idea of cancer care or oncology would fall under another, a number of categories. So, it would be or it would fall into a number of courses. So, we don't necessarily teach . . . cancer as a topic in a course. It's like sprinkled throughout. (FMP6)

Chronic disease curriculum was described as having a dedicated course in the management of multiple types of chronic diseases, and palliative and end of life care was also described as being taught in the chronic disease course. Faculty spoke about teaching nursing students the acute and episodic nature of chronic disease and also the chronicity of the diseases in a broader sense. This is highlighted when a faculty member said,

we talk about . . . how chronic diseases end up with those episodes and then what the nursing care is, and those acute episodes, but also to make the students aware that you might be dealing with an acute situation in this moment, but there's a broader picture, there's a more chronic, ongoing picture for this person that's behind this episode, and even if you don't work in that area of care, you need to be cognizant of it. (FMP8)

Another faculty member described the approach taken when teaching cancer as a chronic disease. She said, "And so it's introduced as a chronic illness that people acquire, which some people, you know, are able to achieve cure some people achieve control, and some people don't, don't survive. And our approach then is about quality of life" (FMP6).

A faculty member also discussed teaching the life-threatening elements of oncology management in the acute episodic course that she provides in the program. She elaborated on teaching this course and reported that she now includes cancer survivorship, referring to

survivorship as living with and beyond a diagnosis of cancer and said, “the course is about acute episodic and life threatening and some of the cancer management comes in there . . . and we started talking about living with and surviving through cancer” (FMP8).

Standards of Practice and NCLEX Examination and Ensuring Student Success.

The National Council Licensure Examination – Registered Nurses (NCLEX-RN) is an entry-to-practice examination for those applying to become a Registered Nurse. The examination tests the competencies nurses require at the beginning of their careers (NCLEX, 2025). Faculty member participants described how curriculum concepts are chosen for the program to meet the accreditation requirements for both CASN and the Nova Scotia College of Nursing (NSCN). Without meeting the expected standards from both CASN and NSCN, the nursing baccalaureate program would not achieve accreditation. Faculty member participants described a curriculum committee that oversees the program, conducts an annual program review, and ensures that the program is meeting standards. For instance, a faculty member said, “So, when we develop courses and stuff, you’re looking at those accreditation standards and knowing that you have to meet that stuff. And so, each program, all the objectives for each course, is structured around meeting those, requirements” (FMP6). Another faculty member reiterated this and shared, “So, our curriculum committee is sort of the overseers of the curriculum” (FMP8). Curriculum content is reviewed based on the NCLEX licensing exam to ensure the nursing students are being taught and are prepared to be successful when writing the exam. Faculty participants reported generating the concepts to teach. Faculty also reported challenges the NCLEX exam has created because of the acute care nature of its questions. Faculty reported that the nursing student’s exam results are considered by the curriculum committee because the program wants to ensure that

their students are best prepared for success when writing the exam. This was highlighted in this statement,

So, the exam has created that struggle as well within our curriculum because it feels like there's too much push for that acute care . . . it's a real it's a conundrum . . . to help people through that content in a way that still supports, you know, what our licensing, our professional body says . . . like it's a bit of a driver. (FMP8)

Oncology Curriculum Learning: Pathophysiology and Pharmacology. Nursing student participants discussed being introduced to oncology in some classes and not going into depth on oncological diseases. They discussed learning about cancer curriculum from lectures and a small amount through readings, and shared “We haven't really gone in depth at different types of oncological diseases, we've just like touched on the basis what like a cancer is and how it develops” (NSP2). This was elaborated on by another nursing student when she said, “I feel like I haven't learned about it a whole lot in lectures, yeah” (NSP5).

Nursing students discussed learning about what cancer is and pharmacological treatments, rather than how you would treat patients, and how to talk to patients and families, as evident in this statement, “I would say most of it is, most of my learning was what cancer is and the treatments rather than like the personal, like how you would treat them and how you talk to the families and stuff like that” (NSP10). When a nursing student participant spoke specifically about chemotherapy I probed for clarity, and she said, “we talked about the different drug classes and everything like that . . . we talked a little bit about, cytotoxic precautions and that kind of stuff. But it was very general” (NSP9). Interestingly, a nursing student commented, “I didn't realize how prevalent cancer is until I got on the floors” (NSP10).

Theme Two: Partial Coverage of Self-Management Support Competencies and Performance

Criteria Requisites

Faculty members, nurse educators, and nursing students articulated an understanding of self-management and self-management support that aligned with definitions cited in the literature. Participants also described the extent to which they felt some self-management support competencies and performance criteria from the Chan et al. (2023) framework existed in the curriculum and was situated within the baccalaureate program. Faculty member and nurse educator participants reported that self-management performance criteria existed, such as health literacy, as noted in this statement from a faculty member,

I think it is integrated in terms of self-management of chronic disease. I think that the concepts are there. I think person-centered care is well done in our curriculum. I think health literacy is done well. I think there is certainly a clear focus on social justice and the determinants of lifestyle. (FMP3)

Nurse educators also shared their thoughts around performance criteria being present, for example, “So, I really just think taking that holistic nursing approach and asking what interventions we can do for them before they leave . . . and then how we can empower them to continue with that self-management at home and not have to end up back in the hospital” (NEP4). This was elaborated on by the nurse educator when she stated, “We do discuss like therapeutic communication . . . and holistic nursing care approaches” (NEP4). I noted that nursing students discussed self-management support performance criteria such as providing patient education and peer support. An example of this was, “from a nursing perspective, like educating the patient and giving them like yeah, educating them about side effects and like what to do and giving them things to help them effectively be able to self-manage” (NSP9). This was

elaborated on, for instance, “I think like the general stuff again, like making sure that there’s like supports like people to talk to or like if it was like a one on one with someone or kind of like peer support group type stuff” (NSP9). Overall, I found that faculty, nurse educators, and nursing student participants responses aligned and agreed on the extent to which they felt a partial coverage of self-management support competencies and performance criterion from the Chan et al. (2023) framework existed in the curriculum.

The following two sections of this theme will now discuss teaching and learning the competencies and performance criteria requisites more specifically. The two sections to be discussed are: 1. The partial coverage of self-management support competencies and performance criteria teaching, as reported by faculty and nurse educator participants. 2. The partial coverage of self-management support competencies and performance criteria learning, as reported by nursing student participants.

Partial Coverage of Teaching Self-Management Support Competencies and Performance Criteria. Faculty and nurse educator participants described a broad approach to teaching nursing students’ requisite competencies and performance criteria. This was reflected in this statement by a faculty member, “I mean, we do a lot of listening. We do a lot of education, a lot of connection building with resources” (FMP3). Another faculty member shared,

So mostly within the concept of health, education, and teaching, I guess principles to help the people understand what the process is, what it’s doing, how it’s being treated, what the therapies are, finding out what the person knows, finding out if there are any gaps in their knowledge, and then taking time to find the resources and the best people to fill those gaps. (FMP8)

Nurse educators described their approach to teaching self-management support in the clinical setting as well as an overall approach they expected nursing students to have in the clinical area, for instance, “On the importance of that holistic approach, really, that’s what I try to push. Make sure that they really are listening to the patient, listening to the family members” (NEP4).

Preparing nursing students to include self-management support criteria for patients to self-manage in community settings and at home was also noted when a faculty member shared, “I think, and self-management, you know the principles of nursing in the community certainly incorporate a lot of that, that idea that people need support to stay healthy and you know” (FMP8). This was emphasized when another faculty member said,

So, if you were going to support this person to go home and manage this treatment on their own, um, how would you do that? What do they need to know? What would they need? What resources would they need? . . . so, it’s kind of asking those sorts of questions that pull the nurse out of the central role as the caregiver and puts the patient in the role of caring for themselves. (FMP6)

Faculty members and nurse educators discussed teaching nursing students to have a switch in thinking from caring for the sick to what strategies they could use for patients to care for themselves. An example of this from a faculty member was,

And so, I use assignments, I use group discussions where I ask questions that kind of shift the thinking. I used to do a lot of teaching, education, patient teaching, but they really weren’t getting that. So, I’ve shifted out of patient teaching, and I talk about a patient support. (FMP6)

What I noted mostly was that faculty and nurse educators articulated a global approach of teaching self-management support, rather than a coordinated approach using self-management curriculum that had specific strategies and program components with learning outcomes. An example of this was when a faculty member reported that self-management is taught as a concept to apply learnings to all chronic diseases and said, “So if we’re talking about heart failure or cancer whatever we’re talking about in class, if that was the exemplar I was using that day, then the students would be discussing all of those aspects” (FMP6).

Overall, I noted that faculty and nurse educator participants articulated an appreciation in recognizing the importance of teaching nursing students’ self-management support strategies to be prepared for the future, and for the future betterment of the health care system, for instance,

My goal is to help students understand how to be facilitators of patients to be able to self-manage and so to achieve the highest level of health and wellness that they can achieve.
(FMP6)

A faculty member elaborated on this when she shared, “I think more and more, it seems like our only chance for our healthcare system to survive is to move towards that as a focus as compared to a fix” (FMP8).

Partial Coverage of Learning Self-Management Support Competencies and Performance Criteria. I noted that nursing students discussed particular self-management support performance criteria they learned in the classroom, simulation lab, and clinical setting. Nursing students articulated various self-management support criteria and reported that they were taught by their professors, nurse educators, nurses in the clinical setting, and from their clinical preceptors. This was evident when a nursing student said,

I would say we learned that nurses are really beneficial teachers for how patients can self-manage their disease like through home therapies and medications and like non-pharmacologic interventions as well . . . self-care techniques such as like journaling or just like reaching out to loved ones and like seeing those supports . . . I would maybe recommend there's lots of online resources they can seek out . . . there's also like support groups that they can attend where like there's like there are others like there's other similar people who are dealing with the same type of thing. (NSP2)

This was reiterated with this statement, "So, I just think . . . it's really important to understand that it's kind of like a fluid thing and it's not going to look the same for everybody" (NSP9).

Nursing students also reported learning self-management support criteria from other than within the classroom, and discussed learning during their clinical placement, for instance "I feel like I've learned on the unit that I'm working on right now and learning is really great with patient self-management" (NSP5). This was elaborated by another nursing student when she shared, "But I also just learned a lot from seeing stuff in clinical and how the different nurses would communicate with different parents. And if the parents were upset, how they would, a lot of it did come down to just seeing it in the clinical setting too" (NSP9).

Nursing students shared that they also learned about self-management support from their preceptors in clinical settings, for example a nursing student shared, "I have actually learned so much just from my preceptors and the nurses on the units. I have found that that's like where I've learned the most for sure" (NSP9). A nursing student reported learning self-management during a co-op clinical placement in a large urban hospital and said,

Just recently, they had a new Doctor come into that clinic and completely shifted it to this kind of philosophy of self-management and self-coaching. So, I was in-depth educated on

self-management and coaching and motivational interviewing and helping the patient become again the active participant in their own care. (NSP7)

Overall, I noted that nursing students discussed that they felt providing self-management support was a very important concept to learn and apply to ensure patients are enabled to self-manage.

Theme Three: Person-Centered Care Teaching and Learning

Faculty, nurse educators, and nursing students all discussed their understanding of person-centered care and their confidence in the concept being taught and learned in the program. Faculty described person-centered care being taught early in the program and threaded through other concepts throughout the entirety of the program. Nurse educators described utilizing case studies to highlight person-centered care as a concept in the simulation lab, and also throughout the entirety of the program. Nursing students discussed learning person-centered care early in the program, and threaded throughout the program, in the classroom, simulation lab, and in the clinical setting. An example shared by faculty member was, “One of underpinnings in our program is person-centered care and so throughout the program there would be various projects and learning activities students would have to do, where they’re looking at patient goals, how to set goals” (FMP6). This was reiterated by nurse educators and an example was when a nurse educator also described person-centered care being taught throughout the program and shared, “It’s one of our curricular themes that we kind of try and pull through. So, we have like curricular concepts and the way our program is set up and we try to kind of tie that into practice” (NEP1). Nursing students also described person-centered care being discussed throughout the program and within the clinical setting. A nursing student said, “We’re really taught about this whole person-centered care model. That is a big like overarching theme in our education” (NSP9). Another nursing student elaborated on this and shared,

So like I would say, we started learning what person-centered care is, that was like one of the first aspects they touched on in nursing school that goes back to like first semester of second year when you first really enter like the nursing core of the program . . . so, we were taught that in the classroom, we were taught that in the communication labs, and then we were taught in 3rd year as well. And then even when you get into fourth year in those in those long clinicals, I think your preceptor is really focused on person centered care too, and like just how you kind of deliver that. (NSP2)

Person-Centered Care Teaching. Although faculty and nurse educators discussed incorporating the concept of person-centered care throughout the program in the classroom and simulation lab settings, the concept was not discussed in the realm of oncology and not necessarily in the context of self-management. A nurse educator provided an example of how person-centered care was discussed using a case exemplar of a trans-gender patient and said,

We do provide a lot of different aspects for them to try to navigate in simulation. We have one specifically . . . it's not cancer care per se, but we have a transgender client and we try to make sure they're taking a very person-centered care approach to that . . . but again, nothing specifically cancer, but we do promote the patient-centered care. (NEP4)

Person-Centered Care Learning. Nursing students discussed learning about person-centered care in the classroom, simulation lab, and in the clinical setting early in the program and the concept being threaded throughout the four years. Nursing student participants were able to describe providing person-centered emotional support to patients and families, and an example of this was,

It's kind of been an overarching topic. It comes up in a lot of our classes and when we talk about managing and we had a class where we talked about chronic conditions and

management and it would, it would just come up periodically throughout the entirety.

Pretty much of my nursing education. Um, and they just always brought us back to it and the importance of it basically. (NSP9)

A nursing student described the confidence she felt learning and understanding the concept of person-centered care when she said, “that’s something we actually talked about a lot in school. I feel like every course somehow integrated person-centered care. I feel like they did a really good job of talking about that and on the floors sometimes, especially on busy med-surg floors” (NSP10).

Although I noted that faculty and nurse educators discussed teaching person-centered care without the inclusion of self-management or oncology, nursing students did discuss person-centered care within the realm of self-management support and cancer. Nursing students provided examples of their understanding of person-centered care in the context of self-management, as stated in the following statement,

If they’re not followed by any kind of hospital care at home, so it’s educating them on what they can do for self-management techniques, educating them on what the process, that’s happening with their family member . . . and on what the plan is going to be. And so yeah, really keeping them involved in teaching them as much as they can do. (NSP7)

Another nursing student provided an example of person-centered care in the context of oncology and said,

Like patient centered care . . . we take patients in from part of Cape Breton and down Guysborough County and all those areas and when they need to get lab work frequently. So, trying to get their lab appointments at the hospital closest to them to mitigate the drive when they will be making the drive into Antigonish for treatment, there’s just a

bunch of little things that you go into person centered care to make it effective, I think.

(NSP9)

One nursing student discussed a focus on person-centered care in the context of palliative care and said, “I’d say when it comes to these . . . I’d say the main topic that was truly heavily focused on self-management incorporating family patient centered care was palliative care” (NSP7).

Theme Four: Essential Communication Skills

Faculty, nurse educators, and nursing student participants discussed how nursing students are prepared with effective communication skills for patients, families, and carers in the classroom, simulation lab, and clinical setting. All participants shared how essential communication skills are taught and learned in the program. Participants frequently referred to teaching and learning occurring within a dedicated communication lab during third semester (second year) of the program. Although the context of how these communication skills is utilized in all areas of providing patient and family care and were discussed, the skills were not discussed in the context of self-management and/or oncology.

Faculty members discussed that one third of a six credit course is dedicated during second year to the initiation of essential communication skill training. They shared that skills are reinforced throughout the program and expectations are that nursing students become more proficient over time and have more advanced communication skills by the end of the program. Faculty member participants also described feeling that the program previously provided more in-depth communication skill teaching when there was a greater dedicated focus on mental health teaching and learning. A faculty member said, “We need more communication course content, but it’s there, just if we had more time to do a better job of that” (FMP3). Further, they

shared that they felt greater communication skill training with nurse-patient interaction should have a greater dedicated focus, particularly in the simulation labs.

The nurse educator participants described using small group discussions with role playing during the communication lab to apply theoretical classroom learning. Elements of establishing rapport and therapeutic communication are taught starting in the semester three communication lab and the teachings are threaded through and built up during the program. A nurse educator, shared,

in our program we have specific communication labs and I do know that they spend quite a bit of time . . . they're really kind of developing those skills and they have small groups . . . they're looking at that therapeutic communication, developing rapport and it's threaded through. So again, it's one of those curricular concepts that's kind of built on each semester . . . it's an expectation in, in every kind of, in every clinical course. (NEP1)

A nurse educator reported that the essential communication skills taught in the classroom and the simulation lab are reinforced in the clinical settings with the expectation that nursing students demonstrate their learnings, and shared, “we try to incorporate therapeutic communication techniques and then moving into clinical, we try to carry that communication lab through with us, through all of their clinical placements” (NEP4).

Nursing students also articulated using the communication skills they were taught starting in second year with the communication lab being in semester three of second year, and example was, “So, it really started in our second year. We have a course that covers 3 very basic but main topics, homeostasis, pharmacology and communication” (NSP7). Nursing students also discussed learning essential communication skills in the classroom, communication lab, clinical setting, and during clinical debrief meetings with nurse educators, for instance, “Kind of like the

core stuff I remember learning in school like communication techniques and like letting them guide the conversation and just active listening and all that kind of stuff. We learned a lot about how communication is actually not verbal” (NSP9). This participant further reflected on essential communication skills, and said, “I feel as if they stressed generally again the therapeutic communication and validating their feelings and open communication and leaving space for the patient to share with you their thoughts and kind of not overpowering them because it’s easy to ask a lot of questions and not listen” (NSP9).

When probed to further discuss learning communication skills in the classroom, a nursing student shared,

A little bit. Not really. In the later years, like maybe, I mean like, I guess a little bit in [name of professor] like with the with the grief and bereavement section . . . we learned about how to grieve with families and so that would be some communication stuff. But in classes, it’s really more so the facts you’re learning about the illness like I guess that makes sense to you. (NSP9)

One nursing student described communication skills in the concept of cancer and said, “In particular to cancer, I feel as if they stressed generally again the therapeutic communication and validating their feelings and open communication and leaving space for the patient to share with you their thoughts” (NSP7).

Faculty, nurse educators, nursing student participants were probed during the interview on their understanding of how students are prepared about communication with patients, families, and carers about (a) establishing a rapport and trust, (b) active listening, (c) open-ended questions, (d) simplifying communication, and (e) summarizing what you have talked about. These five essential communication skills from the Chan et al. (2023) framework were described

by all participants as being taught and learned starting in the communication lab second year and then threaded throughout all curricula, simulation labs, and clinical settings. Nursing students reported however, that the majority of learning about essential communication skills occurred in the communication simulation lab and clinical settings. A nursing student, said, “I would say most of my learning on that would be from the clinical experience and kind of feeling out what kind of worked and what didn’t with patients and debriefing with my nursing instructor and then also in simlab, because simlab was in conjunction with our clinicals” (NSP10).

The Need to Establish Trust and Rapport. The participants discussed how they felt establishing rapport and trust with patients and families was extremely important and they articulated how teaching and learning the skill is provided and the rationale why it’s important. An example from a faculty member was, “Well, it’s discussed theoretically at the very beginning, you know, I mean certainly what is the importance of trust? And I know when I was teaching the introductory stuff, really before you can assess anyone, they have to trust you” (FMP3). A nursing student reiterated this notion and said, “you want to be able to have a meaningful conversation back and forth . . . and to create rapport, you need to create trust” (NSP9).

The Importance of Active Listening. Faculty and nurse educators described teaching active listening and nursing students described using the skill. A faculty member said, “So, active listening and is a big part of it because through the debrief in clinical that’s a big question that’s common that’s asked is ok, so what did you learn from your client? What did you hear them say” (FMP8)? A nurse educator reiterated this teaching when she said, “that’s brought up in our second-year lab, but also incorporated throughout” (NEP4). Nursing students were also able to articulate the rationale why active listening was important, and an example of this was, “I

think active listening is really important, especially with patients that are more reserved and asking you for help because they can kind of tell you what they need like in a roundabout way, not actually saying what they need” (NSP10).

The Basic Communication Skill of Using Open-Ended Questions. Open-ended questions were described by participants as being basic fundamental communication skills that are introduced during the communication lab and then reviewed throughout the program. A faculty member shared, “So that’s a strategy that’s incorporated right from day one in their in their lab and for the most part that’s a piece that they seem to catch on to and be comfortable with early on” (FMP8). Nursing students also shared how open-ended questions are a fundamental communication skill. A nursing shared, “So open ended questions is another core part of communication” (NSP2). Another example from a nursing student was, “What we were taught is that the use of open-ended questions is good because it can help you investigate a little bit more and get more information rather than a yes or no” (NSP9).

Simplifying Communication. Nursing faculty described how simplifying communication is taught in the program and discussed examples of assignments that nursing students complete to facilitate learning the requisite skill. Examples of assignments included having students rephrase text without using multi-syllabi words and a health education project written using guidelines and at a grade three level. Nursing students shared that they felt simplifying communication with patients and families was important and that they completed assignments to practice and enhance their communication skills. A nursing student shared with me, “I guess, within healthcare there’s a lot of big concepts and terminologies and all of that. So being able to simplify it is important, especially when people are going through difficult times and they have a lot on their mind” (NSP5). Another nursing student also shared the importance

of simplifying communication when she said, “I think of personally when I try to communicate with someone simplifying language, I like to . . . try to just use words that I would use in an everyday conversation” (NSP9). This nursing student also shared simplifying communication when completing assignments, and said, “Absolutely. All of our assignments . . . we have to do in layman’s terms . . . they were, they were quite strict about that” (NSP9). Nursing students also voluntarily provided examples of how they simplified communication for patients and families. An example of using simplified communication was, “When you’re talking with the patient, you really have to break it down and say things in simple terms. Like say, if you’re collecting blood, you can’t just say, I’m collecting lytes or CBC” (NSP2).

Summarizing What Was Talked About. Lastly, participants were probed about summarizing what was talked about between a nurse and a patient as an essential communication skill. Participants discussed what they understood about the requisite skill and nursing students articulated without probing how they used the skill when caring for patients and families. A nursing student described how she would apply her learning in a clinical setting when she said, “Before we leave the room, we just kind of put it in a little bubble, so it’s helpful for them to understand it gives them an opportunity to hear it and then ask questions at the end if they need to” (NSP10). A faculty member shared, “I would go with them, after a patient just received a diagnosis of cancer and you know, they find the person quite shocked, and the doctor explained everything, but nothing would go in. I would go sit with them and I would say tell me what you remember” (FMP3)? However, I noted with the summarizing what was talked communication skill, that it was slightly less understood by participants compared to the other skills and how it was less confidently discussed as being an existing communication skill taught in the program. One faculty member said, “That might be a bit of a gap” (FMP8).

Theme Five: Patient Education Interventions For Self-Management Support

Patient education was identified by all participants as being an influential self-management support intervention in the provision of care. Participants were asked to reflect on providing patient education as self-management support for patients with cancer. More specifically, faculty and nurse educators were asked to share their understanding of how nursing students are prepared with health education strategies to ensure patients with cancer are ready and able to self-manage the physical or psychosocial and or life role changes due to cancer. Nursing students were asked to share health education techniques or strategies to help ensure patients with cancer are ready and able to self-manage the physical side effects of treatment, the psychosocial effects of cancer, and the role changes due to cancer (Chan et al., 2023).

Faculty discussed providing a course on patient teaching in third year of the program. They disclosed that the course covers teaching students about how individuals learn in different ways, assessing an individual's readiness to learn, and setting learning goals. Participant three spoke about patient resources, including electronic resources, and that it's important that students understand the importance of providing evidenced based information from credible sources. Faculty also revealed that the curriculum on patient teaching would not be specific to cancer, rather, focused broadly on health and wellness and illness care. For instance,

We start with the principles of adult learning . . . and throughout each entity, talk about what that person would need to know . . . and building on what they've done in their communication lab and previous courses and content and so you know that's an ongoing of piece across the curriculum. (FMP8)

Nurse educators expressed that they felt patient education was covered in the classroom but were unable to speak to specifics of the curriculum. They discussed that unless a nursing

student is assigned a patient undergoing cancer treatment in the clinical setting, then patient education strategies in the realm of self-management support to patients with cancer would not be covered. This was noted when a nurse educator shared,

I do believe it's covered in semester 5 in their classroom, but again, I couldn't speak to the specifics. I believe it's part of the curriculum, I don't know where it lives to specify it, and like I said, unless I have assigned a patient who is undergoing cancer actively within the med-surg floor, then it doesn't get covered in our clinical. (NEP1)

Nursing students shared learning about patient education support strategies in the classroom, simulation lab, and the clinical setting during second year of the program. A nursing student shared, "I've learned about them, I guess generally in the classroom. And then I've learned about it in the cancer settings, specifically in clinical" (NSP5). Another example from a nursing student was, "I learned . . . I guess the different approaches or strategies that like have a name and those are taught in the classroom. In a more of a clinical setting, I just see these strategies . . . I may not know the name of them, but I see them in practice and see that they work and then that makes me want to then use them in my practice, I guess" (NSP9). A nursing student supported the notion of having to be placed in a medical-surgical clinical setting to gain experience teaching cancer patients when she said, "I haven't had too much experience in providing health education for patients with cancer because so far my clinical and 4th year I did an obstetric clinical, I'm sure had I done med-surg clinical I would have had more patients that did have cancer" (NSP7).

I noted that nursing students provided patient exemplars of applying patient education requisites. A nursing student shared her clinical experience of a patient with a chronic illness and who had cancer.

We actually have one patient and he had spina bifida and he lived a really long life, but he got cancer and his whole life he was able to take care of himself. And then he ended up in the hospital and was pretty sick. But then we were able to make it so he could go home and before he went home, we kind of did a bunch of tests with him, just making sure that he could still, you know, get dressed by himself and he could still wash himself properly and we taught it to him and then he showed us that he could do it, and that was a really good, umm, education thing that I saw. (NSP10)

During the interviews, all participants were also probed for their understanding of patient education requisites for patients, families, or carers that included (a) assessing for capacity to receive health education, (b) individuals' beliefs, (c) having patients share what they already know and their intended goals, (d) assessing for past experiences, (e) affirmations, (f) closing the loop, and (g) teach-back (Chan et al., 2023). Participants were encouraged to share whether these requisites were taught or learned in classrooms, simulation lab, or in the clinical setting.

Assessing Capacity to Learn. All participants understood the meaning and importance of assessing an individual's capacity to learn. Without further prompting, faculty and nurse educator participants provided examples of teaching this criterion and nursing students provided an example of applying it in clinical practice. A nurse educator said, "We do have a sim scene . . . it's not based around cancer . . . it's a simple scene based around educating a client who is somewhat non-receptive to hearing it because they have just too much going on right now and they don't, they aren't receptive" (NEP4).

Individuals Beliefs. Chan et al. (2023) reports that requisites for nurses providing self-management support include being able to avoid pitfalls of not seeking the individuals' beliefs of the patient and ignoring the individual beliefs of patients. Delivering self-management education

tailored to the individual's own needs is an important performance criterion to promoting patient autonomy in health behaviour change (Chan et al., 2023). Faculty and nurse educators were asked about their understanding of how nurses are prepared in the classroom, simulation lab, and clinical setting about assessing the individual beliefs of patients with cancer. All participants discussed confidently and passionately the importance of determining and respecting patient's individual beliefs.

Faculty and nurse educators described supporting the individual beliefs of patients as being embedded in the teaching and learning of cultural competencies. A faculty member emphasized, "That would be part of that assessment, determining what their beliefs are, do they have spiritual religious beliefs or cultural beliefs . . . are there, you know, things like do other family members need to be present" (FMP6)? A nurse educator emphasized, "I think that also it kind of gets worked into our cultural competency aspects and the psychosocial concepts that we work through. We always tell them it's really important to discuss that with the patients because people can have very different beliefs around healthcare or things that they will and will not be OK with them" (NEP4).

Nursing student participants discussed that they recognized the importance of respecting an individual's beliefs and understood what the criteria meant. Nursing student said, "I think, yeah, that building those relationships is kind of the best way to learn about the beliefs of the patients" (NSP5). A nursing student reiterated the importance by saying, "Yeah. So that would entail cultural competence, safety and humility and just really like also respect or what their wishes are and what their beliefs are with their illness" (NSP2). However, two nursing students shared concerns about their knowledge to facilitate ensuring that they address an individual's beliefs when providing care. One nursing student recognized not feeling confident and shared,

“But we haven’t, I haven’t had experience, or I haven’t really been taught how to go about approaching determining that” (NSP7). Another nursing student reiterated this when she said, “And other than just asking, I really wouldn’t have any idea how to get a better understanding of that” (NSP9).

Having Patients Share What They Already Know and Their Intended Goals. Chan et al. (2023) also report that it is important when supporting patients to self-manage to have them share what they already know and to express their intended goals. A faculty member shared, “So you’re determining what they already know, so part of that is having a conversation with them, or kind of or listening to what the patient tells you” (FMP6). Nurse educators shared this notion and an example was, “And also ask them what they’ve already, what they’re already aware of. So, you’re not sitting there talking to them about things that they’ve already heard five times and they might not want to hear again. Just make sure you ask them what they want to know and what they already know” (NEP4). Nursing students shared understanding the importance of having patients share what they already know and their intended goals, for instance,

I think that that’s important because sometimes we can think that people don’t know something, but they already know it and that can kind of give them a bad taste in their mouth. If we’re just like, ok, you wouldn’t know this. I’m just going to explain. So, I think it’s important to get the sense of what they already know before we start teaching and yeah. (NSP10)

While faculty, nurse educators, and nursing students shared their understanding on the importance of having patients share what they already know and their intended goals, they did not share an example of using a communication strategy to achieve this.

Assessing and Building upon Past Experiences. Chan et al. (2023) reports that nurses are required to demonstrate an ability to build on the individual patient's past experiences, experiential knowledge, strengths, and social networks, to ensure a mutual selection of the most appropriate interventions. Faculty participants probed on this self-management criterion described teaching about trauma informed care and appreciating that everyone has past experiences to build upon, and also troubling. A faculty member shared, "Well, I think we've become more conscious about trauma informed care and you know to understand that everyone has past experiences that could be um deeply disturbing" (FMP3). Another faculty member reiterated this by saying, "So, trauma informed care is one of the principles that is utilized throughout the curriculum" (FMP8).

Nurse educators described reinforcing teaching students the importance of having this conversation with patients to have an appreciation about what they already know but also expressed that this teaching is not necessarily in the context of cancer. A nurse educator said, "Not necessarily on cancer care, I will say. But just in general, I ask the nursing students what experience they have with anything that we're about to be discussing" (NEP4).

Nursing students discussed applying this learned technique through strategies such as reading the chart and reviewing a patient's past medical history. Nursing students also articulated learning about trauma informed care and the importance of having conversations with patients and families. An example of this was when a nursing student said,

Just probably ask them . . . like so what's worked for you in the past, what have you done like maybe they haven't dealt with cancer in the past, but if they've dealt with some sort of trauma that really affected them, you can say . . . so like what did you do then that that helped you cope with this moment. (NSP2)

Nursing students also shared that although they were aware of this criterion, they expressed that they were unable to articulate how they would assess a patient. This became clearer when one nursing student said, “But other than really just talking with patients, I don’t, I don’t really know much else on how to” (NSP10).

Affirmations. Affirmation is a communication skill that is demonstrated when communicating with patients and is a strategy used with OARS motivational interviewing communication skills. The acronym OARS includes open-ended questioning (O); affirmations (A); simple, amplified, and complex reflections (R); and summarizations (S) (Chan et al., 2023). I noted that this level of self-management support communication with patients and in the realm of providing patient education was not understood and not articulated by faculty, nurse educators, and nursing students. A faculty member said, “And I guess you know, I don’t know that that word is used as much but positive reinforcement which is something similar” (FMP8). Another faculty member reiterated this when she shared, “I don’t know that anyone is deliberately teaching it” (FMP3). Nurse educators also shared not understanding the criteria as noted when one participant shared, “I don’t think that I don’t think they are addressing that to be honest” (NEP1). Nursing students also shared not understanding the criteria as emphasised here, shared, “I’m not. I’m not really sure what that word means” (NSP2).

Closing the loop. Closing the loop and teach-back are techniques that are performance criteria necessary to determine if the individual understands the self-management action to take (Chan et al., 2023). Regarding the technique of closing the loop, a faculty member, shared, “So again, from their communication labs, that was one of those exact words like how do you close that gap so that you’re not constantly going around that circle of telling them over and over and over” (FMP8). Nursing students shared that they could express what they felt it meant but

couldn't recall being taught closing the loop as an education strategy. This was evident when one nursing student shared, "I understand what you mean by closing the loop, but I don't think we've been taught about closing the loop" (NSP7).

Teach-back. The teach-back method is a way for healthcare providers to determine a patient's understanding by asking them to state in their own words what they need to know or do about their health in a particular situation (Chan et al, 2023). Faculty, nurse educators, and nursing students all talked about teaching and learning the education technique of teach-back. Faculty and nurse educator participants shared that the technique is taught in the classroom and simulation lab and demonstration of the technique is an expectation of nursing students in the clinical setting. A nurse educator shared, "That is something we discuss, like return demonstration . . . but again not specific to cancer and it's usually . . . say a post-op patient like they're demonstrating their spirometer and then they're having that teach back" (NEP4). A nursing student shared an example of using teach-back in the clinical setting and said,

for the teach back, I feel like I learned that a lot in my third year . . . we had four different clinicals, specifically my obstetrics clinical . . . there was a lot of teaching the Mom how to take care of their baby and whether it was changing a diaper or breastfeeding, we gave them the education and then we watched them do it themselves . . . and that was a really good way to see the teach-back. (NSP10)

Health Literacy. Applying health literacy universal precautions, such as simplifying communication when providing specific self-management and health education tools and resources to individuals, is reported by Chan et al. (2023) as a performance criterion. Faculty members and nurse educators were asked about their understanding of how nursing students were prepared in the program about health literacy to support patients with cancer in the

classroom, simulation lab, and clinical setting. Faculty member participants discussed that health literacy was an important concept that is taught in the classroom and teaching the concept of health literacy is threaded throughout the curriculum. They described how health literacy is taught in the classroom and how nursing students are assessed regarding their understanding of the concept. One faculty member shared that health literacy is woven throughout the program as a theoretical underpinning and that nursing students are assessed on their knowledge of health literacy through exam questions. Another faculty member described teaching health literacy more specifically when she said,

So, in 308, 333 [nursing courses in the program] we talk about principles of adult learning and that process gets started again in semester 3 and this carried through to semester 8, that ability to communicate with the person and determine what they want and need from their perspective and then to provide teaching that is understandable.
(FMP8)

Nurse educators also described teaching and reinforcing health literacy as a patient education concept. A nurse educator shared, “And they’re exposed to health literacy, but again, it’s not specific to cancer care, it’s just generalized, to my understanding” (NEP1). Another nurse educator shared that an expectation she has as a learning outcome is that when an education plan is developed for a patient, health literacy and the individual health literacy needs of the patient is included in the plan. She shared, “I feel like it shows me that they’re achieving it when I see them making an education plan for their client that fully includes what that client would actually need . . . and then implement that for them” (NEP4).

Nursing students were asked about their understanding of health literacy and how they learned about the performance criteria. Nursing students talked about health literacy being taught

in the classroom and also within the clinical setting. A nursing student shared, “So throughout going to clinical is kind of helped me learn how to talk about health in different way” (NSP10). Nursing students discussed understanding health literacy, and without probing, shared their learning experiences of how they were evaluated through assignments. An example was,

I remember one assignment . . . we had to do it at an eighth grade reading level and it was crazy how much my friends and I struggled doing it because we would use, even acetaminophen. And we’re like, wait, a lot of people know that as Tylenol, and even then, people might not know what it is. (NSP10)

Theme Six: Social Justice

As discussed in chapter three of this dissertation, a traditional literature review revealed that social justice is very limited in the self-management literature and no articles were identified in the realm of social justice and oncology self-management support provided by nurses. The diabetes literature reports that socioeconomic status, race/ethnicity, and cultural beliefs and norms influence the level in which patients can self-manage their diabetes as a chronic disease (Adjei Boakye et al., 2018). It is important to understand factors as barriers to self-management for individuals and families (Grey et al., 2006), for individuals with diabetes that affect their risk of complications and their treatment outcomes (Gonzalez et al., 2016), and for nurses to provide individualized self-management support to patients with cancer (Howell, et al., 2019; Lovell et al., 2014). I therefore felt it was important to discuss with participants their understanding of social justice and how it may play a factor in patients with cancer ability to self-manage their chronic disease. Participants were asked to share their understanding of how social justice is taught and learned in the classroom, simulation lab, and clinical area to support patients with cancer, including expectations of students and learning outcomes.

Participants accounts revealed social justice as being an important concept taught and learned in the school of nursing. Participants, particularly faculty, spoke with passion and conviction about social justice being taught in the program and how its teachings are threaded throughout and over the majority of time within the program. A faculty member shared, “So I mean, [name of the university] from a social justice perspective is you know, their record of social justice, the work in social justice has been outstanding” (FMP3). Faculty members described how the concept of social justice is foundational within the program and its teachings are threaded through all facets of learning, as noted in this statement, “So when you look at the, our philosophy and theoretical underpinnings, social justice and social determinants of health is one of the underpinnings. So, it’s kind of like everywhere” (FMP6).

Nurse educator participants described that they found social justice teaching and learning to be largely situated within clinical settings. This is evident when a nurse educator shared that social justice teaching is limited in the simulation lab and predominantly taught in the clinical setting and said, “In the simulation lab, to be honest, I don’t think it’s overly addressed. Looking at all of our scenes, I don’t think it’s really addressed at all” (NEP4). The participant elaborated on this thought and shared, “I know that it is a concept on every clinical placement that I have with students . . . we try to educate them on the importance of culturally competent care and educate them on basically what it means” (NEP4).

Nurse educators also discussed learning outcomes of nursing students for instance,

Personally, for my clinical placements, I like to see that they’re being respectful of all cultures. We do a large aspect of reflection, so I find it really nice when I get to hear them reflect on making sure that they don’t have any personal biases towards any cultures, and

I like to also hear them talk about the injustices that some of the different cultures we see in our placements. (NEP4)

Faculty and nurse educator participants revealed that social justice is taught in relation to chronic diseases, but not in the context of cancer. A faculty member said, “I don’t know how it would be done specific to cancer, but our program” (FMP6). Nurse educators supported this notion when they said, “In relation to cancer, I don’t believe it’s that specific. They are exposed to social justice and different elements of that, but not, not necessarily specific to cancer care” (NEP1). The second nurse educator supported this when she said, “Specifically, to support patients with cancer, I do not know, but for culturally competent care, I know that we do work that into our curriculum” (NEP4). A faculty member elaborated and shared,

then in the chronic disease course again, we would approach that social justice or from the social determinants of health lens around the inequities and somebody living with chronic diseases . . . so that sort of social justice lens underpins the whole program. So, I wouldn’t say like we teach it in relation to cancer in this way because we would teach it in relation to everything in that way and then cancer would be one of the things, yeah. (FMP6)

Nursing students also described their learnings on social justice in the school of nursing. Here is a nursing student highlighting this, “That’s another thing that’s been huge in the [name of university] school of nursing curriculum that we’ve had for the three years that we’ve been here in school of nursing” (NSP6). Another example was when a nursing said, “So especially this year we were heavily, and we’ve been taught about it before, but one of our classes pretty much was entirely focused on equity based nursing and social justice” (NSP7). Nursing students shared that they learned social justice in the classroom setting but mostly learned about social justice in

the clinical setting. This nursing student participant also discussed learning in the clinical setting and said, “Yeah, I will say most of my learning has come from clinical experience in more so debriefing with particularly my nurse educator that’s on that clinical experience” (NSP7). This notion was reiterated by another nursing student when she shared similar thoughts and said, “to an extent, I’ve definitely learned more in my clinical experience . . . culturally competent care, but like I said, it was kind of just put in little bits everywhere” (NSP9).

