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# Examining nurse/patient relationships in care coordination: A qualitative metasynthesis

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ABSTRACT

*Background:* The combination of education, experience, skill mix, and frequency of nursing care provided has not been broadly studied from a systems theory perspective, in the care coordination process, or within transitions of care.

*Purpose:* To examine nurse/patient relationships (as a proxy for nurse dose) in the care coordination experience through a qualitative metasynthesis using a systems theory approach.

*Design:* The study was a qualitative metasynthesis with four sequential processes; (1) a systematic literature search to answer the structured research question, (2) formal quality appraisal and data immersion, (3) interpretive synthesis of the data within and across studies, and (4) re-situating the derived themes through reciprocal translation to each of the primary studies. CINHAL, Cochrane Library, Embase and PubMed were searched, and 159 articles retrieved. Eight articles remained after inclusion/exclusion criteria and quality review criteria were applied.

*Results:* Key themes were organized using a systems theory perspective (*Structure, Process and Outcomes*). The need for a coordinated nurse-patient relationship and the ability of the nurse to calm the complexity that occurs forms the *structure* of the relationship. The *process* includes having an awareness of challenges of the coordinated nurse-patient relationship and the transitions that occur, nurses going above and beyond, providing meaningful communication, and navigating system complexity. The *outcomes* are the value of a coordinated nurse-patient relationship and managing the illness/wellness journey.

*Conclusions:* The information from this metasynthesis provides an integrated view for nursing leaders and insight into factors that promote an effective and coordinated nurse-patient relationship.

## 1. Introduction

### 1.1. Problem

Chronic diseases (heart disease, stroke, cancer, type II diabetes, obesity, and arthritis) are the leading causes of death and disability for United States citizens, affecting an estimated 133 million people (Salmond & Echevarria, 2017). Individuals with chronic conditions often experience transitions between health care settings. These transitions, characterized as a change in the level and location of care with a hand-off from one healthcare team to another, often lead to conflicting instructions and medication discrepancies (Coleman, Smith, Raha, & Min, 2005).

Considerable research has generated understanding of how nurses and nursing care contribute to patient outcomes within the acute care context (Sidani, Manojlovich, & Covell, 2010a). A growing body of literature suggests effective nursing interventions during critical transitions of care hold promise to improve the health of the population and reduce overall costs for adults with multiple chronic conditions (Brown, 2009).

## 2. Background

Care coordination ((AHRQ) AfHRaQ, 2017), nurse dose (Sidani, Manojlovich, & Covell, 2010b), and transitions of care models (Van Cleave et al., 2013) are ways in which fragmented care can be integrated to prevent patient harm. A recent qualitative descriptive study (Davisson & Swanson, 2018) evaluated a rural nurse-led chronic disease management program and examined patient recruitment and retention issues since the program was initiated in 2013. One of the common

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themes that emerged was patients reported engagement in self-management activities because of specific program elements, such as beneficial nurse-patient interactions.

Care coordination is the deliberate organizing of patient care activities and sharing information among all participants concerned with a patient's care, in an effort to achieve safer and more effective care ((AHRQ) AfHRaQ, 2017). Care coordination is noted as one of the six priorities of the National Quality Strategy (NQS), a national effort to align public and private-sector stakeholders to achieve better health and healthcare for all Americans ((AHRQ) AfHRaQ, 2017).

Nurse dose is defined as the combination of education, experience, skill mix, and frequency of nursing care provided (Sidani et al., 2010a). In the acute care setting, greater nurse dose has been associated with decreases in patient morbidity, mortality, and healthcare costs (Manojlovich, Sidani, Covell, & Antonakos, 2011). In developing a theory to explain nurses' influence on outcomes, nurse dose is posited as a structural variable that impacts the processes and outcomes of nursing care (Manojlovich et al., 2011). Findings from one of the most significant studies from Europe suggested that every 10% increase in the number of nurses with Baccalaureate degrees compared to staffing with Associate and Diploma staff is associated with a 7% decrease in 30-day readmissions (Brooten & Youngblut, 2006). Nurses are credentialed to provide care coordination and are the link between the system demands of care coordination and the patient need for a safe transition. The concept of nurse dose has not been broadly studied from a systems theory perspective, in the care coordination processes, or within transitions of care. Researchers have primarily studied nurse dose quantitatively in the acute care setting using measures of cost, quality, and medication adherence (Manojlovich et al., 2011).

