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# The British Columbia Patient Navigation Model: A Critical Analysis

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**P**atient navigation programs have become a ubiquitous approach to facilitate accessibility to appropriate oncology healthcare and supportive services. Although many facilities have implemented navigation programs, a lack of published, theory-guided, evidence-based research has led to misinterpretations of navigation and a lowered sense of credibility. As a result, this article will provide a summary and critical evaluation of the British Columbia Patient Navigation Model (BCPNM). The analysis of the model will consider the philosophical perspective, including its contribution to nursing knowledge, research, and application to practice. In addition, the evaluation will discuss the model's ease of use and understanding of its identified concepts.

## Framework for the Analysis

The BCPNM is a practical model developed from a psychosocial perspective, aimed at capturing the essence of the patient navigator role. Two frameworks were chosen for the analysis of the BCPNM: the Synthesized Method of Theory Evaluation (McEwen & Wills, 2007) and the Criterion Based Critique (Johnson & Webber, 2005). The Synthesized Method of Theory Evaluation was selected for its simplicity and practicality. The framework was designed specifically to critique middle range and practice theories, which provided further motivation for choosing this method (McEwen & Wills, 2007). The Synthesized Method is divided into three essential components: theory description, theory analysis, and theory evaluation. The criteria specified under each component were designed by integrating other nursing theorists' frameworks. McEwen and Wills (2007) described the method as "contemporary and responsive to both recent and anticipated changes in use of theory in nursing practice, research, education, and administration" (p. 109). The BCPNM is a recent, contemporary model that lends itself to the possibility of change caused by the continuous evolution of healthcare service programming and delivery.

**Purpose/Objectives:** To provide a critical analysis of a patient navigation model using the Synthesized Method of Theory Evaluation and the Criterion-Based Critique as frameworks for the analysis.

**Data Sources:** English-language research and clinical articles and Internet sources (CINAHL®, PubMed, and Google™ Scholar) on patient navigation up to April 2009.

**Data Synthesis:** The British Columbia Patient Navigation Model (BCPNM) is a practical model developed from a psychosocial perspective. The BCPNM highlights the functions of the navigator for patients with cancer and is patient and family centered.

**Conclusions:** The BCPNM provides a comprehensive framework for current patient navigation programs and can facilitate the development of future models.

**Implications for Nursing:** The BCPNM is a useful model for nursing practice because it identifies and clearly highlights numerous functions that nurses provide. The model can serve as a guide for nurses who provide psychosocial interventions in a variety of oncology environments.

The second framework chosen for this analysis was the Criterion Based Critique because it can be used for non-nursing theory evaluation and can further expand the usefulness of the model for nursing practice (Johnson & Webber, 2005). The BCPNM was developed in 2007; a review of numerous databases, including CINAHL®, PubMed, and MEDLINE®, revealed no literature critiquing the proposed model. Critiquing and appraisal of the BCPNM will be guided by the two chosen frameworks, past patient navigation literature, and interpretations of the model.

## Model Description

The topic of patient navigation has generated a groundswell of activity as many healthcare programs strive to provide efficient, streamlined care while acknowledging consumer satisfaction. The psychosocial impact of cancer is multifaceted for patients and their families, who often require a constellation of

care throughout the disease trajectory. The concept of patient navigation is an approach to facilitate timely access to appropriate care and resources for individuals diagnosed with cancer. The BCPNM is a practical model developed from a psychosocial perspective in response to the demand for evidence-based literature that supports the navigation role in practice (BC Cancer Agency, 2005). The model elucidates the role of the navigator within the context of cancer care, postulating six integral components for service delivery: (a) provision of information, (b) emotional support, (c) facilitating decision making, (d) creating linkages to resources, (e) provision of practical assistance, and (f) identifying and developing community supports. According to the model, delivery gaps in cancer care service occur at the time of initial diagnosis, at the end of active treatment, and when patients transition to palliative care. The BCPNM provides a framework for patient navigation aimed at addressing current gaps in health care and highlights specific facets of the navigation role. The main goal of the patient navigator is to assist patients in acquiring an enhanced sense of preparedness (Doll et al., 2005).

