IMPROVING THE PROCESS OF CARE SETTING TRANSITIONS FOR ADULT PALLIATIVE PATIENTS: RECOMMENDATIONS FOR NURSE PRACTITIONER PRACTICE

by

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ABSTRACT

The number of transitions between care settings for palliative patients increase as they approach death. In Canada, 40% of palliative patients experienced one care setting transition prior to death, 6.3% experienced five or more transitions, and 47% made at least one care setting transition in the last four weeks of life. Often, palliative patients are transferred between care settings in order to receive the care necessary to improve their quality of life. Many times these transfers lead to patient and caregiver anxiety and dissatisfaction, medication errors, and ultimately a decrease in the quality of care. The aim of this project is to answer the following question: “How can nurse practitioners improve care setting transition processes for adult palliative patients in the context of primary care in British Columbia?” An integrated review was undertaken and an extensive literature search was conducted by way of electronic databases, journals, reference lists, and guidelines. Results are grouped into three categories or levels: system, clinician, and patient. Within these categories, the key findings in this review include improving communication, continuity of care, and multidisciplinary communication, effective medication reconciliation, adequate health information technology, and improving patient and caregiver education and empowerment. Recommendations for nurse practitioners as primary care practitioner are presented in the areas of practice, education, and future research considerations.

Keywords: care setting transitions, transitional care, palliative care, collaboration, communication, education, empowerment, nurse practitioners, primary care providers, medication reconciliation, health information technology
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CHAPTER 1

Introduction

Everything dies. That is the law of life—the bitter unchangeable law

—David Clement-Davies, Fell, 2007

Death is one of the only sure things in life and, for most Canadians, dying is a process rather than a sudden event. It has been estimated that only 10% of deaths are sudden, with the remainder of people dying more slowly from terminal illness, organ failure, or frailty (Carstairs, 2010). Therefore, 90% of the people who die in Canada could potentially benefit from specific care at the end of their life—palliative care or hospice/end-of-life care. Medical professionals who provide palliative care are able to assist patients to experience improvement in their quality of life until their death. Since almost all palliative patients transition between care settings during their palliative and end-of-life days, health care providers are increasingly seeking to understand why these transitions occur, and what steps can be taken to improve the transition process (Burge, Lawson, Critchley, & Maxwell, 2005).

The quality of the transitions likely to occur between care settings prior to death can have a strong impact on the process of dying and the perception of death, for both patients and their families. Nurse practitioners (NPs), as primary care providers (PCPs), are in a position to contribute to effective care setting transitions for their patients. While this paper will focus on how to improve the process of transitions between care settings, as opposed to improving the quality of the palliative process, it should follow that the quality of the palliative care received will improve as a positive consequence of improving the transition process. At the same time, it is important to recognize that an improvement in the transition between care settings is only a small component amongst a multitude of considerations NPs must take into account when caring for palliative patients. It is equally important to
acknowledge and improve upon the physical, mental, and spiritual aspects of palliative care, but these considerations are outside the scope of this paper. Additionally, this paper will not examine other important issues such as practitioner scope of practice, specific functions of team members, narcotic prescriptions, palliative care forms, and activities outside of scope of any team member. Ultimately, identifying and understanding the factors that facilitate effective care setting transition processes will help to inform the role of the NP working in the context of primary health care in British Columbia (BC).

Project Aim

In my lived clinical experience as a registered nurse, I am familiar with a broad array of palliative care processes, having worked on an acute care ward in a tertiary hospital, as well as in a community care setting as a home care nurse. As my knowledge of palliative care grows, I am increasingly aware of the discontinuity between care settings with respect to palliative care. Much of my time spent caring for palliative patients in the community was used to contact PCPs for necessary orders, track down missing information from hospital discharge summaries, reconcile medication lists, and speak with patients and families about their palliative care needs and wishes.

Specifically, I can readily recall my feelings of panic and my sense of inadequacy when a palliative patient close to death was about to be transferred home from an acute care setting. This inevitably seemed to happen on the weekend, where the patient would be transferred without new medication orders, without an updated care plan or a discharge summary, in uncontrolled pain, to be received by an uninformed family or an informal caregiver. This scenario is often exacerbated with difficulties in contacting the patient’s PCP, and not being able to communicate with a health care provider from the discharging care
setting due to any number of reasons. These feelings of unease around not having the necessary tools or information to effectively transition palliative patients back home continue to resonate with me.

Over time, I also became aware that the consequences of these discontinuities and disconnects as they were experienced by palliative patients, caregivers, and health care providers would be compounded over time. For example, in my experience, difficulty contacting a patient’s PCP for new orders, or for clarification of existing orders would lead to inadequate pain control and uncertainty around current care needs. Untimely delivery of discharge summaries from hospitals would create confusion about the treatment that had been given and the subsequent plan for care. Additionally, health information technology had yet to be implemented in these care settings—which further compounded the ineffective care setting transitions of palliative patients. Put together, all the ineffective elements that contribute to poor care setting transition processes effectively decreased the quality of patient care, and increased my workload as a practitioner.

This project will identify the key factors that improve care setting transition processes for palliative patients using the methodology of an integrated review. A diverse set of sources have been taken into account—including qualitative and quantitative studies, opinions of expert authorities in the health care field, and reports from expert committees—with the purpose of identifying the interventions necessary for NPs to effectively improve the processes of care setting transitions. Following the analysis and synthesis of the findings, recommendations for NPs in the areas of practice, education, and research are presented. The aim of this project is to answer the following question: "How can NPs improve care setting transition processes for adult palliative patients in the context of primary care in British
Columbia?” To preface this question, a number of key terms and central concepts will be identified in order to establish a clear context for identifying relevant improvements in the care setting transition process for the palliative population.
CHAPTER 2

Background

Transitions between care settings for palliative patients can have a negative impact on patient quality of life if these transitions are not carried out effectively. This chapter will set out the key terms and concepts associated with the transition process, and thereby provide the necessary background to the examination of the ways in which NPs can best improve the process of transitions between care settings for palliative patients. The following section will describe the various areas of transitional and palliative care. It will identify the barriers to effective care setting transition processes, and the way in which poor care setting transitions manifest. It will also look at the role of NPs as primary care providers in BC.

Transitional Care

Transitions between care settings can be complex, confusing, and burdensome for patients, families, and health care providers (Cawthon et al., 2012; Rooney & Arbaje, 2013; Van der Block, Bilsen, Van Casteren, & Deliens, 2007). Chalmers and Coleman (2006) explain that transitional times lead to increased patient vulnerability, and can therefore hinder the patient’s recovery or decrease their quality of life prior to death. “Transitional care” has been specifically identified within the complexity of care setting transitions. Coleman and Boult (2003) define transitional care as “a set of actions designed to ensure the coordination and continuity of health care as patients transfer between different locations or different levels of care within the same location” (p. 556). This paper will focus on such transitions as they occur between care settings. These transitions may include, but are not limited to, hospitals, sub-acute and post-acute nursing facilities, patients’ homes, hospice, primary and specialty care offices, and long-term care facilities (Coleman, 2003).
A number of sources agree that transitional care includes both the sending and receiving aspects of the transfer, coordination between all the health care providers involved, logistics of all arrangements, and preparation of both the patient and the family for self-care (Burge et al., 2005; Chalmers & Coleman, 2006; Coleman & Boult, 2003). It is well known that, over the course of care setting relocations, patients will come into contact with many different health care providers. These providers may include registered nurses, occupational and physiotherapists, nurse practitioners, primary care physicians, medical specialists, and home support workers (Parry, Coleman, Smith, Frank, & Kramer, 2003). Depending on the care setting, the health care providers involved may be connected within care teams, by way of collaborative groups, or they may practice independently.

Transfers between care settings can occur for a multitude of care-based reasons. Generally, the first reason for these transfers is that the complex care needs of adults with a palliative diagnosis frequently require care available in a multiplicity of different settings and locations (Schoenborn, Arbaje, Eubank, Maynor, & Carrese, 2013). Also, although most palliative patients have chronic comorbid conditions, acute events can precipitate a need for immediate transfer (Chalmers & Coleman, 2006; Chhabra et al., 2012). For example, Lawson, Burge, Critchely, and McIntyre (2006) found that, during the last month of life, pain and symptom control became a significant factor, which was likely to result in a greater number of care setting transfers. Patients may also be transferred in order to reduce the stress and workload experienced by their informal caregivers, or because the patient lacks an adequate network of familial supports necessary to their level of care (Chhabra et al., 2012; Lawson et al., 2006). Finally, palliative patients may require transfer due to their decreased cognition or their increased frailty (Chhabra et al., 2012; LaMantia, Scheunemann, Viera,
Busby-Whitehead, & Hanson, 2010). Regardless of the reasons for these transfers, it is important to understand the impact that care setting transitions have on all parties involved.

As noted above, the number of transfers between care settings often increases as patients near death, and it is therefore critical to develop a heightened awareness of the ways in which practitioners can provide effective care setting transitions for palliative patients. Often, for palliative patients, a transfer to an acute care setting tends to happen just prior to death (Canadian Institute of Health Information, 2007). A Canadian study found that 40% of palliative patients experienced one care setting transition prior to death, 6.3% experienced five or more transitions, and 47% made at least one care setting transition in their last four weeks of life (Lawson et al., 2006). This reported increase in the number of transitions between care settings as the palliative status progresses is consistent with my experience as a registered nurse working in home and community care.

Burge et al. (2005) emphasize that “the ultimate goal of understanding these transition issues better is to reduce unnecessary changes, help to predict care needs, enhance transitions that improve patient and caregiver quality of life, guide communication links within the health care system and maximize cost-effective utilization of different care settings and providers” (p. 2). While research that focuses on the issues that arise for palliative patients in the home, hospital, or community setting, is equally important, focusing on the process of patient transitions between these settings, identifying the barriers to effective transition processes, and taking a strength-based approach to improve overall care is paramount in order to generate an effective model for palliative care.
Palliative Care

The most widely used definition of palliative care is that proposed by the World Health Organization (WHO), which defines palliative care as “an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual” (WHO, 2014, para. 1). The WHO reminds us that palliative care should strive to inform patients that dying is a normal process; it emphasizes that palliative care requires a holistic approach, supports patients and families, enhances the quality of life by way of appropriate interventions, and employs a team-based approach to better deliver care (WHO, 2014). Most often, the process of palliative care completes with the end-of-life stage of care, i.e., the medical care provided during the last days or weeks of life (Plonk & Arnold, 2005).

In Canada, the type and quality of palliative care depends to some extent on geographic location and the allocation of resources. Currently, as few as 16%-30% of people dying in Canada have access to palliative or end-of-life care services (Canadian Hospice Palliative Care Association, 2014; Carstairs, 2010). Carstairs (2010) notes that this apparent shortage in the delivery of palliative and end-of-life services is largely due to the disparity in health care resources between Canadian communities. She also points out that the limitations on the delivery of health services due to demographic and geographic variables are compounded by the ever-growing gap in human resources allocated to health care. It is not the purpose of this project to underscore the need for increased access to palliative care.
services in BC, it is nonetheless important to note the wide gap between those who need palliative care and those who actually receive it.

The term palliative care, in the context of this project, refers to care that begins from the initial designation of palliative status, continues right through the end-of-life care, terminating only when death occurs. In BC, a patient can be registered with the “BC Palliative Care Benefits Program” on the basis of the following criteria: if the patient is living with a life-limiting or progressive illness, if curative treatment is not the primary focus of care, if the patient or their representative has agreed to accept palliative care services, and if the patient has a life expectancy of less than 6 months (British Columbia Ministry of Health, 2013). Additionally, the patient’s score on the Palliative Performance Scale must fall at 50% or below to qualify for benefits. An example of the Palliative Performance Scale can be found in Appendix A. The palliative care benefits program covers the cost of eligible drugs, medical supplies, and equipment needed for the care of palliative patients.

Population

In order to understand the ways in which NPs will have an impact on improving the care setting transition processes, the relevant population that will benefit from these improvements is identified in the following way. In BC, the term “adult” refers to any person 19 years of age or older (Family Law in British Columbia, 2014). Correspondingly, the term “adult palliative patient” refers to any patient 19 years of age or over who has been designated as having palliative status as outlined in the BC Palliative Care Benefits Program.

Canada’s population is also ethnically and geographically complex, encompassing a wide diversity in language and cultural practices, in both urban and rural settings. The median age in Canada is 40.6, with 16.7% aged 0–14, 68.5% aged 15–64, and 14.8% aged 65
and older (Statistics Canada, 2011). Furthermore, as with many developed countries, Canada’s population is aging. Seniors aged 65 and older now comprise the fastest growing segment of the population, and this trend is expected to continue for the next several decades (Employment and Social Development of Canada, 2014).

Despite the vast amount of habitable land in BC, as much as 86% of the population is concentrated in urban centers according to a 2011 census, with the majority residing in the vicinity of Vancouver (Statistics Canada, 2011). The remaining 14% of BC residents live near rural centers, many having a population of less than 1,000 people with less than 400 people per square kilometer. As it is otherwise beyond the scope of this paper to take into account the cultural and demographic diversity among transitioning palliative patients, the following findings are proposed to represent adult palliative patients in general in BC.

**Barriers to Effective Care Setting Transition Processes**

Hanratty et al. (2012) note that end-of-life care “is a time when health and well-being may be at their lowest, and outcomes are sensitive to how well the components of the system work together” (p. 80). The current literature on care setting transitions outlines a number of areas of concern, grouping them in three distinct categories or levels: the system, the clinician, and the patient. For the purpose of this project, the system level refers to the level of health care delivered by the provincial government (which includes various health authorities across the province of BC); the clinician level refers to all health care providers involved at the various stages of palliative care; and, the patient level includes both the patient and their informal caregivers. Following is a discussion of the main barriers to effective care setting transition processes at each level.
The system level. The way in which the current health care delivery system is organized creates a number of barriers to effective delivery of care across various settings. These barriers essentially stem from the fact that practice settings tend to operate much as silos do, as independent care settings having little to do with the processes that occur within the other settings (Coleman, 2003; Coleman & Berenson, 2004; Parry et al., 2003). The barriers often emerge as a consequence of the insular and specialized nature of the practice settings themselves. This results in fragmentation in the continuum of care in several discernible areas, and is particularly evident in the disconnection between care facilities or primary care homes (Coleman 2003; Parry et al., 2003; Rooney & Arbaje, 2012), and in poor patient care plans and discharge or transitional summaries (Council et al., 2012; King et al., 2013; Parry, Kramer, & Coleman, 2006; Parry et al., 2003). Such barriers are also exacerbated by improper medication reconciliation (Kripalani, Jackson, Schnipper, & Coleman, 2007; Meier & Beresford, 2008) and inadequate health information technology (National Transitions of Care Coalition, 2010b).

First, Coleman (2003) points out that one of the major barriers to effective care setting transitions comes about because of the absence of a formal relationship between different care settings—resulting in an ineffective relationship which leads to inadequate communication and insufficient collaboration (Coleman 2003; Meier & Beresford, 2008; Parry, et al., 2003). It should be noted that patient care plans and discharge or transitional summaries represent the primary means to communicating up-to-date patient information between care settings. Patient care plans are documents that include important patient information on current therapies, health changes, medical history, information about other health care providers involved, and other relevant information that may affect the patient’s
health or treatment options (Government of Alberta, 2009). Discharge or transitional summaries are summaries of the patient’s stay in a given care setting and should include patient details, PCP details, admission and discharge information, clinical information, medication information, follow-up and future management, and the details of the person completing the discharge summary (Health Information and Quality Authority, 2013).

Despite the importance of these documents, findings indicate that little time is given to developing patient care plans, either prior to admission or after discharge (Council et al., 2012). Moreover, a number of findings also indicate that both patient care plans and discharge summaries are missing vital information, thereby leading to delays in patient care (Council et al., 2012; King et al., 2013; Parry et al., 2006; Parry et al., 2003). Additionally, practitioners report that discrepancies are routinely found between the oral report given by transferring care settings, and the written report received at the other end (King et al., 2013). To further complicate these transitions, findings indicate that there is often a time delay between the arrival of the patient in the new care setting and the actual receipt of the discharge summary or updated patient care plan (Kripalani et al., 2007).