An emerging middle range theory – *Transitions Theory* (Meleis, Sawyer, Im, Hilfinger Messias, & Schumacher, 2000) notes that transitions, the transition conditions, and the patterns of response combined with a nursing therapeutic intervention have effects on the care experience which is critical to the success of care coordination (Meleis et al., 2000). Meleis and colleagues discuss that transitions are both a result of, and result in, changes in lives, health, relationships, and environments (Meleis et al., 2000). The authors decided to apply Transitions Theory to this study to inform the research elements since transitions in health care bring risks of negative effects on people's health and nurses have the skills to manage these risks. Transitions theory has been analyzed, its components identified and a framework to articulate and to reflect the relationship between these components has been defined (Meleis et al., 2000).

Current care coordination research is focused heavily on effects on quality outcomes, including readmission rates to acute care facilities, ways to reduce errors in medication compliance, and a process to ease transitions of care for those with chronic conditions. For this metasynthesis, the concepts of care coordination and nurse dose were combined into a construct called “coordinated nurse-patient relationships”.

Donabedian's (2005) Systems Theory approach to quality is described as a three-part approach to quality assessment that is possible only because good *structure* (facilities, equipment, staff, and organizational structure) increases the likelihood of good *process* (giving and receiving care), and good *process* increases the likelihood of a good *outcome* (effects of care on health status of patients and populations). This became the approach we used to synthesize the literature.

### 2.1. Purpose

The aim of the study was to synthesize the available qualitative literature on coordinated nurse patient relationships and explore the encounter from the perspective of nurses and patients in the care coordination experience.

### 2.2. Research question

Coordinated nurse patient relationships: What does a coordinated nurse patient relationship look like, using a systems theory approach from the perspective of nurses and patients in the care coordination experience? A systems theory approach (Donabedian, 2005) was used to synthesize the available qualitative literature on coordinated nurse/patient and caregiver relationships in the care coordination experience.

## 3. Methods

### 3.1. Design

The study was a qualitative metasynthesis with four sequential processes; (1) a systematic literature search to answer the structured research question, (2) formal quality appraisal and data immersion, (3) interpretive synthesis of the data within and across studies, and (4) resituating the derived themes through reciprocal translation to each of the primary studies. Three different methods of synthesis are used in meta-ethnography. One involves the translation of concepts from individual studies into one another, thereby evolving overarching concepts or metaphors. Noblit and Hare (1999) named this process reciprocal translational analysis (RTA).

Qualitative research offers the opportunity to listen to the voices of nurses and patients in care coordination. Qualitative metasynthesis, particularly thematic synthesis as an interpretive process, expands knowledge from existing primary qualitative research that can then build theoretical generalizability and is consistent with international standards for thematic synthesis reporting (Moher, Liberati, Tetzlaff, & Altman, 2009; Tong, Flemming, McInnes, Oliver, & Craig, 2012). Since are coordination and nurse dose has not previously been studied, we conducted a metasynthesis to evaluate the effects of nurse dose in the care coordination process.

### 3.2. Procedure

Databases were searched for qualitative studies published in English concerning nurse-patient relationships in care coordination and included CINAHL, Cochrane Library, Embase and PubMed. Key words searched included: (1) nurse patient relationships, and (2) transitions of care OR, nurse care coordination, and (3) qualitative. A ten-year limit was applied (2008–2018) to increase the sample size. After duplicates were removed, 159 articles were retrieved.

Criteria for inclusion into the metasynthesis were qualitative studies with content or applicability to adult patients, care coordination, care management, case management, and nursing care. The exclusion elements included content primarily focused on pediatrics, behavioral/mental health, oncology, and drug therapy. After inclusion and exclusion criteria were initially applied through title/abstract review, 67 publications remained. Two additional title/abstract reviews were conducted by the author on the literature for in-depth inclusion/exclusion criteria and an additional 56 publications were discarded from the sample, leaving 11 studies.