Nursing students transparently shared their thoughts on social justice and wanting to be prepared for a diversity of cultures. This was noted in this statement, “in school we’ve talked a lot about . . . Indigenous culture, but we haven’t talked much about other cultures” (NSP10). A faculty member supported this notion when she said, “Well, we certainly talk about culture . . . I think we, we’ve kind of used the Indigenous health examples a lot” (FMP3). Other nursing students shared being prepared for diverse cultures in simulation lab. An example was,

but in like simulation we did have some case scenarios of patients who were from different cultures than what we would normally see and they were helpful . . . so I think I have had probably like 3 or 4 simulation experiences with a different culture. (NSP10)

This nursing student also shared thoughtful insights about the simulation mannequins when she said, “they’ll say, pretend this dummy is maybe Chinese or wherever . . . but it was funny because the dummies that we have typically are all white” (NSP10).

Theme Seven: Gaps and Program Needs in Oncology Self-Management Support Education Curriculum

The final and seventh theme emerging from the participant interview data is gaps in oncology self-management support education curriculum. Gaps and program needs specifically identified from the study findings for theme seven are; (a) gap in health coaching, (b) gaps in

learning self-management support competency and performance criteria, (c) the need for a coordinated approach to self-management support education, (d) need for self-management support curriculum in the context of oncology, and (e) gaps in monitoring and evaluating change in self-management support behaviours and health outcomes and quality improvement for integration of self-management support in cancer care. Each of these gaps or program needs will now be discussed.

Health Coaching. Self-management support for persons with cancer as a chronic disease includes approaches and techniques such as the provision of information and online courses and also includes more active support approaches such as motivational interviewing and specific coaching skills for behaviour change (Howell et al., 2021). Health coaching refers to the self-management support delivered by health care providers trained in behavior change theory, motivational strategies, and communication techniques that are used to assist patients in obtaining skills and developing intrinsic motivation (Howell et al., 2017; Wolever et al., 2013). Health coaching has been shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Wolever et al., 2013; Wolever et al., 2010). Coaching interventions are now being explored and implemented across the healthcare delivery spectrum, including chronic disease treatment and prevention and complex care coordination (Wolever et al., 2017). The delivery of health coaching includes in-person, phone, videoconference, and secure email and text (Wolever et al., 2017) and integrating health coaching as an intervention in self-management for persons with cancer has shown to have positive benefits on symptom severity and quality of life (Howell et al., 2021).

Patient activation and sustainable behaviour change for patients with chronic diseases are considered a cornerstone of a quality healthcare system and healthcare providers as coaches

require training and education (Wolever et al., 2017). Chan et al.'s (2023) comprehensive competency and performance criteria framework guides oncology nurses in their provision of effective, person-centered, cancer self-management support, including coaching in behavior change. This evidenced-based framework indicates the importance of health coaching being integrated in self-management support through the dedication of the fourth of six overarching domains being *coaching for behavior change tailored to the individual's phase in the cancer continuum*. Within this domain, there are nineteen performance criteria that are necessary for nurses to achieve competency in health coaching and motivational interviewing to support persons with cancer in the adoption of self-management behaviours (Chan et al., 2023).

Understanding this vital need to educate and prepare nurses to integrate the delivery of health coaching as a self-management support intervention, I felt it was important to ask participants to share their experiences of teaching and learning health coaching in the baccalaureate program. In doing so, the participants shared their experiences that would help address my research question of *what, how, and why* oncology patients' self-management support education is provided in a baccalaureate nursing program, including health coaching as an intervention.

On the participant demographic form, participants were asked to indicate the self-management skill training they received (see Appendix H-Appendix J). Only one of the ten participants indicated receiving health coaching skills training. The one participant was a nursing student who reported receiving health coaching skills training during a co-op clinical placement at a large tertiary care hospital. Each participant was asked in the interview to share their understanding of health coaching and cancer health coaching being taught and learned in the nursing program. Faculty and nurse educators were asked about health coaching curricula being taught to nursing students in the classroom, simulation lab, and clinical settings, and when

appropriate, probed to share curricula examples. Nursing students were asked about how they learned about health coaching in the classroom, simulation lab, and clinical settings, and when appropriate, how they applied health coaching in the clinical setting to support patients with cancer to self-manage. Overall, all participants reported that health coaching as a concept was absent in teaching and learning in the classroom, simulation lab, and clinical settings.

Faculty members discussed health coaching as a concept absent in the curriculum. During the discussion however, faculty member participants shared what they felt were elements of health coaching that existed. A faculty member, shared,

I don't think it is, that's fairly high-level communication and behavioral theory knowledge that wouldn't be a general, we teach at a generalist level . . . we use motivational strategies, like strength based approach . . . connecting the patients learning to their strengths and which creates motivation but if you encounter resistance or you're trying to create behavior change, that's fairly advanced skills and so we really wouldn't teach that . . . but we do teach students to determine what motivators would be for the, for the patient. (FMP6)

Another faculty member shared,

The idea of health coaching isn't a term that I'm familiar with throughout the curriculum, um, the concept of it would certainly be incorporated into a health education in the idea that you know you are just a conduit really to help the person get what they need and that they are the leader of that. So, it might be inherent, but I don't know that it's really talked about as a concept. (FMP8)

Nurse educators were asked about their understanding of health coaching within the curriculum and health coaching being taught to nursing students and they shared that health

coaching was absent within the curriculum, simulation lab, and clinical settings. A nurse educator, shared, “I really don’t have any knowledge of what is being done in the classroom” (NEP1). When probed if she was aware of any specific curricula examples she could share, this participant said, “no, not in my experience” (NEP1). When probed if there was anything related in the simulation lab around health coaching, she further shared, “No, not anything that I am a part of” (NEP1). When asked if there was anything in the clinical area that she was aware of around health coaching being taught, she said, “Honestly, like we do not use that terminology” (NEP1). The second nurse educator shared, “From my understanding and what has been portrayed to me, that is not taught in the curriculum as of right now” (NEP4).

Nursing students were asked to discuss their knowledge and understanding of health coaching, and they shared that they were unfamiliar with the term. For instance, one nursing student said, “I’ve honestly never heard that term before” (NSP2). This nursing student participant also shared, “We learned in class . . . like COPD for example, you can prevent that from happening if you don’t smoke. So, is that like what health coaching is” (NSP2)? I sensed that the nursing students discussed health coaching based on their understanding of the words “health” and “coaching” combined, and not based on learning and understanding the concept theoretically, as noted in this statement,

When I think of health coaching, I almost think of like a motivational type of approach where we’re kind of being their cheerleaders and give the information they need and making sure that they know that they can do it, and they’re competent. And yeah, just trying to give them the confidence that they can take care of their own health. (NSP10)

Although nursing student participants felt unfamiliar with health coaching from the classroom, they discussed that they felt they experienced coaching in the clinical setting, as noted in this statement,

Oh, I feel like it's definitely something that I've been learning on the palliative floor, but ah in school . . . it was more so I guessed what I thought it was, where I feel like I am doing some of those things in clinical right now . . . I didn't feel like I was really taught exactly what it was. (NSP10)

Another student also discussing health coaching in the clinical setting and said,

I've definitely learned about it within the clinical setting, I think just whenever a patient raises, um, like a concern, we kind of try to find ways to help with those. And then also once again providing information about like the side effects and stuff is really important.

So, I think we do a lot of health coaching in terms of that. (NSP5)

One nursing student shared that she learned elements of health coaching when she said, "I don't think I've ever heard it called health coaching throughout my education, but we kind of have touched on like how it's important to . . . use again like certain communication and all that kind of stuff" (NSP9). This nursing student went further by describing the importance of patients being partners in their care when she said, "And we also have touched on like the importance of getting people involved in their own health and what they can do. We've just kind of talked about the importance that someone can play in their own health type thing." (NSP9). When probed about health coaching in the context of cancer, another nursing student shared, "Cancer health coaching? Well, I can't say that. I've heard about that in school" (NSP10). When discussing learning about cancer health coaching in particular, another nursing student also shared, "In the classroom? I don't know if I necessarily have learned about it a whole lot"

(NSP5). When discussing clinical experience and opportunities to apply health coaching to persons with cancer, a nursing student shared,

I've never really thought about it that way, and I think that's something that I would personally want to change. It's that I would want to provide for the patient because this is just another area that they're experiencing, like, a lack of resources and health and a gap in the system and we really should be trying to close those gaps. (NSP2)

When probed to confirm if she was sharing thoughts related to health coaching, this participant confirmed by saying, "Yeah, yeah, yeah" (NSP2).

As mentioned, only one of the ten participants indicated on the demographic and skills training form prior to the participant interview receiving health coaching skills training. This one participant was a nursing student, participant seven, shared during the interview discussion that she did not learn coaching in the nursing school program but was exposed to health coaching, motivational interviewing, and behaviour change theory during an eight-week coop placement at a children's rehabilitation centre. She revealed this when she said,

I keep going back to the coop because I can't recall a time in school that we were taught about health coaching and I actually I reflected on that this summer when we were learning about it and thought to myself, I wish we were taught more about this in school.

And so, I was very grateful to learn that this summer. (NSP7)

When probed if cancer patients were involved in the coop experience, she said, "No. So . . . where I primarily learned about coaching was this summer in the pediatric clinic. And yeah, just this summer I was thinking to myself, I wish we had been taught more about this in school" (NSP7).

One performance criterion under the fourth domain of Coaching for Behavioural Change within the Chan et al. (2023) framework is the ability to demonstrate when a referral for specialist support is needed and to arrange for this referral. When asked more specifically if nursing students are prepared to identify when a patient requires a referral for a specialist support, for example regarding exercise or to a dietitian, a faculty member shared that collaborative care is an expectation within the program and in the Nova Scotia College of Nursing standards. A faculty member revealed, “So interdisciplinary practice is part of our curriculum, so that would be in several courses” (FMP6). Another faculty member who reported being the curriculum leader for the program said, “I think we’ve talked with the whole idea of collaborative care is taught and certainly was written into one of the standards of health, you know, standards of nursing from [name of province] college of nurses”. A nurse educator shared uncertainty whether nursing students are prepared to identify when patients require referral to a specialist support but felt it was an experience gained when in the clinical setting, and said,

I don’t think they are overly educated on it in the curriculum right now . . . but in clinical they see more when they would use a referral . . . if there’s any type of reasoning you think they might be an altered diet, we consult dietary, if there’s any type of financial concerns or discharge concerns, we would consult social work (FMP4).

Motivational Interviewing. Nurses as coaches, therapists, care providers, and educators require a tool to respectfully promote behavior change and motivational interviewing (MI) is the tool that ideally fits into the nursing profession (Dart, 2011). Although it was initially defined as a person-centered directive method for enhancing intrinsic motivation for change by exploring and resolving ambivalence, MI has been more recently specified as a clinical or communication method and interpersonal style that focuses specifically on helping patients resolve ambivalence

and commit to making a behaviour change (Simmons & Wolever, 2013). Motivational Interviewing is a communication method that healthcare providers as coaches can use successfully with patients as part of a comprehensive integrative health coaching approach (Simmons & Wolever, 2013). Moreover, MI is felt to be a useful communication method for healthcare providers to integrate into routine, daily clinical care due to the limited amount of time to assist patients to move toward behavioural change (Simmons & Wolever, 2013). The Chan et al. (2023) framework reports the performance criteria of motivational interviewing communication skills under domain one; *Person-Centered and Motivational Interviewing Communication Skills*. The Chan et al. (2023) framework also identifies the application of theoretical knowledge and skills of health coaching and motivational interviewing to support individuals in the adoption of self-management behaviours as a competency for nurses providing self-management support under domain four, *Coaching for Behavior Change Tailored to the Individual's Phase in the Cancer Continuum*.

On the participant demographic form, participants were asked to indicate self-management skill training they received (see Appendix H-Appendix J). Four of ten participants indicated they received motivational interviewing skills training: one nurse educator, one faculty member, and two nursing students. When discussing teaching and learning health coaching, participants were invited to share thoughts on motivational interviewing. One faculty member shared, "I don't think it is . . . that's fairly high-level communication and behavioral theory knowledge that wouldn't be a general, we teach at a generalist level" (FMP6). This faculty member went further discussing motivational strategies in the context of strength-based approach teaching and learning in the program and shared,

we use them [motivational strategies] like strength-based approach and you know connecting the patients learning to their strengths and which creates motivation . . . but things if you encounter resistance or you're trying to create behavior change, that's fairly advanced skills and so we really wouldn't teach that. (FMP6)

A faculty member shared that she felt motivational interviewing was an important strategy but agreed that it is not taught in the program, and said, "Motivational interviewing . . . was something we had focused on a number of years ago . . . we've been a big supporter of motivational strategic interviewing, but we don't really talk about it. So, it's certainly something that that we should verbalize, I guess" (FMP8).

One nursing student who reported having motivational interviewing skills training did not discuss MI in the interview. The second nursing student was the same student who reported receiving coaching skills training and she discussed receiving education on coaching and MI during an 8-week coop placement at the pediatric rehabilitation clinic, and shared,

So, I was in-depth educated on self-management and coaching and motivational interviewing and helping the patient become again the active participant in their own care. And really, the big part of that that we did was goal setting . . . so absolutely I can see how that is applied to cancer and what patients helping them set the goals of what they want to do and how, what interventions we can take to support that . . . since I came into the idea of the summer, I absolutely love it and I have been trying to incorporate it into my nursing care this so far this year. (NSP7)

Overall, motivational interviewing was felt to be taught in the context of strength-based learning to assist patients to become engaged in their care. Teaching and learning MI in a coordinated approach and within the context of health coaching, however, was absent and is felt

to be an important strategy to include being taught in the program. One participant who received training in MI from a setting outside of the nursing school program, shared the benefit of this learning and subsequently utilizing this learning in her clinical care.

Health Behaviour Change Theory. Health coaching and motivational interviewing are considered behavioural interventions to help patients prevent and manage chronic disease. Both health coaching and MI have origins in behavioural change theories and use interpersonal skills that emphasize empathy (Simmons & Wolever, 2013). Nurses require specific knowledge and skills, coaching for behavior change, and positive attitudes towards engaging patients as equal partners in care, in order for effective self-management support to occur (Chan et al., 2023). It is felt to be critical that self-management support training programs emphasize the theoretical underpinnings of health behaviour change and skills for effective coaching of patients to facilitate the uptake and sustained use of self-management behaviours (Howell et al., 2021). To this end, I felt it was important to explore participants experiences of teaching and learning health behaviour change in the baccalaureate nursing program.

On the participant demographic form, participants were asked to indicate education or training they received on health behaviour change theory (see Appendix H). One of ten participants reported having health behaviour change theory education or training. Participant 7 reported receiving health behaviour change theory education or training; she was a nursing student who received the training during a coop placement at the pediatric rehabilitation centre. Participants were asked to share their experiences of health behaviour change in the context of health coaching, and participants also discussed this within the context of health promotion theory. A faculty member shared, “behavioral theory knowledge, that wouldn’t be general, we teach at a generalist level” (FMP6). She also said, “But as far as the other stuff around trained

behavior change theory, our students wouldn't have that sort of, that's fairly advanced skills, yeah" (FMP6). Another faculty member shared being unsure of the behaviour change theory was being taught in the program when she said, "I understand it's part of smoking cessation theory, you know that theory of planned behavior change. Help me. Who was the theorist Prochaska Diclemente? That theory was taught, I think still this, but I'm not entirely sure" (FMP3). This faculty member also highlighted a shift in the program to social determinants of health and said, "Rather than teaching about how to quit smoking, we look at the determinants of smoking and how can we change the root causes, that shift I've seen over the last few years" (FMP3).

A nurse educator highlighted health promotion and the focus of evaluation outcomes being on skills acquisition when she said, "So the actual outcomes again for the school of nursing on their evaluations or listed in the syllabus, there isn't any on health promotion per se, it's more based around a skills competence than it is any health promotion" (NEP4). This nurse educator also shared teaching and learning occurring in the simulation lab and shared, "We do have a simulation scene on that [smoking cessation] and nursing students trying to educate on that, but the actual techniques that they received throughout the curriculum, on promoting healthy lifestyles are minimal" (NEP4). Overall, through discussions with participants revealed that health behaviour change was felt to be a skill beyond the level of a generalist baccalaureate nursing program.

Gaps in Learning Self-Management Support Competencies and Performance

Criteria. The essential self-management support competencies and performance criteria requisites from the Chan et al. (2023) framework, that were experienced and shared by participants as being present in the program, were discussed in theme two of this chapter. Through inductive analysis from the interviews, and participants self-reporting of self-

management skills training, I also noted competencies and performance criteria requisites for nurses providing self-management support that were missing. Prior to the interview, participants were asked to self-report self-management skills training that they may have received. The self-reported percentage results of participants receiving training on the following essential self-management skills were low and are, 5A's framework (10%), stress management (40%), change talk (20%), sustain talk (0%), rulers (10%) (see Appendix O). Chan et al. (2023) reports that these requisites are necessary to meet the competency of health coaching and MI to support individuals in the adoption of self-management behaviours.

The 5A's Framework. The *5A's framework* describes 5 steps to identify appropriate interventions when communicating with a patient and consists of; Ask, Advise, Assess, Assist, and Arrange. Application of the 5As framework is expected when coaching individuals for behaviour change (Chan et al., 2023). One participant, a nursing student, reported receiving this training (10%) (see Appendix O). This participant reported receiving this training during co-op placement at a pediatric rehabilitation center.

Stress Management. Chan et al. (2023) reports the ability to coach individuals in *stress management* to manage uncertainty and emotional responses is a requisite to meet the competency of health coaching and MI to support individuals in the adoption of self-management behaviours. Of the ten participants, two nursing student participants and two faculty members (40%) reported having stress management skills education or training (see Appendix O).

Change Talk. The performance criteria of *change talk* is necessary to draw out patients ideas about options or solutions for their self-identified priorities areas for behaviour change that

align with their health values (Chan et al., 2023). Of the ten participants, two nursing students reported having change talk skill acquisition education or training (20%) (see Appendix O).

Sustain Talk. The performance criteria of *sustain talk* is using communication skills of simple reflection, amplified reflection, double reflections, shifting focus, reframing, agreement with a twist, emphasizing personal choice and control (Chan et al., 2023). No participants reported having sustain talk education or skills training (0%) (see Appendix O).

RULERS. The performance criteria of *RULERS* (**R**esist the righting reflex, **U**nderstand the individual's own motivations, **L**isten with empathy to identify solutions, **E**mpower by building on individual's strengths and expertise, **R**olling with resistance, and building **S**elf-efficacy) is a coaching technique (Chan et al., 2023). One of ten participants reported having education or training on the *RULERS* performance criterion (10%) (see Appendix O).

Affirmation. When discussing patient education during participant interviews, I noted elements of patient education competency and performance criteria were missing. A performance criterion for nurses providing self-management support to demonstrate is *affirmation*. For instance, a faculty member said, "And I guess you know, I don't know that that word is used as much but positive reinforcement which is something similar" (FMP8). This was echoed by another faculty member when she said, "Those are techniques, I know, but I don't know that anyone is deliberately teaching it" (FMP3). Nurse educator participants also shared teaching affirmation as a skill was missing, as evident when a nurse educator participant shared, "I don't think that, I don't think they are addressing that to be honest" (NEP1). Nursing student participants shared being unfamiliar with the term. For instance, a nursing student said, "I'm not really sure what that word means" (NSP5).

Closing the Loop. Closing the loop is a self-management support communication concept that together with the technique of teach-back demonstration enhances recall and comprehension. Closing the loop is a performance criterion that helps to ensure the competency of applying knowledge and skills to assess the capacity for self-management of medical, emotional, and lifestyle tasks. Nurses applying the concept of closing the loop help to ensure the individual understands the self-management actions to take (Chan et al., 2023).

Participants reported being unfamiliar with the concept of closing the loop. Two faculty members shared they felt closing the loop may be discussed in the communication simulation lab. For instance, a faculty member said, “I know the theoretical stuff on communication deals with closure. How do you sign off? And that’s certainly done in semester three communication labs, that you know the different stages of an introduction and the closure” (FMP3). A faculty member reiterated this when she said, “So again, from their communication labs . . . how do you close that gap so that you’re not constantly going around that circle of telling them over and over and over” (FMP8). Another faculty member was clear about not being familiar with the concept when she said, “I don’t know. I’m not sure” (FMP6). Nurse educator participants were also unfamiliar with the concept. An example of this was when a nurse educator shared, “I would also have to say they are not” (NEP4). Nursing students reported being unfamiliar with the closing the loop concept and shared, “never heard that” (NSP9) and another nursing student said, “I understand what you mean by closing the loop, but I don’t think we’ve talked about closing the loop” (NSP10).

As mentioned, many essential elements of self-management support competencies and performance criteria requisites in the baccalaureate program were discussed and shared by participants, as discussed in theme two. However, many essential elements of self-management

support competencies and performance criteria were shared by participants as gaps in the program, as presented above in theme seven. A nursing student highlighted that she felt a gap existed in self-management and self-management support curriculum when she shared,

I think there's just a gap and there needs to be a shift as well in the adult world into more patient-centered care and more self-management . . . rather than just carrying out those interventions and like just the medical side of it . . . I think there needs to be a big shift into that framework of patient centered care. (NSP7)

When probed whether she was referring to the curriculum, she responded, “Yeah, within the curriculum as well . . . I just think there there's a lot of room to include more education on self-management and patient-centered care” (NSP7).

Need For a Coordinated Approach to Self-Management Support Education. As discussed in themes one through six, participants shared their understanding and experiences on many of the essential competencies and performance criteria for cancer nurses providing self-management support. When invited to discuss their understanding and share their experiences specifically about the concepts of self-management and self-management support, however, I recognized that participants shared that an intentional, integrated, comprehensive, and coordinated approach to teaching and learning the provision of self-management support performance criteria was required. I noted that when discussing self-management and self-management support with participants, specifically there was; (a) a need for a dedicated place in the program for the learning and application of self-management support curriculum, (b) an uncertainty where self-management support performance criteria were situated in the curriculum, and (c) an unknowing shared by nursing students on “how to” provide self-management support.

Need for a Dedicated Place in the Program for the Learning and Application of Self-Management Support in Curriculum. Participants shared that they felt there was a gap in self-management support curriculum teaching and learning in the program and the approach to teaching and learning this concept could be enhanced. This was evident when a nurse educator shared, “I don’t know the extent that it’s being delivered. I do think there’s a class with theory, but it definitely doesn’t have a specific place in the curriculum” (NEP1). The second nurse educator reiterated this notion when she shared, “I would like to better prepare them, but acknowledging, I guess, the lack of curriculum that they do have on it right now in school” (NEP4). Nursing students echoed these thoughts on teaching and learning self-management support in the program, and an example of this was when a nursing student shared, “I’ve really tried to think back about what we were taught about the self-management and I, not to speak badly about the program whatsoever, but I really can’t recall too much about self-management truly” (NSP7). This was also shared by another nursing student when she shared, “Yeah, I feel like maybe we lack that a little bit. I guess in my communications course, we would have learned those types of things and those skills. And how to talk to people” (NSP5).

Uncertain Where Elements of Performance Criteria of Self-Management and Self-Management Support are Situated Within the Curriculum. Participants described performance criteria within the program but were unsure or unconfident about where in the curriculum the criteria were situated. Examples of this from faculty members were when one faculty said, “I think it is integrated in terms of self-management of chronic disease. I think that the concepts are there. I think person-centered care is well done in our curriculum. I think health literacy is done well . . . beyond that, I think there’s a gap” (FMP3). This was further elaborated on by another faculty member when she shared,

It's a really big shift in nursing thinking, to get nurses to really understand self-management support and their role in that as a facilitator and nursing programs are so geared towards nurses providing care and this doesn't get envisioned as care, they envision nursing care is like nursing interventions. (FMP6)

This faculty member also shared, "So, that theory underpins a lot of our curriculum . . . you know, in our communication labs for instance, how do you get out of people what it is they want" (FMP6).

Nurse educators also shared that performance criteria exist but were unclear in expressing where self-management support "lived" within the curriculum. A nurse educator participant highlighted this when she said,

So, I really just think taking that holistic nursing approach and asking what interventions we can do for them before they leave . . . with that self-management at home and not have to end up back in the hospital if it's not necessary . . . I would like to better prepare them, but acknowledging, I guess, the lack of curriculum that they do have on it right now in school. (NEP4)

Nurse educators also shared their thoughts of self-management support curriculum as being an important gap to address in the curriculum. This was highlighted in this statement,

Self-management doesn't have a place in the curriculum . . . I think that we could probably do a better job, because I know they're getting that communication piece, I think we could do a better job of actually applying it so that they are having these conversations with these patients and promoting that. So, I think even just having this awareness would be beneficial. (NEP1)

This was supported when another nurse educator shared, “self-management support is the basis of all nursing care and should be discussed as that, but it’s definitely lacking right now” (NEP4).

Nursing students also discussed elements of self-management support performance criteria but were unable to describe criteria as being situated within a coordinated provisional self-management support approach. An example of this was when a nursing student discussed her understanding of self-management support and said, “Kind of like the core stuff I remember learning in school like communication techniques and like letting them guide the conversation and just active listening and all that kind of stuff” (NSP9). This participant also shared, “Like I think like the general stuff again, like making sure that there’s supports like people to talk to or like if it was a one on one with someone or kind of like peer support group type stuff” (NSP9). A further example of nursing students discussing their understanding of self-management support elements but not within a coordinated approach was when a nursing student shared, “So, I would say basically to my understanding . . . we like learned that nurses are really beneficial teachers for how patients can self-manage their disease like through like home therapies and medications and like non-pharmacologic interventions as well.” (NSP2). This participant also shared,

I would maybe recommend like there’s lots of online resources they can seek out. So, I would kind of research those myself . . . I’d personalize it to the client and then I might share those resources with them. There’s also like support groups that they can attend where . . . there’s other similar people who are dealing with the same type of thing.

(NSP2)

Nursing Students Uncertainty about “How To” Provide Self-Management Support.

Nursing students clearly articulated their experiences of learning and providing performance self-management criteria present in the program, as described in theme two. It was compelling

however, that nursing student participants shared stories of providing patient care in the clinical setting using skills they learned but expressed an unknowing *how to* activate patients to engage and participate in their care. This notion supported my thoughts about the need for a coordinated, integrated approach and dedicated place for teaching and learning the provision of self-management support in the program. For instance, a nursing student shared, “we never really went into how or what the best ways to motivate those people are” (NSP9). When we discussed the delivery of patient education, and I probed for the nursing student to share her experience on assessing a patient’s understanding of using their *past experiences* to apply to patient teaching, this nursing student said, “But other than really just talking with patients, I don’t, I don’t really know much else on how to” (NSP9). A nursing student shared being unsure *how to* activate a patient to participate in their care when she said, “But one thing we don’t really talk about a lot is kind of like teaching those things to patients . . . I don’t really know how I could like delegate to a patient to go do for themselves at home” (NSP5). When probed about where she felt this engagement or activation teaching and learning should be situated, she responded, “I think in the classroom. Probably because we talk a lot about delegation to different healthcare professionals, but we don’t really talk about it very much in terms of nurses delegating to patients or family members and teaching them specifically about their own care” (NSP5). This nursing student also added, “I think it could probably just be talked about a bit more, maybe even like in one specific lesson or something” (NSP5). Another nursing student also added what she wished she had learned in the program was *how to* motivate patients to participate in their care, and shared,

We know that we want to get patients to be a part of their health and we know that we can teach them these strategies to help. But . . . if we talked about ways . . . like make

them want to be a part and ways to keep them like motivated to be a part of their health and that kind of stuff. (NSP9)

When asked to share any further thoughts, this nursing student said, “It would be nice to learn more about, like helping motivate people to play a role in their health I guess would kind of sum it up” (NSP9). A nursing student shared learning from professors to support patients with relaxation techniques and visualization techniques. She shared a story with me about caring for a patient and said, “I actually like said that to a patient once, like I was like oh just picture like something that makes you happy. Like something that you really like find relaxing and they laughed at me” (NSP2). This nursing student went further and shared,

I wish that we learned a more like realistic take . . . I think we should be taught a more like broader scope and like things that are fundamentally like and factually that are going to work for the patient and like that coaching because I think some of the things that we’re taught like just really in the end aren’t realistic. (NSP2)

When asked to share any further thoughts, this nursing student said, “I honestly think that they could probably make a whole course on this topic that would focus a lot on self-management support because it’s, it really plays a huge role in the persons experience with cancer throughout their lifetime” (NSP2). A nursing student specifically spoke about cancer self-management when she said, “I wish that we talked about it more because cancer is so prevalent . . . I feel like we should have had maybe more simulations on cancer” (NSP10).

Need For Self-Management Support Curriculum in the Context of Oncology.

Participants were asked to share their experiences on how cancer is taught and learned in the program. A faculty member shared, “Yeah. so no, we don’t have a course called cancer . . . traditionally year one is non-nursing courses, there is a biology course there, then physiology and

chemistry, psychology, philosophy, ethics, nutrition, um English. So, there's no specific content" (FMP3). Another faculty member described how teaching oncology is throughout various concepts. This was highlighted when she said, "As I say, its snippets of it all over the place . . . there's not necessarily dedicated content to oncology, it's threaded throughout" (FMP6).

A nurse educator shared, "Specific to oncology care? Probably almost none, unless they're patient in the hospital, they're clinical placement, they have a patient who has a diagnosis and is there as the chief complaint. Otherwise, it's pretty rare" (NEP1). This participant went further and shared, "And so, um, what they learn in the classroom through more the pathophysiology aspect of it you pull out in the simulation lab and clinical area" (NEP1). A second nurse educator spoke about cancer teaching in the simulation lab and said, "Right now we don't have any oncology aspects in any of our sim scenes" (NEP4).

Nursing students described a focus of learning about cancer mainly in the context of pathophysiology in the classroom and from textbook readings for instance, "Just like the pathophysiology, like in textbooks like us reading more chapters . . . but we, I would say there could definitely be, a like greater touch on that." (NSP2). This participant further described this when she shared,

So, we've obviously had some classes . . . they really introduced the pockets of oncology to us. We haven't really gone in depth on different types of oncological diseases, we've just like touched on the basis what like a cancer is and how it develops and how it goes to different parts of the body and stuff. (NSP2)

Another nursing student participant shared, "we talked about it in my pathophysiology class . . . and we talked about different types of chemotherapy and different agents and all that kind of stuff . . . besides that class, it was never really taught in depth" (NSP9).

Although all participants reported that education on self-management performance criteria were provided in the program (e.g., essential communication skills, patient education, person-centered care), the education provided was not in the context of oncology. A faculty member, said, “In the context of cancer, some nursing students receive oncology education during their clinical practicum and others do not” (FMP3). Another faculty member explained,

So, we don’t necessarily teach like cancer as a topic in a course. It’s like sprinkled throughout, and then I teach a course in chronic disease management and that would be considered like a long term. So, I teach aspects of chronic disease and then, and then we have different types of chronic diseases. And then palliative and end of life care. So, we would in chronic diseases. (FMP6)

The participant explained further when she said, “I can’t say that we have anything specific that we teach directly [to cancer], we don’t have a piece of curriculum that is for oncology nursing, that would be considered a specialty area of practice, and we graduate generalists” (FMP6). A faculty member who reported also being the curriculum leader shared,

I think it is integrated in terms of self-management of chronic disease. I think that the concepts are there . . . I think complex care such as cancer care, I think some students are getting it if they have a good, good experience in their practicum . . . beyond that, I think there’s a gap. (FMP3)

Nurse educators shared the same sentiments of self-management support in the context of cancer teaching being limited in the program. A nurse educator reiterated this when she said, “Specifically to cancer, from what I’ve seen so far, it is not discussed” (NEP4). A second nurse educator said, “a gap in self-management curriculum is evident” (NEP1).

Nursing students described learning about the pathophysiology of cancer and shared very little with me on self-management support in the context of cancer. Here is a nursing student highlighting this when she shared, “I feel like I haven’t learned about it a whole lot in lectures, yeah” (NSP2). Another nursing student reiterated this when she said, “Yeah, I guess a little bit. I feel like we haven’t necessarily taken the time to like learn about it specifically, but it’s just been incorporated within all the other material” (NSP5). Another nursing student discussed pharmacology and mentioned learning about cytotoxic precautions, and said, “We talked about like the different drug classes and everything like that. And like we talked a little bit about . . . cytotoxic precautions and that kind of stuff. But it was very general” (NSP9). Nursing students recognized the prevalence of cancer, for instance, “I wish we talked about it more because cancer is so prevalent, I didn’t realize how prevalent cancer really was until the palliative floor and just on regular med-surg floors because a lot of patients did have cancer” (NSP10). Nursing students also expressed wanting to have further education on cancer care, for example,

I feel like we should have had maybe more simulations on cancer . . . and um just kind of explain like the difference between regular nursing trying to help people through getting better and then trying to help people through knowing that they’re not going to get better and making them comfortable. I think that was a big difference for me that I really struggled with. So, I think I’d appreciate some more education on that part. (NSP10)

The nursing students also shared with me the difficulty finding time to complete the course readings. An example of this was, “I would say like our workload for the week . . . it was like very like in depth and it was demanding . . . it was definitely a stretch to be able to get to those other readings and have the time” (NSP2). This was echoed by another student when she shared, “Nursing is really busy, so I haven’t been able to do all the readings for my degree”

(NSP9). When probed whether she recalled reading the course document *The Registered Nurses Association of Ontario Self-Management Guidelines*, this nursing student responded, “No”

(NSP9). When probed if she recalled reviewing concept seven in Giddens book on self-management, she said, “A little bit. Like we had the Giddens book but I don’t feel like self-management, we might have like touched on, but specifically from that book, I don’t remember that” (NSP9).

Monitoring and Evaluating Change and Quality Improvement for Integration.

Guided by the Chan et al. (2023) framework and completing an inductive thematic analysis of participant interviews following the six phases of Braun and Clark (2006), I recognized participants shared very little in relation to two of the six domains; (a) monitoring and evaluating change in self-management behaviours and health outcomes, and (b) quality improvement for integration of self-management support in cancer care, and are for more advanced learning.

Monitoring and evaluating change in self-management support behaviours and health outcomes is described by Chan et al. (2023) as the application of knowledge and skills in evaluating changes in health using outcome measures. It is also described as the application of knowledge and skills to assist in self-monitoring of disease and health and the uptake of self-management of behaviours (Chan et al., 2023). During discussion, all participants were asked to share situations on measuring learning outcomes. Only some participants shared their thoughts on self-management learning outcomes and when asked if there were learning outcomes she would look for, a nurse educator said, “To be honest no, no, I find that it’s not even, a lot of the time, it’s not even considered” (NEP1). When asked to share expectations or learning outcomes for nursing students providing self-management support so that patients can self-manage, she reiterated her thoughts and said, “I don’t, I don’t think we’re doing a good job with that, I don’t

think it's even considered" (NEP1). The second nurse educator shared learning outcomes being based on course objectives and said, "So the actual like outcomes again for the school of nursing on their evaluations or listed in the syllabus . . . it's more based around like a skills competence" (NEP4). A faculty member discussed evaluating the skills nursing students learned and shared,

Every clinical course objective . . . that's always a part of what's looked at . . . with an individual student or the course objectives . . . the educators are aware of content . . . the evaluation tool speaks to the entry level competencies which has a number of indicators that require that assessment of learning needs, delivery of education that the person is missing. (FMP8)

A faculty participant also shared, "So, assignments and exams . . . is how you evaluate . . . or you know, activities . . . exam questions and stuff like that, that makes them think in that broader context how someone lives and then what would they need to live with this" (FMP6).

Quality improvement for integration of self-management support in cancer care is domain six and refers to the application of knowledge of quality improvement and skills in implementation of practice change to support the integration of self-management support in routine cancer care (Chan et al., 2023). It is recognized within the evidenced-based framework that not all competencies and performance criteria may be suitable for all levels of nurses (clinical nurses vs specialty oncology nurses vs advanced practice nurses). During interview discussions, participants shared recognizing the importance of self-management support in patient care and the importance of self-management support education being provided within the program. Through their self-reflection during our discussion and the recognition for the improvement in the delivery of self-management support education, faculty members, nurse educators, and nursing students offered insightful and excellent recommendations for the future

inclusion and delivery of oncology self-management support curricula. A faculty member shared, “we really should have a cancer care situation in sim lab, you know in terms of designing, you know courses . . . a good case study . . . perhaps different levels for the sim lab would be perhaps one way of standardizing some information” (FMP3). When reflecting during our discussion, this faculty member, who is the curriculum program leader, shared other thoughts about building capacity for self-management support in the curriculum and said,

That would best be modeled by someone who knows how to do it. I think it can be discussed in class . . . I think that would be a wonderful situation that you could build. You could start even with having someone diagnosed in semester three and then move into complexity of care by semester six, I think that could be done umm nicely through a case study, through a simulation. Yeah, I think it would also be fantastic to have guest speakers in. (FMP3)

This faculty member went further sharing her thoughts on recommendations of the integration of cancer self-management support integration in the nursing program, and said, “I think more evidence-based guidelines that we could use would be helpful” (FMP3). She also shared,

Well, I don’t know if we have room for a course just by that name as ideal as that would be, if I had my dreams come true, I’d see a year five . . . with a residency that students who are really interested in oncology nursing could do that. Well . . . I think from a practical perspective, I think a simulation example could be doable in the immediate without adding an extra year . . . but the kind of care that I think cancer patients ideally need is provided by nurses with postgraduate experience and certification. It might be obtainable with you know, with good mentorship from a from nurses with that background, as could be attainable with the CNA oncology certification or a residency in

cancer nursing. I'm throwing that out there because I know it's a pipe dream, but a residency in cancer care would be for nurses would be the model that I'd like to see.

(FMP3)

Another faculty member shared,

If we introduced that person with cancer in our semester three in the communication lab and then carried them through all of the different courses with different levels and different layers of learning, I think we would do a much better job in being supportive as opposed to instructive. (FMP8)

A nurse educator shared, "I think it's a very interesting study. I definitely, I'm happy to be a part of it and I think that we need to incorporate a lot more of it into our curriculum"

(NEP4). The nurse educator shared recommendations in her discussion when she said,

So, I mean we could introduce, we could introduce a family with a child with cancer early on and then we could move through and have that child grow to be an adult and then maybe have a recurrence. I'm just thinking off the top of my head here, but if we really want it to incorporate that supportive of piece of self-management support. We can't always get that for every student in the clinical setting, but in the in the lab, simulation center and classroom, we could if we if we had that, that structure. (NEP4)

A nursing student shared her recommendation when she said, "I honestly think that they could probably make like a whole course . . . I think there's a lot of different ways that we can teach people how to self-manage their illness and how we can provide that support" (NSP2).

Ten participants consisting of three participant groups; faculty members, nurse educators, and nursing students, were interviewed to share their experiential insights on self-management support teaching and learning in the baccalaureate nursing program. As discussed, seven themes

from the ten participant interviews emerged through reflective inductive thematic analysis (Braun & Clark, 2006). Interpretation of these themes will be provided in the discussion chapter, chapter seven.

A Qualitative Data Outlier in This Study

Qualitative data exists when a researcher can make descriptive statements about a topic based on observations, interviews, or evaluation (Merriam & Tisdell, 2016). Detecting deviations of characteristics of qualitative data is more complex and challenging compared to numerical data in quantitative research. However, it is important to do so to be aware of the potential for the outlier negatively affecting the quality of the data clusters and therefore the quality of the work (Nowak-Brzezinska & Lazarz, 2021). In this study, an outlier was recognized. This outlier was one nursing student participant who received comprehensive self-management support education at a location outside of the study setting. Therefore, this did not meet the study inclusion criteria and does not fall within the themes. However, as a participant the nursing student is included as a unit of analysis and as data generated from the interview, therefore will be reported. Moreover, the participant's data highlights a gap in the program on coaching, more advanced communication skills such as MI, and a program need for an intentional, comprehensive approach to teaching and learning self-management support.