## Purpose and Scope

The BCPNM is a practice model because it was developed inductively through the identification of numerous gaps that patients and their families experience in the context of the provision of cancer care service (Doll et al., 2005). The purpose of the BCPNM is to provide a framework for the role of a patient navigator within the domain of cancer care. The model is considered prescriptive in scope because it prescribes certain activities deemed necessary to achieve the defined goals (McEwen & Wills, 2007). For example, the BCPNM indicates that one function of the patient navigator is to provide information and emotional support, with the expected outcome of improved patient preparedness for treatment and post-treatment coping (Doll et al., 2005).

Prescriptive theories also identify specific goals, explicit activities to meet the goal, and a survey list of questions facilitating the conceptual basis of the theory (McEwen & Wills, 2007). The BCPNM postulates that patient navigation will improve patient outcomes, including enhanced patient self-efficacy, better coping abilities, enhanced emotional and informational preparedness, and improved satisfaction with health care. The outcomes are illustrated within the framework along with the roles and responsibilities of the navigator.

The survey list of questions that assists the theory's conceptual basis includes (a) who performs the function, (b) who receives the activity, (c) in what context the activity is performed, (d) what is the end point, (e) what is the guiding procedure, and (f) what is the energy source or dynamics for the activity (McEwen & Wills, 2007). Within the BCPNM, the navigator performs the function

of providing information and support to the patient and family. The context is the domain of cancer care, and the support takes place in a clinic setting or via telephone. The pioneers of the BCPNM emphasized that the interaction between the navigator and patient "should be time-limited and targeted to high-stress phases" along the cancer care trajectory (BC Cancer Agency, 2005, p. 45). For example, research has indicated that patients who are newly diagnosed with cancer experience significant stress levels (Doll et al., 2003; Melinyshyn & Wintonic, 2006), highlighting the need for patient navigation during this phase of the illness trajectory (BC Cancer Agency, 2005). Alternatively, Harold Freeman, MD, the pioneer of patient navigation, indicated that navigation begins at the diagnostic phase and continues throughout the treatment trajectory into survivorship (personal communication, October 10, 2009).

The BCPNM contains some of the features required to be considered a middle-range theory or model. The concepts are fairly limited, and some degree of generalization is possible across numerous specialty areas (McEwen & Wills, 2007). Researchers have used the concept of patient navigation in studies of areas such as prevention and screening (Ell, Vourlekis, Lee, & Xie, 2007; Fowler, Steakley, Garcia, Kwok, & Bennett, 2006; Psooy, Schreur, Borgaonkar, & Caines, 2004), genetic counseling (Kulchak-Rahm, Sukhanova, Ellis, & Mouchawar, 2007), and palliation (Cain, 2006).

## Origins and Philosophic Perspective

The concept of patient navigation was originally developed by Freeman, a surgical oncologist and former president of the American Cancer Society (Freeman, 2004; Freeman, Muth, & Kerner, 1995). In 1986, Freeman and colleagues developed a navigation program in response to the healthcare obstacles experienced by patients in marginalized communities (Freeman, 2004). The intent of the program was to facilitate access to follow-up and care for individuals with abnormal breast screening results. The program's success was fundamental in advancing further interest and investigation into the development and understanding of patient navigation (Dohan & Schrag, 2005; Ferrante, Chen, & Kim, 2008; Fowler et al., 2006).

The current healthcare system in Canada is reportedly fragmented in areas of service and information delivery and remains deficient in coordination of services (BC Cancer Agency, 2005). Meeting the communication and information needs of patients with breast cancer in particular has been challenging as evidenced by reports since 2000 (Hack, Degner, Parker, & SCRIN Communication Team, 2005; O'Leary, Estabrooks, Olson, & Cumming, 2007; Thomsen, Pedersen, Johansen, Jensen, & Zachariae, 2007). The BCPNM was developed to address many aspects of care, including communication needs and perspectives

of individuals involved in health care. The impetus behind the BCPNM was driven by a number of factors including patients' interest in the potential benefits of navigation services, the psychosocial impact of cancer, the need for evidence-based programs, and tight fiscal barriers (Doll et al., 2003, 2005).