Adding to the inadequate communication at strategic points in the process, there is also a pattern of improper or absent medication reconciliation, which will contribute to adverse outcomes for palliative patients being transferred across care settings. Medication reconciliation is “a formal process in which health care providers work together with patients, families and care providers to ensure accurate and comprehensive medication information is communicated consistently across transitions of care” (Institute of Safe Medication Practices Canada, 2014). Discrepancies between the prescribed medication regimen and the preadmission regimen occur for a number of reasons. For example, an
accurate, comprehensive medication history may not have been obtained on first admission; the medication regimen may well have been necessarily altered during the stay; and, medications may not have been systematically reconciled at the time of transfer to the next care setting (Kripalani et al., 2007; Meier & Beresford, 2008).

Finally, the lack of widespread health information technology (HIT) creates a significant gap in the sharing of patient information between care settings. Health information technology is defined as “the application of information technology products, services and solutions to the health care field with the objective of lowering costs, improving efficiency and reducing errors, while delivering better health outcomes to patients” (British Columbia Institute of Technology, n.d., p. 2). This discontinuity hampers communication and compromises the possibility for coordinated care (National Transitions of Care Coalition, 2010b).

The health care system has yet to implement comprehensive, interconnected technology, and instead uses electronic charting systems that are not capable of sharing information (Coleman & Berenson, 2004; National Transitions of Care Coalition, 2010b). North American medical information systems currently do not support an overarching system that will facilitate the timely transfer of essential patient information across the various settings a palliative care patient is likely to encounter (Kaye, Kokia, Shalev, Idar, & Chinitz, 2010). In Canada, only 34% of physicians use any form of electronic medical records (EMRs) as of 2010 (Biro, Barber, & Kotecha, 2012).

Due to the diverse needs of palliative patients, care is most often multidisciplinary by nature, where communication and coordinated care become even more essential. A multidisciplinary team approach “utilizes the skills and experience of individuals from
different disciplines, with each discipline approaching the patient from their own perspective” (Jessup, 2007, p.330). As the deficiencies at the level of the system intersect in the areas described above, they interact to create a cumulative impact across the continuum of care for palliative patients.

The clinician level. At the clinician level, barriers to effective care setting transition processes occur for multiple reasons, among which the following stand out: the lack of communication and continuity of care between care providers, poor clinician-to-patient communication, and inadequate clinician training. Continuity of care has been defined simply as “the continuous relationship between a provider and a patient, as well as the coordination and sharing of information between providers” (Gill, Mainous, & Nsereko, 2000). Over time, the health care system has evolved to include more and more specialty practitioners. While in the past it was common for one practitioner to follow a patient across a number of care settings, this is becoming increasingly less common (Coleman & Fox, 2004; Delva, Kerr, & Schultz, 2011; Kripalani et al., 2007). In this increasingly used model of specialized health care, continuity of care is difficult to preserve, thus contributing to ineffective palliative care setting transitions.

Ineffective clinician-to-patient communication will intensify unsatisfactory care setting transitions for palliative patients. Slort et al. (2011), in their study of perceived barriers between patients and their general practitioners, found that patients actually perceived practitioner communication as both dishonest and inappropriately short. Insufficient practitioner knowledge in palliative care and care setting transitions will also contribute to poor patient communication (Aslakson et al., 2012). Similarly, an absence of empathetic communication will reinforce the barrier to effective communication where
practitioners avoid any reference to the emotional and social impact of problems arising from the patient’s situation (Ha, Anat, & Longnecker, 2010). On the other hand, positive clinician-to-patient communication is found to result in strong interpersonal relationships, facilitate the exchange of information, and give the patients a sense of inclusion in the decision-making process (Ha et al., 2010).

Finally, a lack of clinician training in cross-site collaboration and care setting transitions along with insufficient clinician knowledge of other care sites, all contribute significantly to ineffective care setting transitions. Few clinicians have any formal training in cross-site collaboration, a situation that contributes directly to under-informed care setting transitions (Coleman, 2003). All these potential shortcomings will contribute to transfers that are likely not to be beneficial for the patient (Coleman & Berenson, 2004).

The patient level. Current research identifies patient education and empowerment as two areas in need of additional development in order to improve the care setting transition processes for palliative patients. A major insufficiency in patient education is inappropriate communication between the patient and the practitioner (Kripalani et al., 2007). For example, in a recent study, palliative patients were dissatisfied with communication styles of practitioners that they felt were controlling, or where the practitioner appeared to have little knowledge about end-of-life care, or appeared to be uncomfortable discussing certain aspects of palliative care (Stephen, Skirton, Woodward, Prigmore, & Endacott, 2013). For some patients, the sense that they are not being heard, or the sense that the practitioner does not have time to talk to them, creates a barrier to their understanding of their diagnosis, their prognosis, and the underlying rationale to their therapy (Hanratty et al., 2012).

Furthermore, patients are often transferred between care settings without having been
prepared in advance to optimize the health care available from the accepting care setting (Coleman, 2003). A primary reason for this is that care setting transitions may be acute and not anticipated, and precipitated by a sudden change in patient status. In addition, these changes often occur after hours when PCPs are not aware that a transition has taken place (Coleman & Fox, 2004). Additionally, once discharged from a care setting, patients may well not be provided with sufficient information about how to access, or make best use of, available community services (Hanratty et al., 2012). Following a discharge, patients may also experience delays in reconnecting with their primary care or other health care provider (Coleman & Berenson, 2004; Meier & Beresford, 2008; Parry et al., 2006).

Additionally, inadequate patient empowerment by health care providers will further hinder effective care setting transitions. The National Transitions of Care Coalition (2010b) found that patients are generally not active participants in their medical care—largely due to poor encouragement from within the health care system. It appears that patients often misunderstand or underestimate their role in their own care, making them poor advocates for their own care (Coleman & Berenson, 2004). Often, in situations where palliative patients attempt to take an active role in their own care, their knowledge or their requests may not be taken seriously (Hanratty et al., 2012). This lack in patient education, and the accompanying perception of disempowerment contributes to patient dissatisfaction, and compromises their safety during care setting transitions. All of these insufficiencies at the level of the patient contribute to significant barriers that hinder the process of effective care setting transitions for palliative patients.
Manifestations of Poor Care Setting Transitions

Ultimately, palliative care is provided for the benefit of the patient, and ineffective care transitions will lead to any number of adverse patient events. For palliative patients, the consequences of poor transitions manifest in various ways, all with the potential to contribute to ineffective care setting transitions. Abarshi et al. (2010) emphasize the “potential relationship between end of life transitions and patient safety, comfort, quality of life and general well being” (p. 166). Coleman (2003) points out that poor preparation of patients prior to transfer to another care setting leads to increased anxiety and dissatisfaction, which effectively places a greater burden on that patient, as well as the care providers. Additionally, King et al. (2013) remind us that untimely transfer of patient care plans and discharge summaries results in care delays leading to unsafe patient care, along with patient and caregiver dissatisfaction.

To this, there is the not-uncommon situation of inadequate medication reconciliation, which has potentially deadly consequences for patients. At the very least, inadequate medication lists or orders for medication stand in the way of proper pain management and symptom control for palliative patients (Meier & Beresford, 2008). Chhabra et al. (2012) note that 46%–54% of all preventable adverse drug reactions occur at transition points of care. Above all, poorly executed transitions can lead to re-hospitalization or permanent institutionalization, which, in the context of palliative care, often precipitates a death in a hospital (King et al., 2013; Meier & Beresford, 2008). For each decision to transfer, the potential benefit must be weighed against the potential harm. Although no transition comes without risks, increasing the efficiency and efficacy within this area will improve the entire continuum of palliative care.
Nurse Practitioners as Primary Care Providers

Nurse practitioners in BC are health care providers with a graduate level of education and an advanced scope of practice. In BC, NPs have the ability to complete advanced medical histories and physical assessments autonomously; diagnose and manage common diseases, disorders, and conditions; order, conduct, and interpret diagnostic tests; prescribe pharmacologic, non-pharmacologic, and complementary therapies; perform advanced interventions for patients across the lifespan; and refer patients to appropriate specialists (Canadian Nurses Association [CNA], 2010; College of Registered Nurses of British Columbia [CRNBC], 2013a). Nurse practitioners work independently, yet collaboratively with other health care providers including physicians through a process of consultation and referral (CRNBC, 2014b). Ideally, NPs use a holistic approach to patient-centered care, promote health, prevent disease, and work collaboratively within a multidisciplinary health care system—all with the intent to ensure the best physical, emotional, and spiritual outcomes for their patients (CNA, 2010; CRNBC, 2014b). Nurse practitioners, as PCPs in BC, have the skills to lead collaborative health care teams, and therefore may well find themselves at the center of a network of care providers coordinating overall care for palliative patients.

Although the NP role in North America has been in existence since 1895 (American Association of Nurse Practitioners, 2014), NPs are a relatively new addition to the BC health care system. In 2005, the BC government implemented legislation, under the Health Professions Act, to allow NPs to practice within the province (CRNBC, 2014b). Within BC there are three separate types of NPs—family, adult, and pediatric—with the majority being family NPs (Roots, 2011). The largest employers of NPs are the provincial health authorities,
accounting for 75% of the NP jobs (Roots, 2011). The other 25% of NPs are employed privately, by the federal government, by universities, or are currently not employed (Roots, 2011). Geographically, 61% of BC NPs work in the Greater Vancouver and Abbotsford region, with the remainder divided between Greater Victoria (7%), regional centers (10%), and rural and remote communities (22%) (Roots, 2011). Each year, the number of licensed NPs grows and, as of September 2014, there were 319 registered NPs in BC (CRNBC, 2014d).

For the purpose of this project, the focus will be on NPs as PCPs practicing in community primary care settings. Many NPs provide primary care for palliative patients, and in their roles, have the skills and knowledge to improve care setting transition processes for these patients.
CHAPTER 3

Methods

In order to best answer the question of *how can nurse practitioners improve care setting transition processes for adult palliative patients*, an integrated review was undertaken. An integrated review combines both theoretical and empirical sources in an attempt to produce the most comprehensive review possible (Whittemore & Knafl, 2005). An extensive search of this nature will incorporate electronic databases, journal hand-searches, web searches, reference lists, and guidelines (Whittemore & Knafl, 2005). A well-defined search strategy is an integral component of a credible integrated review. Following is an outline of the search undertaken for this project. A flow chart of the overall search strategy can be found in Appendix B.

**Stage One: Searching Electronic Databases**

Stage one of the literature search was completed by way of the following electronic databases: CINAHL, MEDLINE Ovid, PsychINFO, Social Work Abstracts, and Cochrane Reviews. Initially, no search limiters were set in order to avoid excluding any relevant literature. The search terms chosen were obtained by way of key terms that came up in the course of reading relevant articles, and with the help of the Northern Health Sciences Librarian at the University of Northern British Columbia. The medical subject heading (MeSH) terms used were: palliative care, terminal care, hospice care, transfer, discharge, transitional programs, and patient transfer. The keywords used were: end-of-life care, care transition*, patient transfer*, care setting transition*, and transitions between care settings. The asterisks indicate that all possible endings of the term would be included. Appendix C shows the search results in terms of the number of results obtained for each search.
Pertinent terms were combined with Boolean operators (e.g., and, or, not) to arrive at sets of results, which were combined, and then duplicates were removed. Since limiters were not set at the outset, the sources initially gathered included a wide variety of ages, disease processes, types of transitions, locations of study, methodology, and dates published. The titles of all 272 potentially relevant articles were assessed and retained if the following inclusion or exclusion criteria were met.

**Inclusion and Exclusion Criteria**

The inclusion and exclusion criteria were applied at all stages of the search. Articles were included if they met the following criteria: written in English, focusing on adults, and addressing transitions between any care setting, transitional care, patient transfers, and palliative patients. Following this, articles were retained if they were published between 2000 and 2014. The reason that limiters were placed on the dates of publication was to ensure improvements in care setting transition processes that have already been rectified to date were not included. Articles that discussed other types of transitions, such as transitioning from pediatric care to adult care, or transitioning from medical to palliative care, were excluded, along with those concerned with the pediatric population. A total of 100 potentially relevant articles were retained on the basis of the content of the titles.

**Stage Two: Screening Abstracts and Hand Searching**

Stage two of the search filtered the articles retained to this point on the basis of scanning the abstracts according to the inclusion criteria. Google Scholar was used to produce some results, and relevant journals, identified in the course of the various electronic searches, were then searched by hand. Lists of references from relevant articles were also searched for relevant material. Hand-searching ensured that salient articles on the topic of
palliative care and transitional care were not missed during the electronic database search. The publications with pertinent abstracts were retained on the basis of the inclusion criteria. In total, 44 potentially relevant articles were retained from the electronic database search results.

The six journals that were hand-searched included the *Journal of Palliative Care*, *Journal of Palliative Medicine*, *Palliative Medicine*, *Generations: Journal of American Society on Aging*, *BMC Palliative Care*, and *Journal of American Geriatrics Society* (see Table 1). Since these journals pertained exclusively to palliative or adult care, the only key term used as a further search criterion was transition*. This broad term could be used because the number of articles found within each publication was not overwhelming. Only articles that met the inclusion and exclusion criteria were kept. This step added 18 articles to the 44 articles identified in the electronic search, resulting in a total of 62 articles for review.

Table 1 *Search results obtained from hand searching journals*

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<tr>
<td></td>
<td><em>Journal of Palliative Medicine</em></td>
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<tr>
<td>Transition*</td>
<td><em>Journal of Palliative Medicine</em></td>
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<td><em>Palliative Medicine</em></td>
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<td><em>Generations: Journal of American Society on Aging</em></td>
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<td><em>BMC Palliative Care</em></td>
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<td><em>Journal of American Geriatrics Society</em></td>
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Following this, Google Scholar was searched using the terms palliative, terminal, hospice, or end-of-life care, combined with transitions, care transitions, and patient transfer. No new relevant articles were found. The reference lists of the articles pertaining specifically to care transitions during palliative care revealed five more potentially relevant publications,
bringing the total to 67 articles for review—the final number of potential articles after which it can be said a saturation point was reached. Full-text articles were then printed, and potential publications that were not available through the University of Northern British Columbia were obtained by way of interlibrary loans.

**Stage Three: Extensive Review for Importance and Relevance**

The 67 potentially relevant articles that were retained after this lengthy search process were closely read to determine their relevance, and a final number of pertinent articles were chosen—again, based on the inclusion and exclusion criteria. Additional exclusion criteria were applied at this stage. Articles that discussed the care setting transitions of patients with dementia, critical care patients, or care transitions within nursing homes were excluded. Also excluded were articles that discussed the physical transfer of patients between care settings rather than the transition of patients between care settings—given that the focus of this paper is on the care setting transition process and not on process of physically transferring the patient.

A final number of 16 articles was retained on the basis of a focus on care setting transition processes for palliative patients and patients with complex care needs, patient-centered transitions, and care transitions of older adults. Two guidelines from the National Transitions of Care Collation website were also examined and incorporated into the literature analysis. The final group of articles was then analyzed for common themes that focused specifically on improving care setting transition processes for adult palliative patients.

**Literature Reviewed**

The 16 publications that were retained for this review addressed different aspects of
the ways in which the care setting transition processes might be improved. The articles reviewed were primarily American publications, with the exception of an English source. There were very few articles that focused specifically on care setting transitions for palliative patients and, after careful consideration, only one article was included. While there were a number of studies that looked at transitions between care settings for palliative patients, they did not focus on the question of improving these transitions. In actuality, only one study looked directly at improving care setting transitions in the palliative population, it became clear that the research looking at improving care setting transitions for the elderly and chronically ill would yield findings that could be applied to palliative care transitions. The majority of the articles chosen for review directly addressed the issue of improving the transition processes in the care settings of older adults with a chronic illness, and more broadly, outlined ways for clinicians to improve on care setting transition processes in general. Four publications specifically focused on medication reconciliation; one looked at end-of-life care setting transitions, four examined patient perspectives on the ways in which care setting transitions could be improved, and the remainder examined general ways to improve care setting transitions.