This nursing student participant shared learning the self-management support strategies of coaching, goal setting, and motivational interviewing, from a new physician and while completing a clinical co-op placement at a pediatric rehabilitation center at a large academic tertiary care center. The nursing student stated, "So, I was in-depth educated on self-management and coaching and motivational interviewing and helping the patient become again the active participant in their own care" (NSP7). The participant described the benefit of learning these

skills in an intentional, comprehensive manner and shared “wishing” she learned self-management support interventions, including coaching, in the nursing program. She said, “It’s all these bunch of different coaching and communication techniques that I wish I had learned [in school] what I learned this summer. I’m like, oh my gosh, this is so extremely helpful” (NSP7). The nursing student expressed the appreciation and usefulness of learning self-management support and that she now intentionally utilizes the learned self-management support interventions when she is now on in other clinical settings, and shared, “I absolutely love it and I have been trying to incorporate it into my nursing care . . . I try to share it with my colleagues and teach them about it because it was so helpful” (NSP7). The participant reiterated utilizing her learnings and the significance it made to her clinical practice when she shared, “Yeah, a huge difference. Yeah, I’m very grateful to have had that because its, it’s certainly impacted my care that I’ve done now” (NSP7). The participant also shared how learning a coordinated approach of self-management support could be applied to persons with cancer, and stated, “So absolutely, I can see how that is applied to cancer and . . . helping them set the goals of what they want to do and how, what interventions we can take to support that” (NSP7).

Chapter Five Summary and Conclusion

This chapter presented the results from interviews with ten study participants; three faculty members, two nurse educators, and five nursing students in a baccalaureate nursing program. Seven themes emerged through inductive thematic analysis. The seven themes are: (a) gap on oncology curriculum, (b), partial coverage of self-management support competencies and performance criteria requisites, (c) the integration of person-centered care teaching and learning, (d) essential communication skills, (e), patient education interventions for self-management

support, (f) social justice, and (g) gaps and program needs in oncology self-management support education in the curriculum.

The results from participant interviews revealed that oncology curriculum in the program is limited and focuses primarily on pathophysiology. Results also revealed that self-management support curriculum is taught within the context of other chronic diseases (e.g., cardiovascular disease, asthma) and not taught specifically in the context of oncology self-management support curriculum. The partial coverage of teaching and learning some performance criteria to give the knowledge and skills required to obtain the competencies required for nurses providing oncology self-management support are situated throughout the program and may exist in the classroom, simulation lab, and/or clinical setting. Participants shared they felt self-management support and oncology self-management support are important curriculum concepts to consider. Although results from the participant interviews identified gaps and program needs in oncology self-management support, the curriculum in the baccalaureate program has the foundation to integrate further self-management support criteria that need to be applied across disease populations. The next chapter, chapter six, provides the results from a deductive thematic analysis of the course-based documents in the baccalaureate nursing program, and the emergent themes from the data source are presented.

Chapter 6: Results Course Documents

While Chapter 5 provided the results from the participant interviews, Chapter 6 provides the results of the course document data collected from four courses that were purposively selected within the nursing program. This chapter provides an overview of the documents from four courses within the baccalaureate nursing program, a reflective deductive thematic analysis is described, and the results of the course document data collection situated within the Chan et al. (2023) six theoretical framework domains are shared. Triangulation within the course documents, triangulation within the participant interviews, and triangulation between participant interviews and course documents (Denzin, 1978) will be shared in the interpretation discussion of chapter seven.

Healthcare environments are ever-changing and highly challenging, and nurse educators are compelled to prepare nursing students to work within this environment through models of nursing education that focus on evidenced-based practice, integration of didactic and clinical education, clinical reasoning, and shifting needs within patient populations (Repsha et al., 2020). Nursing education learning occurs in different locations that includes the classroom, simulation labs, and clinical placements (Reierson et al., 2024). Nursing education in the classroom has traditionally focused on an information transfer model centered on the lecture (Ellis, 2016). In this model professors use teaching strategies to facilitate the teaching-learning process through means that include necessary materials, classroom organization, audio visual resources, case studies, and group discussions (Chavaglia et al., 2018). Various sources of evidence for case study research are highly complementary (Yin, 2018). Thus, my intent was to conduct a thorough examination of course documents to augment the participants shared experiences and provide a deepened, robust understanding to assist in addressing my research question of *what*,

how, and *why* oncology patients' self-management support education is provided in a baccalaureate nursing program, including health coaching as an intervention.

Guiding Framework for the Course Document Data Collection and Analysis

The Chan et al. (2023) International Competency Framework for nurses providing self-management support is an evidenced-based framework that was developed by an international team of experts in self-management and cancer nursing research and education. Importantly, the framework identifies the requisite knowledge and skills for nursing practice in the provision of self-management support for cancer survivors and their families. The framework is considered a first step in the development of a training program curricula to prepare nurses in self-management for cancer and associated coaching knowledge and skills (Chan et al., 2023). As shown in Table 3, ten competencies and 42 performance criteria are categorized into six distinct domains. This evidenced-based framework was ideal to guide the reflective deductive thematic analysis for the data collected from the course documents for this study.

Table 3

Nurse Competencies for Self-Management Support in Cancer Populations

Six Distinct Domains	Oncology Nurse Competencies for Self-Management Support
Domain 1 Person-centered and motivational interviewing communication skills.	<ul style="list-style-type: none"> • Establish rapport and engage individuals as partners in self-management of cancer and health. • Apply motivational interviewing skills including collaboration, compassion, and acceptance to establish rapport.
Domain 2 Whole-person assessment of self-management support needs and capacity for self-management.	<ul style="list-style-type: none"> • Apply knowledge and skills to assess the self-management support needs of individuals and their families. • Apply knowledge and skills to assess capacity for self-management of medical, emotional and lifestyle tasks of cancer and healthy.
Domain 3 Health promotion knowledge theories and interventions.	<ul style="list-style-type: none"> • Establish rapport and engage individuals as partners in self-management of cancer and health.

	<ul style="list-style-type: none"> • Apply knowledge of health promotion theories and interventions to promote uptake of healthy lifestyle behaviours in individuals at risk for /or diagnosed with cancer.
<p>Domain 4 Coaching for behavior change tailored to the individual's phase in the cancer continuum.</p>	<ul style="list-style-type: none"> • Apply theoretical knowledge and skills of health coaching/motivational interviewing to support individuals in the adoption of self-management behaviours. • Apply knowledge of relevant behaviour change theories to promote patient autonomy in behaviour change.
<p>Domain 5 Monitoring and evaluating change in patients' use of self-management behaviors and health outcomes.</p>	<ul style="list-style-type: none"> • Apply knowledge and skills in evaluating changes in health using outcome measures. • Apply knowledge and skills to assist in self-monitoring of disease and health and uptake of self-management behaviours.
<p>Domain 6 Quality improvement for integration of self-management support in cancer care.</p>	<ul style="list-style-type: none"> • Apply knowledge of quality improvement and skills in implementation of practice change to support the integration of self-management support in routine cancer care.

(Chan et al., 2023, p. 9).

Nursing Courses and Data Documents For Applicable Data Extraction

The Director of the school of nursing reviewed this case study with nursing faculty during a faculty meeting on July 5th, 2023. Following the meeting, the Director reported that four courses were identified and agreed upon by faculty members as having oncology, chronic disease, and/or self-management and self-management support content, and therefore suitable for the study. The four courses identified were: (a) NURS332: Advanced Therapeutics for Care of Persons Experiencing Complex Multisystem Challenges, (b) NURS308 Medical-Surgical, Mental Health, and Perinatal Nursing, (c) NURS333: Physical Health 11, and (d) NURS408: Community Health Nursing.

Four types of documents as data sources examined for each of three courses (NURS332, NURS308, and NURS333) were the course (a) syllabus, (b) class slide deck lectures, (c) textbook readings, and (d) other readings (other readings included all documents that could be electronically and systematically searched such as articles, assignments, case studies, websites,

and organizational guidelines). I was provided only the syllabus and not the electronic learning platform (Moodle) site for the fourth course, NURS408. Therefore, I was not able to access the lectures and supplemental readings for NURS408. From the syllabi for NURS408 however, I was able to identify the required textbook readings. Therefore, the syllabi and textbooks for this course were examined.

The publishing company Wolters Kluwer granted me electronic access to the company's textbooks (approximately half of the textbooks for the four courses) to complete an electronic search. The library provided hardcopies of the remaining textbooks for me to conduct a hand search. The applicable chapter readings for each textbook to review were identified on the course syllabi.

Data Analysis of Extracted Data From Document Data Sources

Data collection of the course documents occurred between November 2023 and February 2024. The six domains from the Chan et al. (2023) International Framework were my six themes from which the applicable extracted data findings from the course material were situated. As described in the methodology chapter, a chart document was created using the Chan et al. (2023) framework for each of the four courses (see Appendix K). When systematically searching each course document, I electronically recorded the applicable data finding adjacent to the competency and performance criteria and within/under the applicable and respective four columns (course syllabi, class side deck lectures, textbooks, and other readings). A fifth column on the chart was for me to add any comments or reflections. The column headings for data collection from the four courses were organized and situated under each of the frameworks overarching six domains. Using the performance criteria and requisite competencies under the six domains of the Chan et al. (2023) framework, deductive thematic analysis was conducted on

the data compiled within each chart for each of the four courses. The intent of the thematic analysis was to understand the type, prevalence, and application of the course documents used by the school of nursing to enhance the knowledge and skills of nursing students about oncology patient self-management support. NURS332 accumulated 36 pages of findings, NURS308 accumulated 24 pages of findings, NURS333 accumulated 23 pages of findings, and NURS408 accumulated 21 pages. The total number of documents and type of documents reviewed from each of the four courses are reported in Table 4.

Table 4

Number and Types of Course Documents Per Course

Course	Syllabi	Class PPT Lectures	Textbooks	Other Readings
NURS332	1	19	56	49
NURS308	1	54	48	71
NURS333 (3 Sections)	1	38	58	95
NURS408	1	-	51	-
TOTAL	4	111	213	215
Total Number of Documents for Four Courses: n= 543				

Six Themes Resulting From The Data Analysis

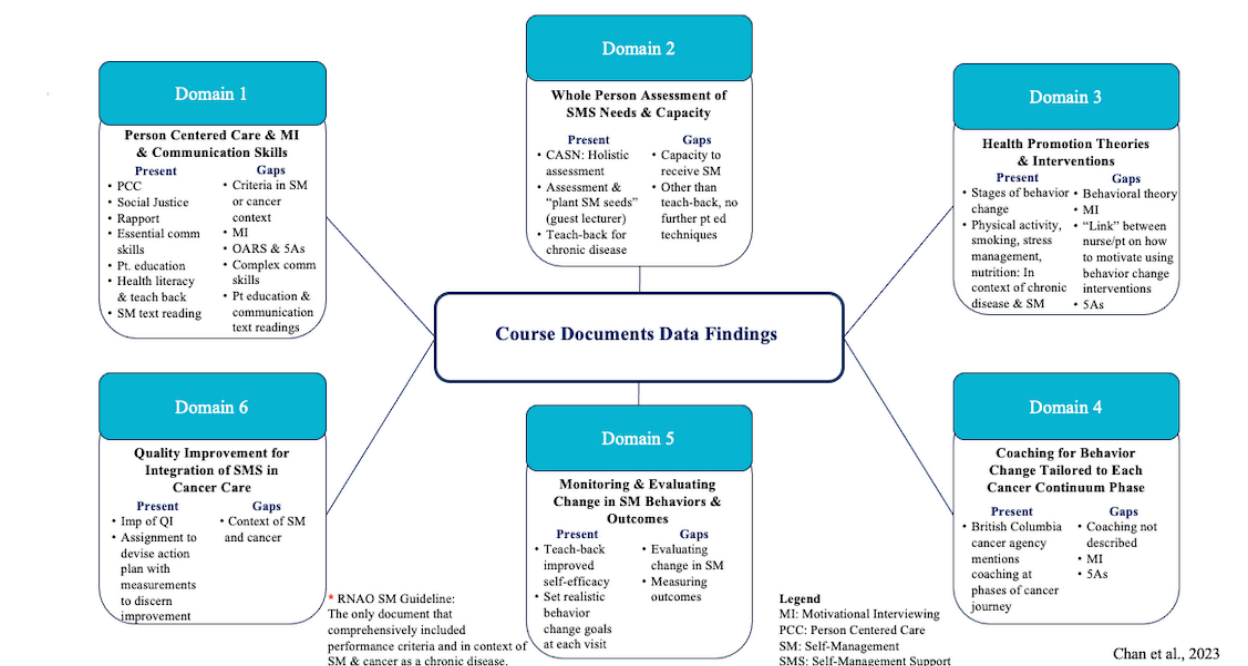
The competency framework is comprised of a total of 52 items that identifies and provides consensus on the requisite knowledge and skills for nurses providing self-management support to cancer survivors and their families (Chan et al., 2023). The identified ten competencies and 42 performance criteria are categorized into six domains (see Appendix K). A nursing competency is defined as the abilities, skills, knowledge, attitudes, and behaviours that are combined and required to act in the delivery of desired results and for evaluating job performance (Chan et al., 2023; Fukada, 2018). The six domains report the nurse competencies for self-management support for persons with cancer. These six domains are the themes from

which the extracted data were situated to conduct reflective deductive thematic analysis (see Appendix K). The presence and gaps in performance criteria, that were identified through the comprehensive course document review, are transposed against the Chan et al. (2023) framework domains and shown in Figure 3.

Figure 3

Course Documents Data Finding

Presence & Gaps in Performance Criteria Necessary to Achieve Requisite Competencies for Self-Management Support & Coaching in Cancer Care



Theme 1: Person-Centered and Motivational Interviewing Communication Skills

Nurses who are competent in person-centered and motivational interviewing communication skills demonstrate skills or competencies in establishing a rapport and engaging persons with cancer as partners in the self-management of cancer and health. Nurses apply motivational interviewing skills that include collaboration, compassion and acceptance to establish rapport (Chan et al., 2023).

Reflective deductive thematic analysis was conducted on the extracted data recorded within the charts for the four courses in relation to domain/theme one. Person-centered care was defined in two course lectures and located in readings. Ensuring individualized person-centered care was reported as an expectation for clinical practice and the concept was threaded throughout the courses in class lectures and readings. Person-centered care in the context of culturally competent care and social justice, particularly in the care of Indigenous Peoples, was comprehensively reflected in course syllabi, textbooks, and lecture documents. Establishing rapport and collaboration with patients and the health care team was also present. However, person-centered care and culturally competent care were not reflected in the context of self-management and was not reflected in the context of cancer.

Learning objectives on course syllabi were found to include demonstrating knowledge of communication strategies to effectively work with patients and health care providers. Essential communication skills were present and in particular included health literacy and the teach-back method to promote active, clear patient-provider communication across the care continuum. The College of Nurses document, from the province where the study took place, was a reading that refers to the expectation of effective communication skills to build trust, compassionate, and therapeutic client relationships in nursing care.

Enhanced patient teaching and learning skills in promoting self-management for persons experiencing complex multi-system health concerns and approaches to chronic disease management was reported as a learning objective from one course syllabi (NURS332). Patient education techniques were mentioned in required readings, however, not in the context of self-management support for cancer populations. The concepts of communication and patient education were not included as required readings in the Giddens (2021) textbook on concepts.

Self-management was defined in a class lecture and the needs for self-management support were described for traditional chronic diseases, such as diabetes. Strength-based nursing was reported as an important concept in one article. The concept of self-management was indicated as a required reading from the Giddens (2021) concept-based textbook for the mental health course (NURS308). Assessing for adequate knowledge for patients to participate in self-management was present in one class lecture. Case studies were found and used as exemplars. Otherwise, motivational interviewing, coordinated self-management support strategies, and self-management in the context of cancer were absent.

I noted that one document, The Registered Nurses Association of Ontario Best Practice Guideline on strategies to support self-management in chronic conditions (2010) was listed as a required reading. This is a comprehensive guideline that provides evidenced based recommendations for nurses in self-management support (Registered Nurses' Association of Ontario, 2010). Although not specific to cancer, this self-management support document reports the inclusion of cancer as a chronic disease and provides guidance on the self-management strategies of person-centered care and motivational interviewing.

Theme 2: Whole Person Assessment of Self-Management Support Needs and Capacity

Nurses who are competent in whole person assessment of self-management support needs and capacity demonstrate applying knowledge and skills to assess the self-management support needs of individuals and their families. Nurses apply knowledge and skills to assess capacity for self-management of medical, emotional, and lifestyle tasks of cancer and health (Chan et al., 2023).

Reflective deductive thematic analysis was conducted on the extracted data recorded within the charts for the four courses in relation to domain/theme two. Ensuring a holistic patient

assessment by nurses was identified. The Canadian Association of Student Nurses (CASN) guidelines describe nurses conducting a holistic assessment of patients' individual strengths and abilities to set goals (CASN, 2015a). However, assessing for a patient's self-management needs and capacity to receive self-management support was absent. The importance of starting with a thorough assessment and "planting the seeds" of self-management was conveyed on the PowerPoint slides of a guest lecturer.

The provision of care by nurses across the continuum of care was reported in the course documents and the inclusion of family and carers in the provision of care was threaded throughout the curricula in the syllabi, class slide decks, textbooks, and readings as being included as part of routine patient care. The importance of remaining active as a lifestyle with a chronic disease diagnosis was reported. While this was not found in the course documents in the context of self-management and cancer, remaining active as a lifestyle is recognized in cancer survivorship literature as being important to enhancing quality of life and outcomes (Rock et al., 2012).

Enhanced communication approaches promoting the collaboration of persons with chronic diseases and within health care provider teams were identified. However, other than locating the teach-back method in congestive heart disease as a self-management support technique, strategies of enhanced communication approaches were absent. The importance of nurses assessing for a patient's understanding of their health concern and understanding patient's past experiences with cancer, was located in one document on chronic kidney disease. The Registered Nurses Association of Ontario (2010) best practice guideline document on strategies to support self-management in chronic conditions included nurses understanding of patients building on past experiences as a self-management support strategy.

Theme 3: Health Promotion Theories and Intervention

Nurses who are competent in health promotions theories and interventions apply knowledge of health promotion theories and interventions to promote the uptake of healthy lifestyle behaviours in individuals at risk for or diagnosed with cancer (Chan et al., 2023). Reflective deductive thematic analysis was conducted on the extracted data recorded within the charts for the four courses in relation to domain/theme three. One course syllabus was found to have an objective of integrating relevant theories and models of chronic care. One class in one course were found to have slides on the stages of behavioural change. Another class in one course class lecture slides was found to have behaviorism, cognitivism, and andragogy, however, it is unsure how this was articulated and taught during class.

The nurse's role in strategies to promote behaviours and patients to make lifestyle changes was found in a textbook reading related to cardiovascular disease. Interventions to support self-management and patient decisions about diet, exercise, and medication are discussed, and a reading on self-management is discussed for activity and nutrition. Health promotion theories were not found in class lectures. Physical activity, nutrition, smoking cessation, and stress management were found in relation to improving health and its importance for patients to self-manage, but the link between the nurse and patient on *how to* motivate, using behavioral theory, was not found.

The Giddens (2021) textbook chapter on the concept of self-management discusses cognitive behaviour change, but not in the context of cancer. The Registered Nurses Association of Ontario (2010) best practice guideline on strategies to support self-management in chronic conditions document included The 5As framework. The 5As framework describes the five steps to identify appropriate interventions with a patient (ask, advise, assess, assist, and arrange) to

coach patients in behavioural change (Chan et al., 2023). Self-management support was noted in Webster et al. (2020) and behaviour change was discussed in Austin and Boyd (2019); however, this was not included in the readings.

Theme 4: Coaching for Behaviour Change Tailored to the Individual's Phase in the Cancer Continuum

Nurses who are competent in coaching for behaviour change tailored to the individual's phase in the cancer continuum apply theoretical knowledge and skills of health coaching/motivational interviewing to support individuals in the adoption of self-management behaviours. Nurses apply knowledge of relevant behaviour change theories to promote patient autonomy in behaviour change (Chan et al., 2023). Reflective deductive thematic analysis was conducted on the extracted data recorded within the charts for the four courses in relation to domain/theme four. The stages of behaviour change were found in a class lecture. Coaching and motivational interviewing for behavioural change were not located in the class lectures. A reading discussed remote communication between nurses and patients and shared a nurse providing self-management support as an example. Once again, the chapter on self-management in Giddens (2021) was a reading. One reading reported coaching as a strategy at phases of the cancer journey. However, the document did not describe *how to* provide self-management coaching. The Registered Nurses Association of Ontario (2010) best practice guideline on strategies to support self-management in chronic conditions document considers coaching as a self-management support for chronic diseases and describes coaching using the 5As as a coaching technique.

A class lecture was noted on providing patient education for symptom management of cancer, however not in the context of self-management. A class lecture was found to include

teaching on self-care in diabetes. This lecture also reported and recognized that without self-management patients are at risk of a poor outcome due to acidosis. An article on strength-based nursing discusses readiness to change and a class was found to teach patients on how and when to contact a healthcare provider. Nursing students demonstrating skills in the use of information and communication technology was found as a course objective in a syllabus and information technology communication was an expected competency. The Nova Scotia College of Nurses defined informatics. The readings described the use of telecommunications by nurses throughout the continuum of care, however not in the context of self-management and not in the context of cancer.

Theme 5: Monitoring and Evaluating Change in Self-Management Behaviours and Health Outcomes

Nurses who are competent in monitoring and evaluating change in self-management behaviours and health outcomes apply knowledge and skills in evaluating changes in health using outcome measures. Nurses apply knowledge and skills to assist in self-monitoring of disease and health, and uptake of self-management behaviours (Chan et al., 2023). Reflective deductive thematic analysis was conducted on the extracted data recorded within the charts for the four courses in relation to domain/theme five. The readings discussed nurses supporting patients to change and contributing to the evaluation of quality of palliative care to enhance quality of life, however, not in the context of behavioural change, self-management, or cancer care. Although not specific to cancer, a guest lecturer's slides reported healthcare providers being familiar with tools to aid in assessment and follow-up and setting realistic behavioural change goals with patients at each visit. The self-management chapter from the textbook Giddens (2021) does not discuss outcome measurement. The teach-back method is reported in a reading

as improving medication adherence, hospital readmission, and self-efficacy. A learning objective from the course NURS408 was for nursing students to demonstrate knowledge in ways of engaging partners to collaborate and advocate with the community to create and implement strategies that improve the health of populations. Due to not having access to course documents, I was unable to search the class lecture slide decks and readings. Overall, monitoring and evaluating change in self-management behaviours and health outcomes was absent in all the course documents.

Theme 6: Quality Improvement for Integration of Self-Management Support in Cancer Care

Nurses who are competent in quality improvement for integration of self-management support in cancer care apply knowledge of quality improvement and skills in the implementation of practice change to support the integration of self-management support in routine cancer care (Chan et al., 2023). Reflective deductive thematic analysis was conducted on the extracted data recorded within the charts for the four courses in relation to domain/theme six. Nursing students were asked as an assignment to develop an action plan and discern patient improvement over time. Nursing students were also asked to develop plans of care. The importance of liaising with colleagues in health care teams was found, however not in the context of quality improvement. The readings were found to discuss quality improvement. However, only one article from the Canadian stroke guidelines discussed measurement and evaluation tools as resources. A reading discussed a quality improvement project reporting teach-back as being measured and an effective strategy. Although an excellent article to read, I reflected on whether nursing students could translate this single self-management strategy to clinical practice. Overall, the importance of quality improvement in chronic diseases such as cardiovascular diseases, respiratory illnesses, and in palliative care was present. However, the integration of quality improvement of self-

management and self-management support in cancer care was absent. Table 5 provides a summary of the comprehensive document findings that are aligned and situated with the six domains (Chan et al., 2023).

Table 5

Summary of Findings from Course Documents

Domain	Number of Times Performance Criteria Found in Course Documents Per Domain	Type of Document	Summarized Course Document Content
<p>Domain 1 Person-centered and motivational interviewing communication skills.</p>	148	<p>Syllabi (11) Class Lectures (33) Textbook Readings (36) Other Readings (68)</p>	<p>Individualized person-centered care of patients and families and social justice is present & threaded throughout but not linked to SM and not in context of cancer. Essential communication skills, health literacy, rapport, collaboration present, not in context of SM or cancer. Teach-back present, not in context of cancer. Motivational interviewing not present. RNAO BPG is comprehensive SM document and includes cancer.</p>
<p>Domain 2 Whole-person assessment of self-management support needs and capacity for self-management.</p>	89	<p>Syllabi (10) Class Lectures (31) Textbook Readings (15) Other Readings (33)</p>	<p>Holistic assessment and “planting seeds” of SM present, not in context of cancer. Capacity to receive SM not present. Teaching skills mentioned, but other than teach-back, techniques not present. RNAO BPG includes whole person assessment, SM capacity</p>
<p>Domain 3 Health promotion knowledge theories and interventions.</p>	45	<p>Syllabi (2) Class Lectures (22) Textbook Readings (10) Other Readings (11)</p>	<p>Stages of behaviour change reviewed. Behaviorism, cognitivism, andragogy in one class, one reading. Physical activity, smoking cessation, stress management, nutrition</p>

			etc. present for chronic disease and important for SM. Link between the nurse and patient on “how to” motivate (using behavioral theory) however, not present. RNAO BPG includes health promotion.
Domain 4 Coaching for behavior change tailored to the individual’s phase in the cancer continuum.	121	Syllabi (8) Class Lectures (44) Textbook Readings (18) Other Readings (51)	Coaching using 5As described in RNAO BPG. British Columbia cancer agency mentions coaching at phases of cancer journey. “How to” coach not described. Otherwise, no coaching or motivational interviewing.
Domain 5 Monitoring and evaluating change in patients’ use of self-management behaviors and health outcomes.	22	Syllabi (0) Class Lectures (10) Textbook Readings (4) Other Readings (8)	Guest lecturer slide deck: to set realistic behavioural change goals at each visit. Not in context of SM or cancer. Social cognitive theory, cognitive-behavioural theory described. Teach-back strategy evaluated as being effective. Otherwise, evaluating SM change not present.
Domain 6 Quality improvement for integration of self-management support in cancer care.	31	Syllabi (2) Class Lectures (13) Textbook Readings (2) Other Readings (14)	Importance of quality improvement present. One reading discusses measurement tools and evaluation tools, not in context of SM or cancer. Article on quality improvement of teach-back strategy discusses effective outcome. Assignment to devise an action plan with measurements to discern improvement over time, but not in context of SM or cancer.

Legend:

RNAO: Registered Nurses Association of Ontario

BPG: Best Practice Guideline

SM: Self-Management

Chapter Six Summary and Conclusion

This chapter presented the results of data collected from course documents of four courses in the baccalaureate nursing program. Six overarching domains from the Chan et al. (2023) International Competency Framework were the themes from which collected data was situated. Results from the systematic review of the course documents reveal that documents pertaining to cancer are primarily and heavily entrenched as pathophysiology. Results also reveal that slide decks for class lectures, textbooks, and supplemental readings for chronic diseases such as cardiovascular diseases, respiratory diseases, and diabetes, are present. Self-management support performance criteria and competencies such as essential communication skills, patient education, social justice, person centered care, liaising with healthcare teams, and health promotions strategies were present. Coaching was found in the context of nurses coaching nurse colleagues and found to be absent in the context of nurses coaching patients. I found it interesting that self-care was discussed in multiple documents, however, self-care was in the context of healthcare providers and not in relation to patients. One article discussed the self-management strategy of teach-back and a quality improvement project positively measuring its effectiveness. I was granted access to the course syllabi and textbook readings, and not the lecture slide decks and readings, for one course: NURS408. From the course syllabi of NURS408, collaboration with patient and community partners is indicated as an important learning course objective. Coaching, motivational interviewing, self-management, and cancer were not present in the syllabus or textbook readings. While the concept of self-management was a reading from Giddens (2021), the concept is not discussed in the context of cancer. Unfortunately, the concept chapter on patient education and the concept chapter on communication from Giddens (2021) were not reported as readings for students.

An exception was the Registered Nurses Association of Ontario (RNAO) Best Practice Guideline (2010) document on strategies to support self-management in chronic conditions. This guideline comprehensively outlines strategies for nurses to provide self-management support for persons with a chronic disease and was identified as a required reading. The document also reports cancer as being considered a chronic disease. A second exception was a document that discussed a quality improvement project reporting teach-back as being measured and reported as an effective self-management support strategy. The next chapter is the discussion chapter. In chapter seven, results from chapters five and six are triangulated, my interpretation of the data is discussed, and the research question and objectives are addressed.

Chapter 7: Discussion

In this chapter, a summarized synthesis and interpretation of the main findings for discussion is provided. Specifically, the chapter provides my analysis and interpretation of the study findings on the extent and impact of oncology self-management support education curricula in a baccalaureate nursing program. The discussion chapter begins with a brief overview, including the research study aim and themes emergent from the data analysis. I then synthesize and summarize my interpretation of key findings through the lens of my theoretical framework, and the findings are supported with key scholarly literature. The in-depth analysis of key findings resulted in three overarching data interpretations that reflect patterns across all data sources (participant interviews, course documents, and journal notes). The three overarching data interpretations that will be discussed in this chapter are: 1. Curriculum coverage and inadequate coverage of fundamental criteria and requisite competencies in the baccalaureate nursing program to prepare nursing students in the provision of oncology self-management support. 2. Curricula need for instruction on cancer, cancer being considered a unique and chronic illness, and self-management support for persons with cancer. 3. Integration of teaching and learning oncology self-management support across all program areas (i.e. classroom curricula, simulation lab, and clinical preceptors). Lastly, a concluding section of the chapter is provided.

Overview: Research Aim, and Data Analysis Emergent Themes

Self-management support patient education provided by health care providers to patients with cancer has been reported in the literature (Howell et al., 2017; Lovell et al., 2014; Musavi et al., 2021; Mutsaers et al., 2021; Schulman-Green & Jeon, 2017). Self-management support education for nurses caring for patients with chronic diseases has also been reported in the literature (Duprez et al., 2018, 2022; Howell et al., 2023; McCleary et al., 2016; Sinclair et al.,

2020; van Hooft et al., 2018). However, this thesis makes an important and novel contribution by advancing knowledge of curricula in undergraduate education to prepare nursing students in self-management support and coaching in cancer populations.

The study was conducted in response to the international calls for oncology self-management support research and curricula (Chan et al., 2020, 2023), the recognition of the unique self-management support needs of persons with cancer reported in the scholarly literature (Howell et al., 2019, 2021), and from my own clinical experiences and research (Liska et al., 2018; Liska et al., 2016; Mutsaers et al., 2021, 2024; Rushton et al., 2015; Rutkowski et al., 2021). This thesis identified a gap in the scholarly literature on understanding the extent and impact of self-management support education in baccalaureate nursing programs. Consequently, the use of a case-study methodology enabled a comprehensive and in-depth examination of the self-management support education literature, and this thesis provides an understanding of what self-management support education curriculum is currently being taught and learned in a baccalaureate nursing program. Resultantly, recommendations are made for baccalaureate nursing programs in Canadian universities and are presented in chapter eight of this thesis (see Appendix P).

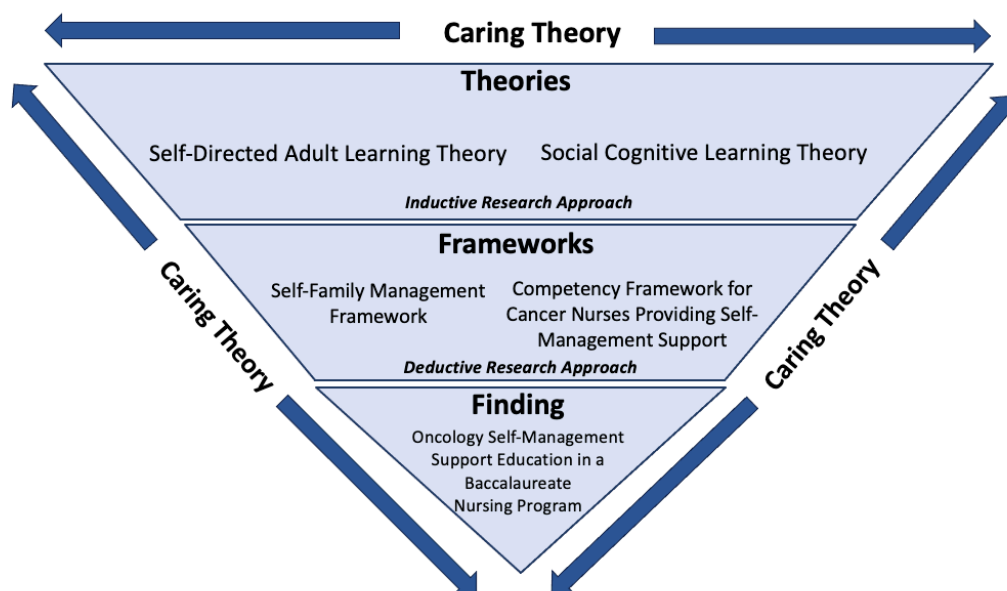
The aim of the study was to understand the extent, if any, that educational approaches of oncology self-management support existed and the impact, if any, upon baccalaureate nursing curriculum, its educators, and students. Specifically, the purpose of this qualitative case study was to explore the *what*, *how*, and *why* (Yin, 2018) a baccalaureate nursing program educated their nursing students on oncology self-management support to enable individuals in self-management of cancer as a chronic illness and their health. The research study question was: *What, how, and why* does a baccalaureate nursing program provide oncology self-management

support education? My theoretical framework helped to examine, interpret, and inform my understanding of faculty, nurse educators, and nursing students' experiences of teaching and learning oncology patient self-management support.

The theoretical framework consisted of: Caring Theory (Roach, 2002), Self-Directed Adult Learning Theory (Knowles, 1975), Social Cognitive Learning Theory (Bandura, 1997b), Self- and Family Management Framework (Grey et al., 2015), and the International Competency Framework for Cancer Nurses Providing Self-Management Support (Chan et al., 2023). As shown in Figure 4, this theoretical framework provided the relevant theoretical underpinning to guide the research study and, resulting from an inductive and deductive research approach, I discuss three overarching data interpretations on the extent and impact of teaching and learning oncology self-management support in the baccalaureate nursing program.

Figure 4

Theoretical Framework: Oncology Self-Management Support Education in a Baccalaureate Nursing Program Interpretation of Data Sources



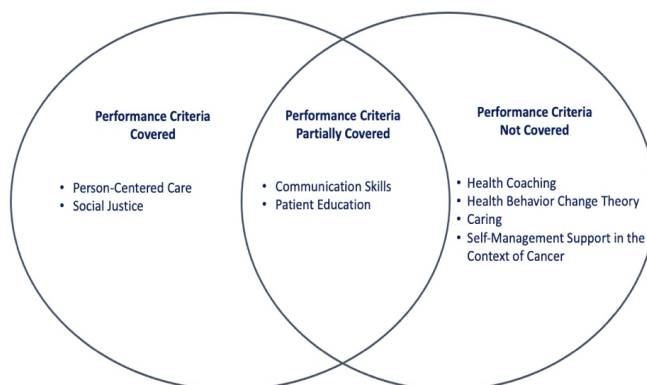
Three overarching data interpretations reflect the pattern across all the study data sources. I will now provide a summarized synthesis and interpretation of the three main findings for discussion.

Interpretation One: Inadequate Curriculum Coverage of Critical Performance Criteria and Requisite Competencies

Overall, the study results demonstrated a partial coverage of performance criteria curricula necessary for nurses to achieve the requisite competencies for the provision of self-management support and coaching in cancer populations. As shown in Figure 5, performance criteria comprehensively covered in the curricula were person-centered care and social justice. Performance criteria that had partial coverage in the curricula were communication skills and patient education. Performance criteria not evident in the curricula were health coaching, behaviour change theory, caring, and self-management support in the context of cancer. The performance criteria covered in the curriculum were reported by all participants as being taught and learned in the classroom, simulation lab, and/or clinical setting, and were also identified in the course documents.

Figure 5

Coverage of Performance Criteria in a Baccalaureate Program Deemed Necessary to Achieve Requisite Competencies for Self-Management Support and Coaching in Cancer Populations



Comprehensive Coverage of Performance Criteria in the Curriculum

The study findings demonstrated comprehensive curriculum coverage on person-centered care and social justice, which are essential constructs necessary for nurses to achieve competence in the provision of self-management support to persons with chronic conditions. These performance criteria were considered by all participants (faculty, nurse educators, and nursing students) as being core value concepts of the program and fundamental underpinnings of the curriculum taught and learned early and threaded throughout the entirety of the program. Teaching and learning these concepts were reported across all participants as being situated in the classroom, simulation lab, and clinical setting. Data collected from the course documents were found on person-centered care and social justice to support participant findings. These performance criteria are considered fundamental building blocks in the provision of self-management support for individuals with chronic diseases (Chan et al., 2023; Lawn & Battersby, 2009; Howell et al., 2023; World Health Organization, 2023) and were confidently shared by all participants as being taught and learned in the program and important fundamental self-management support performance criteria.

Findings supported nursing students being prepared through class lectures, readings, and in clinical settings on the performance criteria of person-centered care, social justice, and health literacy. These concepts are essential underpinnings of self-management support (Chan, 2023; Howell et al., 2023; Lawn & Battersby, 2009; World Health Organization, 2023) and the inclusion of these concepts in the baccalaureate nursing program provides critical building blocks for teaching and learning the provision of oncology self-management support (Chan et al., 2023; Howell et al., 2023; Lawn & Battersby, 2009). The strength of person-centered care and social justice to ensure cultural competence provides the nursing program with essential and

foundational performance criteria requisites to prepare nursing students in the provision of self-management support, and therefore I recommend that these criteria continue to be taught and learned in the baccalaureate nursing program.

Inadequate Coverage of Performance Criteria in the Curriculum

The study findings demonstrated inadequate curriculum coverage of communication and patient education for nurses to achieve competence in the provision of self-management support to persons with chronic conditions. All participants recognized the need for enhancing curriculum coverage of these self-management support performance criteria to ensure better preparation of nursing students to achieve competency.

Communication Skills. Essential communication skills with families and carers are adequately covered in the curriculum through course work, primarily taught and learned during a dedicated simulation lab, and reinforced in the clinical settings, and include (a) establishing a rapport and trust, (b) active listening, (c) open-ended questions, (d) simplifying communication, and (e) summarizing what you have talked about. These five essential communication skills from the Chan et al. (2023) framework were described by all participants as being taught and learned starting in the second-year communication lab and then threaded throughout all curricula, simulation labs, and clinical settings. Although these communication skills are critical in the provision of self-management support, further essential coaching communication skills deemed necessary to achieve competency are required in the program curricula (Chan et al., 2023; Howell et al., 2023; Lawn & Battersby, 2009). These criteria include motivational interviewing and the 5As framework (Ask, Advise, Assess, Assist, and Arrange, used when coaching individuals for behaviour change).

Nursing student participants reported having difficulty communicating with persons with cancer. This finding is supported by a study conducted by Lin et al. (2017) that explored a group of forty-five Taiwanese nursing student's experiences of communication with patients with cancer and their families. The study reported that up to 76% of participants had difficulty communicating with cancer patients and the communication caused them emotional distress. A lack of preparation in knowledge and skills and emotional regulation before clinical placement in cancer settings contributed to nursing students' negative communication experience (Lin et al., 2017). Nursing students may feel overwhelmed when communicating with persons with cancer if they are not adequately prepared (Davidson, 2020). Furthermore, the more advanced communication skills not covered in the program, such as motivational interviewing, are important in the provision of self-management support (Howell et al., 2021) and are necessary to achieve the requisite competencies for self-management support and coaching in cancer populations (Chan et al., 2023; Howell et al., 2021). Further, the baccalaureate program utilizes a concept-based textbook, Giddens (2021). Although communication as an essential performance criterion to achieve self-management support was identified as a chapter in the Giddens (2021) program textbook, it was not identified as a required chapter reading for nursing students. Having the Giddens (2021) chapter, or other applicable communication concept readings, being required is recommended to deepen nursing students learning (Alsayed et al., 2021) on communication performance criteria.

It is critical that communication approaches be assessment-oriented, person-centered, and participatory to foster patient willingness and engagement in self-management (Chan et al., 2023) and personal patient self-management goals and action planning should be integrated into treatment plans (Chan et al., 2023; Howell et al., 2021). Faculty and nurse educators recognized

the need for further communication curriculum to support a deeper level learning (Alsayed et al., 2021). Based on these findings and Social Cognitive Learning Theory (Bandura, 1997b), academic educators could consider additional communication curriculum, such as the essential coaching communication skills, across learning settings (course work and readings, simulation lab, and clinical settings) to support student's confidence in communication with persons with cancer and their families. Lin et al. (2017) supports this recommendation by suggesting case scenarios and role playing in less stressful environments to enhance student's feelings of self-efficacy.