Research surrounding the psychosocial impact of cancer has revealed that information retention is severely limited during times of high stress or feelings of vulnerability (Hack et al., 2005; Palsson & Norberg, 1995). The research emphasizes the need for many patients to have follow-up services concerning their understanding of their diagnosis as well as their treatment options. In the development of the BCPNM, the researchers examined the psychosocial effects of illness by including a review of literature pertaining to the identified, theoretic components of the model. They recognized social support, stages of change, problem solving and emotional coping (coping behaviors), and self-efficacy as key components (BC Cancer Agency, 2005). The model appears to be influenced by theories from the behavioral sciences such as Lazarus' stress theory. Lazarus focused on how people cope with stress; once they have coped successfully with a situation, a reappraisal occurs that assists individuals in adjusting to the new situation (Lazarus & Folkman, 1984). Problem solving and coping are features of the BCPNM model. Lazarus' theory explains how an individual may move through the initial shock of a cancer diagnosis to a state of adaptive coping. This preferable coping state allows for improved information retention during the navigator-patient interaction.

Bandura's theory of self-efficacy also appears to have influenced the BCPNM. Self-efficacy focuses on one's belief in his or her ability to perform a behavior (Pajares, 2002). The BCPNM's developers used self-efficacy as part of their model because of the disabling implications of a diagnosis of cancer. If a patient feels an enhanced sense of self-efficacy, then he or she is more able to mobilize coping strategies.

The researchers also identified three major questions facilitating the development of their model.

- What are the stakeholders' needs and perspectives?
- What are the core functions and best practices of current navigators?
- What models and theories should guide and inform navigation practice and evaluation?

## Major Concepts

McEwen and Wills (2007) stated, "Concepts explicate the subject matter of the theories of a discipline" (p. 52). Concepts also are described as "linguistic labels that are assigned to objects or events considered to be the building blocks of theories" (McEwen & Wills, 2007, p. 80). The BCPNM contains three major concepts within the model: the navigator role, patient and family needs,

and healthcare system gaps. Other concepts identified include social support, coping behaviors, stages of change, self-efficacy, and patient preparedness (BC Cancer Agency, 2005; Doll et al., 2005).

The navigator role is defined as one who provides information and emotional support, links patients to other support services, facilitates decision making and practical assistance, and develops community supports. The role is supportive rather than psychotherapeutic (Doll et al., 2005).

Patient and family needs are defined and assessed at the time of interaction between the navigator and patient. The needs of patients and families vary (Thomsen et al., 2007) and may be predictably higher during different phases of the illness trajectory (BC Cancer Agency, 2005; Knobf, 2007; Melnyshyn & Wintonic, 2006). For example, the time of initial diagnosis is a high stress phase of the journey (BC Cancer Agency, 2005; Knobf, 2007; Melnyshyn & Wintonic, 2006).

The time of initial diagnosis, reintegration into the community (after treatment), and new diagnosis of palliative patients are identified in the BCPNM as health system gaps. Many patients and their families require additional supportive services during those anxiety-inducing times; therefore, gaps are perceived by patients and families during the time periods. A patient navigator can assist patients and families during those phases by providing a venue for comprehension of education, emotional support, and links to alternative supportive care resources.

Social support is defined by structural, functional, and subjective aspects. Structural aspects of social supports include social networks (e.g., the size of the person's social circle) or the number of resources provided (BC Cancer Agency, 2005). Functional aspects of social support include emotional support or a sense of acceptance, whereas subjective perceptions include how the individual views his or her level of support (BC Cancer Agency, 2005).