Five of the studies reviewed were qualitative in nature, two provided systematic literature reviews, and one presented the results of a randomized controlled trial. Additionally, two reports written by expert committees under the auspices of the National Transitions in Care Coalition were included, and the remaining five presented the opinions of expert authorities on the topic of improving care setting transition processes.

The sample sizes of the qualitative studies ranged from 27 to 125 participants; the randomized controlled trial included 750 participants; and, the qualitative reviews included
five to seven studies. Each publication included in this review was analyzed on the basis of study type, population, purpose, and strengths and limitations. Further discussion of study characteristics is addressed in the Findings section, below.

**Analysis Technique**

Research in the area of care setting transitions emphasizes the importance of a systematic and thorough analysis of the selected literature as a way of ensuring the credibility of a high quality integrated review. This analysis of the qualitative data began with just such a reliable and thorough search strategy (documented above). Following a careful selection of relevant articles, based on specific inclusion and exclusion criteria, the resulting body of literature was closely examined to ensure that all aspects of its content was well understood. In the process each publication was analyzed in detail with attention to the level of evidence, the characteristics of the population studied, the sample size, the focus of the study, and the strengths and limitations of the study (and/or content). This process ensured both the credibility and validity of the selected material, and also determined whether the source ultimately added data to answer the question posed for the review. A detailed table of evidence outlining the elements analyzed was compiled and can be found in Appendix D.

Following this process, each publication was critiqued on the basis of its own merits in order to identify patterns, themes, and relationships (Torraco, 2005; Whittenmore & Knalf, 2005). Three broad categories emerged as overarching themes according to which the content could be categorized—the system level, the clinician level, and the patient level. Once all material was thoroughly analyzed, connections between the sources were identified in order to demonstrate the way in which one concept might influence another. By synthesizing the combined content in this way, it became possible to identify specific nodes
in the care setting transition process most in need of improvement. Finally, thematic content analysis was undertaken in order to identify key care setting transition process improvements. The findings that resulted from this multiple-stage process are presented below.
CHAPTER 4

Findings

Following a comprehensive search for pertinent literature on the topic of improving the transition process between care settings for palliative patients, 16 publications were chosen for this review. Results of the literature analysis were grouped according to three levels or categories: system, clinician, and patient. Within these categories, a number of different themes emerged to provide a structure by which to discuss the data in a systematic way. The themes identified at the system level were as follows: connecting care settings, improving patient information flow, effectively reconciling medication, and providing adequate health information technology. At the clinician level the themes included care provider continuity, clinician-to-patient communication, and the furthering of clinician education; and, at the patient level, the themes were primarily related to improving the education of the patient and facilitating their empowerment. It is important to note that most themes may have some overlapping characteristics, given that the literature chosen for review addressed interrelated elements of care setting transitions. The following section will outline the themes noted in the material analyzed, and will focus on bringing about a better understanding of where exactly improvements can be made to the process of care setting transitions for adult palliative patients.

The System Level

At the level of the health care delivery system, four themes emerged with respect to the improvement of care setting transition processes. As discussed earlier, the most common barriers to effective transitions at this level are the disconnect between care settings, inadequate patient care plans (including inadequate discharge or transition summaries), poor
medication reconciliation, and inadequate health information technology (HIT). The analysis of the literature revealed a number of distinct areas where improvement is both feasible and necessary.

Connecting care settings through communication. The necessity for a better connection between health care settings emerged as a common theme in many of the articles reviewed. Generally speaking, the proposition is that connectivity can be improved through effective and standardized communication—in tandem with a multidisciplinary approach. Overall, effective communication between transitioning care settings is seen as essential to achieving positive patient outcomes (Chhabra et al., 2012; Coleman, 2003; Coleman & Fox, 2006; King et al., 2013; Kripalani et al., 2007; Rooney & Arbaje, 2013; Schoenborn, et al., 2013).

First, Kripalani et al. (2007) propose that communication between settings should be viewed as a two-way dialogue rather than the more typical one-way transfer of information from the discharging care setting to the accepting care setting. One of the ways proposed for increasing open dialogue between care settings is to have the discharging setting provide the patient, the caregivers, and the primary care provider (PCP) with the contact information for the discharging physician (Coleman, 2003; King et al., 2013; Kripalani et al., 2007). These sources argue that having a direct line to the discharging physician will expedite the process of acquiring any missing patient information, and will allow a timely clarification of any questions remaining (Coleman, 2003; King et al., 2013). Two-way communication will also allow providers to formulate a cohesive follow-up plan specific to the tasks to be performed in the course of the initial visit with the patient's PCP (Kripalani et al., 2007).

Schoenborn et al. (2013) emphasize that the patient's PCP should connect with the
discharging care setting by way of a telephone interchange that addresses the patient’s course of time in hospital. Furthermore, they note that that, ideally, cross-site communication should be initiated by notifying the PCP soon after the patient has been admitted. In this way, by notifying the palliative patient’s PCP with respect to all admissions at the time they occur, more time would be available for coordinating appropriate care prior to discharge. It is worth noting that Schoenborn et al. found that clinicians acknowledged that they were more likely to communicate directly with a patient’s PCP if the clinician had a prior relationship with that PCP. Their findings emphasize the need for increased connectivity between care settings.

Furthermore, a number of the articles also emphasize the need for a greater standardization of the communication process between care settings as a way to improve care setting transitions for patients. The National Transitions of Care Coalition (2010b) states that, “the safety and effectiveness of care transitions requires some degree of standardization among providers to ensure the completion of critical activities common to all transitions of care” (p. 16). The literature indicates that care providers need to relay patient care information accurately between care settings—the main effective tactic for bridging the communication gap between care settings (Coleman, 2003; Flora, Parsons, & Slattum, 2012). An example of an ideal, standardized transition record is presented in Appendix E.

The final theme at the level of the health care system—with respect to resolving the disconnect between care settings by way of effective communication between care settings—is the advocacy for a multidisciplinary approach, one that includes collaboration based on common goals and mutually agreed upon patient expectations (Flora et al., 2012; Kripalani et al., 2007; Rooney & Arbaje, 2013). According to some findings, clinicians themselves
perceive communication across a diverse range of staff as an important part of their role, thereby reinforcing the importance of a team-based approach throughout the care setting transitions (Schoenborn et al., 2013).

A multidisciplinary approach is also likely to improve patient safety and the quality of care at time of discharge. An exemplary discharge planning team could include a nurse case manager, a social worker, and a number of other care specialists, such as a PCP, an occupational therapist, a pharmacist, and a physiotherapist, all of whom can work in conjunction with each other to facilitate a proper assessment of the full spectrum of needs of both the patient and the caregivers (Kripalani et al., 2007). In summary, interconnecting care settings for palliative patients by establishing a two-way dialogue, standardizing communication processes, and employing a multidisciplinary approach have all been identified as important contributors to the improvement of care setting transitions.

**Patient care plans and discharge or transition summaries.** A good part of the research reviewed examined ways to improve care setting transitions by way of identifying flaws that could be readily fixed in the way patient care plans are put forward and discharge or transition strategies are summarized. Various sources advocate for a clarification of the elements to be included in these documents, and call for better and more timely access to the information contained therein (Coleman & Fox, 2004; Flora et al., 2012; King et al., 2013; Kripalani et al., 2007; National Transitions of Care Coalition, 2010a).

The research indicates that, in order for patient care plans and discharge or transition summaries to be effective, the accepting institution must receive accurate documents in a timely manner. However, ideas as to what constitutes “timely” for the receipt of critical patient information varied. Kripalani et al. (2007) recommend that PCPs should be provided
with some information about the patient’s hospital stay on the day of discharge, with a detailed discharge summary following within the week. King et al. (2013) disagree with the proposal for same-day discharge summaries, proposing instead that essential patient information should be transferred, correctly and completely, at least 24 hours prior to patient discharge. They argue that to relay pertinent information well before discharge will allow the necessary time to ensure that appropriate medications and supplies are available on arrival.

King et al. (2013) also found that, even when discharge summaries were received at a skilled nursing facility in a timely manner, the amount of material nursing staff still had to sift through in order to find the necessary information, had an impact on the care setting transition of the patient. As a result, King et al. developed a list of essential discharge information required from the discharging hospital in order to allow the skilled nursing facility staff at the other end an effective means by which to develop and implement a safe plan of care for patients following their discharge (Appendix F). While the extent and content of this list may not be applicable to a primary care setting, many elements were nonetheless deemed essential for improving the care of transitioning palliative patients by their PCP.

Coleman and Fox (2004) emphasize that—while standardizing the content of the information in patient care plans and discharge/transition summaries has been proven useful for improving care transitions according to a number of sources (King et al., 2013; Kripalani et al., 2007; National Transitions of Care Coalition 2010a)—in order for clinicians to fully understand the type of information needed in these documents, staff from the discharging or transferring care setting should first visit the accepting care setting. These writers indicate that patient information can vary between care settings, and that the best way to identify
various needs is for clinicians to take a proactive approach to gathering this information.

Parry et al. (2006) undertook a study to explore ways in which patient-centered coaching interventions could improve the care setting transitions of chronically ill older adults. One intervention used a dynamic patient health record as a self-management tool. This personal tool provided a means for patients to accurately keep track of health information, and relay this information to their various care settings. The patients who used this tool reported feeling “more prepared to function as active participants in health care interactions because they had a resource they could reference” (p. 48). Using this intervention strategy allowed Parry et al. to remove an important barrier to the provision of accurate and timely discharge summaries and patient care plans by having the patients themselves provide practitioners with the pertinent health information. A limiting feature of this strategy, in the context of the palliative population, would be the progressive decline in the functionality of the patient, leaving the patient faced once more with a barrier to timely, up-to-date information transfer. Alternatively, many palliative patients have informal caregivers who could assist patients with the updating of their personal health records.

It is worth remembering that palliative patients and their caregivers are often the only constant in the transitioning process between care settings. The National Transitions of Care Coalition (2010b) advocates that patients and their caregivers actively participate in the development of patient care plans. Similarly, Coleman and Fox (2004) recommend that care plans incorporate patient goals and preferences for both the short and long term. Palliative patients and their PCP, or other members of their health care team, can work together to formulate these goals and make sure that these patient-centered plans are maintained.

In summary, accurate and up-to-date care plans that benefit from patient and
caregiver input, timely delivery of discharge or transition summaries, and a dynamic patient health record self-management tool are identified in the research reviewed as effective means whereby the transition of patients between settings of care can be facilitated.

Effective medication reconciliation. Improper or absent medication reconciliation is identified in the literature as a major contributing factor to adverse patient events during times of transition. The primary goal of medication reconciliation is to eliminate adverse outcomes for patients transitioning between care settings. Proposals to ensure that medication reconciliation occurs emphasize the necessity for obtaining an accurate medication history, comparing preadmission medication regimens with discharge orders, and involving a pharmacist in the process of medication reconciliation.

Proper medication reconciliation must begin by establishing a thorough history of medication use. Kripalani et al. (2007) acknowledge that the process of obtaining an accurate medication history is dependent on gathering information from a number of different sources—which include the patient and their caregivers, a list of medications provided by the patient, an inventory of prescription bottles, outpatient medication records, and prescription refill information acquired from community pharmacies. In a follow-up to the Pharmacist Intervention for Low Literacy in Cardiovascular Disease (PILL-CVD) study conducted in 2010, Cawthon et al. (2012) reiterate the importance of compiling a detailed medication history from multiple sources; in this way, discrepancies in the medication regimen are more likely to show up. Kripalani et al. (2007) note that the most effective mitigator of discrepancies is the involvement of both the patient and caregiver, along with to the PCP and pharmacist. Since practitioner time is often an issue when resolving medication discrepancies, the combined scrutiny of the PCP, pharmacist, registered nurse, or other care
team members could well contribute to a resolution of potential discrepancies.

The National Transitions of Care Coalition (2010a) has developed a standard set of essential data elements that should be incorporated into all medication reconciliation forms or patient charts. The key elements are “demographics; medications (active and chronically); other medications (over the counter, herbal remedies, dietary supplements); medical history; primary physician; and validation” (“Medication Reconciliation Through Electronic”, para. 4). Having a standardized checklist of key elements will help clinicians compare pre-admission medication lists with discharge lists (Kripalani et al., 2007; LaMantia et al., 2010). Research indicates that clinicians do recognize that best practices should include an examination of the actual medication bottles and an overall simplification of medication regimens (Schoenborn et al, 2013). If a thorough medication history was taken during the admission process, creating a coherent list of discharging medications should be less complicated than current practices allow.

A number of studies identify pharmacists as key contributors to effective medication reconciliation (Cawthon et al., 2012; Chhabra et al., 2012; Flora et al., 2012; LaMantia et al., 2010; National Transitions of Care Coalition, 2010a). For example, 72.8% of patients who participated in a phone survey following the PILL-CVD study rated speaking to a pharmacist at the time of hospital discharge as the most helpful intervention (Cawthon et al., 2012). These patients found that an explanation given by the pharmacist on how to take their medications, and how to prevent or manage side effects, as the most pertinent information they were able to obtain at the time of their discharge. Patients also reported feeling more comfortable about discussing the medication with their health care providers once they had met with the pharmacist (Cawthon et al., 2012).
By contrast, a systematic review conducted by LaMantia et al. (2010) found no intervention prior to discharge that clearly improved the transmission of accurate medication lists between hospitals and nursing homes. At the same time, initial evidence from the same study suggests that a review of patient medication lists by a pharmacist after their transfer, together with a detailed transfer medication list, will improve accurate and appropriate medication use. Although ongoing medication reconciliation is necessary to ensure safe patient care, it is also important to remember that redundancy in the workload would be mitigated by multidisciplinary communication (Kripalani et al., 2007).

The National Transitions of Care Coalition (2010b) emphasize the importance of HIT in increasing the efficacy of medication reconciliation. Improving medication reconciliation—specifically, by taking medication histories and reconciling preadmission and discharge medication regimens (with pharmacist involvement whenever possible), as well as integrating HIT into the process—is found to be among the most important ways to improve patient transitions.

Although the goals of care often differ in the palliative context, the importance of medication reconciliation also applies to care setting transitions for palliative patients. In these situations, many regular medications are discontinued following a palliative diagnosis; these are often replaced by medications for symptom management, either in the process of admission to a care facility or in the process of organizing care at home. Proper medication reconciliation for palliative patients has the same implications for safety as it does for transitioning elderly or chronically ill patients.

Adequate health information technology. Implementing standardized HIT at the system level would remove many barriers that currently exist when it comes to ready access
to patient information, thereby improving care setting transition processes in significant ways for palliative patients. A recent study by King et al. (2013) identified that much work still needs to be accomplished at the national level in order to allow health systems to share information across care settings. Although improvements to HIT are ongoing, electronic communication can only be effective if all of the sites in a patient’s continuum of care have access to both sending and receiving information (National Transitions of Care Coalition, 2010b). Patients and their caregivers are at the centre of a health care constellation, which only works well when the full complement of practitioners and settings—the PCPs, hospitals, nursing homes, home health care organizations, rehabilitation centers, hospice, and other services—are well integrated (National Transitions of Care Coalition, 2010b). Given the complexity of this care constellation, the necessity for a phased-in, universal electronic health record system seems self-evident.

Although a number of sources reviewed refer to the need to improve HIT as part of developing better care setting transitions, only the National Transitions of Care Coalition (2010b) put forward recommendations for actual implementation. They specify that, in order for HIT to be effective, all electronic health records must incorporate specific elements—such as patient preferences and advanced directives, sharable and interactive plans, referral tracking, preferred provider, compliance tracking, and consultants’ recommendations/care plans. Unfortunately, none of the sources provide a clear outline of steps to be taken at the system level that would allow implementation to move forward and connect health care settings through HIT. Despite the numerous challenges to developing more effective care setting transitions at the system level, there is solid evidence to indicate that implementing HIT would certainly reduce the complexity of these transitions.
**The Clinician Level**

According to the sources reviewed, the barriers to effective care setting transition processes at the clinician level reside in the lack of care provider continuity, poor clinician-to-patient communication, and inadequate practitioner training in cross-site collaboration and care setting transitions. The following interventions for improvement at the level of the clinician emerged from the sources reviewed.