#### 3.2.1. Quality appraisal and data immersion procedure

The first step of a qualitative metasynthesis is data immersion using a critical review tool. A team of four researchers independently completed a formal critical analysis of the eleven qualitative studies using a quality appraisal tool by Letts, Law, Steward, Bosch, and Westmorland (2007). The research team utilized the tool to evaluate 17 domains of quality based on study design, qualitative methodology, sampling, data collection, data analysis, and credibility. Using this tool, we rated each study on the 17 domains of quality as either present or not present (Goins, Jones, Schure, et al., 2015). All research team members independently rated each study and then met via multiple video conferences to review the ratings and resolve any differences through

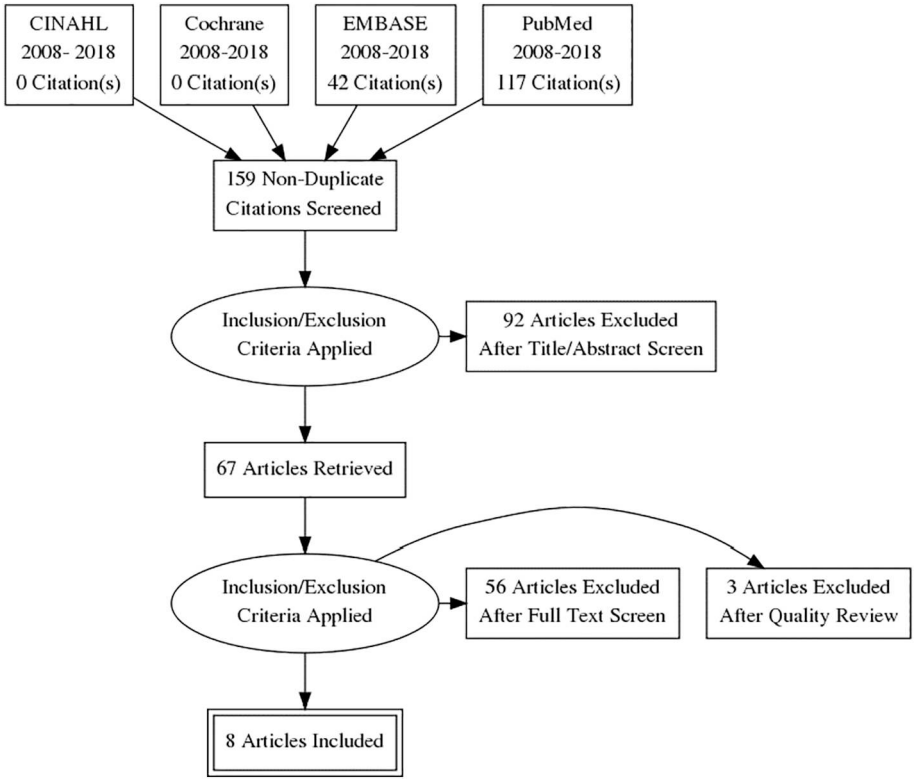


**Fig. 1.** PRISMA diagram – literature search process.

group discussion until consensus was achieved. The full research team agreed that three studies did not provide enough data or did not provide enough detail to interpret and understand the qualitative study and were excluded from the final sample. A total of eight studies were included in the final sample. A preferred reporting item for systematic reviews and meta-analyses (PRISMA) (Moher et al., 2009) was utilized. Fig. 1 outlines the PRISMA process as described above.

### 3.3. Data analysis

The data analysis framework leveraged Creswell and Poth (2018), Richards and Morse (2013), and an established team-based inductive, deductive, and abductive toolkit applied to theme analysis (Goins et al., 2015). Attention was paid to quotes in the results, findings, and discussion sections of the paper. Codes or clusters of meaning were identified, determined a placement among the ideas (Richards and Morse, 2013), and shared with the team for comparison and discussion for inclusion into the thematic analysis.

The themes were reviewed for commonalities, similarities, and differences as well as patterns in the context of answering the research question. A step-by-step process was used to map an evidentiary matrix between newly defined (discovered) themes and the original studies in which they were grounded (Goins et al., 2015). This process of interpretive integration was adapted from Noblit and Hare (1999) and is known as reciprocal translation (Goins et al., 2015), the combination of individual, team, and expert review to triangulate the analysis. The reciprocal translation table for this analysis includes the article number, the labeled themes in the studies, a compilation of derived themes, and actual quotes from nurses, patients, and caregivers in the original studies that demonstrate the derived theme. Finally, a systems theory lens was applied to give organized structure to the meaning of derived themes. See Table 1 for the full reciprocal translation table.

Our thematic analysis revealed key themes and subthemes in coordinated nurse/patient relationships in care coordination programs and was organized in a systems theory perspective (Donabedian, 2005).