Motivational Interviewing. Motivational interviewing (MI) is a tool that ideally fits the nursing profession to assist nurses as coaches, therapists, care providers, and educators to respectfully promote behavior change (Dart, 2011). Although MI was felt by participants to be taught in the context of strength-based learning to assist patients to become engaged in their care, curriculum coverage of MI in a coordinated approach as a more advanced communication skill and within the context of health coaching and patient education was not evident.

Motivational interviewing has been shown to have effective results in promoting behavioral changes in the context of other chronic conditions such as cardiovascular disease, diabetes, and HIV. However, adequate training has been reported as lacking for undergraduate nursing students and a structured program is recommended (Lavilla-Gracia et al., 2023). Nursing students recognize the need for MI training in curriculum due to their lack of skills, knowledge, and self-confidence (Lavilla-Gracia et al., 2023). A growing body of research highlights the fact that the combination of this approach with more active learning strategies, such as case studies, class debates, or role playing, is key to promote deeper levels of learning (Bristol et al., 2019). For example, Lavilla-Gracia et al. (2023) described a training course used to teach nursing

students MI for alcohol misuse demonstrated that the students were satisfied with the training they received. Moreover, nursing students reported, (a) an acquisition in knowledge and improvement in MI microskills, (b) that they felt capable conducting motivational interviews, and (c) that they implemented the tools and strategies they learned in their clinical practice. A course on MI for alcohol misuse positively influenced nursing students both personally and in terms of their future professional work by improving their knowledge, skills, attitudes and self-perceived competence (Lavilla-Gracia et al., 2023). Similarly, Seigart et al. (2018) found that the implementation of MI training curriculum was valued by students, faculty, and clinical partners, and the researchers recommended that all nursing programs consider implementing MI curriculum within their nursing programs.

Motivational interviewing as a method of promoting behaviour change through coaching using therapeutic communication aligns with the nursing profession (Dart, 2011). The integration of MI in the curricula of the nursing program would advance nurses' communication skills essential to the provision of self-management support. The MI training program recently published by Lavilla-Gracia et al. (2023) could guide the introduction of a MI training course in the baccalaureate nursing program. As described within the communication section above, the theory of motivational interviewing could be introduced in the classroom and its application practiced in the simulation lab and clinical settings to assist nursing students develop coaching and behaviour change skills. Readings on motivational interviewing were not identified as required readings in course documents. In light of these findings, academic educators should consider for the nursing program curricula instruction on motivational interviewing in the classroom, application in the simulation lab and clinical settings, and a required reading, to assist nursing students achieve a deeper level of learning (Alsayed et al., 2021). The MI skills gained

through the integration of teaching and learning in the program has the potential to have multifaceted positive implications in all future areas of clinical activities (i.e. mental health), including helping to enable cancer patients in the self-management of their disease.

Patient Education. The performance criterion of patient education was identified as having partial coverage in the curriculum. All participants described the coverage of patient education performance criteria requisites for patients, families, or carers that included (a) assessing for capacity to receive health education, (b) individuals' beliefs, (c) having patients share what they already know and their intended goals, (d) teach-back, (e) health literacy, and (f) assessing for past experiences. Regarding assessing for past experiences, nursing students described being aware of the criteria but unaware of "how to do it". A patient education course is provided during the third year of the program that includes principles of adult learning and utilizing technology and patient and community resources. Although patient education was identified by all participants as being an influential self-management support intervention, participants also identified elements of patient education not covered in the curriculum and required program enhancement, including communication skills of affirmation, closing the loop, and change talk.

Affirmation is a communication skill that is demonstrated when communicating with patients and is a strategy used with OARS motivational interviewing communication skills. The acronym OARS includes open-ended questioning (O); affirmations (A); simple, amplified, and complex reflections (R); and summarizations (S) (Chan et al., 2023). OARS motivational interviewing is a more advanced communication skill (Howell et al., 2023) that supports person-centered care (Chan et al., 2023). OARS communication skills are important patient education strategies to draw out patients' ideas about options or solutions for their self-identified priorities

areas for behaviour change and ensure individuals understand the self-management actions to take (Chan et al., 2023). I noted that this level of self-management supports communication with patients and in the realm of providing patient education was inadequately covered in the curriculum and not understood by faculty, nurse educators, and nursing students. Readings on OARS were not identified as required readings. Readings on OARS (along with appropriate classroom learning activities) could help to ensure nursing students achieve a deeper level learning of patient self-management support. Further, nursing students shared that they wanted further education on these performance criteria which would provide greater understanding and confidence providing self-management support (Bandura, 1997b).

Faculty participants shared that teaching and learning patient education curriculum in the classroom was not specific to cancer, rather it focused broadly on health and wellness and illness care. Nurse educator participants were aware of curriculum covered in the classroom but unable to provide specifics of the curriculum. Across all participants, it was reported that unless a nursing student is assigned a patient undergoing cancer treatment in the clinical setting, then patient education strategies as key components of self-management support to patients with cancer are not covered. The absence of patient education classroom curriculum not specific to cancer, and the unpredictable nature of whether a nursing student would be assigned to a patient with cancer to employ learned patient education self-management support skills, requires further attention. This is due to the questionable connection a novice nurse (Benner, 1982) is able to make between a learned classroom concept and its application in the context of oncology patient self-management support. Further, the baccalaureate program utilizes a concept-based textbook, Giddens (2021). Although patient education was located as a chapter in Giddens (2021), it was not identified as a required reading for nursing students. Having the Giddens (2021) chapter, or

other applicable patient education concept readings, being required could deepen nursing students learning on patient education as an essential performance criterion to achieve self-management support (Alsayed et al., 2021). To ensure adequate preparation of nursing students for future clinical care of persons with cancer, curriculum enhancements with these patient education performance criteria are recommended to be included in the baccalaureate program to enhance both patient education and communication skills. Moreover, nursing students as novice nurses may be unable to recognize the connection between learning patient education strategies and providing the strategies within the context of oncology self-management support to enhance deeper learning. Enhancing the performance criteria and situating it within an intentional and coordinated oncology self-management support teaching and learning training program could assist nursing students in drawing a connection between the criteria and self-management support for persons with cancer.

Performance Criteria Not Evident in Curriculum Coverage

The study findings demonstrated curriculum coverage on the necessary self-management support performance criteria of health coaching, behaviour change theory, caring, and self-management support for persons with cancer, for nurses to achieve competency in the provision of self-management support, were not evident. All participants recognized the need for curriculum coverage on these self-management support performance criteria to ensure better preparation of nursing students to achieve competency.

Health Coaching. Health coaching is a self-management support strategy delivered by health care providers who are trained in behavior change theory, motivational interviewing strategies, and communication techniques that are used to assist patients to obtain skills and develop intrinsic motivation (Howell et al., 2017; Wolever et al., 2013). Health coaching has

been shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Wolever et al., 2013; Wolever et al., 2010) and therefore is important to consider for self-management support in cancer populations. Cancer self-management health coaching is a person-centered, collaborative approach for providing self-management support that educates, engages, and motivates patients to take a more prominent role in managing specific cancer problems and adopting health behaviors to reduce acute, long-term and late effect risks, reduce morbidity and optimize health (Howell et al., 2019). Health coaching is considered a key intervention of self-management support and therefore was included specifically in the research question of this study.

Early palliative care programs with integrated coaching in self-management have shown positive benefits on symptom severity and quality of life (Howell et al., 2021). Health coaching as an intervention is often supported by technology such as web coaching platforms and mobile apps for remote monitoring of symptoms and has been shown to improve symptom management and reduce hospitalizations (Howell et al., 2021; Wolever et al., 2017). Chan et al.'s (2023) evidenced-based framework indicates the importance of health coaching being integrated into self-management support as the sixth overarching domain, *coaching for behavior change tailored to the individual's phase in the cancer continuum*.

The 5As Framework. The 5As framework is a behaviour change counselling framework that consists of a set of five sequential actions; Ask, Advise, Assess, Assist, and Arrange. This model captures the cyclic process of self-management support (van Hooft et al., 2018) and may be used by healthcare providers as a behavioural counseling process for patients in the use of self-management behaviours to build individuals capacity to become better self-managers (Howell et al., 2023). In a study conducted by van Hooft et al. (2018) exploring how Dutch

baccalaureate nursing students are educated to support people's self-management in clinical practice, one third of participants reported not receiving enough education on self-management support. More specifically, educational needs were focused on the *arrange* and *assist* phases of the 5As framework (van Hooft et al., 2018).

The application of the 5As framework is expected when coaching individuals for behaviour change (Chan et al., 2023). Health coaching performance criteria of stress management, change talk, RULERS (**R**esist the righting reflex, **U**nderstand the individual's own motivations, **L**isten with empathy to identify solutions, **E**mpower by building on the individual's strengths and expertise, **R**olling with resistance, and building **S**elf-efficacy), and sustain talk (also used for effective communication) are communication and coaching skills. These skills are necessary to meet the competency of health coaching and MI to support individuals with the adoption of self-management behaviours. Results from this study indicated that these skills are not covered in the program, and integration within the nursing program is critical to prepare nursing students to support self-management behaviour change. Fundamental skills identified for all nurses as being necessary for delivering effective self-management support in routine care and cancer coaching, include establishing rapport, setting a shared agenda, assessing readiness using rulers, ask-tell-ask, closing the loop, teach-back, and goal setting (Chan et al., 2023; Howell et al., 2023; RNAO, 2010). Howell et al. (2023) reported teaching these fundamental self-management support skills, and training on the integration of the skills within the 5As behaviour counseling process, demonstrated an improvement in oncology nurses' knowledge and self-confidence in providing self-management support and coaching in routine cancer care.

Although not evident in the program curriculum, all participants reported they felt health coaching was an important curricula concept to add to the program. Study findings indicated a

gap in nursing students learning about health coaching for behaviour change in the classroom, simulation lab, and in the clinical area. Health coaching curricula have been integrated into other health care teaching, such as medicine, and organizations could draw from these programs to integrate within baccalaureate nursing programs (Polak et al., 2017). The National Education and Training Standards for Health and Wellness Coaching has also been identified for training and education programs (Jordan et al., 2015). These coaching requirements are considered universal requirements for health care professionals (Jordan et al., 2015) and align with the Chan et al. (2023) self-management support performance criteria and competency requisites. As such, they could guide the inclusion of health coaching curriculum in baccalaureate nursing programs. Additionally, the integration of coaching curricula should be assessed for the performance of practical skills that include the demonstration of basic coaching competency. Organizations in the United States (Singh et al., 2022) and the United Kingdom (National Health Service England, 2023) have developed evidence-based health coaching training for health care professionals to meet competencies that includes the use of evidenced based practice interventions and motivational interviewing (Singh et al., 2022).

Health coaching and motivational interviewing are considered behavioural interventions to help patients prevent and manage chronic disease (Howell et al., 2021). However, teaching and learning health coaching for behavioural change as a performance criterion was reported across all participants as not being covered in the curriculum and readings on health coaching, the 5As, behavioural theory, were not identified in course documents. The integration of health coaching curricula for chronic diseases has demonstrated effectiveness in medical school education (Singh et al., 2022). Providing training and support for staff in the use of coaching skills is one way to support people to manage their own health. Health coaching can equip

providers with additional conversational skills, techniques, and the mind-set to support and empower patients toward their own goals (Health Education England, 2015). The most important skills gained from the health coach training were curriculum underpinnings currently provided in the nursing program; these skills are effective communication for the delivery of patient centered care and demonstrating team and leadership skills to optimize health (Singh et al., 2022). Many further health and wellness coaching tasks already exist within the nursing program, and include establishing rapport, active listening, and open-ended questions as core communication skills. The coaching skills for curriculum training and education that are published (Health Education England, 2015; Jordan et al., 2015; National Health Service England, 2023) could be used as a program assessment document from which to identify gaps that exist in curricula and provide a foundation to build knowledge capacity for faculty, educators, and nursing students (i.e. establishing goals, behavior change models, motivating for behavior change).

Behavioural Change Theory. Patient activation and sustainable behaviour change for patients with chronic diseases are key for a healthier healthcare system and healthcare providers, as coaches require training and education (Wolever et al., 2017). The theoretical underpinnings of health behaviour change are critical for self-management support training programs to facilitate patient uptake and sustained use of self-management behaviours (Howell et al., 2021, 2023). Self-management involves applying cognitive and behavioural skills to manage the medical aspects of cancer including physical symptoms and treatment side effects, psychosocial consequences, and role and lifestyle changes that are inherent with living with cancer as a chronic disease (Howell, 2018, 2023). Persons with cancer not only require knowledge and skills, but also health behaviour change, and providing self-management support helps to build patients' capacity and self-efficacy to effectively self-manage the disease (Howell et al., 2023).

However, coverage of health coaching and behavioural change skills were not evident in the study. Although not discussed by participants, one class PowerPoint was found to include behaviorism, cognitivism, and andragogy, and the program textbook (Giddens, 2021) included discussion of cognitive behavior within the concept of self-management as a required reading.

There is increasing interest in training health professionals in conversational and behaviors change skills to support health coaching conversations (Health Education England, 2015). Nurses are in a position to coach individuals to promote behaviour change and need to be better equipped through training to motivate those with chronic conditions to take charge of their health and well-being (Dart, 2011). Nurses trained in self-management support skills and behaviour change counselling as cancer coaches demonstrated an improvement in oncology nurse's confidence in the provision of self-management support (Howell et al., 2023).

Providing self-management support involves more than education related to the disease and condition. It also involves coaching persons with cancer in the cognitive and behavioural application of self-management behaviours to address certain concerns, such as cancer related fatigue (Howell et al., 2023). Nurses require specific knowledge and skills to provide self-management support and coaching for behaviour change. Teaching and learning behaviour change and the underpinnings of behaviour change theory across all areas of the nursing program will deepen the learning and application of self-management support. Although baccalaureate nursing students are being educated and trained at a generalist level, it is noteworthy that nursing students were unfamiliar with the concept. Because of this, an introduction to coaching for health behavior change at the baccalaureate level is recommended. Adult learning theory suggests that learning is enhanced by building on a person's previous knowledge and experience (Knowles et al., 2015). Guided by adult learning theory, teaching theoretical concepts of behaviour change

and self-efficacy in the classroom and applying this teaching and learning in the simulation lab and clinical setting, will enhance nursing student's self-efficacy in providing self-management support (Knowles et al., 2015; World Health Organization, 2023).

Programs should include patient education and intense training in management of disease specific problems to facilitate action through behavior change and adherence to behaviors using cognitive approaches and build problem-solving specific self-efficacy (Howell, 2018). A coordinated, intentional training program on health coaching that includes the underpinnings of behavioural theory, health coaching skills, all nested within the 5As framework, is recommended to be integrated within the baccalaureate nursing program.

Caring. A third construct not evident in the findings was the teaching and learning about the concept of caring. Caring is considered simply *the human mode of being* common to all humanity, but uniquely expressed through nursing (Roach, 2002). The provision of psychosocial and relational support by nurses has been reported by persons with cancer as being important to enable their ability to self-manage their disease (Paterson et al., 2018). Caring and empathy are reported as integral elements in the provision of effective oncology nursing self-management support (Howell et al., 2017). In the provision of coaching as a self-management support strategy, empathy has been reported as the concern for others and therefore the desire to reduce their distress. Empathetic concern is associated with the development of pro-social and altruistic behavior and evidence has shown it leads to better coaching outcomes (Weinberg, 2022). Opportunity exists for the integration of teaching and learning constructs of caring and empathy related to effective health coaching as a self-management support strategy.

Guided by caring theory (Roach, 2002), I explored the concept of caring as self-management support education curricula in this study. Caring was not discussed by faculty and

nurse educator participants and was not located in course documents from four courses. However, exploring the four courses for this study may be a limitation, as the concept of caring may be covered in other program courses. Caring is foundational to the nursing profession (Roach, 2002). Bringing theoretical teaching and learning of caring to clinical practice would provide “hands on” opportunities for persons with cancer. I have personally experienced the effectiveness of oncology nursing self-management support when educational resources and communication skills are nestled within a caring, empathetic environment. Nurses have this unique opportunity to enable persons with cancer in the self-management of their disease and health behaviours through daily, caring interactions. Perhaps this is why nurses may enhance enabling persons with cancer in the self-management of their cancer and health, rather than solely through transmission resources such as online tools, videos, and remote education sessions. King et al. (2024) describe the coach/learner relationship as the bedrock of coaching and requires time and effort to build trust and respect. Through the concept of caring, the essential self-management support performance criteria of mutual rapport and trust may be established between the healthcare provider and patient. The integration of teaching and learning of the concept of caring within a coordinated and intentional approach to oncology self-management support education is recommended for the baccalaureate nursing program to assist nursing students provide effective self-management support for persons with cancer.

In summary, curriculum coverage was not evident for three performance criteria areas of health coaching, behavioural change, and caring in the baccalaureate nursing program. Although teaching and learning performance criteria were covered in the curriculum (person-centered care, social justice) and partially covered in the curriculum (patient education and communication), these performance criterions were not taught and learned within the context of self-management

support, nor in the context of oncology self-management. Moreover, readings, simulation labs, and post-clinical discussion are required to deepen nursing students learning (Alsayed et al., 2021). Curriculum enhancement and development are required for these identified performance criteria (Chan et al., 2023) to help ensure an adequate and comprehensive approach to preparing nursing students for the future. Academic educators should consider enhancing the identified gaps in the performance criteria that are requisites for competency within current concepts (i.e.) enhance patient education and communication to include motivational interviewing. Further, academic educators should consider the development and integration of a health coaching training program and ensure the theory and application of caring in the context of oncology self-management support be provided in the curriculum. The implications of teaching, learning, and mentoring oncology self-management support across all areas to deepen nursing students learning will be reviewed in the third data interpretation of this discussion chapter.

Interpretation Two: Need For Curriculum and Instruction on Cancer and Cancer Self-Management Support

The second overarching data interpretation resulting from an in-depth analysis, and reflecting patterns across all data sources (participant interviews, course documents, and journal notes), discusses the need for curriculum and instruction on cancer, cancer as a unique chronic illness, and self-management support specifically for persons with cancer.

Curriculum and Instruction on Cancer

Across all participants and course documents, cancer curriculum in the program is focused mostly on pathophysiology. Faculty shared that there is no specific course or course topic on cancer, but rather cancer is taught within the concepts of the concept-based curricula framework. One faculty member recognized cancer as a specialty area of practice and stated, “we

don't have a piece of curriculum that is oncology nursing . . . that would be considered as a specialty area of practice, and we graduate generalists". (FMP6) This faculty member also shared that they recognized cancer as being considered, "a long-term disease . . . I teach aspects of chronic disease . . . so we would [teach cancer] in chronic disease . . . its sprinkled throughout" (FMP6). Nurse educators also reported cancer curriculum as being "almost none" (NEP1), that pathophysiology taught in the classroom is *pulled through* to the simulation lab and clinical area, and there is no simulation lab specific to cancer. Faculty and nurse educators recognized that nursing students may be randomly assigned in the clinical setting to a patient with cancer as "the chief complaint, otherwise it's pretty rare" (NEP1). Nursing students described learning about cancer, in the context of pathophysiology, and chemotherapy treatments within instruction on pharmacology, and integrated within other concepts.

The Canadian Association of Schools of Nursing (CASN) National Nursing Education Framework reports the baccalaureate degree in nursing is designed to prepare a generalist nurse for entry-to-practice (CASN, 2015b). The Canadian Association of Nurses in Oncology/ Association Canadienne des Infirmieres en Oncology (CANO/ACIO) has defined the role of a generalist nurse as being a nurse who is prepared at a basic educational level. The generalist nurse may work in settings where persons with cancer receive care along with other patient populations or is new to the knowledge and skills in cancer care and is working in settings where persons with cancer and their families have cancer as the primary focus care (CANO/ACIO, 2001). The CASN Nursing Education Framework guiding principles include care for individuals with multiple comorbidities and complex health needs, including chronic disease management (CASN, 2022). Canadian baccalaureate nursing programs focus on specialty areas such as maternal child health, long-term care, mental health, medicine, and surgery (Davidson, 2020)

and CASN entry-to-practice competencies for distinct specialties that include childbearing family, public health, mental health and addictions, and gerontology (CASN, 2022). When I examined the Canadian Association Schools of Nursing (2022) Framework, the term “cancer” or “oncology” was not present. Generalists, even those who have gained specialized knowledge in other areas, need to have foundational knowledge of oncology concepts and competencies to provide safe care to cancer patients (Davidson, 2020). However, nursing students as generalists have not yet acquired the knowledge and clinical expertise to care for persons with cancer and their families (Love, 2015). It is recognized that baccalaureate nursing programs educational preparation varies across Canada and many programs lack oncology curriculum (Ross et al., 2016).

In Canada, two in five individuals will be diagnosed with cancer in their lifetime (Canadian Cancer Statistics, 2023). Moreover, the incidence of cancer in Canada is estimated to rise in the five major disease sites (breast, colorectal, lung, prostate, and bladder) from 96,460 in 2012 to 176,704 cases in 2042 (Poirier et al., 2019). Cancer is the leading cause of death in Canada and contributes to an estimated burden of cost of approximately 7.5 billion annually. Thankfully, due to advancements in cancer treatment and faster diagnosis, 64% of people diagnosed with cancer are likely to live for at least 5 years beyond the diagnosis (Canadian Cancer Statistics, 2023). Although a decrease in mortality is most welcoming, it must be recognized that cancer survivors experience long-lasting physical and psychological effects from the disease and its treatments that affect quality of life, and include fatigue, cognitive changes, depression, pain, and anxiety (Fitch et al., 2019). These late and long-term effects may persist for years after cancer treatment and impact survivors’ ability to engage fully in work or school, personal, and social activities (Bilodeau et al., 2021; Fitch et al., 2019).

Gap in Incidence and Prevalence of Cancer Within Curriculum. The incidence and prevalence of cancer were not shared or discussed by all study participants. Disease site specific cancers, such as breast or colorectal cancer, were reported by one faculty participant as being provided as exemplars for the concept of pathophysiology. All nurses will provide care to individuals with cancer in their nursing career due to the increasing incidence and mortality of cancer (Davidson, 2020; Edwards et al., 2016) and the use of exemplars in the context of teaching and learning cancer as a disease is excellent (Mitchell & Laing, 2019). However, the limited focus on cancer education in the program is concerning due to the high prevalence of the disease and the likelihood that nursing students will care for persons with cancer at some juncture along the trajectory of cancer care.

Nursing students within Canadian baccalaureate nursing programs have very little oncology experience theoretically and clinically, and therefore it is essential that they obtain basic training in order to care for individuals with cancer upon graduation (Davidson, 2020). As the Canadian population ages and increases, the incidence of cancer also increases (Davidson, 2020). Due to the increasing incidence and mortality of cancer, all nurses will encounter and provide care to individuals with cancer during their nursing career, regardless of where they are employed (Davidson, 2020). The variety of workplace environments where they will provide cancer care include, medical-surgical wards, emergency departments, intensive care units, long-term care, and community settings (Davidson, 2020; Sarna & McCorkle, 1995). Yet, many nurses are inadequately prepared theoretically and clinically to care for oncology patients in these settings and require basic education at the undergraduate level to safely practice (Ross et al., 2016; Davidson, 2020). Given the prevalence of cancer across all care settings, entry level competence to practice within oncology ambulatory care settings is critical (Ross et al., 2016)

and it is essential that nursing students obtain basic training in order to be prepared to care for individuals with cancer (Davidson, 2020). Much has changed in specialty cancer care, cancer treatments, and cancer survivorship (Davidson, 2020; Hart et al., 2024; Liska et al., 2018; Watson et al., 2021). Fast forward 30 years from Sarna and McCorkle (1995) and the message remains the same; baccalaureate nursing programs require teaching and learning in cancer and cancer care concepts (Davidson, 2020) that include knowledge improvement in the area of self-management, treatment side effects, and newer cancer treatments (Edwards et al., 2016).

Nursing students in this study shared feeling underconfident in providing patient education to persons with cancer, which they reported as being most likely due to limited clinical exposure in oncology. One participant shared, “I haven’t had too much experience in providing health education for patients with cancer because so far my clinical and fourth year I did an obstetric clinical” (NSP7). Aligned with findings from this study, Davidson (2020) also reports that nursing students have indicated being inadequately prepared to care for persons with cancer in clinical settings and experience anxiety about caring for cancer patients. The identified cancer curricula gaps in the baccalaureate program should be enhanced (pathophysiology of cancer) or developed and integrated (cancer incidence, prevalence, cancer care across the trajectory, and essential, basic cancer care) to help prepare the nursing students for future clinical cancer care. The incidence and mortality of individuals with cancer in Canada impacts the need to include a comprehensive view of cancer care within baccalaureate nursing curriculums (Davidson 2020). Furthermore, Davidson (2020) reports that the inclusion of quality oncology education in baccalaureate nursing programs will assist in the development of cancer care nurse leaders. Quality oncology education in Canadian baccalaureate nursing degree programs is critically needed (Davidson, 2020; Sarna & McCorkle, 1995), considering the immense number of cancer

diagnoses and deaths in the Canadian population (Davidson, 2020). Comprehensive coverage of oncology curriculum in baccalaureate nursing programs will prepare nursing students to competently provide cancer care (Davidson, 2020). It is essential that baccalaureate nursing programs examine strategies to incorporate this comprehensive view of cancer care into programs to ensure that baccalaureate nursing students meet the entry-to-practice competencies to care for patients across the cancer care trajectory (Davidson, 2020). The integration of cancer statistics and new knowledge of essential cancer care in the nursing program could be strengthened through further coursework, readings, and the application of knowledge through simulation labs and post-clinical discussions.

Curriculum and Instruction on Cancer as a Chronic Disease

In this study, faculty participants spoke about teaching nursing students the acute and episodic nature of chronic diseases and that cancer would be included when teaching about other chronic diseases. One dedicated course in the program had curriculum on the management of multiple types of chronic diseases (i.e. arthritis, diabetes) and a faculty participant (FMP6) shared that palliative and end-of-life care is also described within the chronic disease course. Leading cancer care organizations recommend the integration of palliative care throughout the cancer trajectory and healthcare providers working directly or indirectly with cancer patients should be familiar with concepts and the essential nature of palliative care (Hermann et al., 2006). Although nursing students did not discuss the chronicity of cancer, they recognized the prevalence of cancer through clinical encounters in clinical settings and the complexity of caring for persons and families with cancer. An example is when a nursing student shared caring for a child with leukemia and his family, “We were discussing how we could try and get more

information . . . if this is a forever thing that he needs to avoid this kind of stuff or if they could talk to someone about what they could find solutions to” (NSP9).

A Canadian study by Cheung et al. (2009) indicated that less than ten percent of its curriculum in undergraduate medical, nursing, and pharmacy programs in Canada constituted oncology curricula and concluded that oncology is underrepresented in current curriculums. Edwards et al. (2016) conducted a study in the United Kingdom aimed at evaluating an innovation in cancer curriculum content and delivery within undergraduate nursing education. The study fundings suggested that a three-and-a-half-day program focused on cancer as a life changing long-term condition (cancer survivorship) and that included cancer survivors, carers, and health professionals, improved students’ knowledge, attitudes, and confidence when providing cancer care. Edwards et al. (2016) also recommended cancer care education should be independent of education on end-of-life care to develop student’s positive attitudes toward cancer care and cancer survivorship. Moreover, Edwards et al. (2016) report that clinical nurses employed across non-specialist cancer care areas had a lack of education and training regarding cancer care and treatment; this gap in knowledge impeded the nurses from providing the care they would have preferred to persons with cancer and their caregivers. In summary, Edwards et al. (2016) purport that if nursing students are to be adequately prepared to provide cancer care, then their baccalaureate education should include a focus on survivorship and should be delivered in partnership with patients and clinicians.

Nursing Students Confidence in Providing Cancer Care. For nurses to have the self-efficacy to deliver cancer care, they require both knowledge and confidence (Edwards et al., 2016). Davidson (2020) reports that a lack of oncology experience and knowledge can impact nursing students’ confidence, leaving them feeling inadequate, helpless, and with an emotional

burden from caring for cancer patients. It is important that nursing students be prepared and feel confident to apply their knowledge in clinical practice because it is not only knowledge but also the confidence in the application of knowledge in clinical practice that benefits persons with cancer (Edwards et al., 2016). For someone to have the motivation to perform an activity they must have belief in their ability to do so; confidence, an expectation of success, is an important component of self-efficacy (Bandura, 1977). Edwards et al. (2016) measured their confidence in cancer care before and after teaching and learning cancer education. The study by Edwards et al. (2016) demonstrated that undergraduate nursing students, following a new model for the delivery of undergraduate nurse cancer education and provided with support, felt confident in their ability to assess the needs of persons with cancer and their family/carers.

In relation more specifically to self-management support, in a study conducted by Duprez et al. (2016), final year nursing students reported a gap between confidence and their actual performance in self-management support. In keeping with Bandura's theory, self-efficacy toward performing self-management support was found to be a precursor to fourth year nursing students actual support in patients' self-management (Duprez et al., 2018). Confidence is an expectation of success and an important component of self-efficacy (Bandura, 1977). For nursing students to have self-efficacy in the provision of oncology self-management support, they require both knowledge and confidence (Bandura, 1977; Edwards et al., 2016), for it is not only knowledge, but also the application of knowledge in clinical practice, that can benefit patients (Edwards et al., 2016). In my previous research on providing education and support to breast and colorectal cancer survivors, these qualitative studies demonstrated an increase in knowledge acquisition, self-efficacy, activation, and intent to manage (Liska et al., 2018; Mutsaers et al., 2021; Rutkowski et al., 2021).

Davidson (2020) reports that it is essential that cancer survivorship be incorporated within basic cancer education and yet survivorship has been reported as being only taught in diploma programs. Integrating cancer survivorship would provide a more comprehensive view of oncology that includes multiple and various late and long-term side effects (Davidson, 2020). Ensuring the definition of cancer survivorship, the chronicity of cancer, and late and long-term effects (i.e. fatigue, neuropathy, fear of recurrence) is taught and learned in the nursing program would prepare nursing students to recognize and support persons with cancer. Integrating common cancers (breast, lung, colorectal, prostate, bladder) and using the Canadian Cancer Statistics (2023) are recommendations for content in nursing curriculums. This content would support the current trends in incidence and mortality as well as the likelihood of survivorship and end-of-life care in various cancers (Davidson, 2020). Furthermore, the addition of oncology curriculum within the baccalaureate nursing program may improve nursing students' knowledge and confidence in their ability care for persons with cancer (Davidson, 2020; Edwards et al., 2016).

Curriculum and Instruction on Cancer as a Unique Chronic Disease

Teaching and learning about cancer should also include instruction in the context of cancer being a unique chronic illness that differs from traditional chronic diseases. Cancer is considered unique because of the life-threatening nature of the illness and the sense of helplessness patients report experiencing in being able to influence the course of the disease and the treatment options to potentially cure their disease (Canadian Partnership Against Cancer (CPAC), 2018). Cancer is an unexpected life-changing event that takes those diagnosed on a journey from realizing something is wrong, to hearing "you have cancer" and wondering what's next, to being treated for cancer and hoping it works, through to finding a new normal after

treatment is over and beyond (CPAC, 2018). When persons with cancer share their experiences, they express that one of the most difficult things about living with cancer as a chronic illness is knowing that their healthcare team is unable to predict how long the cancer will stay stable or in remission (Canadian Cancer Society, ND). Cancer survivors themselves have shared that their care is not just about treating the disease, rather, they wish to be seen and cared for as individuals with unique needs, preferences, and challenges (CPAC, 2018).

The unique complexity of cancer as an illness requires special attention in this context to educate and prepare nursing students for their clinical future to effectively care for persons with cancer. Recognizing that knowledge and skill development is required beyond basic nursing is a fundamental stepping stone (Fitch, 2024). A nurse requires knowledge and skills to provide specialized care to meet the individual and chronic care needs of a person with diabetes (i.e. diet). Similarly, nurses caring for persons with cancer require knowledge and skills to provide specialized care to meet the individual, unique, and chronic care needs of a person with cancer (Davidson, 2020). For example, a nurse working in primary care requires an understanding of the fear of recurrence to meet the needs of a breast cancer survivor. Another example is a nurse who requires knowledge that recommended post-treatment follow-up guidelines exist so they may seek out the guidelines and educate and support a colorectal cancer survivor to undergo appropriate testing at the correct intervals of time.

Nursing student participants recognized the prevalence of cancer in clinical settings and discussed wanting further education to be better prepared to care for persons with cancer. One nursing student shared,

to just kind of explain like the difference between regular nursing trying to help people through getting better and then trying to help people through knowing that they're not

going to get better and making them comfortable. I think that was a big difference for me that I really struggled with. So, I think I'd appreciate some more education on that part. (NSP10)

Faculty participants also recognized gaps in teaching and learning on cancer as a distinct illness. One faculty member shared, "they may have a good experience in their practicum . . . beyond that, I think there's a gap" (FMP3). Despite cancer presenting greater disease complexity and late and long-term risks and effects compared to many other chronic diseases, cancer care lags behind other chronic illnesses in integrating strategies of self-management into routine care (Howell et al., 2017, 2021). As such, persons with cancer are left vulnerable to worsening health status, health recovery, and likely poorer survival (Howell et al., 2021).

Cancer as a unique chronic illness is found across the trajectory of care (Ross et al., 2016; Mitchell & Laing, 2019). Recognizing the increase in incidence and prevalence, the chronicity of cancer, and the requirement to meet the unique physical and psychosocial needs of individuals with cancer across the entire trajectory of care, it is imperative to address the unique needs of persons with cancer and to assist the burden on healthcare systems (Poirier et al., 2019; Howell et al., 2017, 2021). I question if nursing students as novice clinicians will draw a connection between learning about the needs of patients with other chronic diseases and applying them to the needs of persons with cancer as a chronic disease. Davidson (2020) suggests that nursing students require efficient theoretical preparation for clinical practice. Every individual nurse moves along a trajectory from novice to expert (Benner, 1982) and the degree of expertise a nurse acquires in oncology care is influenced by the nurses ongoing learning and day to day clinical practice experience (CANO/ACIO, 2006). As such, academic educators should consider the addition of incidence and prevalence of cancer statistics, recognizing cancer as a unique

chronic disease, the unique physical, psychosocial, and lifestyle effects of persons with cancer, and oncology definitions that include cancer survivorship, health coaching, cancer self-management, cancer self-management support. A curriculum on these concepts could be added to NURS332. An oncology case study in the simulation lab would allow deeper contextual learning of these concepts and the practical application followed by post-clinical discussions would allow for deeper contextual learning of these concepts and nursing students improved self-efficacy over time. Implementing a student-centered learning approach such as case studies and discussions allows for the application of theoretical knowledge gained in the classroom to a specific case study (Mitchell & Harris, 2019). In line with Knowles (2011), the application of knowledge could assist students in transferring their gained insight into their own clinical practice. Teaching and learning these concepts and continuity of teaching and learning between the classroom, simulation lab, and clinical settings could assist in ensuring nursing students discern the difference between cancer and other chronic diseases (i.e. cardiovascular or lung disease). Ensuring a coordinated approach to teaching and learning would allow nursing students to gain theoretical knowledge on incidence, prevalence, and the unique needs of persons with cancer as a chronic disease (i.e. late and long-term physical, psychosocial, lifestyle effects) in the classroom, reinforce learnings and application in the simulation lab, and practice the application of learning in the clinical settings (Edwards et al., 2016). This practical application of learning would increase nursing students' knowledge, skills, and understanding of persons with cancer unique and chronic needs and enhance their confidence in applying their learnings in the provision of cancer care.

Specific Curriculum and Instruction on Oncology Self-Management Support

Although teaching and learning self-management support performance criteria were comprehensively covered in the curriculum (person-centered care, social justice) and partially covered in the curriculum (patient education, basic communication), these performance criterion were not taught and learned within the context of oncology. Moreover, self-management curriculum that was taught on chronic diseases (e.g., cardiovascular disease, diabetes, asthma) was not provided in the context of oncology. A nurse educator participant shared, “Specifically to cancer, from what I’ve seen so far, it is not discussed” (NEP4). All participants shared that oncology self-management support was an important concept, however, nurse educator participants elaborated that time constraints and competing priorities may contribute to its limitation in the curriculum. When describing what they felt self-management and self-management support pertained to, faculty and nurse educators did not share teaching these concepts in a coordinated, intentional, and comprehensive approach.

Self-management support curriculum was identified in course documents in the context of other chronic diseases (e.g., cardiovascular disease, diabetes, asthma). Only one document reading however reported cancer being a chronic disease and self-management support being provided in the context of cancer. This document was a best practice guideline on self-management support, (Registered Nurses Association of Ontario, 2010), and when nursing students were asked if they had read the document, they reported that they had not. Van Hooft et al. (2019) reported that many baccalaureate nursing lecturers reported that students often see self-management as an abstract concept and the lecturers found it important to draw connections between different aspects of self-management support in the curriculum. The concept of self-management can be interpreted in numerous ways. It is recommended that the one dedicated

reading on self-management support that includes cancer, is communicated to nursing students as being a fundamental important required reading. The importance of course document readings to deepen nursing students' knowledge and skills will be elaborated upon later in the chapter.

Cancer survivors have unique physical and psychosocial needs (Howell et al., 2017) and therefore I find the absence of teaching and learning self-management support directly in relation to cancer as a chronic disease is noteworthy. It remains uncertain whether self-management support approaches and core skills that are effective in other chronic diseases are equally applicable to cancer, particularly when understanding that chronic disease self-management programs have been criticized for complex illnesses (Howell et al., 2021). Teaching self-management and self-management support explicitly in the context of cancer as a unique and complex disease is warranted. Discussion on my recommendation of an intentional coordinated and comprehensive approach is discussed in the third interpretation.

A Gap in An Oncology Self-Management Support Definition. There is no comprehensive definition of self-management support that encompasses various supportive interventions nurses provide. Also, the activities surrounding self-management support have a closer, sharper focus on medical and behavioural skills to manage a chronic illness (Tharani et al., 2021). Tharani et al. (2021) report a need for a comprehensive definition of self-management support for patients living with chronic illnesses that includes the various essential supportive interventions and behavioural skills that nurses can provide. Understanding that cancer is a prevalent, unique, chronic and complex disease (Howell et al., 2017, 2021; Poirier et al., 2019) brings into sharp focus the need to develop an internationally recognized self-management support definition specific to oncology, and future research is conducted on this development is recommended. An agreed upon definition of oncology self-management support would help

universities, healthcare organizations, and policy makers, facilitate consensus on teaching and learning nursing students and registered nurse's role in the provision of self-management support.

Influencing Factors on Oncology Curriculum Selection

Faculty members shared that a curriculum committee oversees the content taught in the nursing program. Input and suggestions are provided by faculty members to the committee, and students perspectives are welcomed to guide the selection of the curriculum to be taught in the program. During participant interviews, faculty members were probed on the potential role the NSCN and the Canadian Association of Nursing School standards play in guiding the selection of curriculum. When I asked if selected curriculum is based on the NSCN framework, a faculty member shared, "No, we generate those ourselves, over a number of years, we started off with way too many concepts, then tried to narrow it down to something that was a little bit more manageable" (FMP3). Faculty shared that the curriculum content for the program is reviewed to meet accreditation standards for the NSCN entry-level competencies, the Canadian Nursing Association Code of Ethics, and the Canadian Association of Student Nurses standards and guidelines.

Faculty members shared concerns about a concept-based learning approach. They felt that the Giddens (2021) textbook had gaps in concepts that were important to nursing students' education and said, "They need these other concepts that are not in Giddens that are far broader than the focus on the physiological system" (FMP3). Faculty members reported concerns about the Giddens (2021) textbook and the NCLEX licencing exam. An example of this was when a faculty member said, "The problem I found with the Giddens book, I mean nothing that's bad, but it was generated from the American associate degree programs" (FMP3). The textbook was

felt by faculty to have gaps in a holistic approach to nursing and an approach aligning with curriculum that was previously taught in Canadian schools of nursing. Faculty shared that initially students were struggling with the licensing exam, and they were required to align their teaching content with the NCLEX to better prepare nursing students for success on the exam.