*Care provider or care team continuity.* A significant theme in the findings is that improvement in care setting transitions are likely to come about when there is continuity in communication between the various care providers. A number of sources indicate that continuity between specific practitioners leaves patients transitioning between settings with a sense of safety and being well cared for (Coleman, Parry, Chalmers, & Min, 2006; Flora et al., 2012; King et al., 2013; Parry et al., 2006; Schoenborn et al., 2013). Since a patient's PCP is unlikely to remain as the main care provider at each care setting, effective communication between sending and receiving providers is essential (Coleman & Fox, 2004; LaMantia, et al., 2010; National Transitions of Care Coalition, 2010a; Schoenborn et al., 2013). While most sources appear to focus on practitioner continuity, Coleman and Fox (2004) indicate that other professionals, such as case managers, are also often unaware when their patients are transitioned between care settings; they emphasize that continuity must occur between all health care providers right across the care continuum and that this continuity must be in place whether the care teams are formally connected or not.

Schoenborn et al. (2013) found that, when interviewed, clinicians were well aware of the benefits of clinician communication to patient care. In this study, PCPs indicated that they coached patients on how to effectively advocate for clinician-to-clinician
communication, advising them to make sure that the next provider in the process contact the patient’s PCP or care team. In particular, they instructed patients to give the next provider the PCP or care team’s contact information, and to insist that this provider contact the patient’s PCP or care team to advice them of the patient’s admission.

The above study also points out that, unfortunately, even though clinicians are aware of the importance of clinician-to-clinician communication, improvements at this level still need to be formalized. The barriers identified in this area include issues relating to time shortage, high staff turnover, fragmented care, lack of standardized communication systems, and difficulty accessing other clinicians (Schoenborn et al., 2013). Clinicians in this study also identified barriers to the flow of knowledge due to inadequate feedback, and inadequate education related to care setting transitions—both factors that contributed to poor clinician-to-clinician communication.

Additionally, improving provider accountability during patient transfer is seen as a way to enhance continuity in care setting transitions. The providing practitioner at the originating site needs to maintain responsibility for patient care until the receiving provider can assume care (Flora et al., 2012). While agreeing in principle, Schoenborn et al. (2013) argue that sustaining organizational accountability of care providers during transitions will continue to be difficult as long as individual provider roles remain ambiguous. Some time ago, Coleman (2003) also pointed out the ambiguities in the role of care providers in the post-discharge period, but actual recommendations with respect to the ways that clinicians can become more accountable have not been explored until now. In short, Schoenborn et al. (2013) recommend two ways to reduce ambiguity—that providers share patient
responsibility, and that they engage in dynamic feedback. Further research in this area is called for.

Finally, patients who participated in the “Care Transitions Intervention” consistently cited the importance of the continuity provided at each point of transition (Coleman et al., 2006; Parry et al., 2006). This intervention used advanced practice nurses as transition coaches, whose main function was to facilitate patient and caregiver roles, rather than behave in the traditional manner associated with a PCP. The transition coach initially met with patients in the hospital prior to their discharge, then completed a home visit 48–72 hours after their discharge, followed by three telephone calls over the next 28 days. Not only was there a significant improvement in patient and caregiver satisfaction during the transition period, but also findings showed a decrease in patient re-hospitalization at 90 and 180 days. Coleman et al. (2006) emphasize that, “the findings suggest that the continuity of the coaching relationship fostered a sense of caring, safety, and predictability about the transition” (p. 1826).

In the context of health care in BC, using advanced practice nurses such as NPs as transition coaches for palliative patients may not be the best use of health care resources. This relates to issues of sustainability and cost benefit in these models of care. Although the composition of the health care system and the specific roles of practitioners in BC may not lend themselves to the implementation of a transitions coach model, the idea that continuity of patient care is important during care setting transitions, is nonetheless a valid finding. Maintaining continuity of care, either through one provider across the sites of care, or through effective clinician-to-clinician communication, can greatly improve care setting transition processes for palliative patients.
Clinician and patient communication. The literature reviewed discusses the importance of continuous practitioner and patient communication throughout the transition process. Often patients, especially those who are chronically ill or palliative, are transferred between care settings with little notice. Coleman and Fox (2004) recommend that all PCPs engage their chronically ill patients in a dynamic care setting transition planning discussion. Since many palliative patients have multiple comorbid conditions, it follows that palliative patients would also benefit from care setting transition planning. Even though Coleman and Fox did not specifically cite evidence that care setting transition planning improves patient perspectives of care transitions, results from a following study confirm that the positive effects of the transition coach initiating conversation with the patient prior to discharge improved patient satisfaction and thereby contributed to effective transitions (Coleman et al., 2006).

The research indicates that there is a significant advantage to having ongoing communication between provider and patient by way of follow-up visits and telephone calls. There is also consensus between a number of sources, agreeing that all patients discharged from a care setting should have a timely follow-up appointment with their PCP (Kripalani et al., 2007; LaMantia et al., 2010; Perry, Kramer, & Coleman, 2006). Two sources recommend that a follow-up visit be scheduled within two weeks of discharge (Kripalani et al., 2007; Rooney & Arbaje, 2013).

Considering that palliative patients can experience a number of adverse events in the post-discharge period (including death), a belated follow-up with a PCP weeks after discharge is often inappropriate. One way to impart clinician and patient communication prior to a formal clinic visit is with a follow-up telephone call (Kripalani et al., 2007; Parry et
al., 2006; Rooney & Arbaje, 2013). Kripalani et al. (2007) recommend that a telephone call a few days after discharge can help bridge the gap between inpatient and outpatient. Rooney and Arbaje (2013) prefer that a telephone call be made within 48 hours of discharge in order to optimize patient safety. They also found that a Master’s-level of education for social workers forms an ideal fit when it comes to making these post discharge telephone calls. Kripalani et al. (2007) note that a physician, an advanced practice nurse, a registered nurse, a pharmacist, or a care manager can equally and effectively carry out a telephone follow-up. In any event, the professional making the call must be familiar with the patient’s recent course of events and medical history.

Aside from the timing of communication, practitioners must know how to communicate information effectively to patients and caregivers. Kripalani et al. (2007) set out a number of proposals on how best to relay information to patients. First, written material should be provided for all important instructions, since patients are unlikely to fully remember verbal directions. Next, and perhaps most important, practitioners must confirm that patients are comprehending the instructions by asking the patient to show their understanding by repeating the discussion. Additionally, practitioners should ask open-ended questions and allow patients and caregivers ample time to discuss concerns or ask questions. Finally, patients should also be asked to demonstrate any new self-management skills required for their care.

While these communication interventions may be applicable to palliative patients soon after diagnosis, it is also understood that, as palliative status progresses, effective clinician-to-patient communication often becomes a mute point. However, in this event, clinician communication can change focus and involve informal caregivers where present.
Clinician training in care setting transitions and cross-site collaboration. Even though many clinicians complete a number of years of formal education prior to becoming independent practitioners, the current curricula generally does not provide education with respect to care setting transitions or cross-site collaboration (Coleman & Fox, 2004; King et al., 2013; National Transitions of Care Coalition, 2010a). Coleman and Fox (2004) note that, “practitioners generally lack training on how to execute effective transfers and often do not recognize their role in transition planning” (p. 34). Similarly, King et al. (2013) point out that accreditation guidelines for both physicians and nurses are quite vague when it comes to the type or extent of care setting transitions training required. Given the inadequacies in practitioner training when it comes to care setting transitions, more formal and detailed accreditation guidelines need to be implemented to ensure a minimum standard of practitioner knowledge and training with respect to care setting transitions (Coleman & Fox, 2004; King et al., 2013).

Correspondingly, the National Transitions of Care Coalition (2010a) has developed education strategies for improving the understanding of health care providers with respect to the impact that poor transitions have on patients, and has set out guidelines designed to ensure that transitions between care settings are more effective. These education tools can be found on the National Transitions of Care Coalition website. While practitioners often encounter time restraints when it comes to their ongoing education, the tools available on the National Transitions of Care Coalition website are readily obtainable and can be used to achieve continuing competencies for maintaining licensure. Acquiring this knowledge will undoubtedly facilitate a better match between patient needs and care setting services. In summary, it is possible to achieve greater success in the management of care setting
transitions for palliative patients by way of inter-practitioner communication and collaboration, clinician-to-patient communication, and further clinician education.

**The Patient Level**

Barriers to effective care settings transition processes at the patient level include insufficiencies in the patients’ knowledge and inadequacies in patient empowerment. Although many of the proposals for improving care setting transitions at the patient level ultimately depend on clinician and system components, this review of the research revealed several scenarios where patients have the potential to contribute to optimal care setting transitions. Since most palliative patients eventually are unable to be solely responsible for their own care, the interventions at the patient level would also apply to informal caregivers. As patients progress towards death, the subject for, or recipient of, education and empowerment becomes the family or the caregiver. The ultimate goal—to have patients and caregivers take a more active role in the delivery of their health care—can only be achieved by improving patient knowledge and ways in which patients gain empowerment (Coleman et al., 2006).

**Improving patient and caregiver education.** Research shows that the areas where patient and caregiver education is inadequate concerns the management of medication, condition management and, again, in the area of managing care transitions—specifically, knowing what is required of patients during these transitions (Coleman et al., 2006). Sources emphasize that clinicians should provide patients with a complete written list of medications to be taken, complete with indications and instructions for administration (Kripalani et al., 2007; Parry et al., 2006). As well, clinicians should ensure that patients and caregivers know
and can recognize the warning signs of a worsening condition that could necessitate the need for further medical evaluation (LaMantia et al., 2010; Parry et al., 2006).

The National Transitions of Care Coalition (2010b) advises that the active engagement of both patients and their caregivers in the patients’ health care is essential and should occur during every health care encounter. This ongoing engagement has the potential to lead to a significant improvement in their knowledge and their understanding of current medications. Sources emphasize that patients should always maintain a detailed medication list in order to minimize errors (Flora et al., 2012). Cawthon et al. (2012) found that patients feel more comfortable about discussing their medications with PCPs after they have spoken with their pharmacist and have some knowledge of their medications. Again, patient preparation prior to a transfer is an essential component of effective care setting transitions. Since the majority of transitions between care settings are acute and unplanned, preparation for transition is best done prior to any patient transition, as part of overall palliative care planning (Coleman & Fox, 2004). Primary care practitioners are essential to this education and planning process, especially since the practitioner often has a consistent and ongoing relationship with the patient.

It is perhaps no surprise that Cawthon et al. (2012) found that patients with inadequate or marginal medical knowledge were significantly more likely to report the benefits of further education than those patients with adequate medical knowledge. This finding reinforces the necessity to improve patient knowledge given that patients with minimal medical knowledge are more likely to have difficulty navigating the health care system. All the sources consulted agree that clinicians play a pivotal role in the development of patient education. However, apart from highlighting the importance of clinician
involvement, the sources lacked suggestions as to other ways in which patients could be given the means to improve their medical knowledge.

Improving patient education in the palliative population may well contribute to improving the process of care setting transitions early on following their diagnosis, but as the palliative status progresses and patients become less able to participate in their care, patient education becomes less useful. Nonetheless, it is important to keep in mind that findings indicate that reasonably well-educated patients and/or caregivers naturally improve care setting transitions, and this would also apply to the palliative population. Further exploration of the education tools and concepts that PCPs use to improve patient education—such as communication and appropriate knowledge exchange—will be outlined in the discussion.

Patient and caregiver empowerment. While increasing patient knowledge is a critical component of patient empowerment, studies have found that encouraging active patient participation is the primary means by which patients become empowered. A number of sources stress the importance of encouraging patients and caregivers to take a more active role during their care setting transitions (Cawthon et al., 2012; Coleman & Fox, 2004; Coleman et al., 2006; Flora et al., 2012; Kripalani et al., 2007; National Transitions of Care Coalition, 2010a; Parry et al., 2006). Again, it is important to remember that, as palliative status progresses, patients are often unable to participate in their own care, which presents a potential limitation to the relevance of this finding in the context of palliative care. Patient empowerment soon after diagnosis is critical to bettering patient care and care setting transitions, while caregiver empowerment is beneficial as palliative patients progress towards death.
Next, patients should be encouraged to participate in the formulation of their care plans and their transition plans. In order for this to work, clinicians must provide patients with the resources and tools to enable patients to understand the aspects of care that should be included in these plans (Coleman & Fox, 2004). Accordingly, Coleman and Fox (2004) developed a patient transfer checklist for patients or caregivers to complete prior to leaving a care facility (see Table 2).

Table 2 Patient transfer checklist

<table>
<thead>
<tr>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been involved in decisions about what will take place after I leave the facility</td>
</tr>
<tr>
<td>I understand where I am going after I leave this facility and what will happen to me once I arrive</td>
</tr>
<tr>
<td>I have the name and phone number of a person I should contact if a problem arises during my transfer</td>
</tr>
<tr>
<td>I understand what my medications are, how to obtain them, and how to take them</td>
</tr>
<tr>
<td>I understand the potential side effects of my medications and whom I should call if I experience any of them</td>
</tr>
<tr>
<td>I understand what symptoms I need to watch out for and whom I should call if I experience any of them</td>
</tr>
<tr>
<td>I understand how to keep my health problems from becoming worse</td>
</tr>
<tr>
<td>My doctor or nurse has answered my most important questions prior to my leaving the facility</td>
</tr>
<tr>
<td>My family or someone close to me knows that I am coming home and what I will need once I leave the facility</td>
</tr>
<tr>
<td>If I am going directly home, I have scheduled a follow-up appointment with my doctor, and I have transportation to this appointment (Coleman &amp; Fox, 2004, p. 39)</td>
</tr>
</tbody>
</table>


Coleman et al. (2006) also found that encouraging patients and caregivers to take a more active role in their care transition ultimately reduced hospital admission rates. Although their study did not consider palliative patients, the prediction that patient and caregiver empowerment would lead to fewer care setting transitions for palliative patients is plausible. If palliative patients and caregivers are given the necessary education and skills to manage appropriate care, the number of patient transfers could potentially decrease.
As noted above, Coleman et al. (2006) implemented the use of a personal health record as one of the interventions during the “Care Transitions Intervention”. This record was developed as a tool to empower patients to take an active role in their transitions by way of increasing their knowledge while also serving as a reminder of questions to be asked at the next appointment. It turned out that only half of the participants regularly used the personal health record, but those who did reported that they felt prepared to participate more actively in their health care interactions (Parry et al., 2006). The reasons given for the lack of participation included a preference for an existing system, ambivalence about managing one’s health, a general sense of disempowerment, and a lack of support or validation from health care providers.

Furthermore, the National Transitions of Care Coalition (2010a) emphasizes that improved transitional communication can indeed be achieved through patient and caregiver empowerment, and encourages practitioners to provide patients with the necessary tools and resources. At the same time, it should be noted that patients and caregivers need time to process information, weigh options, ask questions, and express concerns (Coleman & Fox, 2004). In any event, findings indicate that supportive practitioner attitudes will reinforce patient and caregiver self-management (Parry et al., 2006). Likewise, Cawthon et al. (2012) note that, “by educating patients on self-care and empowering them to have a more informative discourse with their providers, it may be possible to improve patient self-management after hospital discharge” (p. 322).

While common themes noted within the literature were used to systematically discuss the ways in which to improve care setting transitions for palliative patients, it is important to note that real change can only occur with improvements to all interconnected areas as a
whole. LaMantia et al. (2010) summarize it this way: “Effective transitional care can be understood as a summation of several key steps: communication between sending and receiving clinicians, preparation of the caregiver and patient for the transition, reconciliation of the patients’ pre- and post hospitalization medication lists, arrangement of a plan for follow-up of outstanding tests and for an appointment with the receiving physician, and discussion of warning signs that might necessitate further more-emergent medical evaluation” (p. 781).