The studies chosen for review provide additional knowledge and perspective about the nurse-patient relationship in the care coordination process. Barriers and facilitators to implementing transitional care interventions with advanced practice nurses (Bradway et al., 2012), and understanding caregiver needs in transitions occurring between hospital and home experience (Giosa, Stolee, Dupuis, Mock, & Santi, 2014) illuminated challenges during critical transitions of care. Perspectives about the patient experience in care management and coordination patterns for patients with chronic diseases (Hudon, Chouinard, Diadiou, Bouliane, & Lambert, 2016) and viewing the future of heart failure patients and caregivers as a series of transitions (Jones, Vu, O'Donnell, et al., 2014) provided a chronic disease perspective. Table 2 is a literature matrix summary of the final yield to note the purpose of the study, the country the research was conducted, the design, the methods used, participants in the study and a consolidated summary of findings.

## 4. Results

### 4.1. Findings

The publications selected for the metasynthesis were of varying quality and rigor. In addition, themes examining patients' perceptions about nurses as partners in chronic illness care (Shigaki, Moore, Wakefield, Campbell, & LeMaster, 2010), examining the relationship between comorbidities and care processes within the context of care transitions (Van Cleave et al., 2013), factors influencing nurse care coordination in a patient-centered model (Vanderboom, Thackeray, & Rhudy, 2015) and threats to safe discharge as exemplars of complex care transitions (Waring, Bishop, & Marshall, 2016) were found.

Multiple studies had small sample sizes (Bradway et al., 2012; Giosa et al., 2014; Shigaki et al., 2010; Vanderboom et al., 2015). The sample selection process for the evaluation of case management (Hudon et al., 2016; Waring et al., 2016), limiting the sample to one health system, and the use of primary data for secondary analysis did not allow researchers to probe emergent themes or to test the transition patterns in

the sample (Jones et al., 2014). Additional sampling decisions influencing the studies include the exclusion of family involvement and the effects of recurring transitions on individual attributes (Van Cleave et al., 2013), and inclusion of nurse care coordinators perceptions and not patient perceptions (Vanderboom et al., 2015). Three of the final eight publications were from Canada and the United Kingdom. The remaining five publications were from the United States.

### 4.2. Derived themes - a systems theory approach

The study of care delivery systems and outcomes is important to solving many of the problems facing nursing and healthcare today (Lamb, 2007). Our thematic analysis revealed key themes and subthemes in coordinated nurse-patient relationships and was organized in a systems theory perspective (Donabedian, 2005). The derived themes and subthemes will be discussed according to the *structure* of the coordinated nurse-patient relationship, the *process* of starting the coordinated nurse-patient relationship, or the *outcomes* of a coordinated nurse-patient relationship.

#### 4.2.1. The structure of the coordinated nurse-patient relationship

The derived themes were noted as: (1) identifying the need for a care coordination experience and (2) calming the complexity of the experience. The associated seven derived subthemes were: (1) choosing those that need the most care coordination, (2) nurse knowledge-having it, providing it and sharing it, (3) making the experience personal and meeting the patients where they are, (4) understanding patients' diseases in their terms, (5) working at the top of the nursing license and skills, (6) managing transitions in the experience and (7) understanding financial pressures to discharge from acute care.

> "*You sometimes get the sense that the patients are being rushed out of the door…we are seeing patients arrive home who are still really unwell*"
> (Waring et al., 2016)

#### 4.2.2. The process of the coordinated nurse-patient relationship

The derived themes were (1) the awareness of challenges of care coordination and transitions that occur, (2) going above and beyond the call of duty, (3) conducting meaningful communication within the relationship and (4) the ability to navigate system complexity. The associated derived subthemes from the perspective of the nurse were (1) knowing the patient and caregiver levels of awareness, (2) doing whatever is needed to keep patients safe and out of the hospital or emergency department and exceeding normal care, (3) providing an individual approach, and (4) using advanced clinical judgement.

> "*It should be pretty straight forward, but each time is different, and you never know which social worker you are after…it makes you think there is no continuity of care once they leave the hospital*"
> (Waring et al., 2016)

The associated derived subthemes from the perspective of the patient and caregiver were (1) caring about me, having someone I can ask questions to, (2) helping me live with my disease, (3) organizing my appointments, (4) making sure I am taking the right medications, (5) talking to the doctors for me, (6) being my partner, (7) making sure the correct tests are ordered, (8) communicate with the doctor's offices, (9) coordinating specialist care, (10) looking at the big picture for me, (11) being my advocate, (12) finding community resources as needed and (13) providing consistent approaches to my care.