Understanding how the curriculum is selected to be taught and learned in the baccalaureate nursing program is important to draw inferences on what may contribute to gaps in education on oncology self-management support. As mentioned, faculty reported that curriculum content meets the accreditation standards of the NSCN entry-level competencies, the Canadian Nursing Association Code of Ethics, and the Canadian Association of Schools of Nursing accreditation. Faculty also shared that the curriculum selected and developed for the program is overseen by a curriculum committee, an American textbook on concepts of nursing practice is used throughout the program, and content delivered in the program aligns with preparing nursing students for the NCLEX exam. The course document data collection on the baccalaureate programs concept textbook (Giddens, 2021) revealed gaps in required readings of important concepts on the performance criteria deemed necessary for nurses to achieve requisite competencies for self-management support and coaching (person-centered care, patient education, and communication). The required reading on self-management in the Giddens (2021) was located and is critical, however, the application and appraisal of its content is required and paramount.

Recognizing cancer as a specialty is more apt to bring support, funding, and opportunities for nursing engagement in activities in various settings where one can influence decisions about making improvements (Fitch, 2024). Assessing and evaluating entry to practice oncology competencies as well as addressing oncology content for licensing exams is imperative

(Davidson, 2020). Therefore, understanding the position and expectations for oncology curriculum from influencing agencies such as CASN and NCLEX is recommended to determine opportunities for the nursing program to enhance awareness and growth within these agencies.

In summary, patients experience fluctuations in treatment and uncertainty that are inherent with the life altering disease of cancer. New graduates often practice in settings where they are responsible for the care of persons with cancer however, baccalaureate nursing programs are not designed to prepare nurses for the complexity of nursing in cancer settings. As oncology knowledge continuously expands, it is essential to prepare nurses for the complexities of practice to ensure all persons with care receive the care they deserve (Ross et al., 2016).

Interpretation Three: Oncology Self-Management Support Teaching and Learning Across All Program Areas

The third overarching data interpretation resulting from an in-depth analysis and reflecting patterns across all data sources (participant interviews, course documents, and journal notes) is the gap of integration of oncology self-management support teaching and learning across all program areas. Specific gaps are (a) oncology self-management support knowledge and skills of faculty, nurse educators, and clinical setting nurses, (b) opportunities for nursing students deep-level learning, (c) teacher communication across areas of teaching and learning, and (d) an intentional, coordinated, comprehensive approach to teaching and learning oncology self-management support. These gaps and considerations to meet the gaps are discussed within this third interpretive section of this discussion chapter.

Preparation of Faculty, Nurse Educators, and Clinical Preceptors

Data analysis identified a gap in oncology self-management support knowledge and skills of faculty, nurse educators, and clinical registered nurses. All participants articulated a broad

understanding of self-management and self-management support and although not recited verbatim, their understanding aligned with definitions cited in the literature. When describing what they felt self-management and self-management support pertained to, participants did not connect the performance criteria covered in the program as being self-management support strategies. Moreover, participants did not share these concepts within an intentional, coordinated, and comprehensive approach to teaching oncology self-management support. Nurse educators shared concerns that time constraints and competing curriculum priorities may contribute to the limitation of self-management support curriculum. Nursing students reported learning self-management support strategies mainly from their preceptors and clinical nurses in clinical settings. All participants shared that oncology self-management support teaching and learning is an important curriculum concept to consider having in the program.

Davidson (2020) reports that faculty require education on cancer concepts to effectively educate nursing students. Nurses caring for persons with cancer require specific knowledge and skills in the provision of self-management support and coaching for behaviour change (Howell et al., 2023), and faculty and nurse educators need to be equipped with knowledge and understanding of self-management support to model positive behaviour towards the importance of its use in clinical practice (van Hooft et al., 2018). This includes, understanding the importance of teaching cancer, cancer as a unique chronic disease, and self-management support to enable persons with cancer. Van Hooft et al. (2018) conducted a study exploring how Dutch baccalaureate nursing students are trained to provide self-management support in clinical practice. The teaching participants in the study acknowledged that nursing students require role models of self-management support for persons with chronic diseases is important in both the school and clinical settings (Van Hooft et al., 2018). Modeling self-management support to

nursing students requires faculty, nurse educators, and clinical nurses to be knowledgeable about self-management support strategies and to teach the strategies in a comprehensive approach to nursing students (van Hooft et al., 2018).

van Hooft et al. (2018) reports that students often see self-management as an abstract concept and lecturers felt it was important to draw connections between different aspects of self-management support in the curriculum. Teaching and learning concepts such as person-centered care and basic communication skills are not enough to ensure nursing students comprehensively understand the connection of concepts to the provision of self-management support. Faculty members, nurse educators, and clinical preceptors are required to not only understand and articulate the importance of teaching cancer and self-management support but are recommended to teach the strategies in a coordinated, deliberate manner. van Hooft et al. (2018) suggests that nursing students should not only be made aware of these connections but also shown how the concepts are linked to their own experiences.

Lecturers in baccalaureate nursing programs rarely hold a consensus shared view on what nursing students are required to know and apply in self-management support (van Hooft, et al., 2018). As such, faculty lecturers and nurse educator having a shared view on self-management support are essential to ensuring continuity and preventing individuals from teaching self-management support differently (van Hooft et al., 2018). This supports the importance for all faculty, nurse educators, preceptors, and clinical nurses to be taught and be aware of the importance of self-management support and that self-management curricula be embedded as standard curriculum. The current approach to teaching self-management support is insufficient for students to enable them to perform self-management support for patients in clinical practice (van Hooft et al., 2018). It is important that all faculty and nurse educators in this study's nursing

program recognize the importance of (a) role modeling self-management support in chronic diseases to nursing students, (b) understanding that nursing student's perceptions of self-management support are abstract, and (c) having a shared view of self-management support. To meet these gaps in the nursing program, all lecturers will be required to build knowledge capacity on the importance of teaching cancer (incidence, prevalence, cancer as a chronic disease, cancer survivorship late and long-term effects) and cancer self-management support performance criteria and requisite competencies. Faculty and nurse educators are recommended to discuss how they interpret self-management support to ensure the program reaches consensus and has a shared view of self-management support. Having common shared definitions of self-management, self-management support, and cancer survivorship that are well communicated across all areas of teaching is recommended. Further, all faculty and educators require an understanding of why oncology self-management curriculum is vital and having knowledge of the most common side effects of treatment will assist in the continuity of teaching and learning. Pedagogical approaches of self-management support across all areas of teaching and learning are recommended to be conducted in a coordinated approach to allow nursing students to draw connections on the performance criteria that are taught. To effectively prepare nursing students, nursing faculty also require education on cancer concepts and cancer survivorship (Davidson, 2020) to at least develop, integrate, and teach a case study on the provision of self-management support for a person with cancer as a chronic disease. The nursing program could consider having visiting guest speakers (in-person or remote) who have knowledge and experience in the cancer survivorship field present and dialogue with faculty and nurse educators. The development or revision of curriculum content completed by faculty with oncology background or at minimum provide resources to assist faculty that do not have oncology experience, to

ensure that provincial and national guidelines for cancer care are followed (Davidson, 2020) should be considered.

Clinical Preceptors. An unexpected study finding was the amount and depth of self-management performance criteria learning nursing students reported receiving from nursing preceptors and other registered nurses in assigned clinical areas. A nursing student participant shared, “I have actually learned so much just from my preceptors and the nurses on the units. I have found that that’s where I’ve learned the most for sure” (NSP10). Faculty and nurse educators also expressed the importance of the preceptor role in clinical settings. An example from a faculty member discussing communication skills training was when she said,

I don’t think we’re doing as good in the classroom as we once were and could. I think what happens in clinical is so much out of our hands now and, I mean the skill of the preceptor is everything . . . and many are very skilled. (FMP3)

Nurse educators reported the need for integrating a levelled case study in the simulation lab because they recognized that although some nursing students benefit from strong and experienced nursing preceptors, other nursing students would not.

Duprez et al. (2017) report that final year nursing students have an overall low level of performance in delivering self-management support during clinical internship. Nursing student participants shared factors they felt would contribute to their self-management support learning with preceptors. These included the length of time in the clinical settings to have opportunities to engage in performance criteria, such as person-centered care, and the workload and resulting time pressures of the clinical preceptor. For example, nursing students felt staffing shortages contributed to a lack of caring and empathy. An example of this was, “I think an element of therapeutic communication is empathy . . . I think there’s a lot of compassion fatigue with the

staffing shortages and staffing ratios” (NSP7). Caring and empathy are integral elements in the provision of required and effective oncology nursing self-management support (Howell et al., 2017). Sedwick et al. (2012) reports that staff shortage, casualization of the nursing workforce, mandatory overtime, and increased workloads, have the potential to limit consecutive days with one preceptor. Furthermore, workload issues also limit the preceptors time for teaching and feedback, and results in students missed learning opportunities.

Nursing curricula should be attuned to the complex competencies of self-management support and learning opportunities can be introduced in the classroom activities and during clinical internship (Duprez et al., 2017). Clinical nursing education provides opportunities for students to learn in multiple patient care settings, receive appropriate guidance, and foster a development of clinical competence and professionalism (Wu et al., 2017). Nurse preceptors in these multiple clinical care settings provide support and guidance for nursing students to integrate theory into practice, teach clinical skills, foster clinical competence development and professionalism (Wu et al., 2017). However, clinical nurse leaders and academics have voiced concerns about preceptors’ competence in clinical teaching assessment (Wu et al., 2017) and not all nurses in clinical practice adequately support peoples’ self-management (van Hooft et al., 2018). Therefore, nursing students may lack role models and are left to bridge the gap between theory and practice on their own (van Hooft et al., 2018).

Nurse preceptors are a vital component of nurse’s education (Sedwick & Harris, 2012) and if we are to provide a comprehensive and deep learning approach (Alsayed et al., 2021) to oncology nursing students self-management support teaching and learning, training and education of clinical preceptors should also be considered. Educating future nurses involves more than just the acquisition of knowledge; it also requires the development of professional

competence and life-long skills (Alsayed et al., 2021). Nursing students acquire knowledge in the classroom and at the same time are exposed to clinical training where they apply and practice their knowledge, which ultimately facilitates the simultaneous acquisition of surface and deep learning. Life experiences and acquired knowledge and skills through classroom and clinical experience allows for the acquisition of deep learning (Alsayed et al., 2021), and therefore clinical preceptors are likely to have acquired deep learning to demonstrate and mentor nursing students. Further, age and an increased number of years of experience promote achieving basic nursing competencies, such as understanding patients and the nursing process (Yamamoto et al., 2021). Having acquired deep level learning through clinical experience and being older in age supports the notions of (a) the importance of preceptors enhancing nursing students' acquisition of deep learning of self-management support performance criteria, and (b) emulating and mentoring the integrally important role of demonstrating competency in self-management support. Preparing the workforce with the knowledge and skills necessary to enable patients in effective self-management has been a key action (Howell et al., 2021) and clinical nurse preceptors' play a critical role mentoring and educating nursing students in various clinical settings. By providing education and mentoring to nursing students as the future workforce, clinical nurse preceptors have opportunities to influence nursing students through their knowledge acquisition of self-management support. Therefore, future research on ensuring the provision of education and training in self-management support to clinical nurses should be considered.

Hedenstrom et al. (2021) report that nursing students need to be equipped with accurate information, positive role models, and mentored by experienced oncology professionals to support their proficiency in caring for persons with cancer. Sedgwick and Harris (2012) report

that due to challenges in the healthcare and education industries in Canada, the effectiveness of the preceptor model is undermined. These researchers called into question whether the preceptorship model is meeting nursing students' needs and program outcomes. The unstable nature of the clinical setting as a learning environment, faculty shortages, and inadequate preparation for preceptors and supervising faculty, questions whether current preceptor models can meet student learning needs and program outcomes. Sedgwick and Harris (2012) report that it is imperative that nurse educators, nursing programs, and leaders in practice settings, engage in critical reflection of current models of clinical practice education so that programs are able to graduate safe and competent novice nurses. Wu et al. (2017) recognize that due to a shortage of funding, poor staffing levels, and courses not tailored to meet individual needs, opportunities for preceptors' professional development exist. Technology now offers online learning accessibility, convenience, and flexibility, which is very convenient for those working. Clinical nurse leaders and nursing academics are responsible for facilitating and promoting the development of learning programs for nurse preceptors in online environments and continuing education courses provided through technology support are recommended to increase flexibility and uptake of the nursing workforce (Wu et al., 2017). With this in mind, a self-management support education and training for clinical nurses may be best suited through remote online learning.

Clinical nursing education is considered a vital component of nurse's education (Sedgwick & Harris, 2012). Preceptorship is a cornerstone of nursing students' clinical education (Sedgwick & Harris, 2012), and it is the responsibility of nursing education institutions to educate and prepare clinically competent nurses (Botma, 2016). Despite the importance of clinical education, nursing programs may have little to no control over how preceptors are selected and therefore, may also lack information about the preceptors themselves.

Consequently, faculty may be unaware of the preceptors' teaching and learning needs and therefore are unable to effectively support preceptors in their teaching role (Sedgwick & Harris, 2012). Preceptors are role models for nursing students (Sedgwick & Harris, 2012). Being a preceptor requires advanced nursing competence and preceptor preparation programmes should focus on reflection, critical thinking, and communication skills to properly prepare preceptors (Botma, 2016). Faculty and nurse educator participants in this study reported the unpredictable nature of whether a nursing student would be assigned to a patient with cancer to employ learned patient education self-management support skills. Reviewing the process for preceptor selection and ensuring an ongoing engagement with clinical placement organizations to help ensure optimal clinical self-management support learning experiences for nursing students should be considered. Secondly, continued self-management support training for clinical nurses is recommended to ensure adequate self-management support knowledge and skills of clinical nurses are available for knowledge translation from clinical nurses to nursing students.

In this study, the continuity of teaching and learning from the classroom to the simulation lab and clinical settings requires further reflection to better understand how an optional approach to the application of oncology self-management support education may be considered. Establishing and communicating a shared view on self-management between faculty, nurse educators, and preceptors is imperative to prevent individuals from teaching self-management support differently (van Hooft et al., 2018). Case-based learning and group work discussions are learner-centered teaching methods that improve the quality of learning because the focus is on the student rather than solely through teacher centered didactic approaches to teaching. When students are in control of what they learn, they actively engage in the process which has the potential to improve how they learn (Mitchell & Laing, 2019). Van Hooft et al. (2018) report that

nursing students are taught self-management support by learning theoretical models, communication skills, and reflecting on their clinical internships. Developing a consensus shared view on self-management support among all lecturers, applying authentic simulation situations as examples, ensuring that role models are available at school and during clinical internships, and empowering students (van Hooft et al., 2018), are recommended improvements to help teach and enable nursing students to support persons with cancer to self-manage. Faculty and nurse educators in the nursing program could collaborate on an applicable case study to allow for the practical application of cancer self-management support strategies, including coaching and communication skills such as MI within the 5As and during post clinical follow-up discussion. Guided by Bandura (1985), the integration of these strategies will assist nursing students in learning across all areas. Nursing students would have opportunities to apply learnings from the classroom and practice in simulation settings. This would allow for a deeper learning (Alsayed et al., 2021) of self-management support performance criteria and a greater opportunity to work towards attaining competency.

In summary, clinical nursing preceptors could play a critical role in supporting learning in self-management and preceptor selection helps to ensure optimal clinical oncology self-management support learning experiences for nursing students. Future research initiatives on oncology self-management support education and collaboration with clinical preceptors and nursing staff within institutions are required to help ensure teaching and learning continuity for nursing students. Flexible on-line self-management support education and training may be most suitable for clinical nurses and should be considered as a mode of education delivery.

Supporting Nursing Students Deep-Level Learning

As discussed in previous sections, continuity of teaching and learning from the classroom to the simulation lab and clinical settings, requires integration of an optional application of oncology self-management support education. In line with Bandura's theory, self-efficacy represents an acquired cognition about capacities to successfully accomplish a future task (Duprez, et al., 2017). Continuity of teaching and learning concepts between the classroom, simulation labs, and clinical settings is required to support an acquired cognition and deep learning for nursing students. Students approach their learning in two ways: surface learning and deep learning (Alsayed et al., 2021). Surface learning is described as memorization and the remembering of details and is regarded as the precursor of deep learning. Surface learning alone will not lead to an understanding of content, but rather it leads to poor-quality learning. Deep learning requires a well-organized method for learners to gain knowledge that results in an increase in understanding and is a necessary approach for high-quality learning in higher education (Alsayed et al., 2021). Assimilating nursing concepts and competence demands great critical thinking, decision making, and other lifelong skills that are processed and developed through a deep approach to learning and nursing students have difficulty learning and recalling basic knowledge required to advance from surface learning to deep learning.

Such struggles can be expected due to the nature of the nursing curriculum where students learn information in the classroom and at the same time are exposed to actual clinical training where they apply and practice their knowledge, hence, surface and deep learning happen almost simultaneously. (Alsayed et al., 2021, p. 46)

Nursing students in this study reported feeling unprepared to provide self-management support to persons with cancer. This study finding is supported by findings in the literature.

Although not specific to cancer, nursing students in the literature have reported being insufficiently prepared to provide self-management support in clinical practice (Duprez et al., 2017; Van Hooft, et al., 2018). Drawing on Benner (1982), nurses progress from novice to expert. Educating future nurses involves more than just the acquisition of knowledge. It also requires the development of professional competence and life-long skills that can be achieved through surface and deep learning approaches. Deep learning approaches of students have been found to be correlated with students' age (Alsayed et al., 2021). Older nursing students have higher internal motives, intent to learn, and learn best when they feel the topic is valuable. Younger learners learn best when provided with more opportunities for social learning that enhance accomplishment and higher self-attainability (Alsayed et al., 2021). A challenge in teaching self-management support is because most nursing students are young and lacking in life experience (van Hooft et al., 2018); therefore, deep learning approaches are important for these young, novice nurses who have limited life experiences (Alsayed et al., 2021).

For novice nursing students in the baccalaureate program, the coverage of performance criteria (person-centered care, social justice, patient education and communication) may not translate to knowledge capacity of enacting the criteria as provisions of self-management support for chronic disease, nor translate to knowledge capacity of identifying *when* to enact the criteria as self-management support strategies, particularly within cancer populations. Nursing schools are recommended to provide strategies to overcome the issues commonly encountered by students and to optimize the simultaneous translation of theory to practice to assist nursing students acquire deep learning (Alsayed et al., 2021).

In this study, faculty and nurse educators shared that nurse educators sought curriculum content by searching for material from the course electronic learning platform Moodle portal site

to reinforce nursing student's classroom concept learning. Academic performance of nursing students is measured through the standard evaluation of competence, defined as the student's ability to translate knowledge to skills and educational approaches must be factored into the planning of educator's teaching strategies (Alsayed et al., 2021). Drawing upon Alsayed et al. (2021), a coordinated, deep learning approach to performance criteria is necessary for nursing students to achieve the requisite competencies for self-management support and coaching in cancer populations. Providing education across all areas of teaching and learning deepens learning. Communication between faculty and nurse educators to optimize the integration of teaching and learning self-management support curriculum across all areas (i.e. classroom, simulations, clinical preceptors) with a focus on deep learning, is recommended. This study had five nursing student participants who were all under 24 years of age and within an undergraduate nursing program. Drawing from Alsayed et al. (2021), recommendations for teaching strategies that align with deep learning approaches to consider for program integration are (a) intentionally mixing younger and older students when facilitating nursing students in group learning scenarios (older students sharing life experiences), (b) using advanced technology (younger nurses can share technology knowledge with older students), (c) faculty and nurse educators having a transparent, coordinated approach to communicating curricula and sharing platforms for continuity of learning across all areas, and (d) ensuring a caring, responsive, safe, and student-friendly environment. Adopting these educational strategies in the baccalaureate program could assist in enhancing nursing students deep learning in oncology self-management support.

Readings Assigned to Nursing Students in the Baccalaureate Program. The concept of a teaching strategy in an undergraduate baccalaureate nursing program is defined as the means that a professor uses to facilitate the teaching-learning process (Chavaglia, 2018). Teaching

strategies utilized by professors to facilitate the teaching-learning process include a variety of strategies, resources, and information and communication technologies in the nurse training process (Chavaglia, 2018). Ninety-eight percent of nursing students in baccalaureate nursing programs have reported article reading as a predominate didactic resource used by professors in their program (Chavaglia, 2018). Concept based curriculum focuses on teaching core ideas or concepts that are threaded throughout the curriculum to encourage critical thinking and deeper learning. Concepts are leveled throughout the curriculum to enhance greater understanding and application while minimizing unnecessary repetition that occurs in a traditional nursing curriculum that is saturated with ever-expanding content (Repsha et al., 2020).

A textbook on concepts for nursing practice (Giddens, 2021), and selected chapters for course readings from this textbook, are used throughout the program. The course document data collection identified that the chapters from Giddens (2021) on concepts of person-centered care, patient education, and communication were not required readings. However, chapter seven in Giddens (2021) on self-management was a required reading for nursing students. Although not in the context of cancer, this chapter provides an overview of the provision of self-management support, its attributes and criteria, and provides clinical exemplars. A second document for identified as a required reading was a comprehensive self-management support best practice guideline from the Registered Nurses Association of Ontario (2010). Of the entire data collection on course documents, this guideline was the only comprehensive self-management support document that included cancer as a chronic disease. The important “why” around the importance of self-management for those living with a chronic disease is explained and the document is comprehensive and inclusive of the essential skills in the provision of self-management. A concern about this document is that it was published in 2010 and, therefore, considered to be

dated. Also, although it mentions the document being relevant in the delivery of cancer as a chronic disease, it is not exclusive to persons with cancer by addressing the unique physical and psychosocial needs of persons with cancer. However, I consider this 2010 document to be ahead of its time by referring to the chronicity of cancer and reporting that it “is intended for nurses who work in a variety of practice settings across the care continuum” (Registered Nurses Association of Ontario, 2010, p. 7). Nursing students described the pressures of the reading requirements and shared, “it was definitely a stretch to be able to get to those other readings and have the time . . . for some students it would definitely be a stretch to be able to make time for those readings for sure” (NSP2). When probing about recalling reading the Registered Nursing Association of Ontario best practice guideline, a nursing student participant said, “No” (NSP9). When asked if she recalled reading chapter seven on self-management in Giddens (2021), she said, “A little bit . . . we had the Giddens book but I don’t feel like self-management, we might have like touched on, but specifically from that book, I don’t remember that” (NSP9). Health coaching as a performance criterion was reported across all participants as being absent and was not found to be present in course documents.

Faculty and nursing students report feeling overwhelmed with the amount of required content in nursing courses (Repsha et al., 2020). Advances in healthcare and research requires curricular changes to stay abreast. In order to do so however, a nurse in their specialized area would be required to read seven articles every day to remain up to date (Repsha et al., 2020). Nursing education is demanding (Repsha et al., 2020) and a concern in this study is that nursing students reported the omission of reading the self-management chapter in Giddens (2010) and the one document that comprehensively discusses self-management support, the RNAO best practice guideline (Registered Nurses Association of Ontario, 2010). Integrating teaching

strategies that allow students to make connections with prior knowledge, as in the case of concept-based teaching, allows for meaningful learning and fosters critical thinking skills (Repsha et al., 2020). The concern in this study related to self-management support education is that nursing student participants reported the omission of two important readings on self-management, affecting deep-level learning. This supports the notion that nursing students are not prepared to critically think, comprehend, holistically view a comprehensive, coordinated approach to the provision of self-management support for persons with cancer.

Integration of Communication Across Areas of Teaching and Learning

Nurse educators shared concerns about not being fully aware of what curriculum is taught in the classroom to transfer theory for application in the simulation lab and clinical settings. A nurse educator said, “I do feel like there’s a huge gap in theory to practice . . . I don’t know what’s in the curriculum, so like, that’s a gap because I’m the one that’s encouraging students to apply it” (NEP1). A further example of the curriculum content being taught to nursing students not being integrated into the practice area was, “So, I just find sometimes we work in silos, and it’s not always being integrated through and threaded how it could be” (NEP1). Another nurse educator participant reiterated this when she shared, “So, the curriculum that they learn . . . I’m not 100% sure because that’s not always shared with us as nurse educators” (NEP4). Nurse educators shared that they prepare for simulation labs and clinical settings by prospectively looking at the syllabi on the course Moodle pages to know what concepts they should be reviewing. Faculty members reported being unaware of what simulations are practiced by nursing students in the lab and said, “I don’t know what sims are done in the simlab . . . the nurse educators know” (FMP6).

Strengthening communication channels between all lecturing professors, nurse educators, and clinical mentors supports the importance of having and communicating a common shared view on self-management support and nursing students having role models in the university and in clinical practice (van Hooft et al., 2018). Drawing from Alsayed et al. (2021), to obtain deep-level learning, it is important that the curriculum taught in the classroom is fully and transparently shared through routine communication between faculty and nurse educators. This would allow for nurse educators teaching in the simulation lab and clinical areas to further facilitate teaching and learning so that nursing students may practice and apply their knowledge to allow for surface and deep learning to simultaneously occur.

To be effective, interdisciplinary team members in today's complex health care environment, health professionals, including nursing students, can no longer be educated in silos (Hermann et al., 2016). Faculty shared that having cancer survivors as guest speakers was beneficial and generated interest amongst students. Nursing students also shared having guest lecturers who worked in palliative care and provided a lecture on palliative care management was helpful. Davidson (2020) reports that without proper preparation, nursing students can feel overwhelmed when communicating with cancer patients. Coordinating an observation experience of shadowing registered nurses in the outpatient oncology setting (i.e. chemotherapy, radiation, bone marrow transplant) is a slower area compared to acute in-patient areas, allowed nursing students to experience a multitude of concepts, and nursing students found the experience invaluable in helping to translate theory into practice (Davidson, 2020). This offers potential recommendations to the nursing program for communicating curriculum concepts learned in the classroom to nurse educators and nurse leaders within institutions and community partners. Ensuring discussions between faculty, nurse educators, preceptors, and clinical nurses,

and community members would assist in teaching opportunities to enhance deep level learning of oncology self-management support concepts for nursing students.

“I Don’t Know How To”: Integrating a Comprehensive Approach to Self-Management

Support

Although all participants identified a need for content specific to oncology self-management support education within the baccalaureate program, nursing student participants articulated feeling unprepared and uncertain on *how to* activate patients to engage and participate in their care and expressed a desire to learn. An example is, “But other than really just talking with patients, I don’t really know much else on how to” (NSP10). Another example is, “it would be nice to learn more about helping to motivate people to play a role in their health” (NSP9). As well as recognizing a gap in *how to* motivate patients, nursing students also shared difficulty in applying the self-management support competencies in a coordinated approach. An example of this pertaining to patient education was,

Education is one that I feel like I’m a little bit weaker . . . I know what I want my patients to do and how I’m just supposed to do the treatment but relaying it to them and trying to explain it is something that I have struggled with. (NSP10)

Aligning with what nursing students shared, the results of this study identified a gap in teaching and learning health coaching using behavioural change theory. Health coaching and techniques such as the 5As (Assess, Advise, Agree, Assist, Arrange) and motivational interviewing are considered behavioural interventions to activate and help patients prevent and manage chronic disease (Howell et al., 2021). Further, although the health benefits of concepts such as physical activity were identified, a gap existed in comprehensive teaching and learning for nursing students to link concepts and performance criteria on how to motivate and activate patients to

self-manage. These findings support that nursing students are provided education on some performance criteria but also reflect a need for an intentional, coordinated, and comprehensive approach to teaching and learning the provision of self-management support. Having curriculum approaches that meet students learning needs is important to their knowledge development and transfer (Mitchell & Laing, 2019; Knowles et al., 2015). Moreover, I question if performance criteria learnings to support patients with chronic disease (i.e. diabetes) could be transferrable in their provision of self-management support to persons with cancer as a chronic disease. Drawing from (Alsayed et al., 2021), this may be due to the superficial learnings acquired from classroom instruction and the absence of deep learning acquired through life experiences and simultaneous classroom instruction and clinical experience. Deep learning is important for novice nurses with limited life experiences. Van Hooft et al. (2018) report teaching self-management support is challenging since most nursing students are young and lacking life experiences. It is therefore recommended that opportunities for novice nursing students deep level learning be supported by linking teaching and learning cancer and cancer survivorship, self-management support performance criteria, health coaching and behavioral change, within an intentional, coordinated approach.

Overall, I noted the absence of an intentional, coordinated, and comprehensive approach to teaching and learning of performance criteria deemed necessary for nurses to achieve requisite competencies for self-management support and coaching in cancer populations. The incidence and mortality rates of cancer within the Canadian population impact the requirement to incorporate an overarching view of preparing nursing students for the future (Davidson, 2020). It is essential that faculty examine strategies to integrate a comprehensive view of cancer care into the curriculum to ensure that baccalaureate nursing students can safely provide care to persons

across the trajectory of cancer care (Davidson, 2020). Teaching separate components, such as the performance criteria and requisites outlined in Chan et al. (2023) poses a risk that nursing students will have problems integrating the self-management support aspects into clinical practice (van Hooft et al., 2018). An intentional, coordinated approach to teaching and learning oncology self-management support in the nursing program could assist nursing students as novice learners with limited life experiences to fully grasp teachings on self-management support performance criteria that are being taught for a person with cancer and their family. Theoretical teaching of cancer self-management taught in a dedicated curricula space and the chronic disease course (NURS332) could be considered. Self-management, self-management support, health coaching and behavioural change, and cancer survivorship definitions and concepts and the integration of performance criteria curricula (i.e. motivational interviewing) curriculum and teaching are also recommended for consideration. An intentional, coordinated, and comprehensive approach to oncology self-management support that allows for the practical application of knowledge of skills in the simulation lab, followed by post clinical discussions, would assist nursing students in discerning the complexity of cancer as an illness and allow for increased confidence in clinical settings. Knowledge application of these criteria within a coordinated approach would also have positive repercussions in clinical settings outside of cancer by assisting nursing students in the application of their learnings. For example, the application of motivational interviewing in areas such as mental health.

Teaching nursing students to support people's self-management is challenging. Van Hooft et al. (2018) identify the challenges for teaching self-management support as including (a) lecturers absence of a shared (consensus) view on specifically what students need to know and do in the provision of self-management support, (b) lack of support from the registered nurses on

the clinical settings, (c) role models within the university and clinical setting, (d) the young age and resultant lack of life experience of nursing students, (e) continuity of authentic learning situations in the classroom and simulation lab that resemble situations in the clinical setting.

The nursing program in this study provides performance criteria (person centered care, social justice, basic communication skills) in the curricula. However, a gap in teaching criteria in the context of cancer and within the provision of self-management support poses a risk that nursing students will have difficulty integrating oncology self-management supports aspects in clinical practice (van Hooft et al., 2018). Due to variations in role models practicing adequate self-management support within the university and within clinical settings, nursing students are left to independently bridge a gap from theory to clinical practice (van Hooft et al., 2018). A comprehensive definition of self-management support that includes various essential elements of support is required (Tharani et al., 2021). Developing a shared view amongst faculty, nurse educators, and nurses in institutions where nursing students have clinical placements, developing authentic oncology case studies for application in simulation labs, ensuring role models are available at school and clinical placements, and empowering students (van Hooft et al., 2018) are all considerations for integration within the baccalaureate nursing program.

Implementation Considerations. I have provided options for consideration on where to integrate cancer curriculum and instruction within aspects of the baccalaureate program (see Appendix P). Considerations for enhancement or integration include (a) adding cancer as a specific chronic disease in NURS332, including theoretical content on the incidence, prevalence, chronicity of cancer, cancer survivorship, coaching behavioural change theory, survivorship late and long-term effects, and key self-management support definitions, (b) an opportunity for the application of theoretical learnings from NURS332 in dedicated cancer specific case study

within the simulation centre that includes enhanced communication and health coaching, behavior change theory, 5As, and MI, (c) discussion with nurse educators on practical application of self-management support post-clinical, (d) enhancing or developing identified gaps in the performance criteria that are requisites for competency within current concepts (i.e.) enhance patient education and communication to include motivational interviewing and develop and integrate health coaching training program, (e) the program director and curriculum leader within the baccalaureate program dialogue with agencies such as CASN to understand the agency's position on cancer curriculum and self-management support for chronic disease curriculum and if there is opportunity to enhance awareness and growth within these agencies. The CANO/ACIO standards and guidelines could be useful to assist with curriculum development and implementation within universities (see Appendix P).

Chapter Seven Summary and Conclusion

As the number of persons with cancer continues to grow, the significance of ensuring that nursing students are prepared in the provision of oncology self-management support becomes increasingly apparent. Cancer is a unique, complex, chronic illness that contributes to the burden on healthcare resources and nursing students will undoubtedly care for a person with cancer at some point in their career. Nursing students must first understand the prevalence of cancer and the unique chronic needs of cancer survivors to provide effective, compassionate oncology self-management support. It is imperative that nurse researchers address the sparsity of Canadian studies addressing oncology education in baccalaureate nursing programs and the impact of development and implementation of oncology education on baccalaureate nursing students' attitudes and confidence providing patient care and resulting patient outcomes (Davidson, 2020). Curriculum and instruction are required on cancer, cancer as a chronic disease, and self-

management support specifically in the context of cancer. Nursing curriculum must be aligned with the performance criteria competencies and requisites of self-management support to ensure nurses, as the largest healthcare workforce are prepared to care for and support persons with cancer in their self-management. A gap exists in an intentional, coordinated, and comprehensive, approach to teaching and learning oncology self-management support in the baccalaureate nursing program. Addressing this gap is required to assist nursing students deep level learning and preparation for the delivery of competent, effective cancer care. The next and final chapter, chapter eight, provides more specific study implications and recommendations, dissemination strategies, suggestions for future research, and the overall conclusion of the study.

Chapter 8: Implications, Recommendations, and Conclusion

This final chapter of the thesis summarizes the study's research aim and objectives and the implications for baccalaureate education, nursing practice, and healthcare organizations. Study limitations, contribution to new knowledge, dissemination strategies, considerations for future research, and an overall conclusion are also provided.

Study Aim and Objectives

This study makes a novel contribution by exploring oncology self-management support education in undergraduate nursing education. The study utilized a qualitative case-study methodology to explore and identify the *what*, *how*, and *why* (Yin, 2018) a baccalaureate nursing program educates their nursing students on oncology self-management support to enable persons with cancer in the self-management of cancer and their health. The research study question was: *What, how, and why* does a baccalaureate nursing program provide oncology self-management support education, including health coaching as a self-management support intervention? Despite international consensus that nurses should be prepared and competent in the provision of self-management support in routine care across the cancer continuum, my study has shown that undergraduate nursing self-management support education is insufficient. This finding has been echoed by others (Duprez et al., 2017; van Hooft et al., 2018), and actions must be taken to integrate self-management support competencies in undergraduate education if the health and survival outcomes of cancer populations are to be improved.

Implications For Baccalaureate Nursing Education

Nursing graduates, equipped with a broad range of skills and competences, are required now and in the coming years (Giddens et al., 2022). To prepare for the future, academic nursing is obliged to transform nursing education to align with the major transformation and advances

occurring in the healthcare system (Giddens et al., 2022). Integration of core concepts in nursing education prepares nursing students with the knowledge and skills to meet professional competencies. This integration of concepts ensures their application throughout the nursing students educational experience and ultimately, in their nursing practice (Giddens et al., 2022). Subsequently, this study identified a gap in knowledge that was specific to cancer as a unique chronic illness and the knowledge and skills required for nurses to provide effective self-management support. This is problematic given the high prevalence of cancer and the likelihood that nursing students will provide care to a person with cancer during their career employment. Gaps in cancer specific knowledge and sub-specialized knowledge to enable patients to self-manage cancer as a complex chronic illness in baccalaureate nursing education is essential in preparing the registered nurses' workforce to improve health outcomes of cancer populations. This critical gap in cancer specific curricula has also been noted by Davidson (2020). Moreover, Duprez et al. (2017) and van Hooft et al. (2018) identified that nursing students had difficulty transferring theory into practice and were not ready to support patients' self-management in their clinical practice. This study has significantly deepened these findings by demonstrating the specific need for cancer and cancer self-management support education in undergraduate nursing curriculum.

Several implications on the teaching and learning needs of nursing students for self-management support in cancer care have been identified. The key gaps and implications identified in this study that need to be addressed are: 1. Gaps in cancer specific competencies and self-management support specific skills and competencies. 2. Integration of cancer knowledge and self-management competencies across all learning modalities. 3. Preparation of academic

educators. 4. Integration and co-design with healthcare institutions to address gaps in competencies in preparation of baccalaureate nursing students.

1. Gaps in Cancer Specific Competencies and Self-Management Support Specific Skills and Competencies

Despite the growing number of persons with cancer, oncology curriculum is limited in Canadian undergraduate and graduate training programs (Ross et al., 2016; Cheung et al., 2009; Love, 2015; Tam et al., 2014). In view of the incidence and prevalence of cancer in Canada (Poirier et al., 2019) and the unique, complex, and chronic physical and psychosocial needs and challenges facing cancer survivors (Howell et al., 2018; Mitchell & Laing, 2019; Ross et al., 2016), it is essential to enhance cancer curricula in nursing programs to better educate and prepare nursing students to care for this population (Davidson, 2020; Sarna & McCorkle, 1995). Consequently, nursing students in this study reported feeling underconfident in communicating with and providing care to persons with cancer and their families. Lockhart et al. (2018) also noted the low priority of cancer within nursing curriculum as negatively impacting the educational preparation of oncology nurses. New nursing graduates and nurses without oncology knowledge and skills, often practice in settings where they are responsible for persons with cancer (Ross et al., 2016). Due to the growing incidence of cancer and number of survivors (Poirier et al., 2019), it is imperative to educate and better prepare nursing students for the undoubtable interaction they will encounter with persons with cancer and their families in the future. If nurses are to be equipped with knowledge and skills to provide oncology self-management support, they first need to understand the urgency and implications for doing so. Embedding cancer curricula including cancer statistics, late and long-term effect health risks due

to a diagnosis and treatment of cancer, will assist in understanding the urgency and importance of self-management support in baccalaureate nursing education.

The inadequate coverage of oncology self-management support performance criteria identified in this study requires enhancement in the concepts of patient education and communication, which are embedded in concept-based undergraduate nursing curriculum. Learning specific skills in health coaching, behavioural change theory, and caring is also required to ensure better preparation of nursing students to achieve competency (Chan et al., 2023). These performance criteria have been identified by an international community of oncology nursing leaders to prepare nurses to support persons with cancer in their self-management of their disease and health (Chan et al., 2023) and are necessary components for integration within baccalaureate nursing program curriculum.

2. Integration of Cancer Knowledge and Self-Management Competencies Across All Learning Modalities

Participants in this study identified a gap on an intentional and coordinated approach to self-management support education. Teaching and learning approaches are important in developing and achieving a desired performance and level of competence (Alsayed et al., 2021). An intentional, coordinated, and comprehensive teaching approach by all academic educators on self-management support theoretical concepts in the classroom, practical application of skills in the simulation lab, and discussion in post-clinical debriefing, could assist nursing students on learning *how to* enable oncology patients to self-manage. This coordinated approach to teaching and learning self-management support performance criteria is necessary for nurses to achieve the requisite competencies for self-management support and coaching in cancer populations. Furthermore, this comprehensive preparation will help to ensure a novice nurse recognizes *when*

and *how to* employ self-management support when they encounter a person with cancer in a clinical setting. Simulation-based education is an effective strategy to educate nurses in cancer care through improved knowledge, skills, and satisfaction (Silva et al., 2023) and the integration of oncology concepts and oncology self-management support concepts within the simulation labs as a practice implication is recommended. Nursing student participants also shared that competing priorities and time pressures due to the workload of the program impacted them from completing readings on self-management. Consideration for competing time pressures may help to ensure nursing students complete the readings to enhance deep-level learning. Moreover, in keeping with Bandura's theory, the acquisition of knowledge, and application of knowledge in practice, may deepen nursing students learning and enhance their knowledge and confidence in the provision of oncology self-management support (van Hooft et al., 2018).