**Limitations**

There are a number of limitations to this review. An obvious limitation is the potential for publication bias: only articles published in English were used for this review, and only sources published after the year 2000 were included. The majority of the articles were published in the United States and describe health care from an American standpoint. Only one report from England, and no pertinent Canadian studies surfaced in the searches or bibliographies. Even though studies pertaining to care setting transitions of palliative patients in Belgium, Italy, and the Netherlands were identified, these studies did not specifically address ways to improve the care setting transition processes. Given the American standpoint, one can ask whether these findings can be generalized to the PCPs functioning within the health care setting in BC. For example, daily PCP practice as it occurs in BC may not be conducive to the implementation of some of interventions described in the literature reviewed.

It is also possible that key material pertaining to care setting transitions of palliative patients were inadvertently omitted, despite a thorough and methodical search. As well, it is possible that material was unintentionally excluded where studies did not refer to
improvements for care setting transitions in their title or abstract. The fact that some of the
data discussed here did not arise out of qualitative or quantitative studies might be seen as a
potential limitation, but this can be offset by the credibility and authority of the sources—
which include some of the most influential authorities with respect to modern research in
care setting transitions in the United States. Their extensive experience, insights, and
observations in the field of care setting transitions added greatly to the findings of this
project.

Additionally, the palliative patient population presents certain limitations on the
possibility of conducting studies, not to mention the obvious ethical barriers to the usual
methodology used in double-blind clinical trials or randomized controlled trials. This limits
certain kinds of evidence available for consideration and puts a greater burden on qualitative
research that involves patient and/or caregiver surveys and interviews. As well, some studies
used a limited number of participants, which may be seen to compromise the external
validity of the findings.

Only one study reviewed here pertained definitively to care setting transitions for
palliative patients, while the remaining material focused on care setting transitions of
chronically ill older adults, or care setting transitions in general. This literature indicated
potential limitations to implementing the proposed interventions in the palliative population,
but nonetheless revealed possibilities where PCPs could improve care setting transition
processes for palliative patients. Additionally, although the literature recognized that
inadequate practitioner time creates barriers to effective care setting transitions, the sources
did not otherwise address ways to rectify or alleviate this shortcoming in current care
practices. Since there is often an increase in the number of care setting transfers experienced
by palliative patients as their illness progresses, the ultimate outcome of a care setting transition, namely death, is much different than the outcome of a care setting transition in a resolvable acute episode.
CHAPTER 5

Discussion

The primary objective of this project was to examine the ways in which nurse practitioners (NPs), as community based primary care providers in BC, can better facilitate more effective care setting transition processes for adult palliative patients. The findings from this project make a strong case for improvements to better facilitate effective care setting transition processes. Improvements need to be made at three levels: the system, the clinician, and the patient. Communication, collaboration, health information technology, medication reconciliation, education, and empowerment surfaced as common themes across all three levels. These themes have been set out below to provide a framework for the discussion of the literature. The following section will synthesize the evidence as it relates to NP practice, and will conclude by identifying a number of key recommendations for the ways in which NPs can improve the care setting transition processes for adult palliative patients.

How NPs can Facilitate Effective Communication at Each Level

Times of transition between care settings for palliative patients are often emotional, confusing, and difficult for patients and caregivers. Effective communication has a direct impact on patients' quality of care, safety, and overall satisfaction with the care they are receiving (Australian Government, 2014). Facilitating effective communication as a means by which care setting transitions can be improved is a common theme that arises in all three levels—system, clinician, and patient. This commonality indicates that improving communication at all levels is fundamental to the well-being of transitioning patients. Although the ways in which communication can be improved differ for each of the three
levels, there appears to be a universal conviction that effective communication contributes to improved patient outcomes. The literature on the whole recognizes the positive effect of effective communication at every level during palliative care. For example, the Canadian Hospice Palliative Care Association (2013) stated that effective communication is "fundamental to both the process of providing care, the team-based approach to person and family-centered care and the efficient function of a hospice palliative care organization (p. 9).

At the system level, the findings indicate that one of the barriers to effective care setting transitions is the disconnect between care settings. Research findings propose that improving connectivity between care settings by way of effective communication embedded in a standardized and multidisciplinary approach is likely to improve care setting transitions (Chhabra et al., 2012; Coleman, 2003; Coleman & Fox, 2006; King et al., 2013; Kripalani et al., 2007; Rooney & Arbaje, 2013; Schoenborn et al., 2013). Nurse practitioners can improve the connection between care settings for palliative patients with a number of interventions that have been found effective.

At the outset, the palliative patient’s NP or care team must be notified soon after the patient is admitted or transferred (Schoenborn et al., 2013), allowing ample time for patient care planning. Nurse practitioners can facilitate this process by providing direct contact information (usually a telephone number) to all palliative patients, and by strongly encouraging each patient to have the care setting contact his or her health care provider. Since no one provider will be available at all times across the board, facilitating effective communication between the accepting care setting and the patient’s care team will increase the quality of the overall communication process required to improve care setting transitions.
Next, and perhaps the most important proposal at this level is the call for clinicians to view communication between care settings as a two-way dialogue rather than the more traditional one-way transfer of information (Kripalani et al., 2007). A two-way dialogue between care settings opens the lines for further communication and connectivity. Open dialogue can be achieved when NPs and other health care providers take the initiative to build relationships with supporting health care providers through multidisciplinary collaboration, either by way of telephone or in-person exchanges.

There is also a call for the standardization of information about patients that is being communicated between care settings. The National Transitions of Care Coalition (2010b) clearly sets out the minimum criteria that would be included in an effective transition record. See Table 2. Variation across the province, in terms of care setting processes, and care population characteristics, means that information pertaining to admission and discharge may also vary. For this reason, all health care providers working with palliative patients should have input into the patient information necessary to ensure patient safety and enable practitioners to do their jobs correctly.

Finally, the findings emphasize that all practitioners must remember the value of accurately and comprehensively relaying patient information to and from palliative care settings. The most effective and timely way to relay information such as care plans, transition records, and discharge summaries is through EMRs (National Transitions of Care Coalition, 2010b). Further discussion on the role NPs can play in facilitating more comprehensive health information technology (HIT) will be addressed later in this discussion.

At the clinician level, the literature reviewed indicates that effective communication amongst health care providers is crucial for ensuring that patients receive safe, high-quality
care. However, within most health care settings, effective communication is hampered by a number of barriers. Discussions regarding patients are often conducted within a busy work environment where providers are dealing with many patients and numerous tasks. Instructions are sometimes communicated over the phone rather than in person, and often this information has to be presented quickly. Many health care settings deal with this by way of a using a common tool while communicating by phone—“Situation, Background, Assessment and Recommendation” or SBAR (Canadian Foundation for Healthcare Improvements, 2014). SBAR is a technique that allows providers to quickly and effectively share pertinent patient information in a concise and structured format (Appendix G). SBAR was originally used in health care for nurse to physician communication, but has more recently been found to be beneficial for communication between all health care providers (Canadian Foundation for Healthcare Improvements, 2014; Lenert, Sakaguchi, & Weir, 2014; Vardaman et al., 2012).

Another tool which clinicians can utilize to improve communication specific to palliative patients is the Palliative Performance Scale (Appendix A). This scale is an 11-point scale designed to measure patients' performance status in 10% decrements from 100% (healthy) to 0% (death) based on five observable parameters: ambulation, ability to do activities, self-care, food/fluid intake, and consciousness level (Victoria Hospice Society, 2006). The Palliative Performance Scale serves as a way for clinicians and multidisciplinary health care teams to communicate with each other, as this scale can be used as a guide to help in initiating and facilitating conversations about a palliative care or end-of-life care transition.
The material reviewed also stresses that clinicians must remain accountable to the palliative patient—even after transfer to a receiving care setting has occurred—until the next provider has been made aware of the patient’s needs, and full care for the patient has been assumed (Flora et al., 2012; Schoenborn et al., 2013). Schoenborn et al. (2013) point out that accountability can be achieved through shared patient care and improved clinician-to-clinician communication. For this reason alone, it is important that clinicians shift their focus from patient discharge to patient transfer. Improving HIT and using standardized patient records at the system level will also improve communication at the clinician level.

In summary, NPs can implement the interventions necessary to improving communication at the clinician level by using communication assistance tools such as SBAR and the Palliative Performance Scale, by remaining accountable to patients during transfer, by being attentive to standardizing patient information, and by making use of available HIT.

At the patient level, the findings indicate that effective NP-to-patient communication is required for the provision of reasonable care setting transitions for palliative patients. There are many steps NPs can take to improve communication with palliative patients. Slort et al. (2011), in their examination of palliative patient perspectives, outlined a number of areas that patients identified as facilitators of primary care practitioners (PCP) and patient communication in general. Their findings indicate that patients want the PCPs to be accountable to the patient. Patient perception of PCP accountability was influenced by factors such as home visits, being able to access the PCP by way of the telephone, experiencing continuity in care, and feeling that the PCP had allotted adequate time. Slort et al. also note that PCPs should practice active listening. This means encouraging patients to express their emotions, allowing for silence during conversations, helping patients articulate
their concerns, and being sensitive to patient signals. Patients also identified honesty as fundamental to effective communication with their PCPs: they indicated that PCPs need to be open, honest, prepared to share, straightforward, friendly, respectful, empathetic, and to able to treat each palliative patient like a person. Although many NPs already communicate with these attributes, in an increasingly busy health care setting it remains important to be mindful in the course of patient interactions.

The literature specific to care setting transitions identified the importance of providing timely follow-up care. Rooney and Arbaje (2013) found that improved outcomes were realized when patients discharged from a care setting were contacted by telephone within 48 hours, during which a clinic visit would be arranged to take place, ideally within two weeks from the date of discharge. In order to accomplish this kind of prompt connection, NPs can ask office staff, for example medical office assistants, to contact discharged palliative patients in order to schedule both the follow-up telephone calls and the clinic appointments. In summary, effective communication at the system, clinician, and patient levels leads to better care delivery decisions, a more effective plan for patient care, greater patient and caregiver satisfaction, and less stress for everyone involved.

How NPs can Improve Collaboration

Multidisciplinary collaboration is more important than ever before given the diversity of skilled medical practitioners and the increasingly specialized compartments within the health care system. It became evident in the course of this review that collaboration at the system, clinician, and patient levels is among the requirements necessary to improve care setting transition processes for palliative patients. Although most NPs understand that collaboration is invaluable in order to provide effective care setting transitions for palliative
patients, the ways in which collaboration can be facilitated might not be immediately evident. Through formal education preparation and clinical practice as collaborators and team members, NPs are both able to collaborate with other team members as well as take on a leadership role within their clinical practice (Burgess & Purkins, 2010; CRNBC 2013a). The following discussion will provide insight as to how NPs can improve collaboration at each level.

The literature reviewed indicates that, at the system level, it is beneficial to organize both a multidisciplinary discharge planning team as well as a palliative care team. This would help ensure and improve patient safety and quality of care during care setting transitions (DeMiglio & Williams, 2012). Many communities in BC have both discharge planning teams and palliative care teams. Often these teams are composed of health care providers specially trained in palliative care. Minimally, these would include nurse practitioners, physicians, registered nurses, and social workers. To further improve care setting transitions, PCPs can enter into a collaborative partnership with a palliative care team (DeMiglio & Williams, 2012). For rural or remote BC communities that do not have a sufficient complement of health care providers needed to form a palliative care team, Doctors of BC supports a provincial palliative care telephone line (BC Medical Journal, 2010). This line, which NPs can access, is staffed by hospice palliative care physicians, and offers health care providers advice about symptom management, psychological issues, or difficult end-of-life decision-making.

At the clinician level, care setting transitions could further benefit from collaboration between NPs and clinicians at the accepting or discharging care settings. Nurse practitioner visits to care settings, such as hospice, long-term care homes, and hospitals, will foster a
better understanding of the care and services these settings offer, as well as help the NPs to understand the scope of other health care providers (Coleman & Fox, 2004). In order to be effective, collaboration between health care providers must be knowledgeable and grounded in a relationship of trust. Nurse practitioners can secure these relationships by being prepared to learn more about their team members. When practitioners work to understand the specific role they are better able to appreciate the specialized knowledge particular to each team member, In this way a team achieves a level of confidence in one another’s skills and abilities, and trusting relationships are formed (Zillich, McDonough, Carter, & Doucette, 2004).

The patient level. Research indicates that there is also a need, at the patient level, for PCPs and palliative patients and their caregivers to collaborate more effectively in order to improve their care setting transitions. Much of the needed collaboration can be achieved by way of shared decision-making. Slort et al. (2011) identified a number of interventions that would provide PCPs and patients with the opportunity to work collaboratively. These include discussions concerning the meaning of the medical condition, how to choose an appropriate method of care, negotiating palliative care options, deciding on treatment options together, and the necessity of being proactive in general. Patient input into completing their medication histories and assisting with medication reconciliation will promote an improvement in care setting transitions (Kripalani et al., 2007). Patient input has been shown to be effective when discrepancies arise in a patient’s medication regimen particularly when their input is combined with outside resources such as pharmacists, PCPs, and other health care providers (Kripalani et al., 2007).
Collaboration between NPs and palliative patients has been shown to improve the process of transition between care settings when collaboration includes patient-centered advance care planning along with care setting transition planning. According to Council et al. (2012) patient-centered care plans provide a tool to create “negotiated goals that incorporate the values of the patient and the health care team into a mutually agreed upon explicit action plan” (p. 191). A patient-centered care plan must ideally be goal-based, identify patient strengths, and be continuously managed. Council et al. identified three integral components to patient-centered care plans: medical summaries, patient snap shots, and goal directed action plans developed by both the patient and the NP. Although there are challenges when it comes to formulating and making use of patient-centered care plans—at both the clinician and patient levels—there is strong evidence to support the proposition that there are significant benefits to integrating care plans into care setting transitions (King et al., 2013; Kripalani et al., 2007). In summary, through collaboration at the system, clinician, and patient levels, NPs can further remove barriers and facilitate effective care setting transitions care for palliative patients.

**How NPs can Improve Health Information Technology**

Many of the improvements proposed for care setting transitions can be facilitated by standardized HIT. For example, communication between care settings and health care providers would be enhanced, continuity of care would be better maintained, timely access to vital patient information such as care plans, discharge, and transitional summaries would be significantly increased, and medication lists would be kept up to date more efficiently (National Transitions of Care Coalition, 2010b). HIT improvements must take place at both the system and clinician levels.
A consideration of solutions to government-related issues around HIT implementation are beyond the scope of this project, it is nonetheless useful to summarize the barriers to HIT implementation at the system level in order to highlight the larger issues at play. At the system level, significant barriers to widespread HIT use are in place due to both economic and structural factors. The economic requirements for implementing widespread interconnected HIT are significant to say the least. Under the current information sharing structure, HIT systems are characteristically fragmented, attempting with little success to combine a multiplicity of EMR programs from multiple different providers (Kaye et al., 2010). Within BC, there are a number of different EMR vendors supplying systems across and within health authorities. This proliferation of multiple vendors has created a significant barrier to the potential for connectivity across EMR systems. In summary, although HIT in Canada is far from adequate, Canada Health Infoway (2012) continues to push for improvements in this area under the umbrella of federal funding.