> "*They would offer the possibility to group my appointments together so I wouldn't have to make too many trips*"
> (Hudon et al., 2016)

#### 4.2.3. The outcome of the coordinated nurse-patient relationship

The derived themes were: (1) the value of care coordination and (2)

**Table 1**
Reciprocal translation table.

| Paper # | Organizing theme - systems theory | Derived themes | Derived subthemes | Primary study themes (as labeled) | Quotes |
|---|---|---|---|---|---|
| 1,6 | Structure of a coordinated nurse-patient relationship | Identifying the need for a coordinated nurse-patient relationship | Choosing those that need the most care coordination | Attributes - Who benefits from Nurse Care Coordination | "*Comorbidity is associated with…poor quality of life, polypharmacy and increased adverse drug events, increased use of healthcare resources, increased mortality and caregiver burden*" (Bradway et al. (2012), p. 394). |
| 1,6,7 | | | Nurse knowledge - having it, providing it, sharing it | Facilitators of TCM, Having the necessary information and knowledge | |
| 6,8 | | Calming the complexity | Making it personal, meet patients where they are | Context, Conditions, Comorbidities | |
| 6,7,8 | | | Understanding their disease in their terms | Personal characteristics, Chronic conditions, Signs & Symptoms, history, functional status | |
| 1,2,6 | | | Working at the top of license and skills | Delivery of TCM intervention | |
| 1,2,3,4,6, 7 | | | Managing transitions | Challenges of transitions of care, Complexity | "*Individuals with comorbidities often experience transitions between health care settings. These transitions, are characterized as a change in the level and location of care with a hand-off from one health care team to another*" (Van Cleave et al., 2013, p. E1). |
| 5,6,8 | | | Understanding financial pressures to d/c from acute care | Financial pressures to d/c from hospital admin, Systems Change | "*You sometimes get the sense that the patients are being rushed out of the door…we are seeing patients arrive home who are still really unwell (Nurse)*", (Waring et al. (2016), p. 5). |

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**Table 1** (*continued*)

| Paper # | Organizing theme - systems theory | Derived themes | Derived subthemes | Primary study themes (as labeled) | Quotes |
|---|---|---|---|---|---|
| 1,2,7 | Process of starting the coordinated nurse-patient relationship | Awareness of challenges of a coordinated nurse-patient relationship & transitions that occur | Knowing the patient level of awareness, knowing the caregiver level of awareness | Challenges of transitions of care | "*…we don't have a lot of cultural or language barriers but the things that I see are education, lack of social or family support… with a lot of our patients (Nurse)*", (Vanderboom et al. (2015), p. 20). |
| 1,2,6 | | Going above and beyond | Do whatever is needed to keep patient safe and out of hospital/ED, exceeding normal care | Going above and Beyond - Do what needs done to make sure patient gets what they need - care about and for the patient/CG, caring attitude | "*…made five hospital visits, seven home visits, one joint visit with the patient to the PCP office and made 17 phone calls during the intervention (from authors, about the nurse's response)*", (Bradway, et al. (2012), p. 402). |
| 1,8 | | | Individual approach | Patient/caregiver considerations when planning care | |
| 1, 6 | | | Using advanced clinical judgement | APNs identify gaps in care quickly | |
| 1,2,3,4,5,6,8 | | Meaningful communication | Caring about me; someone I can ask questions to | Care giver experience | "*She's [the nurse is] really very, very competent and she's also a decent, caring person. (patient)*", (Shigaki et al. (2010), p. 134). |
| 2,5,7 | | | Helping me live with my disease | Patients involvement | |
| 3,5 | | | Organizing my appointments | Organizing post acute care | "*They would offer the possibility to group my appointments together so I wouldn't have to make too many trips(patient).*" (Hudon et al. (2016), p. 525). |
| 6,8 | | | Making sure I am taking the right medications | | *{I was} given bag of medications but no instructions. No idea what they are for (Patient)*, (Waring et al. (2016), p. 5). |
| 6,8 | | | Talking to the drs for me | | |
| 6,8 | | | be my partner | Care giver experience | |
| 6,8 | | Navigating the system complexity | Make sure correct tests ordered | Ordering/Reporting of Tests, DME | |
| 1,5,8 | | | Communicate with dr. offices | Communication | |
| 1,3,8 | | | Coordinate specialist care | Collaboration | |
| 1,7 | | | Looking at the big picture for the patient | Coordinating - making complexity easier for pt./ CG | *"patients with multiple issues: health and social issues - not having family in town, support, 90 yr. olds driving to appointments…schedules that are 3 pages long…we see the complicated patients that have multiple things going on, that don't quite get their schedule, and where they need to be and when they need to be there and which doctor to ask which questions to (Nurse)*", (Vanderboom et al. (2015), p. 20). |
| 1,2,5,6,7,8 | | | Patient advocate | | |
| 7,8 | | | Find community resources as needed | | |
| 6,8 | | | Provide consistent approaches to care | | |
| 1,2,3,4,8 | Outcomes of a coordinated nurse-patient relationship | Value of coordinated nurse-patient relationship | Patient and care giver happy with experience | Care giver experience | *"my partner and I, we really appreciated this because we'd have a closer follow-up, we felt confident…I felt reassured to know that there was a team there (caregiver)*", (Hudon et al. (2016), p.525). |
| 6,7,8 | | | Making an impact on cost, quality and need for care | Consequences | |
| 4,6,8 | | Managing the illness/wellness journey | Keep me safe | Perspective | |
| 4,6,8 | | | Work with me to understand what I need to do to live with this disease | | "*…work in progress and that never stops. As I get worse there will be less things I can do. But I don't want to give those up until I have to give them up.(patient)*", (Jones et al. (2014), p. 178). |
| 1,2,3,4,5,7 | | | Partners in care | | |
| 1,2,6,7 | | | Managing transitions | Delivery of TCM intervention | *"transitions…often lead to conflicting instructions, medication discrepancies, and lack of follow-up appointments…resulting in poor outcomes"(Van Cleave et al., 2013, p. E1).* |