3. Preparation of Academic Educators

Teaching faculty and nurse educators will need to be equally prepared on the growing number of cancer survivors, the unique complex needs of cancer survivorship, and the provision of oncology self-management support and coaching. The faculty participants in the study reported the importance of these oncology concepts in the curriculum as being higher than what was identified across data sources. Similarly, Lockhart et al. (2018) identified the importance of cancer curricula being rated consistently higher in academic institutions than the depth at which the content was taught. Academic educators' readiness to endorse self-management support curricula may depend on the extent to which they understand the urgent nature of cancer (increasing incidence, prevalence, and chronicity) and the resultant value of self-management support (Duprez et al., 2018). Teaching academic educators about cancer and the unique complex cancer survivorship needs of persons with cancer (Davidson, 2020) will assist in their

understanding on the need to include oncology self-management support education for nursing students in their curriculum (Duprez et al., 2018). Raising organizational awareness on the importance and priority of oncology self-management support (Duprez et al., 2018) may improve the priority academic educators give to teaching self-management support, and nursing students give to learning and providing self-management support. It is therefore also advantageous that nurse leaders in the school of nursing be informed on the relevance of cancer and cancer self-management support to highlight its importance among academic educators (Duprez et al., 2018, 2021) and to help ensure operationalization of oncology self-management support education being embedded within the curricula. Moreover, having a shared consensus awareness and view (van Hooft et al., 2018) of oncology self-management support among teaching faculty and nurse educators will assist in the continuity of teaching and learning self-management support. Continuity of teaching and learning theory in the classroom, application practice of skills in the simulation labs, and post-clinical discussion will ultimately assist deep level learning of oncology self-management support for nursing students (Alsayed et al., 2021) and the application of self-management support in practice.

4. Integration and Co-Design with Healthcare Institutions to Address Gaps in Competencies in Preparation of Baccalaureate Nursing Students

Enhancing Nursing Students Exposure to Persons with Cancer. The integration of education between the university and clinical practice settings to build nursing students competency capacity has important implications for consideration. All participants recognized the minimal exposure nursing students have with persons with cancer. Faculty and nurse educator participants recognized and reported that not all nursing students may have a practicum experience with a person with cancer. The randomness of a student being assigned an oncology

patient has implications on nursing students' application of theoretical concepts in clinical practice and acquiring deep level learning on cancer and oncology self-management support.

Increased Capacity of Clinical Preceptors Oncology Self-Management Support

Knowledge and Skills. Nursing students are highly exposed to clinical preceptors and registered nurses while in clinical settings. Nursing students in this study reported valuing self-management support and identified learning self-management support performance criteria mostly from preceptors and registered nurses in the clinical setting. This heightens awareness on the impact that clinical nurses make on mentoring nursing students and substantiates the importance of ongoing oncology self-management support skills training for registered nurses. Duprez et al. (2017) reported that nursing students may have seen few role models in self-management support during their clinical internships, particularly on aspects of coaching and building collaborative partnerships with patients and therefore may not have been sufficiently stimulated to practice self-management support skills. In keeping with Bandura's social cognitive learning theory, students learn through modelling and observation (Bandura, 1997). The study findings, congruently supported by the literature, has implications on the requirement to also educate and train registered nurses in clinical settings on the delivery of self-management support and coaching to mentor and support nursing students. A self-management support training program demonstrated positive effects on improving oncology nurses and cancer coaches' confidence and skills and could be used to educate registered nurses for self-management support and coaching for routine care (Howell et al., 2023). Along with lecturers having a shared consensus view of self-management support and the application of authentic simulated situations, ensuring that role models are available at both the school of nursing and during clinical internships are also required improvements that may better enable students to support people to self-manage (van

Hooft et al., 2018). Through lifelong learning, continued competence is enhanced and affords high quality patient outcomes and evidence-based practice (Ross et al., 2016). Educating and training oncology nurses in clinical settings on the delivery of self-management support and coaching will provide role models to assist deep level learning for nursing students and overall strengthen the delivery of quality care for persons with cancer. The school of nursing could enhance nursing student's opportunities by liaising and coordinating with institutions on (a) nursing students having clinical placements within a cancer setting (i.e., chemotherapy unit), (b) purposely selecting preceptors in clinical settings with knowledge, skills, and experience in cancer care and self-management support, and (c) communicating the current curricula being taught in the school of nursing and the current learning needs of nursing students.

Increased Capacity Between Universities and Health Care Industry Cancer Workforce to Deliver Improved Cancer Care. Cancer care settings and organizations play a central role in supporting nursing education (Hedenstrom et al., 2021; Ross et al., 2016). Capacity exists for academic educators, healthcare leaders, and hospital administrators, to understand the importance of self-management support to help ensure the integration of self-management support in healthcare systems, and ultimately for nurses to understand and enact. Howell et al. (2021) reports that to embed self-management support into everyday routine care, a whole system change is required through targeted training and communication for 'buy-in' that includes preparing the workforce (microsystem), the organizational (macrosystem), and developing care protocols, pathways, and standards of cancer care delivery (mesolevel). Nursing students should understand contrasting health system orientations in terms of prevention, acute/episodic care, and chronic condition care (Lawn & Battersby, 2009). A guide for education and training organizations to determine their workforce education and training needs and the

skills and knowledge required for action was outlined and published in Australia in 2009 (Lawn & Battersby, 2009). This health organizational approach is an excellent guide from which other countries, including Canada, may follow. I recognize and appreciate that further reflection and future research is required to support these recommendations.

Universities and healthcare organizations must be informed on the relevance of cancer and cancer self-management support so they may internally communicate its necessity to healthcare professionals to ignite awareness and create organizational buy-in and operationalization embedding of self-management support education curricula (Howell et al., 2021, 2023). Teaching and learning across all levels and areas by creating staff awareness on the incidence and prevalence of cancer statistics and the urgency of embedding cancer self-management support curricula to meet the unique, complex, and chronic needs of persons with cancer are needed. Nursing students require training and practice across all teaching and learning areas and need opportunities for practical application of training and skills to acquire deep level learning. Meeting this curricula requirement in all facets of teaching and learning, including educational opportunities within external institutions, will assist with nursing student's self-efficacy to provide self-management support in clinical practice. Duprez et al. (2018) reported that to support nurses in the challenges of supporting individuals towards self-management, raising the priority of self-management support within health care organizations and cancer programs should be provided. For example, clinical nurses should be mentored and held accountable by their clinical nursing team leaders that self-management support is an essential component of chronic care and that they are in a unique position to provide that care. Through raising awareness and in their performance of delivering this as part of their preceptor roles,

nurses can improve the priority they give to providing self-management support (Duprez et al., 2018).

Considerations for Nursing Regulation Policy. Implications for consideration exist not only between universities and healthcare organizations. Implications for consideration also exist for nursing regulation and the potential for regulatory policy innovation (Giddens et al., 2022). Faculty participants described reviewing curricula to ensure the program is preparing nursing students to be successful with the National Council Licensure Examination (NCLEX) exam. A broader, systematic need and level of urgency to address the need for oncology self-management support education is through reviewing NCLEX requirements. Embedding oncology self-management curricula within NCLEX programming may urge schools of nursing to adopt oncology self-management support within their curricula. Assessing and evaluating entry to practice oncology competencies as well as addressing oncology content for licensing exams is imperative (Davidson, 2020).

An opportunity for national integration of cancer curricula and oncology self-management support exists within The Canadian Association of Student Nursing (CASN) through innovated policy implications. Endorsement of these competencies by CASN may be based on industry pressure for preparing the nursing workforce in cancer. Reviewing and understanding the position and expectations for oncology curriculum and self-management support from influencing agency's such as NCLEX and CASN is recommended by academic and healthcare leaders to determine opportunities to enhance awareness and growth within these agencies. In conducting a review of Australian literature on common approaches to supporting self-management of chronic health conditions, Lawn and Schoo (2010) reported that although there are variety of common approaches that can be applied to enhance self-management (i.e.,

counseling using motivational interviewing, health coaching, 5As), no one approach is necessarily superior to another. Ultimately, which ever approach to self-management support are applied, of most importance is how health services (primary care, secondary care, hospitals) work together to provide self-management support (Lawn & Schoo, 2010). Academic educators and administrators in universities, clinicians and clinical leaders in healthcare organizations, and those in governing organizations (i.e., CASN, NCLEX, provincial nursing organizations) could heed findings from Lawn and Schoo (2010) by initiating and supporting dialogue for oncology self-management support integration. Ultimately this goal is to support persons with cancer in the self-management of their chronic disease and health and improve their outcomes.

Recommendations

Data analysis of oncology self-management support education in a baccalaureate nursing program identified several implications to comprehensively address nursing students learning needs and the global calls for action to improve self-management support in cancer care (Chan et al., 2023; Howell et al., 2022). Stemming from the implications are six recommendations which need to be attuned to academic or healthcare organizations. The recommendations are: 1. Integrate curriculum on cancer as a unique chronic disease. 2. Integrate self-management support performance criteria. 3. Integrate oncology self-management support and coaching curricula program. 4. Prepare academic educators in oncology. 5. Collaborate and coordinate oncology clinical preceptors. 6. Collaborate with nursing organizations to build oncology education capacity.

1. Integrate Curriculum on Cancer as a Unique Chronic Disease

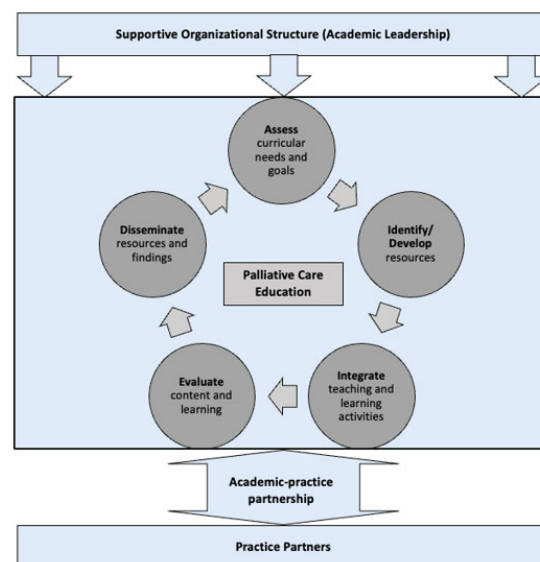
An infusion of cancer education is required to address the current sparsity of curricula dedicated to cancer. Curriculum on cancer, cancer survivorship, cancer statistics, and the most

common late and long term physical and psychosocial side effects due to a diagnosis and treatment, is recommended to be added to baccalaureate nursing programs. Moreover, cancer education should be taught by academic educators with at least foundational oncology knowledge and skills. Teaching and learning the fundamentals of cancer care will prepare nursing students for the future to care for persons with cancer and will provide a contextual foundational understanding of the requirement of oncology self-management support. The Adult Cancer Survivorship Manual, a Self-Learning Resource for Nurses, is available for CANO/ACIO members and would be an advantageous resource for academic educators looking to enhance cancer survivorship curricula. Cancer survivors as guest lecturers are also recommended.

2. Integrate Self-Management Support Performance Criteria

Baccalaureate nursing programs should integrate performance criteria to achieve the requisite competencies for self-management support and coaching in cancer populations. The Chan et al. (2023) Competency Framework for Cancer Nurses Providing Self-Management Support is recommended to use to screen and conduct an inventory of the curricula being taught and the gaps that exist at a university to stimulate quality improvement. The University of Calgary Taylor Institute for Teaching and Learning Educational Development Unit provides a framework: *Curriculum Review: Analyzing Curriculum Mapping Data* (Dyjur et al., 2019) which may be resourceful in conducting a curriculum screen or to guide the creation of a tool from which a program could conduct a self-assessment measurement. Drawing on Koirala et al. (2023), an approach could be to focus on existing concept content and integrating cancer and cancer self-management support throughout the current coursework. The development of a framework is recommended as a systematic curriculum mapping process to integrate competencies into baccalaureate nursing education. As shown in Figure 6, this framework

consists of five specific processes: 1. Assess curricular needs and goals. 2. Identify and develop resources. 3. Integrate teaching and learning activities. 4. Evaluate content and learning. 5. Disseminate resources and findings (Koirala et al., 2023, p. 34). An important research implication to consider as a next step to this study is to conduct a systematic curricula mapping process for the implementation of cancer and cancer self-management support curriculum in Canadian baccalaureate nursing programs. Koirala et al. (2023) offer a concrete and valuable framework that could guide a potential research study. Further, nursing student's competencies for self-management support could be evaluated and stimulated by using the performance criteria and requisite competencies from Chan et al. (2023) to create clinical practicum learning objectives (Duprez et al., 2018). Governments and institutions are currently challenged to re-visit training programs due to academic educator staffing shortages and to train and prepare more nursing students for a workforce shortage, which may create an opportunity to screen and update curriculum delivery.



(Koirala et al., 2023, p. 34).

Figure 6

Framework for Integrating Palliative Care Knowledge and Skills in Nursing Education

3. Integrate Oncology Self-Management Support and Coaching Curricula Program

An intentional, coordinated, comprehensive, evidenced-based curricula program of oncology self-management support and cancer coaching is recommended. Implementing oncology self-management support and health coaching training would also benefit nurses providing self-management support for individuals self-managing other chronic conditions. Nursing students reported not knowing *how to* and *I wished I learned* oncology self-management support. It is unlikely that a novice nursing student with minimal life and clinical experience can ascertain *when* and *how to* connect theoretical concepts and skills when they encounter a person with cancer at the various touch points of the clinical trajectory. Duprez et al. (2018) reported that trained nurses performed more self-management support. Furthermore, and beyond training, better educated nurses performed more self-management support and could act as role models to optimize self-management support competencies (Duprez et al., 2018). This has implications for continued learning practices and roles for nurse navigators, advanced practice nurses, and/or clinical nurse specialists. To integrate a cohesive, coordinated, and comprehensive approach, I recommend implementing a dedicated oncology self-management support and coaching education training program (Howell et al., 2022, 2023). The self-management support and coaching training program could be outsourced and offered over a period of approximately five days. The program could be held following the basic communication education and training that is provided in the baccalaureate program and would therefore likely fall at the end of second year allowing for the ongoing practical application of newly acquired skills during authentic simulation sessions (van Hooft et al., 2018) and while in clinical settings. Nurses from external healthcare organizations could be offered to attend the training program or nursing students could attend an intensive oncology self-management support and coaching education training

program offered at healthcare organizations and during clinical placements. Alternatively, or until a dedicated program could be provided, cancer self-management support and coaching competencies for undergraduate nursing curricula could be integrated using the Koirala et al. (2023) framework as a guide. It is also recommended that the nursing program review the current readings that enhance oncology self-management support teaching and learning and put mechanisms in place that will support nursing students' opportunities for time to complete the readings.

4. Prepare Academic Educators in Oncology

The preparation of academic educators on cancer incidence, prevalence, chronicity, cancer survivorship, late and long-term side effects, cancer coaching, and self-management support is recommended. Having knowledge and understanding of cancer, its resultant effects, and the benefit of oncology self-management support will assist in knowledge translation activities with nursing students. An improved coordinated and communicated approach between faculty and nurse educators on oncology concepts, including self-management support and coaching, to improve concept learning and for nursing students to attain deep level learning is also recommended. Having a shared consensus view (van Hooft et al., 2018) of oncology self-management support that is well-communicated across all areas of teaching and having self-management support role models within universities and during clinical settings, are essential (Duprez et al., 2017; van Hooft et al., 2018). The development of authentic situations as practical examples, demonstrated by role models within the university and during clinical settings, will assist and empower students to translate theory to practice and are recommended improvements to better enable nursing students to support persons to self-manage (van Hooft et al., 2018). A supervisor's support is an enabler to implement self-management support skills of nursing

students in clinical practice (Duprez et al., 2018) and academic educators and clinicians with cancer knowledge and trained in self-management support and coaching are role models to enable the provision of self-management support by nursing students. A faculty member (FMP8) shared having the education modeled by an individual knowledgeable and experienced in the area would be ideal. Conducting a self-assessment of faculty knowledge may identify opportunities for faculty development (Lippe et al., 2022). Further, a guide for education and training organizations to determine their workforce education and training needs and the skills and knowledge required for action was outlined and published in Australia in 2009 (Lawn & Battersby, 2009). The selection of an academic coordinator responsible to oversee the preparation of academic educators is recommended and a pilot project where nursing students are purposefully matched with clinical opportunities to apply theoretical self-management support should be considered.

5. Collaborate and Coordinate Oncology Clinical Preceptors

The university is recommended to facilitate further dialogue and collaboration with healthcare institutions to proactively select preceptors with knowledge, skills, and experience in cancer care. Role models as supervisors in clinical settings would support nursing students' application of theoretical knowledge and enhance deep level learning (Alsayed et al., 2021; Duprez et al., 2018). If not already in existence, creating or enhancing a guideline that supports all nursing students receiving dedicated oncology clinical time in primary care, community care, and/or tertiary care settings is recommended. Additional training of clinical or advanced practice nurses to act as role models to optimize self-management support competencies for nursing students would augment nursing student's self-efficacy and skills. Aligned with Bandura's theory, nurses who felt confident in performing self-management support and who also felt

confident in their overall nursing competency, performed more self-management support (Duprez et al., 2018). It is recommended that the university welcome clinical nurses from local healthcare organizations to attend oncology guest lectures and self-management support and coaching training sessions. A pilot project may be useful to allow for feedback and evaluation.

6. Collaborate With Nursing Organizations to Build Oncology Education Capacity

It is recommended that universities liaise and collaborate with nursing organizations. Academic educators are recommended to collaborate with The Canadian Association of Nurses in Oncology/Association Canadienne des Infirmieres en Oncologie (CANO/ACIO) and CASN to build oncology and oncology self-management support curricula capacity in Canadian universities. I also recommend liaising with the National Council of State Boards of Nursing to understand their position on cancer examination and make recommendations on the inclusion of oncology and oncology self-management support on the National Council Licensure Examination. Further, the Canadian Nurses Association (CNA) Certification Program in Oncology for registered nurses and nurse practitioners should consider including specific competencies in oncology self-management support and health promotion for their examination given the risks for patient's poor health and secondary cancers.

The Canadian Federation of Mental Health Nurses (CFMHN) joined with CASN to jointly develop entry-to-practice mental health and addiction competencies for undergraduate nursing education in Canada. In 2014, CASN partnered with CFMHN to develop a national, consensus-based framework of essential discipline-specific, entry-to-practice mental health and addiction competencies and indicators. The aim of the framework was to promote the integration of core content related to mental health and addictions in undergraduate nursing education in Canada (Canadian Association of Schools of Nursing, 2015c). An opportunity for the

CANO/ACIO partnering with the CASN to jointly develop an entry-to-practice self-management support competency guideline for Canadian baccalaureate nursing programs is recommended.

The Chan et al. (2023) internationally recognized framework provides a structured, evidenced-based, and consensus framework from which the two organizations could agree upon entry-level recommendations for Canadian schools of nursing.

It is recommended that CANO/ACIO develop a self-management and self-management support standard to include in the current CANO/ACIO standards and guidelines (CANO/ACIO, 2006). Following the Nursing Knowledge and Practice Framework for Cancer Care (CANO/ACIO, 2019), CANO/ACIO could articulate the knowledge expectations of this newly developed self-management and self-management support standard for ‘all nurses’, ‘many nurses’, ‘some nurses’, and ‘few nurses’ (Aranda & Yates, 2009; CANO/ACIO, 2019; Nowell & Campbell, 2020). In collaboration with CASN, baccalaureate nursing programs could subsequently integrate in their curriculum the knowledge expectations from the ‘all nurses’ (generalists) level of the self-management and self-management support CANO/ACIO standard (CANO/ACIO, 2006; CANO/ACIO, 2019; Nowell & Campbell, 2020). In doing so, this could assist in addressing the knowledge expectations and preparation of nursing students as generalists, compared to specialist and advanced nursing roles (see Appendix P).

Of the recommendations provided, the most important recommendations are: 1. Integrate Curriculum on Cancer as a Unique Chronic Disease. 2. Integrate Self-Management Support Performance Criteria and 3. Integrate Oncology Self-Management Support and Coaching Curricula Program.

Recognizing Challenges. The current climate of healthcare represents nursing staffing shortages and financial restraints, and universities have been tasked to increase the number of

nursing student seats and resultant graduates (Ahmed & Bourgeault, 2022). Further, the acuity of patient care demands nursing graduates to be prepared for the many challenging arenas and facets of healthcare delivery (Ahmed & Bourgeault, 2022; Davidson, 2020). As such, I am aware of the challenges imposed on university faculty and administration by recommending the addition of oncology and oncology self-management support curricula in an already stretched four-year baccalaureate program. Unequivocally, Canadian healthcare is currently facing system challenges of human resource shortages, and the acuity of care demands to meet patient needs. Universities are tasked with preparing nursing students as generalists to fill critical human resource voids in provinces across Canada. Tasking schools of nursing to embed further curricula in an already burdened curriculum with competing priorities proves challenging and must be considered and reflected upon in this research study. Recognizing the tensions between government mandates and the nursing programs accreditation, some current curricula may need to be “squeezed out”. Selecting the criteria to be removed or restructured requires dedicated time and human resources.

Physiotherapy and occupational therapy are health programs that now require an additional two years of higher learning prior to licencing and practice (Lall et al., 2003). Baccalaureate nursing programs could follow suit to provide further time and training to ensure nurses are prepared for a highly complex and demanding healthcare workforce. Although beyond the scope of recommendations stemming from this study, it is also recognized that baccalaureate programs are taxed to prepare nursing students in all areas of clinical practice within a four-year timespan. Simultaneously, provincial governments are pressured by a lack of nurses in the workforce to meet the current health care demands. Ideally recommended is the restructuring of a four-year baccalaureate program to include fellowship or residency oncology programming

following the completion of the degree. Although ideally recommended, it is recognized the pressures governments and healthcare institutions currently face. However, it is cause for reflection given the ever-increasing number of individuals being diagnosed and treated for cancer with complex needs and an ever-increasing number of complex treatments. Persons with cancer require highly trained clinicians with the knowledge and skills to provide complex care and persons with cancer morally deserve a highly educated and skilled workforce to ensure their quality of life and healthcare needs are met.

Significance and Contribution to The Research Field

Cancer has surpassed cardiovascular disease and diabetes in morbidity and mortality (Cheung et al., 2009; Poirier et al., 2019; Tam et al., 2014) and yet this study has identified a gap in cancer curricula, cancer survivorship curricula, and cancer self-management support curricula. There is a vitally important need for nurses to be educated in self-management support to provide the care that persons with cancer require to optimize their health and long-term survival, and ultimately their quality of living. This study has created new knowledge and fills a gap by identifying the extent and impact to which pedagogical approaches of oncology self-management support education exist in a baccalaureate nursing program. The new knowledge generated from this study has provided recommendations for which baccalaureate nursing programs, and to a larger extent healthcare organizations, may integrate and implement curricula to help ensure nursing education programs foundationally prepare nursing students to effectively care for the growing number of individuals affected by cancer.

Future Research Considerations

This dissertation addresses some questions regarding oncology self-management support education in a baccalaureate nursing program. However, like all research, it invokes new

questions to consider. This study identified a gap in the literature and within a baccalaureate nursing program on *oncology* self-management support and coaching. Further, this study identified a gap in oncology curriculum in the nursing program. As such, a plethora of future research opportunities exists in oncology curricula and oncology self-management support curricula within baccalaureate nursing programs. In what follows, are recommended future research opportunities to consider. This is not an exhaustive list but rather focuses on the next steps stemming from this dissertation to generate thoughtful discussion and engagement.

1. The Description and Evaluation on the Development of a Framework for the Integration of Cancer and Cancer Self-Management Support Knowledge and Skills within a Concept-Based Curricula

This study has outlined the importance of integrating cancer and cancer self-management support into baccalaureate nursing education. The development of a framework to integrate cancer curricula and cancer self-management support performance criteria and competencies within a concept-based curriculum is recommended. The framework from Koirala et al. (2023) could guide the mapping process across Canadian universities. Future research initiatives in this endeavor include: 1. The description and evaluation of a systematic curricula mapping process to enhance and integrate cancer and cancer self-management support performance criteria and competencies embedded throughout a baccalaureate nursing program. As described in Koirala et al. (2023), the experiences, activities, and challenges of conducting a curricula mapping process could be considered. 2. Once the curriculum is taught and learned, evaluate how nursing students are able to apply the competencies in practice and the impact on patient health outcomes. 3. Evaluate the collaboration with clinical partners in healthcare organization(s) on the quality of

clinical placement in cancer settings and opportunities for nursing students to be mentored by registered nurses with cancer and cancer self-management support knowledge and skills.

2. The Contribution of a Comprehensive Oncology Self-Management and Coaching Program in Baccalaureate Nursing Education

The evidenced-based program should be developed based on building blocks already developed and tested (Chan et al., 2023; Howell et al, 2021, 2023). 1. Research and development of a comprehensive self-management support and coaching program for baccalaureate nursing education could include investigating (a) the program development, (b) universities perspectives on the program need, (c) nursing student's experiences of the program, (d) nursing students' confidence in the provision of oncology self-management support after program completion, and (e) patient reported outcomes following nurses' utility of the program. 2. Educate registered nurses as preceptors on self-management support and coaching and evaluate their ability to teach and mentor self-management support and coaching to nursing students.

3. The Cancer and Cancer Self-Management Support Educational Needs of Academic Educators in Baccalaureate Nursing Programs

Research considerations in this area could include academic educator's experiences, perspectives, and preparation for receiving education on oncology curricula and oncology self-management support curricula. A responsible point-person and comprehensive self-reflective studies could both be considered to assist schools of nursing.

Dissemination Strategies of Research Knowledge

A case study is brought to a close with the dissemination of research findings to appropriate audiences (Yin, 2018). This study has created new knowledge and the research results now require effective knowledge mobilization activities to maximize the impact of the

research. The research results should be communicated to university nursing faculty and nursing administration, oncology nurses and oncology nurse leaders, and healthcare organization nurses and administrators. To maximize reach to appropriate target audiences, the process of communicating the research results of this study is best mapped through (a) the storage of this dissertation for access at the StFX university library, (b) sharing results with the school of nursing involved in the research, (c) presentation at scientific peer-reviewed conferences, (d) publication in a peer-reviewed journal, (e) networking through oncology nursing channels in Canada (CANO/ACIO) and internationally, and (f) networking with nursing regulators (CASN, CNA, National Council of State Boards of Nursing). In following this mapping approach to communicate results, knowledge users will engage with the research results and the potential of knowledge uptake and future research initiatives will be sustained. Broad knowledge mobilization activities will ultimately help to ensure nurses as the largest healthcare workforce have the knowledge and skills to effectively assist cancer patients to improve their behavioral and health outcomes (Chan et al., 2023; van Hooft, et al., 2018; Wolever, 2013).

Limitations of The Study

Although the use of an exploratory case study design allowed for richness and depth in the collection of robust qualitative data, it is recognized that the responses and personal experiences were individualistic self-reported data from each of the participants. With this, I acknowledge that the qualitative design does not allow for the generalization of baccalaureate nursing students knowledge and experiences on oncology self-management support that a quantitative design would provide. Moreover, it is recognized that within the methods of selected data collection, all experiences may not have been captured in detail (i.e., absence of classroom and lecturer observations, simulation lab observations, clinical setting observations). Further, it is

recognized that all participants in this study were female. The absence of male participants limits the possibility of different perspectives within the baccalaureate nursing program.

It also needs to be recognized that this case is situated within a small, primarily undergraduate orientated university. The university is partnered with a small regional hospital where clinical placements occur. Students' knowledge of self-management and applications in oncology settings may differ among undergraduate nursing students at larger post-secondary institutions with access to academic hospitals affiliated with speciality cancer services.

Due to the absence of oncology curricula and oncology specific self-management support curricula, nursing students in the program received minimal cancer teaching and learning in these areas. It must be recognized and questioned whether the nursing student participants in the study could truly understand and provide insights into oncology self-management support.

Chapter Eight Summary and Overall Conclusion

Improved self-management support for persons with cancer offers the potential to optimize health outcomes, expediate recovery, and reduce long-term disability across the cancer continuum (Howell et al., 2021) and calls to action have been implored from the international cancer nursing community to build an improved integration of self-management support in cancer care (Chan et al., 2020, 2023; Howell et al., 2023). One of three identified priority actions identified from the international cancer nursing community is the inclusion of self-management support knowledge and skill development in undergraduate curricula (Chan et al., 2020, 2023; Howell et al., 2021). The inclusion of oncology curricula in baccalaureate nursing programs will assist nursing students to foundationally develop the competencies required (Davidson, 2020; Lockhart et al., 2018; Sarna & McCorkle, 1995) to achieve oncology standards of care that all persons with cancer deserve and are entitled to (Ross et al., 2016).

University settings and academic educators are tasked with preparing nursing students for the future to provide safe, quality, evidenced-based care to a growing number of cancer survivors across the continuum of care (Duprez et al., 2017; Lockhart et al., 2018; van Hooft et al., 2018). The Chan et al. (2023) international competency framework for cancer nurses could be used to screen for current competencies of nursing students and stimulate quality improvement. To meet the unique, complex, and individual needs of the growing number of persons with cancer, the following recommendations for baccalaureate nursing programs are: 1. Integrate curriculum on cancer as a unique chronic disease. 2. Integrate self-management support performance criteria. 3. Integrate oncology self-management support and coaching curricula program. 4. Prepare academic educators in oncology. 5. Collaborate and coordinate oncology clinical preceptors. 6. Collaborate with nursing organizations to build oncology education capacity. Future research opportunities on oncology self-management support education are plentiful and have been identified. Every encounter across the cancer care continuum is considered a potential teachable moment to integrate a structured assessment approach to enable tailored self-management support to meet the individualized needs of patients (Howell et al., 2021). Implementing these recommendations will help to ensure nursing students are prepared for the future as the largest workforce in healthcare to support the growing number of persons with cancer to self-manage their disease and health and improve overall outcomes.

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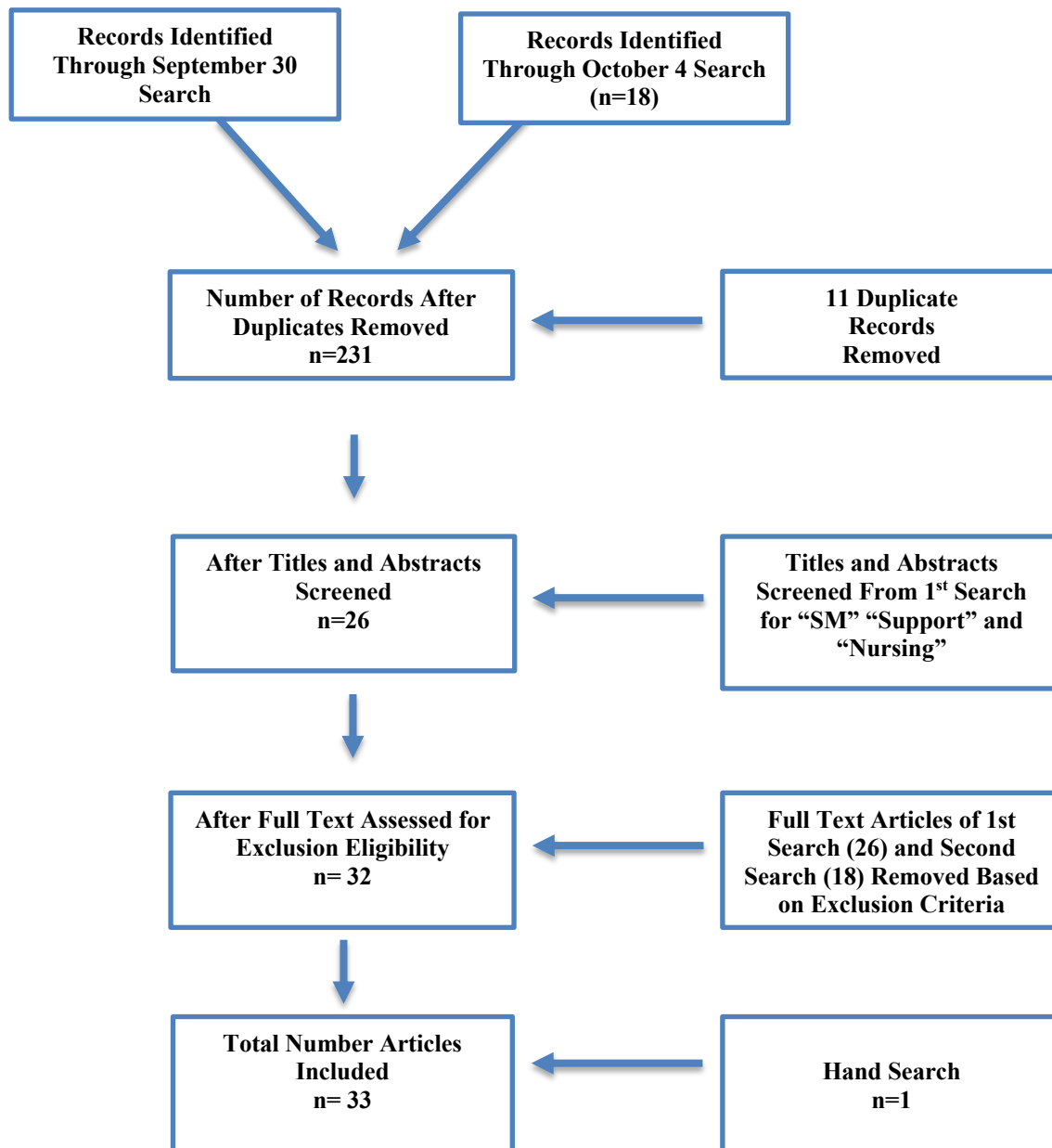
Appendix A

Inclusion and Exclusion Criteria for An Integrative Literature Review

Inclusion Criteria	Exclusion Criteria
P- Population: cancer, oncology, survivors, patients (age 18 and over) at any stage in the cancer trajectory	Non-English papers Duplications
I- Intervention: nursing, self-management, support, coaching (in person or over the phone)	Patients <18 years of age
C- Comparator: nursing, self-management, support	Non-peer reviewed journals/editorials/letters
O- Outcomes: cancer, oncology, patients, self-manage, self-efficacy	Coaching delivered by non-nurses
H- Health care context: cancer, oncology, care	Coaching dedicated to non-self-management, sports, or other professional disciplines

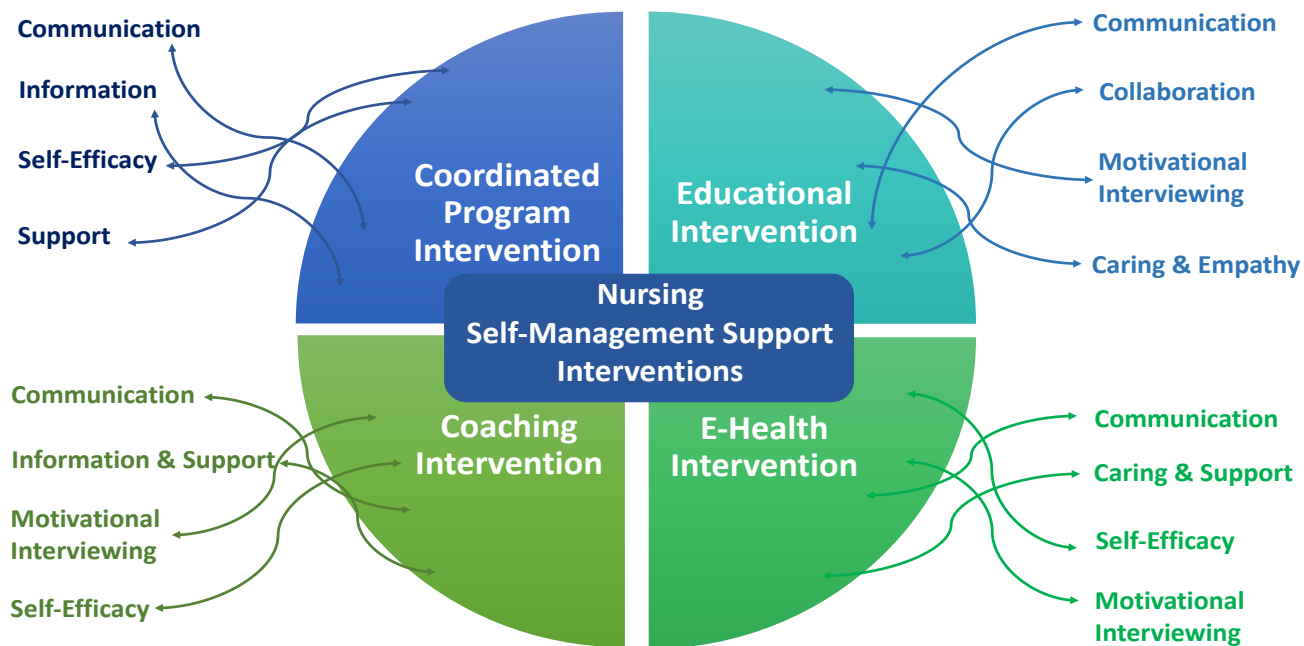
Appendix B

Search Strategy for a Nursing Self-Management Interventions Literature Review



Appendix C

Themes from Nursing Self-Management Interventions Literature Review



Appendix D

Screening Full-Text Self-Management Nursing Intervention References (n=32):

Identifying Social Justice Key Words

Key Words Identified	Article Name	Interventions/Findings	SMS Implications
Theme #1: Traditional Self-Management Educational Interventions (n-6 references)			
<ul style="list-style-type: none"> • Cultural • Ethnicity • Old • Family support • Education Level 	<p>Dwarswaard et al (2015) <i>Self-management support from the perspective of patients with a chronic condition: a thematic synthesis of qualitative studies</i></p>	<p>Study Aim: The aim of this qualitative review was to identify patients' needs with respect to SMS and to explore by whom this support is preferably provided.</p> <p>Cultural background influences the need for support and the preferred type of support.</p> <p>Support ethnically suitable such as American Indian story telling.</p> <p>Provision of information should be age appropriate (young & old). Support is required from family and fellow peers.</p>	<p>Recognizes the importance of cultural appropriateness, however, focus on western countries and English demonstrated a superficial understanding of these issues.</p> <p>Cultural background influences SMS needs.</p> <p>Chronically ill patients need instrumental support, psychosocial support and relational support from health-care professionals, family/friends and fellow patients to manage the chronic condition. Relational support is at the centre of the support needs and fuels all other types of support.</p> <p>Patients do not self-manage on their own. Dynamics in support needs make it important to regularly assess patient needs.</p>
<ul style="list-style-type: none"> • Age • Economic • Cultural 	<p>Howell et al. (2017) <i>Self-management education interventions for patients with cancer: a systematic review</i></p>	<p>Study Aim: This systematic review was intended to identify the effectiveness and inclusion of essential components of self-management education interventions to support patients with cancer in developing the skills needed for effective self-management of their disease and the acute or immediate, long-term, and late harmful effects of treatments.</p> <p>Tailoring SMS to the individual. Must take into account factors that include age, economic, cultural diversity that can influence a patient's ability to navigate a complex care system.</p>	<p>SM education intervention should be tailored to individual needs, characteristics, and life circumstance's, including cultural diversity.</p>
<ul style="list-style-type: none"> • Family 	<p>Paterson et al (2018) <i>Development of a Prehabilitation Multimodal Supportive Care Interventions for Men and Their Partners Before Radical Prostatectomy</i></p>	<p>Study aim: To explore the perceptions of a multimodal prehabilitation intervention, including a SM group seminar, for men and their partners before prostate surgery.</p> <p>Prostate cancer and its treatment is felt to affect the individuals and significantly impact on family</p>	<p>The researcher reported that the questionnaire was designed for patients who have been diagnosed with a cancer, not necessarily for partners. Given this limitation, future research is needed to explore and develop standardized instruments with demonstrated reliability and validity to assess the</p>

	<i>for Localized Prostate Cancer</i>	members as well by having added responsibilities. Felt that important to consider both the patient and his partner throughout prehabilitation programs.	supportive care needs of partners/loved ones affected by cancer.
• Socioeconomic	Van Hecke et al (2017) <i>Systematic literature review on effectiveness of self-management support interventions in patients with chronic conditions and low socio-economic status</i>	Study Aim: To assess the quality of evidence and determine the effect of patient-related and economic outcomes of self-management support interventions in chronically ill patients with a low socio-economic status. Recognized that patients with a chronic condition and LSES face several specific challenges leading to a greater disease burden.	Recognized that integrated evidence on SMS interventions in chronically ill people (cancer) with low socio-economic status is lacking. Therefore, SM & SMS in low socioeconomic patients with chronic conditions is challenging for patients and healthcare professionals.
• Marital Status	Peeters et al (2018) <i>Support Needs of People With Head and Neck Cancer Regarding the Disease and Its Treatment</i>	The researchers reported on marital status of the research participants (age, race, ethnicity, income, marital status) were assessed at baseline only and no inferences were made in the discussion regarding the SMS by nurses.	
None	Hammer et al (2015)		
Theme #2: Electronic Platform Educational Interventions (total n=8 references)			
• Socioeconomic • Income • Education level	Ruland et al (2013)a <i>Effects of an Internet Support System to Assist Cancer Patients in Reducing Symptom Distress</i>	Study Aim: The objective of this study was to examine the effects of WebChoice on symptom distress (primary outcome), depression, self-efficacy, health-related quality of life, and social support (secondary outcomes). Participants had higher income and education levels than average, suggesting that they were not representative of the general population.	The researchers recognized that although more than 80% of households in Norway were reported to have internet access at the time of the study, being required to have internet access at home may have favored those with higher socioeconomic status.
• Cultural	Ruland et al (2013)b <i>Evaluation of different features of an eHealth application for personalized illness management support: Cancer patients' use and appraisal of usefulness</i>	Study Aim: To identify which components of WebChoice were most used and perceived useful by breast and prostate cancer patients.	Results suggested that the various sections in WebChoice can meet many patients' need for support and information. However, future research is needed to investigate the different components required to support patients with different personal, social, cultural and illness characteristics.
• Sociodemographics	Hernandez Silva et al (2018) <i>The effectiveness of mHealth for self-management in improving pain, psychological distress, fatigue, and sleep in cancer survivors: a systematic review</i>	Study Aim: Systematic review to assess the effectiveness of mHealth applications (apps) for self-management in improving pain, psychological distress, fatigue, or sleep outcomes in adult cancer survivors. The review intended to extract data relating to associations between uptake or use and other factors (e.g., sociodemographic variables) to identify factors influencing mHealth app uptake or use.	No studies in the systematic review reported sociodemographic data. Researchers reported that uptake and usage should be assessed, in order to identify sociodemographic characteristics associated with improved outcomes and populations most likely to benefit.