How NPs Can Facilitate Adequate Medication Reconciliation

Inadequate medication reconciliation is known to create any number of adverse patient outcomes. The literature review reveals a resounding collective call for adequate medication reconciliation; improving on this is particularly important in care setting transitions. Barriers that stand in the way of better NP implementation of medication reconciliation include inadequate HIT at the system level, incomplete medication histories and poor discharge reconciliation with preadmission medications at the clinician level, and minimal patient or caregiver involvement at the patient level. The following discussion will outline ways for NPs to improve medication reconciliation for transitional palliative patients at each of the three levels.
First, at the system level, it is evident from the literature that, when improvements are made in certain aspects of HIT, the process of medication reconciliation is enhanced. Present HIT allows providers to input information about current and discontinued medications, but does not allow providers to compare medications or rectify discrepancies (Bassi, Lau, & Bardal, 2010). Next, HIT should include interoperable EMRs that are accessible to clinicians across all palliative care settings (Bayoumi, Howard, Holbrook, & Schabort, 2009). Finally, effective HIT would require that prescribers be provided with secure access to patients’ drug plan profiles (Bayoumi et al., 2009). As HIT expands, medication reconciliation will continue to improve, and each of these interventions will contribute to better outcomes for palliative patients during transitions.

At the clinician level, obtaining a complete and accurate medication history on each palliative patient creates a foundation on which to build further medication reconciliation (Kripalani et al., 2007). This is best accomplished using a multidisciplinary approach that includes patients, caregivers, pharmacists, and other involved health care practitioners. This approach will not only ensure that an accurate history is obtained, but will also help to eliminate redundant work. Additionally, PCPs should perform a detailed in-home medication review involving actual medication bottles, blister packs, vitamins, and other supplements (Bayoumi et al., 2009). While practitioner time constraints create a barrier to this comprehensive approach, research shows that the education and skills possessed by pharmacists make them ideal providers of accurate medication histories (Brown, Maack, & Mehling, 2013). Accordingly, through PCP and pharmacist collaboration, accurate and complete medication histories for palliative patients can be obtained (Kelly et al., 2013).

Ultimately, if the patient’s NP or a pharmacist is not available, registered nurses or other care
team members knowledgeable about medications could compile an accurate medication history.

In order to reconcile medications intended for administration between palliative admissions and discharges, health care providers must ensure accurate and timely communication of patient medications. This begins with proper documentation, which is ideally accomplished through the use of standardized medication reconciliation forms, which can be accessed through the National Transitions of Care Coalition and the American Pharmacists Association. An example of a standardized medication reconciliation form can be found in Appendix H. These forms must be updated with each medication change and provided to the patient, as well as to current and future health care providers, and to the patient's PCP (American Pharmacists Association, 2012).

Finally at the patient level, it is important that NPs involve palliative patients (and their caregivers) in their own medication management. Patients should also be encouraged to use personal medication lists as well as contribute to an accurate medication history (Bayoumi et al., 2009). Personal medication lists, in cases where patients or their caregivers are able to manage them, provide an up-to-date record that patients can carry with them, allowing them to share this important information with all health care providers in the course of each care setting transition. Although some patients may be reluctant to make use of this personal tool (or unable, in cases where illness has advanced), NPs nonetheless need to convey to the patients and their caregivers the value of carrying an accurate medication list through the continuum of care (American Pharmacists Association, 2012). An example of a personal medication list can be found in Appendix I. In summary, the extent to which NP practice is able to incorporate these strategies and interventions into their practice will
determine the degree of improvement in the reconciliation of medication. With improvements in this area, some of the barriers currently standing in the way of effective care setting transitions will be removed.

**How NPs can Further Patient Education and Empowerment**

As knowledgeable members of the health care community, and advocates for improved patient outcomes, NPs, along with other health care providers, have the teaching skills necessary to educate palliative patients and their caregivers. The findings underscore the importance, at the patient level, of improving patient knowledge through specific education initiatives, particularly in the areas of care setting transitions, medication administration, and warning signs of worsening condition (Coleman et al., 2006). In order to improve care setting transition processes, NPs are advised to encourage newly diagnosed palliative patients to schedule a clinic appointment specifically to address care planning. This kind of planning (which includes care setting transition planning) should take place prior to any transition or admission, and is important for preparing palliative patients, their caregivers, and their care team for these likely events. Care setting transition planning, whether carried out by the NP, PCP, or another qualified health care provider familiar with the patient, should be shared with the care team when completed.

While ongoing patient education is necessary, it is also important to remember that all patient and caregiver education must be provided at a level and in a manner that maximizes the patient understanding of the content, and is also appropriate to their needs, to the stage of their palliative journey, and to their capacity to take it in (CRNBC, 2013a). These findings indicate that it is important for NPs to recognize and take advantage of all opportunities to tailor and improve the means by which they communicate appropriate and helpful health
information in order to improve care setting transitions for palliative patients. Having the right knowledge allows patients and their caregivers to make informed decisions, it allows them to understand the need for the care setting transfer, and understand the process by which it occurs. This transfer of knowledge through education will work to maximize effective care setting transitions.

Similarly, patient empowerment is closely connected to improved patient education. Through education comes empowerment, and with empowerment comes self-care (Williams & Sidandi, 2001). The literature as a whole recognizes that patients benefit by receiving ongoing education from their health care providers. For example, Stajduhar et al. (2011) found that empowered palliative patients and their caregivers experienced increased comfort, felt more positive about their care experience, were less reliant on health care services, and had the potential to remain at home longer. The goal of patient empowerment is to promote independence, improve well-being, and increase patient satisfaction (Funk, Stajduhar, Purkis, 2010). Since informal caregivers often assume responsibility for the care of a patient as palliative status progresses, NPs need to empower both the palliative patients and their caregivers. This review of research findings indicates that, when patients feel empowered in the process of care setting transfers, their transitions felt less burdensome.

In general, palliative patients and their caregivers identified education, preparation, and reassurance as vital components of their sense of empowerment (Stajduhar et al., 2011). The literature also identifies the empowering effects of education when PCPs share their knowledge with a patient with respect to their disease, the expected progression of their illness, ways to problem solve, important health care resources, and ways to navigate the health care system. Studies also stress that PCPs should encourage patients to actively
participate in the formulation of care plans. Preparing patients and their caregivers by engaging them in planning and decision-making is also seen as an important contributor to patient empowerment. The implication is that providers must encourage patient and caregiver participation at every step along the way. This can be accomplished by allowing time for patients and caregivers to ask questions, weigh options, and express concerns. Funk et al. (2010) found that patients were reassured when PCPs advocate for the wishes of the patient, ease their fears, provide guidance with respect to handling crises, and show respect for, and acceptance of, patient and caregiver decisions.

When it comes to the care setting transitions for palliative patients, NPs need to go beyond the general considerations that have been identified above as productive for facilitating the empowerment of patient and caregivers. All palliative patients should be encouraged to formulate a dynamic self-management personal health record in collaboration with their PCPs because this record can also serve as a tool to promote independence and ease the transition process (Coleman et al., 2006). While a self-managed personal health record may be too burdensome for some palliative patients to sustain, the task can be extended to involve caregivers. Additionally, PCPs should provide palliative patients with Transfer Checklists during their care setting transition planning session (Table 2). This checklist will help patients or caregivers feel more prepared for the care setting transition.

Furthermore, patients also report that they feel a greater sense of empowerment when they perceive a supportive attitude on the part of the NP. It has been shown that, when patients and their family caregivers have a sense of empowerment, there is an increase in their self-care, which in turn has been shown to improve patient safety and satisfaction in the process of care setting transitions. This highlights the need for NPs to continually promote...
palliative patient empowerment. Nurse practitioners can further promote a sense of
empowerment by encouraging patients to ask questions, a process which has been shown to
improve medication accordance and accuracy, making action plans, and gathering patient
feedback (Lambert & Keogh, 2014).

It became evident in the course of this review that a multifaceted approach is required
in order to improve care setting transition processes for adult palliative patients.
Improvements need to be made at the system, clinician, and patient levels in order to better
enable NPs to provide effective care setting transitions. It is important to note that many of
the improvements must be made at the system level. It is also important to note that NPs
have the skills and education required to facilitate many of these improvements.

**Recommendations**

The overall purpose of this project was to identify recommendations with respect to
improving care setting transition processes for adult palliative patients that could be applied
to the practice of NPs in BC. Although this review only uncovered one useful study—that
looked specifically at improving care setting transitions for palliative patients— by
integrating the findings of the literature that looked at the needs of palliative patients with the
literature that looked at improvements of care setting transitions this review has been able to
provide a solid link between care setting transitions and the palliative population. While
some of the findings do not specifically apply to the palliative population, there is enough
overall evidence to allow the formation of solid recommendations at the education, research,
and practice levels. Correspondingly, integrating the following recommendations for NPs has
the potential to remove barriers that stand in the way of care setting transition processes and
thereby improve the transitional experience for palliative patients.
Recommendations for Education

Nurse practitioners, along with all other PCPs, are expected to maintain clinical and educational competencies. As part of the yearly renewal process for NPs through the CRNBC, all NPs must complete a minimum of three personal development activities. These activities can include attending educational forums or taking an academic credit course (CRNBC, 2014c). The findings reviewed here recommend furthering education in the areas of care setting transitions and cross-care setting collaboration. While it is often difficult for practitioners to find time for further education, the National Transitions of Care Coalition (2014) website provides quick reference tools to assist with care setting transitions.

Specifically, NPs should have the necessary training to be able to recognize the need for care setting transition education in the palliative population. Primary care practitioners must to be alert to the changing needs of their patients, aware of the appropriate times to discuss death and dying; they must also be able to facilitate conversations about patient and caregiver goals, values, and wishes. Much of this knowledge is acquired through clinical experience. With proper training, education, and clinical experience, PCPs in general and NPs in particular are more likely to have a positive impact on the care setting transition processes for palliative patients.

Recommendations for Future Research

A greater understanding of the care setting transition processes as it applies to the palliative patients is necessary in order to gain insight into the specific nature of palliative care setting transitions. Research is needed to identify the specific patient information necessary for palliative care plans and transitional summaries, as well as information that would contribute to the development of standardized palliative transitional plans.
Performance indicators for effective palliative care transitions need to be developed and implemented in order to evaluate which aspects of care contribute to furthering effective care setting transitions. Additionally, a consideration of the cultural aspects involved in palliative and end-of-life care is important; therefore, both international literature and further research in North America would be useful to further recommendations with respect to Canada’s culturally diverse population. Further, care settings transitions can be improved with further research into health information technologies that facilitate inter-institutional and inter-practitioner communication and collaboration.

Studies on how best to encourage patients and caregivers to serve as integral components in their multidisciplinary palliative care team are needed to help clinicians empower patients and caregivers to take an active approach in their health care. As well, research on how to best foster collaboration between clinicians, health care settings, and patients or caregivers is needed to improve care setting transition processes at all levels. Further, more research into the utilization of transitional care coaches could benefit palliative patients and if this model is effective, sustainable, and cost effective.

**Recommendations for Practice**

As advances in health care are made, and patient needs become more complex, time in the NP’s workday becomes more limited. While there are numerous interventions that NPs could implement into their practice in order to improve care setting transition processes for adult palliative patients, the time required to do so may not fit with the realities of clinical practice. The following recommendations (Table 3) identifies key ways in which NPs can improve care setting transition processes for palliative patients that can be integrated into the usual workflow of daily practice.
Table 3 Recommendation for practice: Ways for nurse practitioners, as primary care providers to improve the care setting transition processes for adult palliative patients

<table>
<thead>
<tr>
<th>COMMUNICATION</th>
</tr>
</thead>
</table>
| 1. Prepare patients to advocate for communication between accepting facility and care team  
   • Provide patients with contact information and processes to reach members of their care team  
   • Educate patient and caregivers on the importance of advocating for the accepting care facility to inform their NP and care team of their care setting transfer  
| 2. Use care plans and discharge or transfer summaries to share timely information between providers.  
| 3. Ensure patients receive a telephone call within 48 hours of transition back to the community setting, with an in-person appointment with the NP or appropriate team member within 1 week.  
   • Ensure that the NP/Team Medical Office Assistant schedules both the telephone and in-person appointment, prior to or just after transition  
| 4. Obtain a written and/or verbal patient discharge or transfer summary  
   • Request discharge information prior to patient discharge or transfer  
   • Locate discharge summary if is not received  
| 5. Initiate and maintain two-way dialogue between NP/care team and current patient care setting  
| 6. Utilize SBAR as needed for telephone interactions with care setting providers.  
| 7. Utilize the Palliative Performance Scale as a way to help in initiating and facilitating conversations about a palliative care or end-of-life care transition  

<table>
<thead>
<tr>
<th>COLLABORATION</th>
</tr>
</thead>
</table>
| 1. Use a multidisciplinary team-based approach  
   • Share and apply NP knowledge and skills related to collaboration and multidisciplinary care  
   • Learn the role of each team member, and those of providers caring for patient in other settings  
   • Ensure processes are in place to clarify provider accountability during care setting transitions  
   • Utilize team based approach to share care and workload related to patient care setting transitions  
   • Use two-way dialogue, when collaborating with other care providers  
|  

<table>
<thead>
<tr>
<th>HEALTH INFORMATION TECHNOLOGY</th>
</tr>
</thead>
</table>
| 1. Ensure all pertinent patient information is kept up-to-date in the EMRs, when available, and or written records and within personal patient tools  
   • Documentation in the EMR to be completed by all team members after each patient interaction  
   • Utilize Subsequent Patient Interactions Checklist (Appendix J)  
| 2. Advocate for EMR use and HIT improvements in one’s own jurisdiction  

<table>
<thead>
<tr>
<th>MEDICATION RECONCILIATION</th>
</tr>
</thead>
</table>
| 1. Obtain and maintain an accurate and comprehensive medication history  
   • Collaborate with a pharmacists when required  
   • Utilize Subsequent Patient Interactions Checklist (Appendix J)  
   • All care team members and caregivers to update medication list during each visit.  
| 2. Assist patient/caregiver to utilize personal medication list  

<table>
<thead>
<tr>
<th>PATIENT AND CAREGIVER EDUCATION AND EMPOWERMENT</th>
</tr>
</thead>
</table>
| 1. Include care planning, including care setting transition planning as part of the education and care for each newly diagnosed palliative patient  
   • Schedule a care planning appointment for all newly diagnosed palliative patients  
   • Utilize Care Planning Checklist for Care Setting Transitions (Appendix K)  
| 2. Provide education at a level and in a manner that maximizes understanding of the content provided, and is appropriate to their needs, stage of their palliative journey, and capacity  

The above table summarizes the areas of improvement needed with respect to communication, collaboration, health information technology, medication reconciliation, and patient/caregiver education and empowerment. A Care Planning Checklist for Care Setting Transitions (Appendix K) and a Subsequent Patient Interaction Checklist (Appendix J) were developed as tools to be utilized by care teams in an attempt to save practitioner time and ensure all important elements of the care setting transition process are addressed.

Additionally, an example of a standardized medication reconciliation form is included in Appendix H and an example of a personal medication record is included in Appendix I.

In the beginning of this paper I recalled personal feelings associated with my experiences as a registered nurse with respect to ineffective care setting transitions for palliative patients. Through the implementation of these recommendations for practice, it is my hope that all health care providers, and specifically NPs, can effectively address issues related to transition processes when transitioning palliative patients between care settings.

Specifically, difficulty tracking down missing information from hospital discharge summaries, or the untimely transfer of this information, can be improved through utilizing a multidisciplinary team based approach to collaboration, ensuring written or verbal patient discharge or transfer summaries are obtained, maintaining a two-way dialogue between practitioners, and ensuring all pertinent patient information is kept up-to-date in the EMRs or written records.

Next, health care providers can have improved communication with the patient’s NP or care team if patients are better prepared to advocate for this communication between the accepting facility and the care team, and if a two-way dialogue between the NP or care team and the current patient care setting is initiated early after transfer and maintained throughout
the patient's stay. Medication reconciliation can be improved through health care providers obtaining and maintaining a comprehensive and accurate medication history, assisting patients to utilize personal medication lists, and ensuring patients receive a follow-up telephone call within 48 hours of transition back to the community setting.

Finally, speaking with patients and caregivers about their needs and wishes is seen as a way to improve patient education and empowerment. Patients need to be involved with their palliative care planning, care setting transition planning, and personal care plan formulation. The education provided must be at the level and in a manner that maximizes the patient's understanding. As well, patients and their caregivers will feel empowered through the utilization of their personal medication record and personal health record. Adopting the process changes recommended will improve the quality of palliative care setting transitions and provide NPs as PCP the efficiencies to better provide care to this patient population.