**Table 2**
Literature review matrix.

| Author, year | Purpose | Country | Design | Methods | Participants | Summary of findings |
|---|---|---|---|---|---|---|
| #1. Bradway, C. et al. (2012) | To describe barriers and facilitators to implementing a transitional care intervention for cognitively impaired older adults and their caregivers lead by advanced practice nurses (APNs). | US | APNs implemented an evidence-based protocol to optimize transitions from hospital to home. | An exploratory, qualitative directed content analysis examined 15 narrative case summaries written by APNs and fieldnotes from biweekly case conferences. | APNs participating in the Transitions of Care Model at the University of Pittsburgh medical center. | • Three central themes emerged:<br>(1) patients and caregivers having the necessary information and knowledge,<br>(2) care coordination,<br>(3) caregiver experience.<br>• An additional category was also identified, APNs going above and beyond. |
| #2. Giosa, J.L. et al. (2014) | • Explored informal family caregiver experiences in supporting care transitions between hospital and home for medically complex older adults. | Canada | • Qualitative<br>• Grounded-theory approach | In-depth semi-structured interviews were conducted with community and resource case managers, and informal caregivers. | Population of older hip-fracture and stroke patients, and of those recovering from hip replacement Notes surgery. | • Six properties characterizing caregiver needs in successfully transitioning care between hospital and home were integrated into a theory (1) assessment of unique family situation; (2) practical information, education, and training; (3) involvement in planning process; (4) agreement between formal and informal caregivers; (5) time to make arrangements in personal life; and (6) emotional readiness. |
| #3. Hudon, C. et al. (2016) | Examine the experience of people with chronic diseases, frequent users of health care services, and FPs who participated in a CM intervention | Canada | A descriptive qualitative approach. | • Data were collected through in-depth interviews (frequent users) and 4 focus groups (FPs).<br>• Thematic analysis of the verbatim transcripts used the 6 dimensions of service integration proposed by the National Collaboration for Integrated Care and Support. | • 4 family medicine practices in the Saguenay region of Quebec.<br>• Participants: n = 45; people with chronic diseases (n = 25), frequent users of health care services, and FPs (n = 20) who participated in a CM intervention by a nurse in primary care. | • Patients confirmed that the CM nurse was usually their primary contact with primary care.<br>• She or he actively involved them in developing and carrying out their individualized services plan with other health care partners.<br>• Patients and FPs believed that patients' needs were taken into consideration.<br>• CM facilitated communication and coordination with and among health care partners as well as better access to relevant information. |
| #4. Jones, J. et al. (2014) | Identify how patients with heart failure and their informal (family) caregivers perceive their future. | US | • This was a cross-sectional study using qualitative methods.<br>• Participants were asked in individual, semi-structured interviews: “When you think about what lies ahead, what comes to mind?” | • Purposive sampling strategy to include patients within a range of ages and health statuses.<br>• Qualitative analysis used an inductive approach.<br>• Early in the analysis, it became clear that participants' narratives about the future were described in terms of past transitions.<br>• Led team to use transition theory to further guide analysis. | • 33 patients from an academic health care system with New York Heart Association class II–IV heart failure and 20 of their informal caregivers participated in the study. | • 4 common pivotal transitions, included:<br>(1) the shock of first being diagnosed with heart failure;<br>(2) learning to adjust to life with heart failure;<br>(3) reframing and taking back control of one's life;<br>(4) and understanding and accepting that death is inevitable.<br>• Concerns about the future were framed based on the most recent transition.<br>• Transition theory describes how people restructure their reality and resolve uncertainty during change. |
| #5. Shigaki, C.L. et al. (2010) | • Examine how patients with multiple chronic conditions | US | • Exploratory qualitative approach with the aims of | • Data were collected using a semi structured interview protocol | • Thirteen patients between the ages of 56 and 88 years were | • 3 themes emerged: |