<ul style="list-style-type: none"> • Income • Education level 	<p>Børøsdund et al (2014) <i>Comparing Effects in Regular Practice of E-Communication and Web-Based Self-Management Support Among Breast Cancer Patients: Preliminary Results From a Randomized Controlled Trial</i></p>	<p>The researchers included participants income and education level in demographics, but no inferences were made in the implications for SMS by nurses.</p>	
None	Moradian et al (2018)		
None	Hochstenbach et al (2015)		
None	Hochstenbach et al (2016)		
None	Hochstenbach et al (2017)		
Theme #3: Coordinated Program Educational Interventions (total n=5 references)			
<ul style="list-style-type: none"> • Family 	<p>Howell et al (2019) <i>Implementation of self-management support in cancer care and normalization into routine practice: a systematic scoping literature review protocol</i></p>	<p>Included “family” in their systematic review question: What populations (cancer patients and/or family members, community or peer support services, family physician practices, health care organizations, health care professionals) have been targeted for implementation of SMS?</p>	<p>No scoping reviews of implementation studies of SMS in the context of cancer care were identified.</p>
<ul style="list-style-type: none"> • Cultural • Socioeconomic • Older age • Ethnicity 	<p>Odom-Forren & Wesmiller (2017) <i>Managing Symptoms: Enhancing Patients Self-Management Knowledge and Skills for Surgical Recovery</i></p>	<p>Study Aim: To review postoperative symptoms experienced by patients following surgery for cancer and discuss focused, evidenced-based methods to teach the patient acute pain and symptom management to include both pharmacological and non-pharmacological strategies. Researchers identified at 1-year post-op, reduced arm mobility is associated with decreased quality of life scores and limits a survivor’s ability to participate in activities. Thus, how a patient self-manages symptoms following surgery may have negative consequences long after the acute pain has been relieved.</p> <p>Some patients have untreated post-operative pain as a result of communication, cultural barriers, older age, female gender, lower socioeconomic status, and societal attitudes toward addiction may contribute to inadequate pain management.</p> <p>Ethnicity also plays a factor, with African Americans experiencing a higher incidence of DVTs.</p>	<p>The researchers report that nurses need to be prepared to recognize support the patient with cancer complex symptoms and report cultural, socioeconomic, older age, and ethnicity as risk factors for post-operative pain. However, the researchers fall short of reporting nurses recognizing these social factors in SMS.</p>

<ul style="list-style-type: none"> • Race/ethnicity • Marital status • Income • Social support • Education level 	Reb et al (2017) <i>Empowering survivors after colorectal and lung cancer treatment: Pilot study of a Self-Management Survivorship Care Planning intervention</i>	The researchers reported on sociodemographic of the research participants (race/ethnicity, marital status, income, social support, education level) however no inferences were made in the discussion regarding the SMS by nurses.	N/A
None	Howell (2018)		
None	Komatsu et al (2016)		
Theme #4: Health Coaching Intervention (total n=13 references)			
<ul style="list-style-type: none"> • Family caregivers 	Beck et al (2017) <i>SymptomCare@Home: Developing an Integrated Symptom Monitoring and Management System for Outpatients Receiving Chemotherapy</i>	Study Aim: SymptomCare@Home monitoring system was designed to help patient manage at home their symptoms. Cancer chemotherapy is primarily delivered in the outpatient setting; thus, patients experience and self-manage treatment-related symptoms at home. The researchers recognized the need to adapt the system to support family caregivers.	The system assists in the self-management of treatment-related symptoms patients experience at home. The researchers report that coaching could be tailored to the patient or family caregiver.
<ul style="list-style-type: none"> • Family 	Koller et al (2013) ^b <i>Supporting self-management of pain in cancer patients: Methods and lessons learned from a randomized controlled pilot study</i>	Study Aim: PRO-SELF Plus Pain Control Program (PCP), a 10-week intervention to support self-management of pain in adult oncology outpatients and their family caregivers, was compared to attention control. The intervention included family. If family was involved in the patient's care, they were asked to participate in the RCT study. Secondary outcomes were knowledge and attitudes of the patients and their family caregivers about pain management, analgesic intake, pain interference with daily function, and quality of life.	The researchers reported that while patients and their caregivers are the key persons in interventions that support pain self-management, many patients and their family caregivers needed to acquire skills to structure and manage multiple consultations and prescriptions during the course of treatment. Interventions that support self-management of cancer pain can become an essential component of chronic illness management.
<ul style="list-style-type: none"> • Equity • Family • Cultural 	Lovell et al. (2014) <i>Patient Education, Coaching, and Self-Management for Cancer Pain</i>	Study Aim: This review provides best-bet recommendations based on available evidence to guide service managers and clinicians in developing a patient education program. The researchers report on information and resources being embedded in ongoing health professional-patient communication with the aim of empowering patients and family caregivers to confidently plan and manage their pain in partnership with the health care team. To provide education effectively, clinicians need to be aware of both the internal and external resources of	The researchers reported that to provide education effectively, clinicians need to be aware of both the internal and external resources of each individual and consider his or her sociocultural context.

		each individual and consider his or her sociocultural context. Education materials for which there is evidence of effectiveness should be made available on the internet. These materials can then be adapted to meet the needs of specific cultural groups, tumor groups, and clinical settings.	
<ul style="list-style-type: none"> • Marital status • Family Support • Income • Socioeconomic Status • Education Level 	Petitte et al (2014) <i>Feasibility Study: Home Telemonitoring for Patients With Lung Cancer in a Mountainous Rural Area</i>	<p>Study Aim: To explore the feasibility of rural home telemonitoring for patients with lung cancer.</p> <p>Less willingness to participate in the study was identified when there seemed to be no financial benefit or improved care unless the patient received a telemonitor.</p>	<p>Family and marital status were reported as demographics in study participants but was not reported in the implications for nursing research.</p> <p>The researchers report that the study participants were of a higher socioeconomic status and that there was less willingness to participate in the study if there was no financial benefit. While nurses can base coaching interventions on electronic device data, to enhance self-management of rural patients, the authors recommend that research should offset financial limitations and address social needs for participation support of patients.</p>
<ul style="list-style-type: none"> • Family 	Mooney et al (2019) <i>A Comprehensive and Pragmatic PRO System Approach to Improve Cancer Symptom Care</i>	<p>Study Aim: To describe a system called Symptom Care at Home (SCH) as an example of a comprehensive PRO system that addresses unmet need for symptom support outside the clinic.</p> <p>The researchers report using a patient/family care giver centric lens to develop and test the automated system that addresses the shortfall in home symptom monitoring for cancer patients and their family.</p>	<p>N/A</p> <p>The researchers reported that the SCH system provides automated, just-in-time self- management coaching tailored to the specific symptom pattern and severity levels reported in the daily call to provide patient symptom care. However, they fall short to mention family or SMS implications including family.</p>
<ul style="list-style-type: none"> • Family Support • Education Level 	Coolbrandt et al (2018) <i>A Nursing Intervention for Reducing Symptom Burden During Chemotherapy</i>	The researchers reported on the sociodemographic of the participants (family support, education level) however no inferences were made in the discussion regarding the SMS by nurses.	<p>N/A</p> <p>Nursing implications related to the social justice factors is not mentioned.</p>
<ul style="list-style-type: none"> • Age • Race • Ethnicity • Income • Marital Status • Education Level 	Davis et al (2019) <i>Rationale and design of extended cancer education for longer term survivors (EXCELS): a randomized control trial of 'high touch' vs. 'high tech' cancer survivorship self-management tools in primary care</i>	The researchers reported on sociodemographic of the research participants (age, race, ethnicity, income, marital status) but no inferences were made in the discussion regarding the SMS by nurses.	<p>N/A</p> <p>Nursing implications related to the social justice factors is not mentioned.</p>
<ul style="list-style-type: none"> • Older • Income • Ethnicity 	Edbrooke et al (2017) <i>Benefits of home-based</i>	Study Aim: The protocol for a study investigating the benefits of exercise, behaviour change and symptom self-	N/A

	<i>multidisciplinary exercise and supportive care in inoperable non-small cell lung cancer – protocol for a phase II randomized controlled trial</i>	management for patients with recently diagnosed, inoperable non-small cell lung cancer is reported. The researchers report that patients who were older and had lower incomes were more likely to have concerns, and higher levels of concern were correlated with higher levels of pain. African American and 17 Hispanic patients regarding communications about the meaning and treatment of cancer pain. Both African American and Hispanic patient ethnic groups reported severe pain and had numerous concerns about pain management. Most expressed a belief in stoicism, concerns about possible addiction, and difficulties communicating with their physicians, including a reluctance to complain of pain.	Nursing implications related to the social justice factor of ethnicity is not mentioned.
<ul style="list-style-type: none"> • Race/ethnicity • Marital status • Income • Social support • Education level 	Reb et al (2017)	The researchers reported on sociodemographic of the research participants (race/ethnicity, marital status, income, education level, social support) however no inferences were made in the discussion regarding the SMS by nurses.	N/A No mention of the social justice factors for SMS implications for nursing. Article overlapped with programs.
<ul style="list-style-type: none"> • Age • Family inclusion • Marital Status. 	Koller et al (2013) <i>Results of a randomized controlled pilot study of a self-management intervention for cancer pain</i>	Demographic data included age, gender, family caregiver inclusion, and marital status. No reference for nursing implications related to social justice factors is mentioned.	N/A No mention of the social justice factors for SMS implications for nursing.
<ul style="list-style-type: none"> • Marital Status • Family Support • Education level 	Koller et al. (2017) <i>Testing the Implementation of a Pain Self-management Support Intervention for Oncology Patients in Clinical Practice</i>	The researchers reported that if family caregivers were involved in pain self-management, they were invited to take part in the intervention. No reference for nursing implications related to social justice factors is mentioned.	N/A Demographic data included age, gender, family care giver inclusion, education level, and marital status. No mention of social justice factors are mentioned in the implications for nursing SMS.
<ul style="list-style-type: none"> • Older • Educational Level • Income 	Fahey et al (2008)	Patients who were older, less educated, or had lower incomes were more likely to have concerns, and higher levels of concern were correlated with higher levels of pain.	N/A No mention of the social justice factors for SMS implications for nursing.
None	Lewis & Zahlis (1997)		
Legend			
Abbreviations: Self-Management Support-SMS: Self-Management-SM: Health Care Providers - HCP			
Social Justice Key Words: Social Justice, Health Equity, Health Disparity, Health Inequality, SDOH, Marginalization, Poverty, Socio-cultural, Cultural Norms, Socio-economic Status, Income, Race, Ethnicity, Ethnic Minorities, age/aged/old, Marital Status, Family/Partner Support			

Appendix E

Research Ethics Board Letter of Approval



March 24, 2023

Ms. Carrie MacDonald-Liska (Principal Investigator)
Dr. Jennifer Mitton (Supervisor)
Faculty of Education\Education
St. Francis Xavier University

ROMEO File #: 26241

Project Title: Exploring Oncology Self-Management Support Education in Baccalaureate Nursing Curriculum: A Case Study

Dear Carrie MacDonald-Liska,

The Research Ethics Board (REB) has cleared the above cited proposed research project for ethics compliance with the Tri-Council Guidelines (TCPS) and St. Francis Xavier University's ethics policies. In accordance with the Tri-Council Guidelines, your project has been cleared for one year. At the end of each year, the REB will ask if your project has been completed and, if not, what changes have occurred or will occur in the next year. This will be required each year following approval until the project is reported to be completed, up to a maximum of five years.

Renewal Due-2024/03/24

You are reminded of your obligation to advise the REB of any adverse event(s) that occur during this one-year period. An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s).

You are also reminded that all changes that might affect human participants must be cleared by the REB. For example, you must report changes in study procedures or implementations of new aspects in the study procedures. These changes must be sent to the undersigned prior to implementation.

On behalf of the Research Ethics Board, I wish you continued success in your research.

Sincerely

Dr. Christine Lomore
Professor and Chair
STFX Research Ethics Board

Appendix F

Invitation to Participate



Title: Exploring Oncology Self-Management Support in Baccalaureate Nursing Curriculum

Researcher: Carrie MacDonald-Liska PhD(c), St. Francis Xavier University

Supervisor: Jennifer Mitton PhD, Associate Professor, St. Francis Xavier University

Invitation to Participate

You are invited to participate in a study about Faculty, Nurse Educators, and Nursing Students experiences on providing self-management support for patients with cancer at [name of the school of nursing]. Participation in this research is strictly voluntary. By signing the consent form, you are agreeing to be interviewed for this study.

What is this study about?

I am very interested in learning from you about your experience on how to support patients with cancer in the self-management of their disease and treatment. The purpose of this study is to gain an in-depth understanding of the oncology patient self-management support education being taught in the classroom and/or clinical area(s) to full-time undergraduate nursing students. Your responses will be helpful in ensuring that nursing students are prepared to assist patients with cancer participate in the self-management of their disease and treatment. Nursing students can participate in this study if you are 18 years or older, an undergraduate nursing student registered full-time, pursuing your studies on campus, have received exposure to cancer curriculum, and have completed some clinical time in an area of cancer (e.g.) diagnostic imaging, surgery (operative or post-operative), chemotherapy, and/or community primary care clinic(s). Faculty lecturing professors teaching oncology content can participate in this study if they have been employed and working on campus full-time for at least one year between February and December 2023. Nurse Educators teaching oncology content can participate in this study if they have been employed full-time for at least one year and working on campus between February and December 2023.

What will I be expected to do?

If you participate in this study, you will have a one-to-one in-person interview for approximately 60 minutes and potentially one in person follow up meeting for approximately 30 minutes. For the Faculty administrative professor, the researcher will ask questions about experiences overseeing and implementing the national and provincial nursing curriculum expectations. For faculty lecturing professors and nurse educators, the researcher will ask you about your experiences and knowledge of providing oncology self-management support education to

nursing students. For nursing students, the researcher will ask you about your education and experiences of providing oncology self-management support interventions and strategies. The interview will be audio-taped and then transcribed by a professional transcriptionist who will complete a confidentiality agreement form. After the interviews are transcribed, you will have any opportunity in a follow up meeting to review the findings, and expand, clarify or make further comments. You will also have an opportunity to review a draft of the study findings. Prior to the interview you will be invited to complete a demographic information form.

How much time will it take?

The interview will take approximately an hour, and the follow up meeting will take approximately thirty minutes. Overall, your participation will require approximately ninety minutes of your time.

Will anyone know what I said?

The data will be kept confidential throughout the process of data collection, analysis, and presentation. Pseudonyms (alternate names for participants) will be used in the data analysis, presentations, and publications. No identifying information will appear in any documents or presentations from this study. The data collected in the interviews will be kept for five years after the study has been completed in a confidential, locked cabinet in the study supervisor's office. The electronic data will be stored in an encrypted file, password protected, and hard copies will be locked in the study supervisor's office. Only the researcher and the supervisor will have access to the data. All data will be destroyed five years after collection.

What happens if I change my mind and do not wish to participate?

Participation and answering questions is strictly voluntary. If you do not wish to answer a specific question, want to stop the audio-tape recording, or withdraw from the study, you may do so at any time. If you choose to withdraw from the study, you can inform the researcher. There will be no repercussions if you chose to withdraw. Any data collected prior to your withdrawal will be included.

What are the potential benefits and harms associated with participation in the Study?

This study may provide increased insight and understanding into the preparation of nursing students to care for patients with cancer. Participating in this study will help to better understand how and why nursing students are prepared to assist the growing number of patients with cancer to self-manage their disease and treatment to improve their outcomes and quality of life. For some participants the research may induce emotional memories of themselves, patient(s) they have care for, and/or a loved one who has undergone cancer treatment. If so, the researcher will stop the interview and inquire if the participants wish to stop the questioning or withdraw from the study. If the participant does express any feelings of distress or issues arise, the researcher will stay with the distressed participant until a further support person is available.

Will it cost me anything to participate?

There are no costs associated with participation in this study. You will not receive any compensation for participating in this study.

Where do I get my questions answered?

If you have any questions, or you would like additional information, you can contact, Carrie MacDonald-Liska by email at: *Email Address*

Sincerely,

Carrie MacDonald-Liska PhD(c), St. Francis Xavier University, email: *Email Address*

Jennifer Mitton PhD, Associate Professor, St. Francis Xavier University: email: *Email Address*

Appendix G

Participant Consent Form



Name of study: **Exploring Oncology Self-Management Support in Baccalaureate Nursing Curriculum**

Principal Investigator: Carrie MacDonald RN, PhD(c)

Supervisor: Dr. Jennifer Mitton PhD

I have received a copy of the Invitation to Participate Form, and/or have had the Invitation to Participate Form read and explained to me in person or over the phone.

I know that I also have the choice to provide a verbal consent and that I will be audio recorded while giving verbal consent, if I am unable to provide my signature. I confirm, I have the consent form in front of me. If providing verbal consent, my name, time and date will be written on the researchers copy.

I understand this information and the researcher has answered all of my questions.

I wish to take part in the study. I understand that whatever I say will be respected with confidentiality by the researcher and transcriptionist. I understand that I can change my mind and leave the study at any time.

If I have questions, I can contact Carrie MacDonald-Liska by email at: *Email Address*, or the supervisor Jennifer Mitton by email: *Email Address*

Name of Participant: _____ Date: _____

Signature of Participant: _____

Carrie MacDonald-Liska PhD(c), St. Francis Xavier University, email: *Email Address*

Jennifer Mitton PhD, Associate Professor, St. Francis Xavier University, email: *Email Address*

Appendix H

Faculty Participant Demographic Form and Interview Guide



No. ____

Demographic Background Form and Interview Guide: Faculty Participants Oncology Self-Management Support Curriculum Research Study

Thank you for agreeing to participate in this research study exploring oncology self-management support curricula in baccalaureate nursing education. We are very interested in learning from you about your experience of educating nursing students on how to support patients with cancer in the self-management of their disease and treatment. Please take a few minutes to first complete the demographic section on this form. The second section of this form is an interview guide that will be used to guide our conversation about your experiences teaching or overseeing self-management support interventions by nurses for patients with cancer. We may report the results of the demographic section and the conversation from the interview in a presentation or publication, but your individual responses will remain confidential. Please do not put your name on this demographic form and interview guide. Participation is completely voluntary – you may choose at any point to decline answering a question(s).

Section 1: Demographic Background University Faculty:

- | | | |
|--|---|--|
| <p>1. Age</p> <ul style="list-style-type: none"> <input type="radio"/> 30-39 years <input type="radio"/> 40-49 years <input type="radio"/> 50-59 years <input type="radio"/> 60-69 years <input type="radio"/> 70 > years | <p>2. Gender</p> <ul style="list-style-type: none"> <input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Non-binary <input type="radio"/> Prefer to self-describe <input type="radio"/> Prefer not to disclose | <p>3. Education</p> <ul style="list-style-type: none"> <input type="radio"/> Master's Degree <input type="radio"/> PhD Degree <input type="radio"/> Oncology Nursing Certification |
|--|---|--|

4. How many years of university teaching experience do you have? _____
5. How many years of teaching oncology curriculum/concepts do you have? _____
6. How many years university administrative experience do you have? _____
7. How many years have you provided patient cancer care as a CCA, LPN, and/or RN? _____

8. What is your experience caring for a person with cancer, such as a family member or friend?

9. Have you provided, or are you aware of faculty in the school of nursing, providing education or training in any of the following skills? Please check all that apply:

- Motivational Interviewing Communication
- Cancer Health Coaching
- The 5 A's Framework
- Other Health Behaviour Change Theory(s)
- Stress Management, including patient problem-solving techniques.
- Change Talk
- Sustain Talk
- RULERS (**R**esist the righting reflex, **U**nderstand individual's motivation, **E**mpower by building on individual's strengths and expertise, **R**olling with resistance, building, **R**olling with resistance, **S**elf-Efficacy).
- None of the above

Section 2: Interview Guide University Faculty Participants

2.1 Curriculum Development and Teaching Experience:

10. How is oncology curriculum content generated to teach in the program?
11. How are concepts in the syllabus generated/created for faculty to follow?
12. How is the oncology content delivered/taught in the BScN program?
13. What is the oncology content that you have taught in the BScN program?
(If taught in other universities, how is it similar or different?)
14. How is the curriculum content reviewed to meet provincial standards/expectations?
15. What role does external standards or standardized exams play in the guidance of the development of the curriculum?

2.2 Self-Management & Self-Management Support:

16. (a) What do you understand about patient self-management?
- (b) Probing: What do you understand about self-management support interventions, or strategies, provided by nurses for patients with cancer?
- (c) Probing: Tell me, how would you prepare nursing students to provide self-management support interventions, or strategies, to patients with cancer?

I'm going to give you, and read with you, the definition of patient self-management and self-management support by health care providers. You may refer to and read the definitions at any point.

Self-management is reported as involving the person with cancer as a chronic disease engaging in activities that protect and promote health, monitoring and managing of symptoms and signs of illness, management of the impacts of illness on functioning, emotions, and interpersonal relationships, and adhering to treatment regimens.

Self-Management Support is what health providers do to assist patients and their caregivers to become active participants in their own care. It is a patient-centered approach to empower the patients and their caregivers to have a central role in managing their own chronic illness (Otero-Sabogal et al., 2008).

17. Now that you have reviewed the definitions, **is there anything further to add** on what your understanding is of self-management and self-management support interventions provided by nurses for patients with cancer?

18. (a) How do you prepare nursing students to provide self-management support interventions to patients with cancer?

(b) Probing: What are your expectations, or learning outcomes, for nursing students providing self-management support so patients may better self-manage the **physical side effects** of their treatment, such as wound care from surgery, or nausea from chemotherapy, or fatigue from radiation?

(b) Probing: What curricula, or what do you teach, nursing students to support their capability in achieving this?

19. (a) What are your expectations, the learning outcomes, for nurses providing self-management support so they may better self-manage the **emotional side effects**, such as depression, or fear of cancer recurrence?

(b) Probing: What curricula, what do you teach, nursing students to support their capability in achieving this?

20. (a) What are your expectations, the learning outcomes, for nurses providing self-management support so they may better self-manage **the life role changes** they may have, such as returning to work, or managing at home?

(b) Probing: What curricula, what do you teach, nursing students to support their capability in achieving this?

There are various strategies that that are required to provide effective self-management support that include person-centered care, health literacy, communication skills, patient education, health coaching, using health behavior change theories. I'll ask you about each these now - **(Ask if the participant hasn't reported on any or all the strategies below)**.

2.3 Person Centered Care:

21. What is your understanding of how you prepare nursing students about person-centered care (a) in the classroom, (b) in the simulation lab, and (c) clinical setting?

(d) Probing: What are your expectations, the learning outcomes, to understand nursing students achieve this?

(e) Probing: What curricula, what do you teach, nursing students to support their capability to achieve this?

2.4 Social Justice:

I would like you to think about **competent cultural care**. **Social Justice** offers a framework to provide **competent cultural care**. I'm going to give you, and read with you, the definition of **social justice**. You may refer to and read the definition at any point.

The Canadian Nurses Association (2010) defines social justice, as equity in society. It is the equitable, or fair, distribution of society's benefits, responsibilities, and their consequences. Social justice focuses on the relative position of social advantage of one individual or social group in relationship to others in society, as well as on the root causes of inequities and what can be done to eliminate them.

22. What is your understanding how nursing students are prepared in the BScN program about providing cultural care to support patients with cancer (a) in the classroom, (b) in the simulation lab, and (c) clinical setting?

2.5 Health Literacy:

I'll ask you to think about Health Literacy. I'm going to give you, and read with you, the definition of health literacy. You can refer to and read the definition at any time.

Health literacy is considered as the capacity to obtain, interpret, and understand basic health information and services and the competence to use such information and services to enhance health.

23. What is your understanding of how nursing students are prepared in the BScN program about health literacy to support patients with cancer in the classroom, (b) in the simulation lab, (c) in the clinical setting?

(d) Probing: What are your expectations, the learning outcomes, to understand nursing students achieve this?

(e) Probing: What curricula, what do you teach, nursing students to support their capability to achieve this?

2.6 Communication Skills:

I'm going to ask you to think now about **communication skills between nurses and patients, and patient's families and carers**. Please provide specific curricula or examples as you can.

24. (a) What is your understanding of how nursing students are prepared with effective *communication skills* for patients, families, and carer's in the classroom, (b) in the simulation lab, (c) in the clinical setting?

(b) Probing: What is your understanding of how nursing students are prepared about *establishing a rapport* and trust with the patient, their family, their carer in the classroom, simulation lab, and clinical setting?

(c) Probing: What is your understanding of how nursing students are prepared about *active listening* when communicating with patients, their families, their carers in the classroom, simulation lab, and clinical setting?

(d) Probing: What is your understanding of how nursing students are prepared about using *open-ended questions* when communicating with patients, families, their carers in the classroom, simulation lab, and clinical setting?

(e) Probing: What is your understanding of how nursing students are prepared about *simplifying* communication when talking to patients, their families, their carers in the classroom, simulation lab, and clinical setting?

(f) Probing: What is your understanding of how nursing students are prepared about *summarizing* what you have talked about with a patient, family, and carer in the classroom, simulation lab, and the clinical setting?

2.7 Patient Education:

I'll ask you now to think about providing **patient education** as a self-management support intervention for patients with cancer. Please provide specific curricula or examples as you can.

25. (a) What is your understanding of how nursing students are prepared about health education techniques or strategies to help to ensure patients with cancer are ready and able to self-manage the physical or psychosocial and or life role changes due to cancer?
- (b) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting to *assess* a patient's, or family's, or carer's capacity to receive health education, including assessment of the whole person?
- (c) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about the *Individual's Beliefs* of patients, families, or their carer's?
- (d) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about having patients share *What They Already Know and What Their Intended Goals Are*?
- (e) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about patient's *Past Experiences* that they may apply to the teaching you are providing?
- (f) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about *Affirmation* as an education technique?
- (g) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about *Closing the Loop* when providing health education?
- (h) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about *Teach-Back* as an education technique?

2.8 Health Coaching:

I'm going to talk about and ask you now about **health coaching**: I'm going to give you, and read with you, the definition of **health coaching and cancer self-management health coaching**. You may refer to and read the definitions at any point.

Health coaching is referred to the self-management support delivered by health care providers trained in behavior change theory, motivational strategies, and communication techniques that are used to assist patients to obtain skills and develop intrinsic motivation (Howell et al., 2017; Wolever et al., 2013) and has shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Wolever et al., 2013; Wolever et al., 2010).

Cancer Self-Management Health Coaching is a person-centered, collaborative approach for providing self-management support that educates, engages, and motivates patients to take a more prominent role in managing specific cancer problems and adopting health behaviors to reduce acute, long-term and late effect risks, reduce morbidity and optimize health (Howell et al., 2019).

26. (a) What is your understanding about *health coaching curricula* being taught to nursing students in the classroom, in the simulation lab, in the clinical area?
 (b) Probing: Can you provide specific curricula or examples?
 (c) Probing: How are nursing students prepared to tailor individual patients' health promotion using relevant health theories?
 (d) Probing: Can you provide specific curricula or examples?
 (e) Probing: How are nursing students prepared to identify when patients require a referral for specialist's support? (i.e.) exercise, dietician
 (f) Can you provide specific curricula or examples.
 (g) Probing: What are your expectations, learning outcomes that may be viewed in the clinical area.
27. (a) What is your understanding of *health promotion theory curriculum* being taught to nursing students in the classroom to promote patient's healthy lifestyle?
 (b) Probing: Can you provide specific curricula or examples.
 (c) Probing: How are nursing students prepared to support individuals to adopt healthy lifestyle (i.e.) smoking cessation, healthy eating, weight management?
 (d) Probing: Can you provide specific curricula or examples.
 (e) Probing: What are your expectations, learning outcomes that may be viewed in the clinical area.

2.9 Wrap-up: Important Overall Questions

I'll repeat the self-management support definition.

Self-Management Support is what health providers do to assist patients and their caregivers to become active participants in their own care. It is a patient-centered approach to empower the patients and their caregivers to have a central role in managing their own chronic illness (Otero-Sabogal et al., 2008).

28. How do you feel about cancer self-management support curriculum being taught to nursing students in baccalaureate nursing programs?

29. Can you please share any further thoughts you may have about cancer self-management support in nursing curriculum?

Appendix I

Nurse Educator Demographic Form and Interview Guide



No. _____

Demographic Background Form and Interview Guide: Nurse Educators

Oncology Self-Management Support Curriculum Research Study

Thank you for agreeing to participate in this research study exploring oncology self-management support in baccalaureate nursing education. We are very interested in learning from you about your experience of educating nursing students on how to support patients with cancer in the self-management of their disease and treatment. Please take a few minutes to first complete the demographic section on this form. The second section of this form is an interview guide that will be used to guide our conversation about your experiences teaching nursing self-management support interventions for patients with cancer. We may report the results of this demographic form and interview in a presentation or publication, but your individual responses will remain confidential. Please do not put your name on this demographic form and interview guide. Participation is completely voluntary – you may choose at any point to decline answering a question(s).

Section 1: Demographic Background Nurse Educators

1. Age

- 21-29 years
- 30-39 years
- 40-49 years
- 50-59 years
- 60-69 years
- 70 > years

2. Gender

- Male
- Female
- Non-binary
- Prefer to self-describe
- Prefer not to disclose

3. Education

- BScN
- Master's Degree
- Other Degree

4. How many years of university teaching experience do you have? _____
5. How many years of lecturing oncology curriculum/concepts do you have? _____
6. How many years of teaching oncology curriculum/concepts in the simulation lab? _____
7. How many years of overseeing oncology clinical placements do you have? _____
8. How many years have you provided patient cancer care as a CCA, LPN, and/or RN? _____
9. What is your experience caring for a person with cancer, such as a family member or friend?

10. Do you hold Oncology Nursing Certification? _____ Yes _____ No

11. Have you provided, or are you aware of faculty in the school of nursing, providing education or training in any of the following skills? Please check all that apply:

- Motivational Interviewing Communication
- Cancer Health Coaching
- The 5 A's Framework
- Other Health Behaviour Change Theory(s)
- Stress Management, including patient problem-solving techniques.
- Change Talk
- Sustain Talk
- RULERS (Resist the righting reflex, Understand individual's motivation, Empower by building on individual's strengths and expertise, Rolling with resistance, building, Rolling with resistance, Self-Efficacy).
- None of the above

Section 2: Interview Guide Nurse Educators

2.1 Curriculum Development and Teaching Experience:

12. What is the oncology content that you have taught in the BScN program?

(If taught in other universities, how is it similar or different?)

13. (a) What is your understanding of how oncology content is generated/created to teach in the program?

(b) Probing: How are concepts generated/created to teach in the simulation lab?

(c) Probing: How are concepts generated/created to teach in the clinical setting?

14. (a) What has been your experience overseeing nursing students in the simulation lab in relation to oncology care?

(b) Probing: What has been your experience overseeing nursing students in clinical setting in relation to oncology care? (i.e.) at any point along the cancer trajectory from diagnosis to primary care.

2.2 Self-Management & Self-Management Support

15. (a) What do you understand about patient self-management?

(b) Probing: What do you understand about self-management support interventions, or strategies, by nurses for patients with cancer?

(c) Probing: Tell me, how would you prepare nursing students to provide self-management support interventions, or strategies, to patients with cancer so they may better self-manage their physical side effects, their emotional side effects, their possible life role changes from treatment and having a chronic disease?

I'm going to give you, and read with you, the definition of patient self-management and self-management support by health care providers. You may refer to and read the definitions at any point.

Self-management is reported as involving the person with cancer as a chronic disease engaging in activities that protect and promote health, monitoring and managing of symptoms and signs of illness, management of the impacts of illness on functioning, emotions, and interpersonal relationships, and adhering to treatment regimens.

Self-Management Support is what health providers do to assist patients and their caregivers to become active participants in their own care. It is a patient-centered approach to empower the patients and their caregivers to have a central role in managing their own chronic illness (Otero-Sabogal et al., 2008).

16. Now that you have reviewed the definitions, **is there anything further to add** on what your understanding is of self-management and self-management support interventions provided by nurses for patients with cancer?
17. (a) How do you prepare nursing students to provide self-management support interventions to patients with cancer?
 - (b) Probing: What are your expectations, or learning outcomes, of nursing students providing self-management support so patients may better self-manage the **physical side effects** of their treatment, such as wound care from surgery, or nausea from chemotherapy, or fatigue from radiation?
 - (c) Probing: What curricula, or what do you teach, nursing students to support their capability to achieve this?
18. (a) What are your expectations, the learning outcomes, of nursing students providing self-management support so they may better self-manage the **emotional side effects**, such as depression, or fear of cancer recurrence?
 - (b) Probing: What curricula, what do you teach, nursing students to support their capability to achieve this?
19. (a) What are your expectations, the learning outcomes, of nursing students providing self-management support so they may better self-manage **the life role changes** they may have, such as returning to work, or managing at home?
 - (b) Probing: What curricula, what do you teach, nursing students to support their capability to achieve this?

There are various strategies that that are required to provide effective self-management support that include person-centered care, health literacy, communication skills, patient education, health coaching, using health behavior change theories. I'll ask you about each these now – **(Ask if the participant hasn't reported on any or all the strategies below).**

Person Centered Care

20. What is your understanding of how nursing students are prepared about person-centered care (a) in the simulation lab, (b) clinical setting?
 (c) Probing: What are your expectations, the learning outcomes, to understand nursing students achieve this?
 (d) Probing: What curricula, what do you teach, nursing students to support their capability to achieve this?

2.3 Social Justice:

I would like you to think about **competent cultural care**. **Social Justice** offers a framework to provide **competent cultural care**. I'm going to give you, and read with you, the definition of **social justice**. You may refer to and read the definition at any point.

The Canadian Nurses Association (2010) defines social justice, as equity in society. It is the equitable, or fair, distribution of society's benefits, responsibilities, and their consequences. Social justice focuses on the relative position of social advantage of one individual or social group in relationship to others in society, as well as on the root causes of inequities and what can be done to eliminate them.

21. What is your understanding how nursing students are prepared in the BScN program about providing cultural care to support patients with cancer (a) in the simulation lab, and (b) clinical setting?
 (c) Probing: What are your expectations, the learning outcomes, to understand nursing students achieve this?
 (d) Probing: What curricula, what do you teach, nursing students to support their capability to achieve this?

2.4 Health Literacy:

I'll ask you to think about Health Literacy. I'm going to give you, and read with you, the definition of health literacy. You can refer to and read the definition at any time.

Health literacy is considered as the capacity to obtain, interpret, and understand basic health information and services and the competence to use such information and services to enhance health.

22. What is your understanding of how nursing students are prepared in the BScN program about health literacy to support patients with cancer (a) in the simulation lab, (c) in the clinical setting?
 (c) Probing: What are your expectations, the learning outcomes, to understand nursing students achieve this?
 (d) Probing: What curricula, what do you teach, nursing students to support their capability to achieve this?

2.5 Communication Skills:

I'm going to ask you to think now about **communication skills between nurses and patients, and patient's families and carers**. Please provide specific curricula or examples as you can.

23. (a) What is your understanding of how nursing students are prepared with effective *communication skills* for patients, families, and carer's in the classroom, (b) in the simulation lab, (c) in the clinical setting?
- (b) Probing: What is your understanding of how nursing students are prepared about *establishing a rapport* and trust with the patient, their family, their carer in the classroom, simulation lab, and clinical setting?
- (c) Probing: What is your understanding of how nursing students are prepared about *active listening* when communicating with patients, their families, their carers in the classroom, simulation lab, and clinical setting?
- (d) Probing: What is your understanding of how nursing students are prepared about using *open-ended questions* when communicating with patients, families, their carers in the classroom, simulation lab, and clinical setting?
- (e) Probing: What is your understanding of how nursing students are prepared about *simplifying* communication when talking to patients, their families, their carers in the classroom, simulation lab, and clinical setting?
- (f) Probing: What is your understanding of how nursing students are prepared about *summarizing* what you have talked about with a patient, family, and carer in the classroom, simulation lab, and the clinical setting?

2.6 Patient Education:

I'll ask you now to think about providing **patient education** as a self-management support intervention for patients with cancer. Please provide specific curricula or examples as you can.

24. (a) What is your understanding of how nursing students are prepared about health education techniques or strategies to help to ensure patients with cancer are ready and able to self-manage the physical side effects of treatment, the psychosocial effects of cancer, and the role changes due to cancer?
- (i) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting to *assess* a patient's, or family's, or carer's capacity to receive health education, including assessment of the whole person?
- (j) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about the *Individual's Beliefs* of patients, families, or their carer's?
- (k) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about having patients share *What They Already Know and What their Intended Goals Are*?
- (l) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about patient's *Past Experiences* that they may apply to the teaching you are providing?
- (m) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about *Affirmation* as an education technique?

- (n) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about *Closing the Loop* when providing health education?
- (o) Probing: What is your understanding of how nursing students are prepared in the classroom, simulation lab, and clinical setting about *Teach-Back* as an education technique?

2.7 Health Coaching:

I'm going to talk about and ask you now about **health coaching**: I'm going to give you, and read with you, the definition of **health coaching and cancer self-management health coaching**. You may refer to and read the definitions at any point.

Health coaching is referred to the self-management support delivered by health care providers trained in behavior change theory, motivational strategies, and communication techniques that are used to assist patients to obtain skills and develop intrinsic motivation (Howell et al., 2017; Wolever et al., 2013) and has shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Wolever et al., 2013; Wolever et al., 2010).

Cancer Self-Management Health Coaching is a person-centered, collaborative approach for providing self-management support that educates, engages, and motivates patients to take a more prominent role in managing specific cancer problems and adopting health behaviors to reduce acute, long-term and late effect risks, reduce morbidity and optimize health (Howell et al., 2019).