**Conclusion**

Transitions between care settings for palliative patients are often burdensome and troubling for both patients and caregivers. As palliative illness progresses, the number of transfers between care settings often increases. This integrated literature review has examined how NPs can facilitate effective care setting transitions for adult palliative patients. A comprehensive literature search was conducted using electronic databases, pertinent journals, references lists, and guidelines. As a result, 16 publications were selected for review.

The publications were critically analyzed for their strengths, limitations, relevance, and potential contributions to improving care setting transition processes in the context of palliative care. The key findings were grouped under the system, clinician, and patient levels.
Specifically, improvements needed within the health care delivery system have been identified, including connecting care settings by way of improved communication strategies, improved and timely delivery of care plans and discharge or transition summaries, effective medication reconciliation, and adequate health information technology. At the clinician level, improvements are needed in terms of caregiver continuity, clinician and patient communication, and clinician training in care setting transitions and cross-site collaboration. Finally, improvements at the patient level aimed at improving the process of transitions between care settings involved contributions from clinicians, and included improving patient and caregiver education and encouraging patient empowerment.

The most pertinent recommendations for NP practice have been made in the areas of communication, collaboration, medication reconciliation, health information technology, and patient and caregiver education and empowerment. It is the hope of the writer that, with implementation of the practice recommendations, NPs will be better able to utilize their time effectively in the preparation for, and management of care setting transitions of palliative patients.

This review also identified important gaps in the literature with respect to effective care setting transitions specific to palliative patients. For this reason, recommendations for future research include improving care setting transitions specifically for palliative patients, creating performance indicators to identify effective transitions, and further incorporating patients and caregivers into the transitional process. As well, recommendations for education are based on the identified barrier of insufficient clinician knowledge about care setting transitions and collaborative practice.
In conclusion, this integrative review identifies current barriers and proposes facilitators of effective care setting transition processes for palliative patients. This project adds to the current literature on improving care setting transitions by focusing on the role of NPs as PCPs. Most important, this project identifies specific practice strategies that can be implemented by NPs and other PCPs in order to further facilitate effective care setting transition processes for adult palliative patients.
References


Appendix A

Palliative Performance Scale (PPSv2) Version 2
(Victoria Hospice Society, 2006)

<table>
<thead>
<tr>
<th>PPS Level</th>
<th>Ambulation</th>
<th>Activity &amp; Evidence of Disease</th>
<th>Self-Care</th>
<th>Intake</th>
<th>Conscious Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Full</td>
<td>Normal activity &amp; work No evidence of disease</td>
<td>Full</td>
<td>Normal</td>
<td>Full</td>
</tr>
<tr>
<td>90%</td>
<td>Full</td>
<td>Normal activity &amp; work Some evidence of disease</td>
<td>Full</td>
<td>Normal</td>
<td>Full</td>
</tr>
<tr>
<td>80%</td>
<td>Full</td>
<td>Normal activity with Effort Some evidence of disease</td>
<td>Full</td>
<td>Normal or reduced</td>
<td>Full</td>
</tr>
<tr>
<td>70%</td>
<td>Reduced</td>
<td>Unable Normal job/work Significant disease</td>
<td>Full</td>
<td>Normal or reduced</td>
<td>Full</td>
</tr>
<tr>
<td>60%</td>
<td>Reduced</td>
<td>Unable home/house work Significant disease</td>
<td>Occasional assistance necessary</td>
<td>Normal or reduced</td>
<td>Full or Confusion</td>
</tr>
<tr>
<td>50%</td>
<td>Mostly Sit/Lie</td>
<td>Unable to do any work Extensive disease</td>
<td>Considerable assistance required</td>
<td>Normal or reduced</td>
<td>Full or Confusion</td>
</tr>
<tr>
<td>40%</td>
<td>Mostly in Bed</td>
<td>Unable to do any activity Extensive disease</td>
<td>Mainly assistance</td>
<td>Normal or reduced</td>
<td>Full or Drowsy + Confusion</td>
</tr>
<tr>
<td>30%</td>
<td>Totally Bed Bound</td>
<td>Unable to do any activity Extensive disease</td>
<td>Total Care</td>
<td>Normal or reduced</td>
<td>Full or Drowsy + Confusion</td>
</tr>
<tr>
<td>20%</td>
<td>Totally Bed Bound</td>
<td>Unable to do any activity Extensive disease</td>
<td>Total Care</td>
<td>Minimal to Irrelevant</td>
<td>Full or Drowsy + Confusion</td>
</tr>
<tr>
<td>10%</td>
<td>Totally Bed Bound</td>
<td>Unable to do any activity Extensive disease</td>
<td>Total Care</td>
<td>Mouth care only</td>
<td>Drowsy or Coma + Confusion</td>
</tr>
<tr>
<td>0%</td>
<td>Death</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Instructions for Use of PPS (see also definition of terms):

1. PPS scores are determined by reading horizontally at each level to find a "best fit" for the patient which is then assigned as the PPS score.

2. Begin at the left column and read downwards until the appropriate ambulation level is reached, then read across to the next column and downwards again until the activity/evidence of disease is located. These steps are repeated until all the columns are covered before assigning the actual PPS for that patient. In this way, "heavier" columns (columns to the left of any specific column) are "stronger" determinants and generally take precedence over others.

Example 1: A patient who spends the majority of the day sitting or lying down due to fatigue from advanced disease and requires considerable assistance to walk even for short distances but who is otherwise fully conscious level and good intake would be scored at PPS 30%.

Example 2: A patient who has become paraplegic and quadriplegic requiring total care would be scored at PPS 30%. Although this patient may be placed in a wheelchair (and perhaps seem initially to be at 20%), the score is 30% because he or she would be otherwise totally bed bound due to the disease or complication if we were not for caregivers providing total care including wheelchair. The patient may have normal intake and full consciousness.

Example 3: However, if the patient in example 2 was paraplegic and bed bound but still able to do some self-care such as feed themselves, then the PPS would be higher at 40% or 50% since he or she is not totally care.

3. PPS scores are in 10% increments only. Sometimes, there are several columns easily placed at one level but one column does not seem better at a higher or lower level. One then needs to make a "best fit" decision. Choosing a "half" value of PPS 40% for example, is incorrect. The combination of clinical judgment and "best fit" principles is used to determine whether 40% or 50% is the most accurate score for that patient.

4. PPS may be used for several purposes. First, it is an excellent summarization tool for quickly describing a patient's current functional level. Second, it may have value in criteria for work load assessment or other measurements and comparisons. Finally, it appears to have prognostic value.

Appendix B
Overall Search Strategy

ELECTRONIC DATABASES SEARCHED:
- CINAHL
- MEDLINE Ovid
- PsycINFO
- Cochrane Reviews
- Journal of Palliative Medicine
- PsycINFO
- Journal of Palliative Medicine
- Cochrane Reviews
- Journal of Palliative Care
- Social Work Abstracts
- Generations: Journal of American Society on Aging
- BCM Palliative Care
- Journal of American Geriatrics Society

STAGE 1
All results from electronic databases screened by title, and potentially relevant articles were identified based on inclusion and exclusion criteria.
N=100

STAGE 2
The abstracts of the remaining database articles were screened
N=67

STAGE 3
All potential articles in step 2 re-read in detail for appropriateness.
N=16

JOURNALS SEARCHED
- Palliative Medicine
- Journal of Palliative Medicine
- Journal of Palliative Care
- Generations: Journal of American Society on Aging
- BCM Palliative Care
- Journal of American Geriatrics Society

GOOGLE SCHOLAR
N=0

REFERENCE LISTS
N=5

GUIDELINES
The National Transitions of Care Coalition
N=2
Appendix C

Results Obtained From the Databases Searched

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<th></th>
<th></th>
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<tr>
<td>SEARCH TERMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Hospice Care OR Palliative care OR Terminal Care OR End-of-life care] AND [Care transition* OR Patient transfer* OR Transfer, discharge OR Care setting transition]</td>
<td>85</td>
<td>114</td>
<td>6</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Transitional programs AND Care transition*</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Transitions between care settings</td>
<td>12</td>
<td>17</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Care transition*</td>
<td>Used above</td>
<td>Used above</td>
<td>33</td>
<td>Used above</td>
<td>2</td>
</tr>
<tr>
<td>TOTALS</td>
<td>143</td>
<td>131</td>
<td>39</td>
<td>25</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL: After duplicates removed</td>
<td>139</td>
<td>80</td>
<td>31</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>DATA BASES TOTAL:</td>
<td>346</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After DUPLICATES removed</td>
<td>272</td>
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</tr>
<tr>
<td>Kept after reading TITLE:</td>
<td>100</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Kept from ABSTRACTS:</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Appendix D

Table of Evidence

The level of evidence indicates the study design used by the investigators to assess the effectiveness of an intervention, and reflects the degree to which bias has been eliminated by the study design (National Health and Medical Research Council, 2000). The following table of evidence was used with the different levels outlined below (LoBiondo-Wood, Haber, Cameron, & Singh, 2013).

**Level I:** Systematic review or meta-analysis of randomized controlled trials (RCTs), evidence informed clinical practice guidelines based on systematic reviews

**Level II:** A well-designed RCT

**Level III:** A controlled trial without randomization (quasi-experimental study)

**Level IV:** Single non-experimental studies, case-control, correlational, cohort studies

**Level V:** Systematic reviews of descriptive and qualitative studies

**Level VI:** Single descriptive or qualitative studies

**Level VII:** Opinion of expert authorities or reports of expert committees

<table>
<thead>
<tr>
<th>Author, Date, &amp; Country</th>
<th>Level of Evidence</th>
<th>Population</th>
<th>Focus of Study</th>
<th>Sample</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Cawthon et al. (2012) USA | VI Qualitative Telephone surveys | Male and female, mostly Caucasian, median age of 63 who were within 30 days of previously participating in the PILL-CVD study | The participants’ assessment of different components of the previously done RTC to reduce medication error with care setting transitions | 125 Survey participants | • Findings of feeling comfortable with discussing medication with out patient providers was increased across patients with both low and high health literacy | • Relatively small sample size
• Excluded all patients who did not manage own medications
• Limited health literacy of sample was already lower than national average
• Study did not adjust for which pharmacist provided the intervention, how long the counseling sessions were, or is the pharmacist contacted patient after discharge |
<table>
<thead>
<tr>
<th>Author, Date, &amp; Country</th>
<th>Level of Evidence</th>
<th>Population</th>
<th>Focus of Study</th>
<th>Sample</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Coleman (2003) USA      | VII Opinion of expert authorities | Persons with continual complex care needs being transitioned between care settings | Identify the problems with transitions, manifestations of poor transitions, barriers to effective transitions, and elements for effective transitions | Not defined | - Peer reviewed journal article  
- Author is an expert in the field of transitional care  
- Provides solid, referenced barriers and solutions to transitional care  
- Discusses possible needs for future research  
- Included over 100 academic resources | - Results could not be pooled across studies because of the differences of outcomes considered in each  
- Possible studies were missed during inclusion and exclusion phase |
| Coleman & Fox (2004) USA | VII Opinion of expert authorities | Practitioners caring for patients during care transitions | Recommendations for practitioners on how to improve care transitions for patients | Not defined | - Authors are experts in the field of improving transitional care  
- Recommendations are consistent with those found in other literature | - Potential citation bias  
- Potential interpretation bias  
- Very few references cited as this is more of an opinion piece  
- Many recommendations set forth with little outside referencing |
| Coleman, Parry, Chalmers, & Min (2006) USA | II RCT | Hospitalized patients 65 years or older, with 1 of 11 selected chronic diseases, and originally from a community dwelling | Randomized to either usual care or to receive care transition interventions | 750 subjects | - Interventions and methods are clearly stated  
- Study was conducted in a clinical setting  
- Inclusion and exclusion criteria relevant and clearly stated  
- Research assistants were blinded | - Study participants were not blinded  
- Difficult to know if the interventions were applied equally to all participants  
- Unsure if the results could be sustained over time |
<table>
<thead>
<tr>
<th>Author, Date, &amp; Country</th>
<th>Level of Evidence</th>
<th>Population</th>
<th>Focus of Study</th>
<th>Sample</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Flora, Parsons, & Stattum (2011) USA | VII Opinion of expert authorities | Older adults begin transferred between care settings | How to better manage medications to improve care transitions | Not defined | - The finding of reduction in hospital rates is comparable to results found in previous studies | - Potential citation bias
- Potential interpretation bias |
| Hanratty et al. (2012) England | VI Qualitative In-depth interviews and thematic analysis | Patients between 69 to 93 years old, who moved between at least two care settings in the last three months, and who were thought to be in their last year of life | To explore older adults’ experiences as they move between places of care at the end of life, diagnosed with either lung cancer, heart failure, or stroke | 30 patients | - Despite the use of patients with different disease trajectories, the themes that emerged were still common to all conditions included
- Results showed little or no variation with socioeconomic status, thus data is relevant beyond the older adults interviewed | - Participants were identified from a range of health professionals leading to variation on the application of criteria
- Disproportionate number of interviewees were from disadvantaged areas
- Patients with lung cancer had fewer inpatient episodes |
| King et al. (2013) USA | VI Qualitative using grounded dimensiona analysis, focus groups, and in-depth interviews | Registered nurses representing five skilled nursing facilities, recruited through staff meetings, on-site flyers, and e-mail | Examine how skilled nursing facility nurses transition the care of individuals admitted from hospitals, the barriers they experience, and the outcomes associated with variation in the quality of transitions | 27 registered nurses | - Appropriate method was used for the type of data collected
- Analysis to collected data progressed through all three stages
- Analysis also occurred during the interviews to facilitate ongoing constant comparative analysis
- Strategies used to maintain rigor and ensure accuracy included the use of multidisciplinary | - The hospitals used may not be representative of all hospitals nationwide
- Did not include for-profit nursing homes since negative outcomes described by nurses in these homes may be exaggerated since they have lower staffing ratios
- No demographic information was collected on participating nurses
- Examined only transitions to skilled nursing facilities |
<table>
<thead>
<tr>
<th>Author, Date, &amp; Country</th>
<th>Level of Evidence</th>
<th>Population</th>
<th>Focus of Study</th>
<th>Sample</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Kripalani, Jackson, Schnipper, & Coleman (2007) USA | VII Opinion of expert authorities | Adult patients following discharge from hospital | Reviews challenges to providing high-quality care as patients leave the hospital | Not defined | • Peer reviewed journal article  
• Authors are experts in the field of transitional care  
• Provides solid, referenced barriers and solutions to transitional care  
• Analyzes the included literature well  
• Included over 100 academic references | So findings cannot be generalized to other settings  
• No direct participant observation took place, so there is no certainty about how often nurses encounter deficiency in quality information transferred  
• Subject to opinion bias |
| LaMantia, Scheune-mann, Viera, Busby-Whitehead, & Hanson (2010) USA | V Systematic literature review of qualitative studies | Literature search of 3 academic databases up to June 2008, reference lists, and suggestions by experts in geriatrics | Identify and evaluate interventions to improve communication of accurate and appropriate medication lists and advanced directives for transitions between nursing homes and hospitals | 5 articles | • Search strategy was developed in assistance with the assistance of a research librarian  
• Did not include pertinent journals in their search strategy | English only literature was used  
• The interventions in the included studies were performed in varying health care settings and with limited sample sizes  
• The sustainability of the results and effectiveness of the interventions found in the studies is unclear |
| National Transitions of Care Coalition (2010a) USA | VII Report from expert committee | Recommendations aimed at health care providers and established for improved | Improving care transitions through communication, medication reconciliation, care coordination, and | Not defined | • Collaboratively compiled with the input of health care professionals, academics, organizations, councils, and research | This is not a study  
• Subject to citation bias  
• Subject to opinion bias |
<table>
<thead>
<tr>
<th>Author, Date, &amp; Country</th>
<th>Level of Evidence</th>
<th>Population</th>
<th>Focus of Study</th>
<th>Sample</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Transitions of Care Coalition (2010b) USA</td>
<td>VII</td>
<td>patient care</td>
<td>performance measures</td>
<td>Not defined</td>
<td>Collaboratively compiled with the input of health care professionals, academics, organizations, councils, and research</td>
<td>This is not a study, Subject to citation bias, Subject to opinion bias</td>
</tr>
<tr>
<td>Parry, Kramer, &amp; Coleman (2006) USA</td>
<td>VI</td>
<td>Recommendatio ns aimed at health care providers and established for improved patient care</td>
<td>Using health information technology to improve transitions of care</td>
<td>32 participants</td>
<td>Purposeful sampling to contain equal proportions of gender and eligible diagnoses, All interviews were equal length and audio recorded</td>
<td>Limits in validity and generalizability include small sample size, social desirability effects, and the relatively high education level of the population perhaps further enhancing the self-management aspect</td>
</tr>
<tr>
<td>Rooney &amp; Arbaje (2013) USA</td>
<td>VII</td>
<td>Older adults transitioning between care settings</td>
<td>A need to look beyond the medical model of care to changing the culture of practice to support care transitions</td>
<td>Not defined</td>
<td>Peer reviewed journal article, Provides solid, referenced barriers and solutions to transitional care</td>
<td>This is not a study, Subject to citation bias, Subject to opinion bias</td>
</tr>
<tr>
<td>Schoenborn, Arbaje, Eubank, Maynor, &amp; Carrese (2013) USA</td>
<td>VI</td>
<td>Physicians, home health care administrative and field staff, social workers, nurse practitioners, physician assistants, and</td>
<td>To identify the perceived roles and responsibilities of clinicians during care transitions of older adults</td>
<td>40 health care professionals</td>
<td>Equal interview length was used for each participant, Saturation was reached for the findings presented</td>
<td>Study was conducted in one metropolitan area and might not represent transition experiences elsewhere, The interviews were done in 2005/2006 and might not reflect potential changes since</td>
</tr>
<tr>
<td>Author, Date, &amp; Country</td>
<td>Level of Evidence</td>
<td>Population</td>
<td>Focus of Study</td>
<td>Sample</td>
<td>Strengths</td>
<td>Limitations</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------</td>
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<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hospital case manager different community and hospital based facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E