Stages of change refer to patients' readiness to move from emotional coping to problem solving (Doll et al., 2005). This may occur gradually during the treatment decision-making process. Patients may move from emotional coping to problem solving as they participate in their upcoming treatment plans. For example, deciding between mastectomy or lumpectomy may require additional time and education to move from emotional coping toward problem solving (BC Cancer Agency, 2005).

The concept of coping behavior includes active and passive coping. Patients who actively cope may engage in problem-solving activities that may include participating in educational sessions and posing focused questions to their healthcare team. Alternatively, passive coping involves introspective thought based largely on emotion (BC Cancer Agency, 2005).

Patient preparedness involves aspects such as patients' understanding and comprehension of their diagnosis and upcoming treatment trajectory. This may include



patients' knowledge of the goals of care and appropriate supportive care services (BC Cancer Agency, 2005).

## Theoretic Propositions

Theoretic statements derived from a theory or model provide a basis for understanding and connecting the concepts used to develop the theory (McEwen & Wills, 2007). A number of propositions exist within the BCPNM including the relationship between information provision and emotional support leading to the concept of patient self-efficacy. The theory proposes that the navigator supplies patients with the necessary tools that facilitate the desirable outcome of improved coping and self-efficacy. The model also proposes to address significant gaps that remain in cancer care service delivery during the illness trajectory when a patient's sense of vulnerability is heightened (i.e., during initial diagnosis, end of curative treatment, and palliative care) (Doll et al., 2005).

## Assumptions

Assumptions are the concepts or variables identified in a model that are presumed to be true (Johnson & Webber, 2005). Whether the assumptions are explicit denotes the ability of the model or theory to communicate its meaning (McEwen & Wills, 2007). One assumption in the BCPNM is that patients and families require information and emotional support to feel prepared. The researchers stated that patient preparedness is one of the main goals of navigation and can be accomplished through information provision and emotional support (BC Cancer Agency, 2005).

Another assumption in the model is that patients and their families will access the services of a navigator as opposed to leaving their care in the hands of their doctors or nurses. The BCPNM also assumes that navigators are part of the multidisciplinary healthcare team working in a partnership for the benefit of the client and family. Bruce (2007) indicated that team communication and support for navigators has proven to be challenging because of the multifaceted role of the navigator.

## Context

McEwen and Wills (2007) reported that the context for using a theory and whether a theory is described in the empiric literature will lend to further analysis. The BCPNM was developed with consideration given to the complexities of the context of cancer care. The researchers believed the role of navigation should be flexible, based on the circumstances of the individual receiving care, and limited to high-stress phases along the illness trajectory.

Another view of examining context is an assessment of the concepts and propositions of the nursing paradigm (McEwen & Wills, 2007). The four metaparadigm concepts of the nursing discipline are nursing, person, health, and environment. Although the BCPNM is not

considered a nursing theory per se, the model includes concepts related to nursing's four metaparadigm concepts. *Person* includes the patient, family, and the community in the BCPNM. *Nursing* can be applied to the role of the navigator because nurses provide care through support, guidance, and education. The navigator also promotes adaptation and lends to improved self-efficacy. The concept of *health* is defined as "the ability to function independently; successful adaptation to life's stressors" (McEwen & Wills, 2007, p. 43). A goal of navigation is for the patient to experience an improved sense of coping and satisfaction with health care. *Environment* in the BCPNM encompasses the provision of links to healthcare resources including community support services and an assessment of the patient's own social support. Therefore, the patient navigator would require a thorough understanding of the complex environment of cancer care.