- 25. (a) What is your understanding about **health coaching curricula** being taught to nursing students in the classroom, in the simulation lab, in the clinical area?
 - (h) Probing: Can you provide specific curricula or examples?
 - (i) Probing: How are nursing students prepared to *tailor individual patients'* health promotion using relevant health theories?
 - (j) Probing: Can you provide specific curricula or examples?
 - (k) Probing: How are nursing students prepared to identify *when patients require a referral* for specialist's support? (i.e.) exercise, dietician
 - (l) Can you provide specific curricula or examples?
 - (m) Probing: What are your expectations, learning outcomes on any of these strategies that you may view in the clinical area?

- 26. (a) What is your understanding of **health promotion theory curriculum** being taught to nursing students in the classroom to promote patient's healthy lifestyle?
 - (f) Probing: Can you provide specific curricula or examples?
 - (g) Probing: How are nursing students prepared to support individuals to adopt healthy lifestyle (i.e.) smoking cessation, healthy eating, weight management?
 - (h) Probing: Can you provide specific curricula or examples?
 - (i) Probing: What are your expectations, learning outcomes that may be viewed in the clinical area?

2.8 Wrap-up: Important Overall Questions

I'll repeat the self-management support definition.

Self-Management Support is what health providers do to assist patients and their caregivers to become active participants in their own care. It is a patient-centered approach to empower the patients and their caregivers to have a central role in managing their own chronic illness (Otero-Sabogal et al., 2008).

27. How do you feel about cancer self-management support curriculum being taught to nursing students in baccalaureate nursing programs?
28. Can you please share any further thoughts you may have about cancer self-management support in nursing curriculum?

Appendix J

Nursing Student Demographic Form and Interview Guide



No. _____

Demographic Background Form and Interview Guide: Nursing Students

Oncology Self-Management Support Curriculum Research Study

Thank you for agreeing to participate in this research study. We are very interested in learning from you about your experience of learning about and providing self-management support care to patients with cancer. Please take a few minutes to first complete the demographic section on this form. The second section of this form is an interview guide that will be used to guide our conversation about your experiences learning about and providing self-management support care to patients with cancer. We may report the results of this demographic form and interview guide in a presentation or publication, but your individual responses will remain confidential. Please do not put your name on this demographic form and interview guide. Participation is completely voluntary – you may choose at any point to decline answering a question(s). Your professors nor the administration will be informed of participation. This is not a test. Your answers, or not answering questions, will have no impact on your grades.

Section 1: Demographic Background Nursing Students

1. Age

- 20-29 years
- 30-39 years
- 40-49 years
- 50-59 years
- 60-69 years
- 70 > years

2. Gender

- Female
- Non-binary
- Prefer to self-describe
- Prefer not to disclose

3. Education

- LPN Diploma
- Other Degree

4. What year of your baccalaureate nursing degree are you currently in:

ث Third
ف Fourth

5. What date do you intend to begin working as a Registered Nurse? _____

6. Do you have any of the following previous education or clinical experience? Check all that apply:

- Clinical Care Assistant (CCA)
- Liscenced Practical Nurse (LPN)
- Kinesiology Program
- Other education or experience working with patients: _____

7. Have you had education or training in any of the following skills? Please check all that apply:
- Motivational Interviewing Communication
 - Cancer Health Coaching
 - The 5 A's Framework
 - Other Health Behaviour Change Theory(s)
 - Stress Management, including patient problem solving techniques
 - Change Talk
 - Sustain Talk
 - RULERS (**R**esist the righting reflex, **U**nderstand individual's motivation, **E**mpower by building on individuals strengths and expertise, **R**olling with resistance, building, **R**olling with resistance, **S**elf-Efficacy).
 - None of the above
8. What is your experience caring for a person such as a family member or friend with cancer?

Section 2: Interview Guide Nursing Students

2.1 Self-Management & Self-Management Support

9. (a) How have you learned about cancer during your nursing degree program?
 (b) Probing: Through a lecture(s)? Textbook(s)? Required or optional readings?
10. (a) What do you understand about patient self-management and patient self-management support interventions by nurses for patients with cancer?
 (b) Probing: Tell me, how would you provide self-management support interventions to patients with cancer so they may better self-manage their physical side effects, their emotional side effects, their possible role changes from treatment and having a chronic disease?

I'm going to give you, and read with you, the definition of patient self-management and self-management support by health care providers. You may refer to and read the definitions at any point.

Self-management is reported as involving the person with cancer as a chronic disease engaging in activities that protect and promote health, monitoring and managing of symptoms and signs of illness, management of the impacts of illness on functioning, emotions, and interpersonal relationships, and adhering to treatment regimens.

Self-Management Support is what health providers do to assist patients and their caregivers to become active participants in their own care. It is a patient-centered approach to empower the patients and their caregivers to have a central role in managing their own chronic illness (Otero-Sabogal et al., 2008).

I'll ask again after reading the definitions:

11. (a) What do you understand about patient self-management and patient self-management support interventions by nurses for patients with cancer?
- (b) Probing: How would you provide self-management support interventions to patients with cancer so they may better self-manage the physical side effects of their treatment, such as wound care from surgery, or nausea from chemotherapy, or fatigue from radiation?
- (c) Probing: How would you provide self-management support interventions to patients with cancer so they may better self-manage the emotional side effects, such as depression, or fear of cancer recurrence?
- (d) Probing: How would you provide self-management support interventions to patients with cancer so they may better self-manage the role changes they may have, such as returning to work, or managing at home?

I'd like you to think about a time when you cared for a patient with cancer:

12. (a) Without saying a patient's name, can you think about and share with me an experience in a clinical setting when you cared for a particular patient with cancer. This could be anytime along the cancer trajectory such as during the patients treatment in the hospital or after they have completed their cancer treatment and they are home.
- (b) Probing: What do you recall the patient sharing with you about how felt about managing their cancer as a chronic disease?
For example, this may include physical side effects from treatment like surgical wound care, or knowing who to call if side effects occur, or emotional side effects such as fear, anxiety, or depression, or attending or maintaining follow-up appointments, or taking medications as prescribed, or returning to work.
- (c) Probing: What self-management support strategies do you recall focusing on and using to help support this patient manage their symptom of _____ *whatever symptom the student tells me: Examples (pain) or (wound care) or (depression) or (caring for their children).*
- (d) Probing: How have you learned about the patient self-management support strategies that you have just described to me?

If they do not name many requisites of self-management support in the above questions, continue with the remainder questions: (Focused on minimum competencies for novice ns).

2.2 Person-Centered Care

I'd like you to now think about person-centered care, including the family & carer.

13. (a) What is your understanding of person-centered care, including the family & carer?
- (b) Probing: Tell me, how do you apply person-centered care for patients with cancer?
- (c) Probing: How have you learned about person-centered care? In the simulation lab? In the clinical area?

I'm going to give you, and read with you, the definition of patient-centered care. You may refer to and read the definitions at any point.

Patient- centered care places the patient as the focus of any health care provision. The focus is on the needs, concerns, beliefs and goals of the patient rather than the needs of the systems or professionals. The patient feels understood, valued and involved in the management of their

chronic condition. Patients are empowered by learning skills and abilities to gain effective control over their lives versus responsibility resting with others.

I'll ask you again after reading the definitions:

14. (a) What is your understanding of person-centered care, including family & carer?
- (b) Probing: Tell me, how do you apply person-centered care for patients with cancer?
- (c) Probing: How have you learned about person-centered care?

2.3 Social Justice:

I would like you to think about **competent cultural care**.

15. (a) What is your understanding of how you provide cultural care to support patients with cancer?
- (b) Probing: How have you learned about providing cultural care? In the classroom? In the simulation lab? In the clinical area?

I'm going to give you, and read with you, the definition of **social justice**. You may refer to and read the definition at any point.

Social Justice offers a framework to provide **competent cultural care**. I'm going to give you, and read with you, the definition of social justice. You may refer to and read the definition at any point. The Canadian Nurses Association (2010) defines social justice, as equity in society. It is the equitable, or fair, distribution of society's benefits, responsibilities, and their consequences. Social justice focuses on the relative position of social advantage of one individual or social group in relationship to others in society, as well as on the root causes of inequities and what can be done to eliminate them.

I'll ask you again after reading the definition:

16. (a) What is your understanding of how you provide cultural care to support patients with cancer?
- (b) Probing: How have you learned about providing cultural care? In the classroom? In the simulation lab? In the clinical area?

2.4 Health Literacy:

I'll ask you now to think about **health literacy**.

17. (a) What is your understanding of health literacy?
- (b) Probing: How have you learned about health literacy in the classroom, lab, clinical setting?

I'm going to give you, and read with you, the definition of health literacy. You can refer to and read the definition at any time.

Health literacy is considered as the capacity to obtain, interpret and understand basic health information and services and the competence to use such information and services to enhance health.

I'll ask you again after reading the definitions:

18. (a) What is your understanding of health literacy?
 (b) Probing: How have you learned about health literacy in the classroom, lab, clinical setting?

2.5 Communication Skills:

I'm going to ask you to think now about **communication skills**.

19. (a) What is your understanding of *communication skills* with patients, families, and carers that you've learned in the classroom, or in the simulation lab, or in the clinical setting?
 (b) Probing: Tell me, what are some examples of *essential skills for good communication* with the patients, their families, their carers?
 (c) Probing: What do you understand about *establishing a rapport* with the patient? Establishing trust with the patient, family, carer?
 (c) Probing: What do you understand about *active listening* when communicating with patients, their families, their carers?
 (d) Probing: What do you understand about using *open-ended questions* when communicating with patients, families, their carers?
 (e) Probing: What do you understand about *simplifying* communication when talking to patients, their families, their carers?
 (f) Probing: What do you understand about *summarizing* what you have talked about with a patient, family, and carer?
 (g) Probing: How have you learned about the essential skills and core elements for good communication with patients, families, and carers? In the classroom? In the simulation lab? In the clinical setting?

2.6 Patient Education:

I'll ask you now to think about providing **patient education** as a self-management support intervention for patients with cancer as a chronic disease.

20. (a) What are the health education techniques or strategies that you use to help to ensure patients with cancer are ready and able to self-manage the physical side effects of treatment, the psychosocial effects of cancer, and the role changes due to cancer?
 (p) Probing: How do you *assess* a patients, or family's, or carers capacity to receive health education, including assessment of the whole person?
 (q) Probing: What do you understand about learning about the *individuals beliefs* of patients, family's, or their carers?
 (r) Probing: What do you understand about having patients share *what they already know and what their intended goals are*?
 (s) Probing: How do you assess for understanding a patients *past experiences* that they may apply to the teaching you are providing?
 (t) Probing: What is your understanding of *affirmation* as an education technique?
 (u) Probing: What is your understanding of *Closing the Loop* when providing health education?
 (v) Probing: What is your understanding of *Teach-Back* as an education technique?

- (w) Probing: How have you learned about these patient education self-management support strategies for cancer patients? In the Classroom? In the simulation lab? In the clinical setting?

2.7 Health Coaching:

I'm going to talk about and ask you now about **health coaching**:

21. (a) What is your knowledge and understanding of Health Coaching?
 (b) What is your understanding of Cancer Health Coaching?

I'm going to give you, and read with you, the definition of **health coaching and cancer self-management health coaching**. You may refer to and read the definitions at any point.

Health coaching is referred to the self-management support delivered by health care providers trained in behavior change theory, motivational strategies, and communication techniques that are used to assist patients to obtain skills and develop intrinsic motivation (Howell et al., 2017; Wolever et al., 2013) and has shown to create sustainable change, optimize health, and improve health outcomes for other chronic diseases (Wolever et al., 2013; Wolever et al., 2010).

Cancer Self-Management Health Coaching is a person-centered, collaborative approach for providing self-management support that educates, engages, and motivates patients to take a more prominent role in managing specific cancer problems and adopting health behaviors to reduce acute, long-term and late effect risks, reduce morbidity and optimize health (Howell et al., 2019).

I'll ask you again after reading the definitions:

22. (a) What is your understanding of health coaching?
 (n) How have you learned about health coaching? In the classroom? In the simulation lab? And/or the clinical area?
 (o) Probing: How have you applied health coaching in the clinical setting to support patients with cancer to self-manage?

2.8: Wrap-up: Important Overall Questions

I'll repeat the self-management support definition.

Self-Management Support is what health providers do to assist patients and their caregivers to become active participants in their own care. It is a patient-centered approach to empower the patients and their caregivers to have a central role in managing their own chronic illness (Otero-Sabogal et al., 2008).

23. What do you wish you learned about self-management support interventions in your nursing program?
24. Please share with me any further thoughts you may have about cancer self-management support interventions in the nursing curriculum.

Appendix K

Data Collection Chart for Course Documents

Name of Course and Professor						
Domain 1: Person-Centered and Motivational Interviewing Communication Skills						
Competency <i>The skill</i>	Performance Criteria (Key Search Words) <i>How to do it</i>	Course Syllabi	Textbook(s)	Class PPT	Readings: Articles, Assignments, Case Studies, Organization Documents, Websites	Comments
1.1 Establish rapport and engage individuals as partners in self-management of cancer and health.	Person centered care skills. Level 1 Key Search Words: Person centered care Level 2 Key Search Words: Self-Management Self-Management Support Level 3 Key Search Words: Oncology Cancer	Syllabi with Findings Listed Here Adjacent to The Performance Criteria	Textbook Names Listed Here Adjacent to The Performance Criteria	Each Class With Content Findings Listed Here Adjacent to The Performance Criteria	All Readings With Findings Named and Listed Here Adjacent to The Performance Criteria	Applicable Comments and Notes
	Understand individual’s health values, perceptions of health, ethnicity/cultural background, socioecological determinants that can impact SM & health Level 1 Key Search Words Health Values Ethnicity Culture/Cultural Socioecological					

	<p>Level 2 Key Search Words: Self-Management Self-Management Support Level 3 Key Search Words: Oncology Cancer</p>					
	<p>Engage & establish rapport through collaborative person-centered process Level 1 Search Words Rapport Collaborative process (with pt) Level 2 Self-Management Self-Management Support Level 3 Oncology Cancer</p>					
	<p>Application of health literacy universal precautions when communicating and providing SM and education tools/resources Level 1: Health Literacy Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer</p>					

<p>1.2 Apply motivational interviewing skills including collaboration, compassion, and acceptance to establish rapport.</p>	<p>Active listening and OARS MI communication skills incl. Open ended questions, Affirmation, Reflection, Summarization Level 1: Communication Active Listening Motivational Interviewing Active Listening Rapport, establish Affirmation Collaboration compassion, acceptance OARS Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer</p>					
	<p>Communication pitfall avoidance: Find out patients' current knowledge, cues for patients' main concerns, avoid own agenda, seek patients' beliefs Level 1: Communication Patient Knowledge Patient Beliefs Level 2: Self-Management</p>					

	Self-Management Support Level 3: Oncology Cancer					
	Person-Centered skills and person-centered communication skills Level 1: Covered above Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer					
	Health education using techniques (i.e.) elicit-provide-elicited/ask-tell-ask) Level 1: Health Education, Techniques Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer					

Domain 2: Whole Person Assessment of Self-Management Support Needs and Capacity for Self-Management Support						
Competency	Performance Criteria (Key Search Words)	Course Syllabi	Textbook #1	Class PPT	Optional Readings/ Docs/Assignment	Comments
2.1 Apply knowledge and skills to assess the self-management	Whole person assessment, incl patients desire to engage in SM					

<p>support needs of individuals and their families.</p>	<p>Level 1: Whole Person Holistic Assessment Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer</p>					
	<p>Tailor SM to tasks for patients across each stage of cancer continuum (medical needs, psychosocial consequences, lifestyle changes, roles, & relationships) Level 1: Trajectory Continuum (Lifestyle Psychosocial) Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer</p>					
	<p>Identify with the patient the supportive role of family/carers in SMS Level 1: Family support Carers support (Pt identified) Level 2:</p>					

	<p>Self-Management Self-Management Support Level 3: Oncology Cancer</p>					
<p>2.2 Apply knowledge and skills to assess capacity for self-management of medical, emotional, and lifestyle tasks of cancer and health emotional, lifestyle tasks of cancer and health.</p>	<p>Application of techniques such as closing the loop and teach-back. Level 1: Teaching Skills Education Skills Teach Back Closing Loop Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer</p>					
	<p>Assessment, with patient, of their individual SM capacity Level 1: Assessment, with patient Individual capacity Self-Management capacity Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer</p>					
	<p>Build on patient’s past experiences, knowledge, strengths, & networks to inform</p>					

	shared selection of appropriate interventions Level 1: Past Experiences Patient Knowledge Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer					
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Domain 3: Health Promotion Theories and Interventions

Competency	Performance Criteria (Key Search Words)	Course Syllabi	Textbook #1	Class PPT	Optional Readings/ Docs/Assign	Comments
3.1 Apply knowledge of health promotion theories and interventions to promote uptake of healthy lifestyle behaviours in individuals at risk for or diagnosed with cancer.	Ability to identify evidence-based interventions for smoking cessation, weight management, stress management, healthy eating, physical activity. Level 1: Interventions for: Smoking Cessation Weight Management Stress Management Physical Activity Nutrition Healthy Eating Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer					

	<p>Ability to support patients adopting healthy lifestyle behaviours (i.e.) nutrition, smoking cessation, activity throughout cancer continuum</p> <p>Level 1: Support patients for: Smoking Cessation Weight Management Stress Management Physical Activity Nutrition Healthy Eating</p> <p>Level 2 Search Words: Self-Management Self-Management Support</p> <p>Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to tailor individual health promotion using behaviour change theories</p> <p>Level 1: Behaviour Change Behaviour Change Theory</p> <p>Level 2 Search Words: Self-Management Self-Management Support</p> <p>Level 3 Search Words: Oncology Cancer</p>					

Domain 4: Coaching for Behaviour Change to an Individuals Phase in the Cancer Continuum						
Competency	Performance Criteria (Key Search Words)	Course Syllabi	Textbook #1	Class PPT	Optional Readings/ Docs/Assign	Comments
4.1 Apply theoretical knowledge and skills of health coaching/motivational interviewing to support individuals in the adoption of SM behaviours.	Ability with patient to create a coaching plan to enable positive sustainable health behaviour change. Level 1: Coaching Motivational Interviewing Coaching Plan Applying Knowledge Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer					
	Coaching patients using 5A's framework Level 1: 5 A's Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer					
	Coaching patients in stress management & positive coping skills to manage uncertainty. Level 1:					

	<p>Coaching Stress Management Coping Skills Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer</p>					
	<p>Ability to determining when a referral to other HCP (i.e.) Dietician or specialist Level 1: Referral Health Care Team Consult Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to engage family members/carers in SMS & if need be, train them. Level 1: Coaching Family Training Level 2: Self-Management Self-Management Support</p>					

	Level 3: Oncology Cancer					
	Ability to use change talk communication to draw out options/solutions for priority areas for behaviour change Level 1: Change Talk Communication Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer					
	Coaching in the use of skills to navigate health care system Level 1: Navigate Coaching Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer					
	Ability to differentiate health coaching from traditional patient education Level 1:					

	<p>Coaching Education (patient, differentiating) Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to respond to Sustain Talk using skills: simple reflection, amplified reflection, double reflection, shifting focus, reframing, emphasize personal choice Level 1: Sustain Talk. talk Sustain Talk Skills Reflection Shifting focus Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to apply coaching techniques (i.e.) RULERS: Resist righting, Understand, Listen, Empower,</p>					

	Rolling, building self- efficacy Level 1: Coaching RULERS Self-Efficacy Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer					
	Ability to use readiness ruler to assess readiness to change and elicit change talk through discussion of scores (i.e.) 7 not a 1 Level 1: Readiness Readiness to change Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer					
	Ability to redirect coaching to address the patients' priorities for behaviour change, based on their motivation to change Level 1:					

	<p>Coaching Redirect Patient priorities Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to coach patients in behaviour change by using SMART goal and specific actions Level 1: Coaching SMART Goals Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to elicit patients' strengths and experiences with health behaviour change and build on these collaboratively to decide change solutions Level 1: Elicit Strengths, health behaviour change</p>					

	<p>Experience, health behaviour change Level 2: Search Words: Self-Management Self-Management Support Level 3: Search Words: Oncology Cancer</p>					
	<p>Ability to teach problem solving skills to address specific problems engaging in SM Level 1: Problem Solving Skills Self-Management Level 2: Search Words: Self-Management Self-Management Support Level 3: Search Words: Oncology Cancer</p>					
	<p>Apply collaborative identification of problems, priorities, goals, and explore barriers to SMART goals/action plan Level 1: Problem, problem solving Collaboration Action Plan Level 3 Search Words: Oncology</p>					

	Cancer					
	Level 1: Peer Support Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer					
	Level 1: Community Resources Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer					
4.2 Apply knowledge of relevant behaviour change theories (i.e., self-determination theory), to promote patient autonomy in health behaviour change of behaviour change theories	Deliver SM education tailored to the individual's needs. Level 1 Needs Individual Needs Self-Determination theory Autonomy (patient) Level 2 Key Search Words: Oncology Cancer Level 3 Key Search Words: Self-Management Self-Management Support					

	<p>Ability to coach patients in problem solving and solution finding to manage consequences of cancer and treatment</p> <p>Level 1: As above: With problem solving skills.</p> <p>Consequences of cancer</p> <p>Level 2 Search Words: Self-Management Self-Management Support</p> <p>Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to coach individuals to use and select a modality to support SM behaviours (i.e.) telephone, remote monitoring, interactive communication platforms</p> <p>Level 1: Coaching Telephone Email Electronic Technology Platforms</p> <p>Level 2 Search Words: Self-Management</p>					

	Self-Management Support Level 3 Search Words: Oncology Cancer					
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Domain 5: Monitoring & Evaluating Change in SM Behaviour Health Outcomes

Competency	Performance Criteria (Key Search Words)	Course Syllabi	Textbook #1	Class PPT	Optional Readings/ Docs/Assign	Comments
5.1 Apply knowledge and skills in evaluating changes in SM behaviours and health outcomes.	Selecting and using variety of outcome measures to evaluate behaviour change, self-efficacy, SM capacity, engagement levels, and other health outcomes over time Level 1: Evaluate change Evaluation Behaviour change, Outcome Measures Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer					

<p>5.2 Apply knowledge and skills to assist in self-monitoring of disease and health, and uptake of SM behaviours.</p>	<p>Counselling in the use of tracking tools (i.e.) Physical activity scales, BMI, symptom scales Level 1: Tracking, Tools Self-monitoring Care plans Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer</p>					
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<p>Domain 6: Quality Improvement for Integration of Self-Management Support in Cancer Care</p>						
<p>Competency</p>	<p>Performance Criteria (Key Search Words)</p>	<p>Course Syllabi</p>	<p>Textbook #1</p>	<p>Class PPT</p>	<p>Optional Readings/ Docs/Assign</p>	<p>Comments</p>
<p>6.1 Apply knowledge of quality improvement to evaluate changes in SM behaviours and health outcomes.</p>	<p>Ability to identify gaps in provision of SMS in cancer care and facilitate improvement in quality of SMS in routine cancer care Level 1: Gaps, identify Quality Improvement Evaluation Level 2 Key Search Words: Self-Management</p>					

	<p>Self-Management Support Level 3 Key Search Words: Oncology Cancer</p>					
	<p>Ability to develop partnerships with care teams and across communities to facilitate access to SMS, ensuring mutual plans to support continuity and progress in the patients SM efforts Level 1: Partnership Care Teams Continuity Progress Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to determine the coaching and coordination role within differing nursing roles within an organization and set realistic plan to support integration</p>					

	<p>into routine cancer care. Level 1: Coaching Coaching in different nursing roles Coaching Coaching integration Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to develop a plan to support one's own achievement of competencies in the provision of SMS Level 1: Plan Action Plan Care Plan Sheets Level 2 Search Words: Self-Management Self-Management Support Level 3 Search Words: Oncology Cancer</p>					
	<p>Ability to support training of other nurses' capability in providing SMS Level 1:</p>					

	<p>Training (nurse to nurse, train the trainer) Self-Management Self-Management Support Level 2: Self-Management Self-Management Support Level 3: Oncology Cancer</p>					
	<p>Ability to use outcome measurements to evaluate effectiveness of SMS on patients' health outcomes and experience of care Level 1: Health Outcomes Outcome Measure Patient Outcomes Evaluate Level 2: Self-Management Self-Management Support Level 3: Search Words: Oncology Cancer</p>					

Legend:

SM= Self-Management

SMS= Self-Management Support

Appendix L

Letter of Support to Conduct Research



March 10, 2023

Research Ethics Board (REB)
St. Francis Xavier University
Antigonish, N.S.
B2G2W5

Dear StFX Ethics Committee:

I am happy to support Carrie MacDonald- Liska on her research study related to *"gaining an understanding of the extent, if any, that educational approaches of oncology self-management support interventions, including health coaching as an intervention, exist and the impact, if any, upon baccalaureate nursing curriculum, its educators, and students"*.

This research is important to nursing education and clinical practice and therefore, I am pleased to know this study will soon begin.

If the REB or Ms. MacDonald-Liska have any questions, please let me know.

Sincere best wishes with this study.

Yours truly,

Joanne Whitty-Rogers RN, BScN, MN, PhD
Associate Professor
Director, Rankin School of Nursing
Phone: 902-867-3629
Email: jrogers@stfx.ca

Appendix M

Research Ethics Board Protocol Change Approval



March 13, 2024

Ms. Carrie MacDonald-Liska (Principal Investigator)
 Dr. Jennifer Mitton (Supervisor)
 Faculty of Education\Education
 St. Francis Xavier University

ROMEO File #: 26241

Project Title: Exploring Oncology Self-Management Support Education in Baccalaureate Nursing Curriculum: A Case Study

Dear Ms. MacDonald-Liska:

Thank you for your request regarding a protocol change for the approved application noted above.

The following changes have been requested:

The purpose of this REB Protocol Change Request submission is to report two funding sources awarded since the approval of the REB application in March 2023. The first additional funding source in support of my doctoral research study is a \$15,000 Nova Scotia Graduate Scholarship (NSGS). The NSGS is a funding source for research projects aligned with an area of priority established by the province. A priority area established by the province includes healthcare research that will positively impact provincial residents. The funding award is \$15,000 being received from September 2023 to May 2024. The second additional funding source in support of my doctoral research study is a \$5,000 research grant from the Canadian Association of Nurses in Oncology/Association Canadienne des Infirmieres en Oncologie (CANO/ACIO). The CANO/ACIO Research Grants were established for oncology nurses to help build capacity for oncology nursing research across Canada. The primary goal of these research grants is to provide support for oncology nurses to conduct and disseminate a clinical research project in support of evidence-informed oncology nursing practice. The funding award is \$5000.00 received in September 2023. Once the research is completed, a report of the study findings will be shared with the CANO/ACIO Board of Directors. Evidence is emerging in cancer care that the provision of self-management support has beneficial effects on reducing symptom severity and improving overall quality of life. Research literature reports that nursing self-management support education is very limited and an urgent need for research in baccalaureate nursing education is required. Acquiring a foundational understanding of the extent and impact of self-management support education currently being provided to nursing students is a critical and prudent first step. My research case study titled "Exploring Patient Self-Management Support Education in Baccalaureate Nursing Curriculum" being conducted at StFX University will fill this research gap by providing an understanding of self-management support education currently being provided to nursing students. Funding from the NSGS and the CANO/ACIO are in support of this important and novel doctoral research study.

These changes pose no significant increase in risk to participants. Therefore, I am pleased to approve the protocol change, and I wish you well in your research.

Sincerely

Dr. Christine Lomere
 Professor and Chair
 STFX Research Ethics Board

Appendix N

Results of Participant Demographic Characteristics

Faculty: n3		
1. Age	Report Age range: 60-69 50-59 60-69	
2. Gender	%100 Female	
3. Education	PhD=Level 4 Masters=Level 3 Oncology Nursing Certificate=Level 1	1. Level 3 2. Level 4 3. Level 3
4. Number of years of university teaching Experience	Mean result: 1. 35 yrs 2. 7 3. Over 20 yrs	
5. Number of Years of teaching oncology curriculum/concepts	1. Not clear 2. 7 3. 7-10	
6. Number of years university administrative experience	1. 1.5 yrs 2. 0 yrs 3. 0 yrs	
7. Number of years providing patient care as CCA, LPN, and/or RN	Mean result 1. 4 as RN 2. 21 as RN 3. Over 20	Standard deviation Number above and below the mean
8. What is your experience caring for a person with cancer, such as a family member or friend	1. Childhood friend at age 13 2. None 3. Family member	
Nurse Educators: n2		
1. Age	1. 30-39 2. 21-29	
4. Gender	100% Female	
5. Education	PhD=Level 4 Masters=Level 3 Oncology Nursing Certificate=Level 1	1. Level 3 2. Level 3
6. Number of years of university teaching experience	1. 2 yrs 2. 2 yrs	
7. Number of years of lecturing oncology curriculum/concepts	1. 0 yrs 2. 0 yrs	
8. Number of years teaching oncology	1. 0 yrs 2. 0 yrs	

curriculum/concepts in the simulation lab		
9. Number of years providing overseeing oncology clinical placements	1. 0 yrs 2. 0 yrs	
10. Number of years providing patient cancer care as a CCA, LPN, and/or RN	1. 12 yrs RN 2. 7 yrs RN	
11. What is your experience caring for a person with cancer, such as a family member or friend	1. Perioperative experience with persons with cancer 2. Family members passed away at home	
12. Do you hold a Oncology Nursing Certification	1. No 2. No	
Nursing Students: n5		
1. Age	1 20-29 2 20-29 3 20-29 4 20-29 5 20-29	
2 Gender	100% Female	
3. Education: LPN or other degree	1. 0 2. 0 3. 0 4. Other degree	
4. Year of Baccalaureate Nursing Degree Program	1. Fourth 2. Fourth 3. Fourth 4. Fourth 5. Fourth	
5. Date Intending to Begin Working as a RN	1. June 2024 2. May 2024 3. May 2024 4. June 2024	
6. Previous Education or Clinical Experience	1. CCA 2. CCA 3. 0 4. CCA 5. CCA	
8 Experience caring for a person with cancer such as a family or friend	1. None 2. Personal experience having childhood cancer 3. Cared for aunt with ovarian cancer. 4. Not cared for anyone but has observed the effects of cancer have had on loved ones. 5. Observed family members- Uncle, Grandparents	2 - "I feel this has given her a unique experience when caring for patients with cancer, as able to empathize with their needs and what they are going through" 5 - Palliative care-40 patients

Appendix O

Results of Participants Self-Reported Self-Management Skills Training

Participants	n:10
Motivational Interviewing	4/10 = 40%
Cancer Health Coaching	1/10 = 10%
The 5A's Framework	1/10 = 10%
Other Health Behaviour Change	1/10 = 10%
Stress Management, including patient problem-solving techniques	4/10 = 40%
Change Talk	2/10 = 20%
Sustain Talk	0/10= 0%
RULERS: (R esist the righting reflex, U nderstand individual's motivation, E mpower by building on individuals 'strengths and expertise, R olling with resistance building, R olling with resistance, S elf-Efficacy	1/10 = 10%
None of the Above	2/10 = 20%

Appendix P

Considerations for Program Enhancement or Integration Implementation

Interpretation 1: Inadequate Curriculum Coverage of Critical Performance Criteria and Requisite Competencies			
Thesis Data Interpretation	Performance Criteria	Gaps Identified	Consideration For Implementation
Interpretation 1	More Advanced Communication Skills	MI 5As Framework	1.Enhance communication curriculum: Integrate theory on MI and 5As in classroom course. 2.Include Giddens 2021 as required reading. 3.Lavilla-Gracia et al. (2023) may guide MI. 4.Case study for sim lab and/or role playing. 5. Post clinical discussion with Nurse Educators. Curriculum inventory screen may be helpful: Chan et al. (2023) & Dyjur et al. (2019).
Interpretation 1	Patient Education	Affirmation OARS Closing the Lopp Change Talk	1.Enhance pt education theory in classroom. Integrate affirmation, closing the loop, OARS, & change talk. 2.Include Giddens 2021 as required reading. 4.Case study for sim lab and/or role playing. 5.Post clinical discussion with Nurse Educator.
Interpretation 1	Health Coaching and Behaviour Change Skills	Health Coaching Behaviour Change Theory 5As Framework Stress management Change Talk RULERS Closing the Loop Ask-Tell-Ask	1.Integrate theory in classroom on Health Coaching & behavioural change theory, in classroom. MI, rulers, ask-tell-ask, closing the loop, teach-back, goal setting, within 5As framework. Howell et al. (2023). 2.Jordan et al (2015) offers curricula suggestions for coaching. 3.Case study for sim lab and role playing. 4.A coordinated & comprehensive approach to health coaching teaching/learning implementation.
Interpretation 1	Establishing mutual trust, rapport, and respect in context of oncology	Elements of caring (empathy, sympathy, establishing trust and rapport) within the context of oncology self-management support	1.Caring theory in classroom curricula and included in the context of oncology self-management support. 2.Inclusion of the concept of caring woven in an oncology case study for sim lab. 3.Discuss caring, establishing rapport, and trust, during post clinical discussion.
Interpretation 2: Need For Curriculum and Instruction on Cancer and Cancer Self-Management Support			
Data Interpretation	Concepts	Gaps Identified	Consideration for Implementation
Interpretation 2	Curriculum and Instruction on Cancer	Essential Cancer Curricula	1.Dedicated space for cancer curricula. Include incidence & prevalence statistics, comorbidities, basic pharmacology, & most common treatment side effects.

			<p>2.Cancer case study in the simulation lab.</p> <p>3.Cancer simulation resource: Silva et al. (2023)</p> <p>3.Ensure all nursing students receive a rotation through a specialized oncology setting (i.e. chemotherapy unit at SMH).</p>
Interpretation 2	Curriculum and Instruction on Cancer as Chronic Disease	Cancer Chronicity Cancer Survivorship	<p>1.Integrate curriculum on the uniqueness of cancer as chronic disease.</p> <p>2.Cancer survivorship definition. History of cancer now being considered a chronic disease. Trajectory of cancer survivorship from diagnosis to remission/end of life.</p> <p>3.Curricula on top survivorship concerns: (i.e.) fatigue, fear of recurrence, work/lifestyle effects.</p> <p>4.Curriculum & instruction on cancer as chronic disease embedded in NURS332.</p> <p>5.Cancer case study started in classroom, practiced in sim lab, post-clinical discussion. Case study example to build upon: MacDonald-Liska et al. (2025).</p> <p>6.Cancer survivorship resource: The Adult Cancer Survivorship Manual, a Self-Learning Resource for Nurses CANO/ACIO</p>
Interpretation 2	Curriculum and Instruction on Cancer Self-Management Support	Cancer Self-Management Support	<p>1.Curricula inclusion of self-management and self-management support definition. Reduce abstract nature for students through discussion.</p> <p>2.Review and discuss with CASN cancer and cancer self-management support curricula expectations, and potential for enhancement.</p> <p>3.Review CANO/ACIO guidelines.</p> <p>4.Ensure required reading on self-management (Giddens) and self-management support (RNAO, 2010) are encouraged with students.</p> <p>5.Case study and role play in the sim lab and post-clinical discussion.</p> <p>6.Resource: Dyjur et al. (2019) University of Calgary Curriculum Review: Analyzing Curriculum Mapping Data</p> <p>7.Resource: Koirala et al. (2023) Integration of Palliative Care Competencies Framework</p>
Interpretation 3: Oncology Self-Management Support Teaching and Learning Across All Program Areas			
Data Interpretation	Concepts	Gaps Identified	Consideration for Implementation
Interpretation 3	Knowledge Acquisition	Oncology self-management support knowledge and skills of faculty, nurse	1.Lecturing and teaching faculty and nurse educators build knowledge capacity on cancer, cancer survivorship & its importance, incidence & prevalence as a

		educators, and clinical preceptors	<p>chronic disease, cancer survivorship late and long-term effect, SM and SMS</p> <p>2. Develop shared view of SM & SMS and communicate broadly amongst lecturers and educators.</p> <p>3. Consider inviting expert guest lecturers and invite community nurses.</p> <p>4. Curricula and instruction demonstrating connectedness of SMS strategies.</p> <p>5. Demonstrate connections of concepts in own experiences.</p>
Interpretation 3	Liaising With and Knowledge Acquisition of Clinical Preceptors	Communication with Institution Registered Nurses/Clinical Preceptors	<p>1. Connections of curricula between classroom, simulation lab, clinical placements.</p> <p>2. Review current model of preceptor placements and preceptor selection.</p> <p>3. Intentionally ensure all nursing students are placed with person with cancer and rotate through cancer setting (i.e. Chemo unit).</p> <p>4. Liaise as necessary, with institution leaders, APNs/CNSs, and RNs at preceptor placement areas to ensure a coordinated approach to clinical education. Lawn & Battersby (2009) as a helpful resource.</p> <p>5. Authentic simulation lab, case-based and group discussion learning reflecting on care of cancer patient.</p>
Interpretation 3	Supporting Deep Learning	Nursing Students Inability to Connect Concepts to Provision of SMS	<p>1. Review with students' opportunities to recognize and pull through SMS concepts from classroom, readings, sim lab, clinical, group discussion.</p> <p>2. Mix younger & older students for group discussion.</p> <p>3. Use of advanced technology.</p> <p>4. Faculty & nurse educators communicate curricula teachings between classroom/sim lab/clinical settings & post discussions.</p> <p>5. Nurture caring, responsive, safe, and student-friendly environments.</p>
Interpretation 3	Supportive Readings & Resources of Performance Criteria & SMS	Communication Patient Education Caring Self-Management Support	<p>1. Review, identify, & eliminate unnecessary readings.</p> <p>2. Review performance criteria readings. Include and stress readings of: communication, person-centered care, patient education in Giddens (2021), caring, RNAO self-management support guideline.</p>
Interpretation 3	Intradepartmental Communication	Communication Across Teaching Areas	<p>1. Strengthen communication between faculty and nurse educators on classroom curricula for simulations.</p> <p>2. Discuss post-clinical discussion on curricula concepts taught in classroom and sim lab to support deep-level learning.</p>

			<p>3. Maintain/strengthen communication with institution leaders, APNs/CNSs on curricula being taught.</p> <p>4. Guest lecturer, cancer survivor lecturers.</p>
Interpretation 3	Intentional Approach to Oncology Self-Management Support	Comprehensive Coordinated Approach to SMS Teaching and Learning	<p>1. Ensure shared view of SM and SMS definition between lecturers, nurse educators, clinical preceptors.</p> <p>2. Discuss SMS with nurse leaders and preceptors in clinical education settings.</p> <p>3. Institute and enact SMS role models in university setting.</p> <p>4. Continuity of SMS learning situations in classroom, sim lab, clinical setting, post-clinical discussion.</p>
Interpretation 3	Potential for Regulatory Policy Innovation	Nursing Regulation Policy	<p>1. Collaborate with CANO/ACIO and CASN for opportunities for a national integration of cancer and cancer SMS curriculum. (Similar to CFMHN & developing entry-to-practice mental health & addictions competencies).</p> <p>2. CANO/ACIO develop a SM & SMS standard and include the standard within the current standards (CANO/ACIO, 2006).</p> <p>3. CANO/ACIO articulate the knowledge expectation of a SM & SMS standard for 'all nurses' (generalist role), 'many nurses', 'some nurses', and 'few nurses'.</p> <p>4. Using the CANO/ACIO standards, CASN report on and universities integrate curriculum on, the knowledge expectations for cancer and cancer SMS curriculum for the 'all nurses' level (generalist role). Resources: (a) CANO/ACIO Nursing Knowledge and Practice Framework and Toolkit for Cancer Care (CANO/ACIO, 2019) (b) Nowell & Campbell (2020).</p> <p>5. Collaborate with the CNA Oncology Certification Program for RN & NP to include SMS competences in the exam.</p>

Abbreviation Legend	
Advanced Practice Nurse	APN
Canadian Association of Nurses in Oncology/Association Canadienne des Infirmieres en Oncologie	CANO/ACIO
Canadian Association of Mental Health	CAMH
Clinical Nurse Specialist	CNS
Motivational Interviewing	MI
Nurse Practitioner	NP
Registered Nurse	RN
Registered Nurses Association of Ontario	RNAO
Self-Management	SM
Self-Management Support	SMS