Elements of an Ideal Transition Record
*(National Transitions of Care Coalition, 2010b)*

- Principal diagnosis and problem list
- Medication list, including over the counter/herbal, allergies, and drug interactions
- Clear identification of medical home/coordinating physician and contact information
- Patient’s cognitive status
- Test results/pending results and normal value ranges and explanation for patients
- Emergency plan and contact number and person
- Treatment and diagnostic plan
- Prognosis and goals of care
- Advanced directives, power of attorney, consent
- Planned interventions, durable medical equipment, wound care, etc.
- Assessment of family caregiver status
## Appendix F

**Hospital Discharge Information that Skilled Nursing Facility Nurses Need to Develop and Implement a Safe Plan of Care**  
* (King et al., 2013)  

<table>
<thead>
<tr>
<th>Contact Information</th>
<th>Allergies and Intolerances</th>
<th>Functional Status</th>
<th>Psychosocial and Behavioral Concerns</th>
<th>Treatments</th>
<th>Elimination status</th>
<th>Nutritional status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharging unit and telephone numbers</td>
<td>Medications</td>
<td>Ability to perform and assistance required activities of daily living</td>
<td>Personal interests/communication preferences</td>
<td>Wound care</td>
<td>Bowel or bladder incontinence</td>
<td>Swallowing of feeding concerns</td>
</tr>
<tr>
<td>Attending doctor and telephone number</td>
<td>Food</td>
<td>Sensory aids</td>
<td>Cognitive status</td>
<td>Peripherally inserted central catheter line care</td>
<td>Use of indwelling catheter and if and when it was discontinued</td>
<td>Appetite</td>
</tr>
<tr>
<td>Other providers who will manage specific conditions</td>
<td>Latex</td>
<td>Mobility status</td>
<td>Behavioral symptoms related to dementia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered nurse who cared for individual and telephone number</td>
<td></td>
<td>Level of assistance needed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse or partner and telephone number</td>
<td></td>
<td>Equipment requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family member(s) involved in care and telephone number</td>
<td></td>
<td>Fall risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power of attorney, if activated, and telephone number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Functional Status

- Ability to perform and assistance required activities of daily living
- Sensory aids
- Mobility status
  - Level of assistance needed
  - Equipment requirements
  - Fall risk

### Psychosocial and Behavioral Concerns

- Personal interests/communication preferences
- Cognitive status
- Behavioral symptoms related to dementia

### Treatments

- Wound care
- Peripherally inserted central catheter line care

### Elimination status

- Bowel or bladder incontinence
- Use of indwelling catheter and if and when it was discontinued

### Nutritional status

- Swallowing of feeding concerns
- Appetite

### Medications

- Discharge medication list
  - Drug names
  - Dose
  - Diagnosis and rationale for every medication
  - Start and stop dates and last dose administered
- Opioid prescriptions
- Significant medication changes
  - Change in psychiatric medications during stay
  - Change in opioid medications at discharge
  - Withdrawal of medications because of side effects

### Past Medical History and Hospital Stay

- Remarkable medical history
- Remarkable events during hospital stay
- Comorbidities
- Code status

### Sensory Aids

- Mobility status
  - Level of assistance needed
  - Equipment requirements
  - Fall risk

###Mobility status

- Level of assistance needed
- Equipment requirements
- Fall risk

### Nutritional Status

- Swallowing of feeding concerns
- Appetite

### Medications

- Discharge medication list
- Opioid prescriptions
- Significant medication changes

### Allergies and Intolerances

- Medications
- Food
- Latex

### Contact Information

- Discharging unit and telephone numbers
- Attending doctor and telephone number
- Other providers who will manage specific conditions
- Registered nurse who cared for individual and telephone number
- Spouse or partner and telephone number
- Family member(s) involved in care and telephone number
- Power of attorney, if activated, and telephone number
## Appendix G

**SBAR: Tool for Effective Communication Between Health Care Professionals**  
*(Canadian Foundation for Healthcare Improvement, 2014)*

<table>
<thead>
<tr>
<th>S: Situation</th>
<th>Briefly state the situation in 5-10 seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>B: Background</td>
<td>Identify the factors leading up to the current situation (pertinent history and objective data)</td>
</tr>
<tr>
<td>A: Assessment</td>
<td>State what you think the problem is (include severity)</td>
</tr>
<tr>
<td>R: Recommendation</td>
<td>State what you think needs to be done for the patient (include timeframe)</td>
</tr>
<tr>
<td>Category</td>
<td>Element</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>Demographic</td>
<td>Date of birth</td>
</tr>
<tr>
<td></td>
<td>ID Number</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>Contact information</td>
</tr>
<tr>
<td></td>
<td>Caregiver knowledge of patient</td>
</tr>
<tr>
<td></td>
<td>Date of assessment</td>
</tr>
<tr>
<td></td>
<td>Medications (active, taken chronically)</td>
</tr>
<tr>
<td></td>
<td>Other medications/OTC/herbal remedies</td>
</tr>
<tr>
<td></td>
<td>Other elements for consideration</td>
</tr>
<tr>
<td></td>
<td>Religious/cultural factors</td>
</tr>
<tr>
<td></td>
<td>Known medical conditions</td>
</tr>
<tr>
<td></td>
<td>Primary health care provider</td>
</tr>
</tbody>
</table>

### Suggested/Common Essential Data Elements for Medication Reconciliation

**Category:**
- **Source(s):**
  - Patient/caregiver
  - Interviewer
  - Other

**Element:**
- **Date of birth:
  - Universally available unique identifier information
- **ID Number:
  - Patient/caregiver
- **Gender:
  - Patient/caregiver
- **Contact information:
  - Patient/caregiver
- **Caregiver knowledge of patient:
  - Interviewer
- **Date of assessment:
  - Interviewer
- **Medications (active, taken chronically):
  - Patient/caregiver
- **Other medications/OTC/herbal remedies:
  - Patient/caregiver
- **Other elements for consideration:
  - Patient/caregiver
- **Religious/cultural factors:
  - |
- **Known medical conditions:
  - |
- **Primary health care provider:
  - |
<table>
<thead>
<tr>
<th>Category</th>
<th>Element</th>
<th>Source(s)</th>
<th>Barrier(s)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient access to medications</td>
<td>Prescription benefits, out-of-pocket costs, public and manufacturers' pharmaceutical assistance programs, patient/caregiver access to pharmacy (e.g., in rural areas or in neighborhoods where pharmacies won’t carry certain drugs, such as pain medications)</td>
<td>Patient/caregiver, health care setting personnel</td>
<td>Patient/caregiver lack of knowledge regarding, or difficulty navigating, benefit plans or programs, lack of patient/caregiver financial resources, gaps in public and manufacturers' pharmaceutical assistance</td>
<td>To ensure patients will be able to obtain prescribed medications.</td>
</tr>
<tr>
<td>ASSESSMENT/RECONCILIATION ON TRANSFER OF CARE</td>
<td>Name – generic/trade</td>
<td>MAR, health care setting personnel, physicians orders, universal order sheet</td>
<td>Incomplete documents, missing information, poor communication among care providers</td>
<td>Transfer information can serve as admission information on subsequent access to care. For home care or other self care setting, should include a plan to enhance adherence. Assignment of duration of use as appropriate for selected medication (e.g., end date, number of days). Examples include high risk medications such as anticoagulants following surgery, antibiotics, and steroids. Patient/caregiver should be able to reconcile new medication list with previous list if self medicating at home.</td>
</tr>
</tbody>
</table>
### Other elements for consideration

<table>
<thead>
<tr>
<th>Category</th>
<th>Element</th>
<th>Source(s)</th>
<th>Barrier(s)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications</td>
<td>Reason for use</td>
<td>Health care provider</td>
<td>Time to provide information, gather</td>
<td>Could be provided in portable document file, printed documents</td>
</tr>
<tr>
<td></td>
<td>Monitoring parameters,</td>
<td></td>
<td>documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient access to medications</td>
<td>Payer or other source</td>
<td>Patient/caregiver or</td>
<td>Patient/caregiver/health care setting</td>
<td>To ensure patient will be able to obtain medications prescribed on transfer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>health care personnel</td>
<td>personnel lack of knowledge</td>
<td></td>
</tr>
<tr>
<td>Point of contact</td>
<td>Person/Department</td>
<td>Health care provider, other</td>
<td>Poor coordination of transfer</td>
<td>Who to contact in the previous health care setting regarding medication issues</td>
</tr>
</tbody>
</table>

NTOCC realizes that health care systems vary in their method of data collection, access, and communication. This list of essential data elements is an attempt to provide a list of variables one should commonly and routinely consider when an individual is entering and leaving a different system or level of health care. Other elements are also offered for completeness when the resources and technology are available to complete the medication record.

Some important questions to consider with implementation of a medication reconciliation program are:

1. How is the information transferred or "harmonized" within the permanent medication record?
2. Who is responsible for signing off on the reconciliation tool?
3. Who is responsible to close the list and pass this document on to the next provider?
4. How is a provider reimbursed for completing this medication reconciliation form?
5. How is the information from the medication reconciliation tool at the provider's level to be transferred to the patient's personal medication list?

Rev. 4/17/08

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Note. From “Improving Transitions of Care: The Vision of the National Transitions of Care Coalition,” by National Transitions of Care Coalition, 2008, Appendix A. Copyright 2008, by NTOCC. Reprinted with permission from the National Transitions of Care Coalition, 750 First St, NE Suite 700, Washington DC 20002, www.ntocc.org
How to use My Medicine List:

"My Medicine List" can help you and your family keep track of everything you take to keep you healthy—your pills, vitamins, and herbs. Having all of your medicines in one place also helps your doctor, pharmacist, hospital, or other healthcare workers take better care of you.

Start using "My Medicine List" today!

1. With help from your healthcare professional, fill out the form.

2. In order to fill out the form, you need a list of all of your medicines or everything you take in front of you. Be sure you include medicine you take from all pharmacies that you use as well as any over-the-counter medicines, vitamins, herbs or minerals you may take.

3. Next, think about what you take in the morning, afternoon, around dinner time, and before you go to bed.

4. For every medicine (including ones you get without a prescription), vitamin or herb you take, you need to write down these things:
   - The name of what you take (like Tylenol, Acetaminophen 500 mg)
   - How much you take of this (1 pill, 3 drops, 2 puffs)
   - What it looks like (round, white and red, clear liquid)
   - How you take it (by mouth, with food, with a needle)
   - You started taking this on: (Sept. 15, 2007)
   - You will stop taking this on: (Sept. 30, 2007)
   - Why you take it (for my arthritis, for my heart, to lower cholesterol)
   - Who told me to use it (my internist, my rheumatologist)

Here's an example:

<table>
<thead>
<tr>
<th>Drug name (brand name, generic name, dose)</th>
<th>This looks like</th>
<th>How much?</th>
<th>How I take it</th>
<th>I started taking this on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zocor, Simvastatin, 40 mg</td>
<td>yellow pill</td>
<td>1 pill</td>
<td>with water</td>
<td>June 2001</td>
</tr>
</tbody>
</table>

5. Always keep this card with you. Fold it and keep it in your wallet or purse, so you will have it in case of an emergency.

6. Whenever you stop taking something or start taking something new, be sure to update "My Medicine List".

7. When you see the doctor, your pharmacist, have a test, or have to go to the hospital or emergency room, take this form with you.

8. If you have any questions about your medicines, contact your doctor or pharmacist.

My Medicine List was developed by the American Society of Health-System Pharmacists (ASHP) and the ASHP Research and Education Foundation through a sponsorship from Walgreens Cos, US, LLC 10/2007.
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# Subsequent Patient Interactions Checklist

<table>
<thead>
<tr>
<th>SUBSEQUENT PATIENT INTERACTIONS CHECKLIST</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Medications reconciled and updated in EMR.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Patient reminded to update Personal Medication Record.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Pharmacist consulted (as needed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient-Centered Care Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Care-Plan reviewed, updated in EMR.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Patient reminded to or assisted to update Personal Health Record.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (Teach back method)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Time allotted for patient questions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Patient concerns addressed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Follow up next visit:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix K

#### Care Planning Checklist for Care Setting Transitions

<table>
<thead>
<tr>
<th>CARE PLANNING CHECKLIST FOR CARE SETTING TRANSITIONS</th>
<th>(To be completed during overall care planning)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appointment scheduled</strong></td>
<td>□ Date and time:</td>
</tr>
<tr>
<td><strong>Patient Tools and Education:</strong></td>
<td>□ Discussion on care setting transitions.</td>
</tr>
<tr>
<td>(updated at each subsequent contact as needed)</td>
<td>□ Printed contact information and processes.</td>
</tr>
<tr>
<td></td>
<td>□ Transfer Checklist.</td>
</tr>
<tr>
<td></td>
<td>□ Copy of care plan including health record and medication list that can be updated by the patient or caregiver.</td>
</tr>
<tr>
<td></td>
<td>□ Pertinent easy-to-read educational materials.</td>
</tr>
<tr>
<td><strong>Provider Completed:</strong></td>
<td>□ Medication History.</td>
</tr>
<tr>
<td>(updated with each subsequent contact as needed)</td>
<td>□ Home visit completed (as needed, but appropriate provider).</td>
</tr>
<tr>
<td></td>
<td>□ Pharmacist consulted (as needed).</td>
</tr>
<tr>
<td></td>
<td>□ Patient-Centered Collaborative Care Plan.</td>
</tr>
<tr>
<td><strong>Patient/Caregiver Questions:</strong></td>
<td>□ Time allocated for patient questions.</td>
</tr>
<tr>
<td><strong>Items to be addressed at subsequent visits:</strong></td>
<td>□ Concerns addressed.</td>
</tr>
</tbody>
</table>