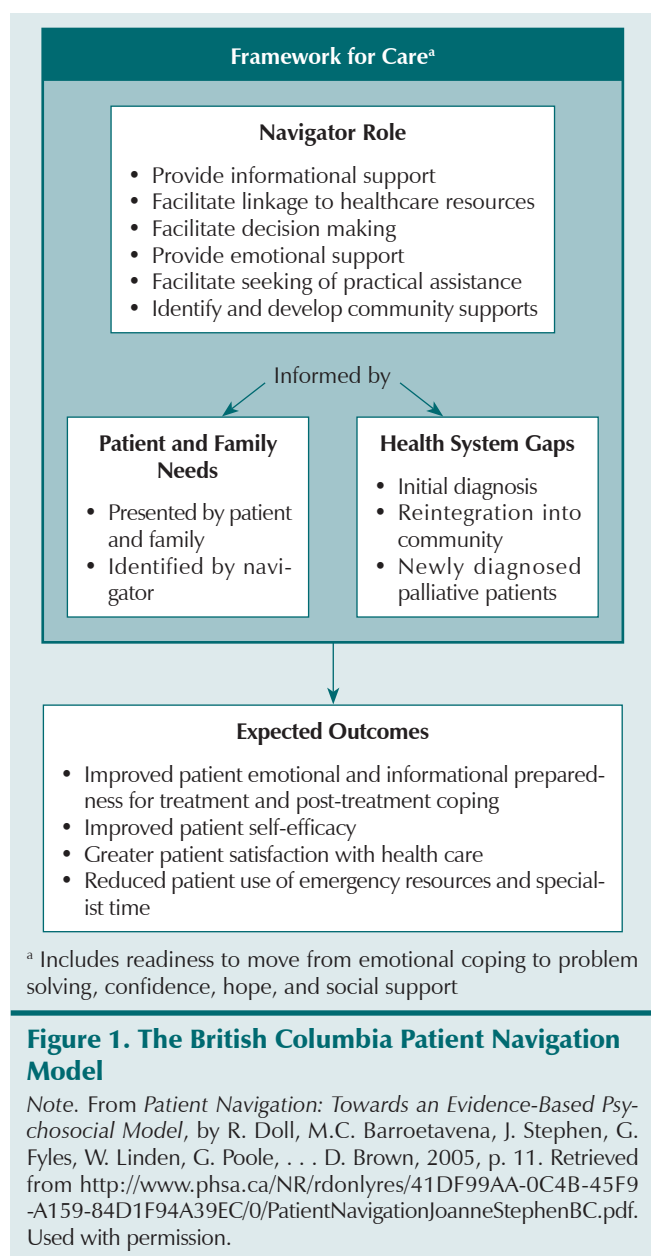
## Model Analysis

The major concepts in the BCPNM were defined theoretically, which enables readers to derive an understanding of the identified terms from a theoretic milieu and assists in determining the validity of major concepts (McEwen & Wills, 2007). The model also provides operational linkages to some of the concepts, which permits the concepts to be measured and allows hypotheses to be tested (McEwen & Wills, 2007). One of the expected outcomes for the patient navigation intervention is patient preparedness. The researchers developed a patient needs identification tool as well as a patient preparedness questionnaire to articulate and assist in determining particular interventions. The patients' needs were identified and measured through the screening tool before interaction took place with the navigator. The interaction between the patient and navigator may reveal additional patient needs or concerns.

The BCPNM's researchers specified that the effectiveness of the navigation intervention was not tested because of time limitations (BC Cancer Agency, 2005). Past research studies have measured the effectiveness of navigation programs through pretest and post-test methods involving anxiety scales, satisfaction surveys (Ferrante et al., 2008; Schwaderer & Itano, 2007), and qualitative interviews with patients and family members (Cancer Care Nova Scotia, 2004; Melinyshyn & Wintonic, 2006).

## Organization

The researchers developed a basic diagram of the BCPNM using unidirectional arrows with defined concepts explicating the parsimonious features of the model (see Figure 1). Minimal jargon was used, thereby augmenting the reader's ability to comprehend the theory. The diagram also provides clarity by expressing the



**Figure 1. The British Columbia Patient Navigation Model**

*Note.* From *Patient Navigation: Towards an Evidence-Based Psychosocial Model*, by R. Doll, M.C. Barroetavena, J. Stephen, G. Fyles, W. Linden, G. Poole, . . . D. Brown, 2005, p. 11. Retrieved from <http://www.phsa.ca/NR/rdonlyres/41DF99AA-0C4B-45F9-A159-84D1F94A39EC/0/PatientNavigationJoanneStephenBC.pdf>. Used with permission.

linkages between the concepts and expected outcomes. For example, the model identifies the navigator's role while illustrating the rationale and motivations behind the navigator's functions. The model also identifies psychosocial features such as confidence and hope, social support, and readiness to move from emotional coping to problem solving. The psychosocial features are linked to the authors' identified key components, which demonstrate consistency and flow within the model.

The expected outcomes of the intervention are stated in the model. One of the major influences behind the development of the model is the psychosocial impact of cancer on patients and their families. The expected outcome of improved self-efficacy is clearly illustrated, facilitating an effortless understanding of the model. For example, the researchers acknowledged the psychosocial impact of cancer, proposed an intervention (the

navigator), and stated expected outcomes of improved self-efficacy, better preparedness, and greater satisfaction with the healthcare system.

The increasingly tightening fiscal barrier is part of the impetus behind developing a comprehensive patient navigation model. One benefit of patient navigation is the reduction of emergency resource use or specialists' time. The reduction would occur as a result of the education, emotional support, or information provided by the navigator.

## Model Evaluation

An evaluation of a theory or model involves the ability to comprehend the language used by the developers. Evaluation is a necessary preliminary step to critically appraise the theory or model's consistency and usefulness to nursing practice (Johnson & Webber, 2005). One objective of Doll et al.'s (2005) study was to propose a model of navigation derived from the needs and perspectives of different stakeholders with consideration given to the current research literature. The BCPNM uses easily understood language, serving to define concepts that might otherwise be misinterpreted. The navigator provides a link to psychosocial supportive services for the patient as deemed necessary. The concepts and propositions also are clearly linked for ease of application to nursing practice. Nurses currently provide a navigational component in their work as they link families to appropriate resources, provide education, and help create a venue for comprehension to facilitate decision making (Bruce, 2007).

## Social and Cultural Relevance

McEwen and Wills' (2007) recommendations for theory evaluation include an examination of the model or theory's social and cultural relevance. Social relevance is found within the mode and refers to the responsibility of the navigator to identify and develop community supports through outreach and research.

The BCPNM does not acknowledge a cross-cultural component in the framework; however, patient navigation originally was developed for individuals in marginalized communities and continues to reflect that concept in many areas of the United States. The researchers recommend flexibility in the BCPNM based on the context or the community it is serving (Doll et al., 2005). Flexibility should allow other regional healthcare authorities to implement patient navigation and incorporate changes based on community needs (BC Cancer Agency, 2005).

Although the BCPNM is designed for cancer care navigation, patients who are diagnosed with any chronic illness could benefit from the interventions depicted in the model. According to the BCPNM, navigation work can be enacted by different professionals based

on the healthcare system context. The model does not indicate which discipline is best suited for the role of the navigator. However, some components of the model show congruency with current nursing interventions and therapeutics. Interventions such as information and education provision, emotional support, and linking individuals to additional resources encompass the functions that nurses currently provide. Research has revealed a variety of centers implementing nurses as navigators to assist with the complexities of cancer care (Canadian Partnership Against Cancer, 2009; Cancer Care Nova Scotia, 2009; Fillion et al., 2006; Melinyshyn & Wintonic, 2006; National Cancer Institute, 2009). The centers that employ nurse navigators to date emphasize the importance of understanding physical and psychological care needs for patients while simultaneously providing an empathic communication style (Fillion et al., 2006; Melinyshyn & Wintonic, 2006; Seek & Hogle, 2007). The quality of the relationships and support among physicians, navigators, and other members of the healthcare team have been identified as critical components to the success of a navigation program (BC Cancer Agency, 2005; Bruce, 2007).

## Implications for Nursing

The results of the current analysis reveal that the BCPNM is a useful model for nursing practice. The model can serve as an infrastructure for comprehensive care planning for nurses in oncology. The psychosocial elements of the model that reflect the core functions of oncology nursing are clearly highlighted. The BCPNM also explicates many of the potential obstacles that patients and their families face as they navigate their way through cancer care. Oncology nurses are well positioned to use the BCPNM as a practice guide because it encompasses the numerous facets patients and families require for enhanced oncology care. Oncology nurses must recognize

the significant challenges patients face during the entire cancer care diagnosis and treatment trajectory. With this knowledge, oncology nurses should advocate for the implementation of patient navigation services because the goal of patient navigation is to provide comprehensive, streamlined care for patients as well as their families.

## Conclusion

Patient navigation has generated an outpouring of activity since 2000 and will continue to grow in response to the demands of patient care needs. The BCPNM is a practice model derived from a combination of theories from the behavioral sciences. The model provides a solid foundation for the critical development of a patient navigation model that allows for flexibility in response to the demands of numerous contexts. Because of the practical nature of the model, nurses can easily implement the BCPNM into their oncology practice environments. The model identifies the core functions of the navigator role and provides potential outcomes of navigation that may be measured in numerous ways. Notwithstanding the usefulness of the model for nursing practice, further investigation is required to measure the actual efficacy of the BCPNM. As patient navigation programs continue to evolve, one can expect adjustments and refining to occur within the BCPNM because of its contemporary nature.

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## References

- BC Cancer Agency. (2005). *Patient navigation in cancer care: Summary report*. Retrieved from <http://www.bccancer.bc.ca/NR/rdonlyres/F888FDE0-799D-4C98-9A1B-189E91E422D9/24635/WebSummaryNavigation.pdf>
- Bruce, S.D. (2007). Taking the wheel. *Oncology nurses help patients navigate the cancer journey*. *ONS Connect*, 22, 8–11.
- Cain, J.M. (2006). Palliative care in gynaecology. *Current Obstetrics and Gynaecology*, 16, 111–116. doi: 10.1016/j.curobgyn.2006.01.008
- Canadian Partnership Against Cancer. (2009). Cancer journey. Retrieved from <http://www.partnershipagainstcancer.ca/priorities/cancer-journey>
- Cancer Care Nova Scotia. (2004). *Cancer patient navigation: Evaluation findings—Summary report*. Retrieved from <http://www.cancercare.ns.ca/site-cc/media/cancercare/PtNavEvaluationSummaryReport.pdf>
- Cancer Care Nova Scotia. (2009). Cancer patient navigation. Retrieved from <http://www.cancercare.ns.ca/en/home/nscancerservices/cancerpatientnavigation/default.aspx>
- Dohan, D., & Schrag, D. (2005). Using navigators to improve care of underserved patients. *Cancer*, 104, 848–855. doi: 10.1002/cncr.21214
- Doll, R., Barroetavena, M.C., Stephen, J., Fyles, G., Linden, W., Poole, G., . . . Brown, D. (2005). *Patient navigation: Towards an evidence-based psychosocial model*. Retrieved from <http://www.phsa.ca/NR/rdonlyres/41DF99AA-0C4B-45F9-A159-84D1F94A39EC/0/PatientNavigationJoanneStephenBC.pdf>
- Doll, R., Stephen, J., Barroetavena, M., Linden, W., Poole, G., Ng, E., . . . Habra, M. (2003). Patient navigation in cancer care: Program delivery and research in British Columbia. *Canadian Oncology Nursing Journal*, 13, 193.
- Ell, K., Vourlekis, B., Lee, P., & Xie, B. (2007). Patient navigation and case management following an abnormal mammogram: A randomized clinical trial. *Preventive Medicine*, 44, 26–33. doi: 10.1016/j.ypmed.2006.08.001
- Ferrante, J., Chen, P., & Kim, S. (2008). The effect of patient navigation on time to diagnosis, anxiety, and satisfaction in urban minority women

- with abnormal mammograms: A randomized controlled trial. *Journal of Urban Health*, 85, 114–124. doi: 10.1007/s11524-007-9228-9
- Fillion, L., de Serres, M., Lapointe-Goupil, R., Bairati, I., Gagnon, P., Deschamps, M., . . . Demers, G. (2006). Implementing the role of patient-navigator nurse at a university hospital centre. *Canadian Oncology Nursing Journal*, 16, 11–17.
- Fowler, T., Steakley, C., Garcia, A.R., Kwok, J., & Bennett, L.M. (2006). Reducing disparities in the burden of cancer: The role of patient navigators. *Public Library of Science Medicine*, 3, 974–976.
- Freeman, H.P. (2004). A model patient navigation program. *Oncology Issues*, 19, 44–46.
- Freeman, H.P., Muth, B., & Kerner, J. (1995). Expanding access to cancer screening and clinical follow-up among the medically underserved. *Cancer Practice*, 3, 19–30.
- Hack, T.F., Degner, L.F., Parker, P.A., & SCRN Communication Team. (2005). The communication goals and needs of cancer patients: A review. *Psycho-Oncology*, 14, 831–845. doi: 10.1002/pon.949
- Johnson, B., & Webber, P. (2005). *An introduction to theory and reasoning in nursing* (2nd ed.). Philadelphia, PA: Lippincott, Williams and Wilkins.
- Knobf, M.T. (2007). Psychosocial responses in breast cancer survivors. *Seminars in Oncology Nursing*, 23, 71–83. doi: 10.1016/j.soncn.2006.11.009
- Kulchak-Rahm, A., Sukhanova, A., Ellis, J., & Mouchawar, J. (2007). Increasing utilization of cancer genetic counseling services using a patient navigator model. *Journal of Genetic Counseling*, 16, 171–177. doi: 10.1007/s10897-006-9051-6
- Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Philadelphia, PA: Springer.
- McEwen, M., & Wills, E. (2007). *Theoretical basis for nursing* (2nd ed.). Philadelphia, PA: Lippincott, Williams and Wilkins.
- Melnyshyn, S., & Wintonic, A. (2006). The role of the nurse navigator in the breast assessment program at Hotel Dieu Hospital. Retrieved from <http://www.krcc.on.ca/pdf/The%20Role%20of%20the%20Nurse%20Navigator%20in%20the%20Breast%20Assessment%20Program.pdf>
- National Cancer Institute. (2009). NCI's patient navigator research program: Fact sheet. Retrieved from <http://www.cancer.gov/cancertopics/factsheet/PatientNavigator>
- O'Leary, K., Estabrooks, C., Olson, K., & Cumming, C. (2007). Information acquisition for women facing surgical treatment for breast cancer: Influencing factors and selected outcomes. *Patient Education and Counseling*, 69, 5–19. doi: 10.1016/j.pec.2007.08.002
- Pajares, F. (2002). Overview of social cognitive theory and of self-efficacy. Retrieved from <http://des.emory.edu/mfp/eff.html>
- Palsson, M.B., & Norberg, A. (1995). Breast cancer patients' experiences of nursing care with the focus on emotional support: The implementation of a nursing intervention. *Journal of Advanced Nursing*, 21, 277–285.
- Psooy, B.J., Schreur, D., Borgaonkar, J., & Caines, J. (2004). Patient navigation: Improving timeliness in the diagnosis of breast abnormalities. *Canadian Association of Radiologists*, 55, 145–150.
- Schwaderer, K.A., & Itano, J.K. (2007). Bridging the healthcare divide with patient navigation: Development of a research program to address disparities. *Clinical Journal of Oncology Nursing*, 11, 633–639. doi: 10.1188/07.CJON.633-639
- Seek, A., & Hogle, W. (2007). Modeling a better way: Navigating the healthcare system for patients with lung cancer. *Clinical Journal of Oncology Nursing*, 11, 81–85. doi: 10.1188/07.CJON.81-85
- Thomsen, D., Pedersen, A., Johansen, M., Jensen, A., & Zachariae, R. (2007). Breast cancer patients' narratives about positive and negative communication experiences. *Acta Oncologica*, 46, 900–908.