(*continued on next page*)

**Table 2** (*continued*)

| Author, year | Purpose | Country | Design | Methods | Participants | Summary of findings |
|---|---|---|---|---|---|---|
| | perceive the role of nurses who function in a care management role in a primary healthcare setting | | identification and description | and analyzed using an iterative process. | recruited from an outpatient family practice clinic.<br>• All participants had type 2 diabetes, plus at least 1 chronic comorbid condition. | (1) an overwhelming positive regard for the nurse partner, both as a person and a professional;<br>(2) appreciation for the availability of the nurse partner<br>(3) a perceived partnership with healthcare providers. |
| #6. Van Cleave, J.H. et al. (2013) | • To elucidate the theoretical underpinnings of the phenomenon of individuals with comorbidities undergoing care transitions. | US | Qualitative study of empirical literature, using the Dimensional Analysis approach. | • Interviews were coded independently by the core team and emerging themes were identified through weekly discussion.<br>• Discrepancies in coding and interpretation were resolved by reviewing transcripts and field notes as a group until consensus was reached. | To conduct open coding, the 60 articles for the analysis were divided among the group of 5 researchers. | • Findings were arranged in a schematic demonstrating that the relationship among individual attributes, comorbidities, and care processes informed the individual's risk for adverse outcomes.<br>• Useful for future nursing research studies evaluating innovative programs implemented to improve health outcomes among vulnerable populations undergoing care transitions. |
| #7. Vanderboom, C.E. et al. (2015) | • Identify factors influencing nurse care coordination. | US | • This study was an analysis of existing data using a qualitative descriptive design. | • Data were analyzed using content analysis.<br>• The aims were to 1) describe the characteristics of patients perceived by nurse care coordinators (NCCs) to benefit from care coordination and to 2) describe interventions judged by NCCs to be most effective in caring for patients with complex chronic care needs. | • Experienced NCCs from various practice settings participated in a focus group. | • Findings indicate the importance of the cumulative impact of complex health problems, limited social support, culture and language on patients needing care coordination.<br>• Effective interventions are focused on providing holistic, relationship-based care. |
| #8. Waring, J. et al. (2016) | • Investigated the views of healthcare professionals and patients about the threats to safe hospital discharge with aim of identifying contributory and latent factors.<br>• The study focused on the threats to safe discharge for hip fracture and stroke patients as exemplars of complex care transitions. | United Kingdom; English National Health Service Study – 2 regional health and social care systems. | • A qualitative study involving narrative interviews | • Narratives were analyzed in line with 'systems' thinking to identify proximal (active) and distal (latent) factors, and the relationships between them. | • 3 acute hospitals, community and primary care providers and municipal social care services.<br>• 213 representative stakeholders and professionals involved in discharge planning and care transition activities | • Three linked categories of commonly and consistently identified threat to safe discharge were identified:<br>(1) 'direct' patient harms comprising falls, infection, sores and ulceration, medicine-related issues, and relapse;<br>(2) proximal 'contributing' factors including completion of tests, assessment of patient, management of equipment and medicines, care plan, follow-up care and patient education<br>(3) distal 'latent' factors included discharge planning, referral processes, discharge timing, resources constraints, and organizational demands. |

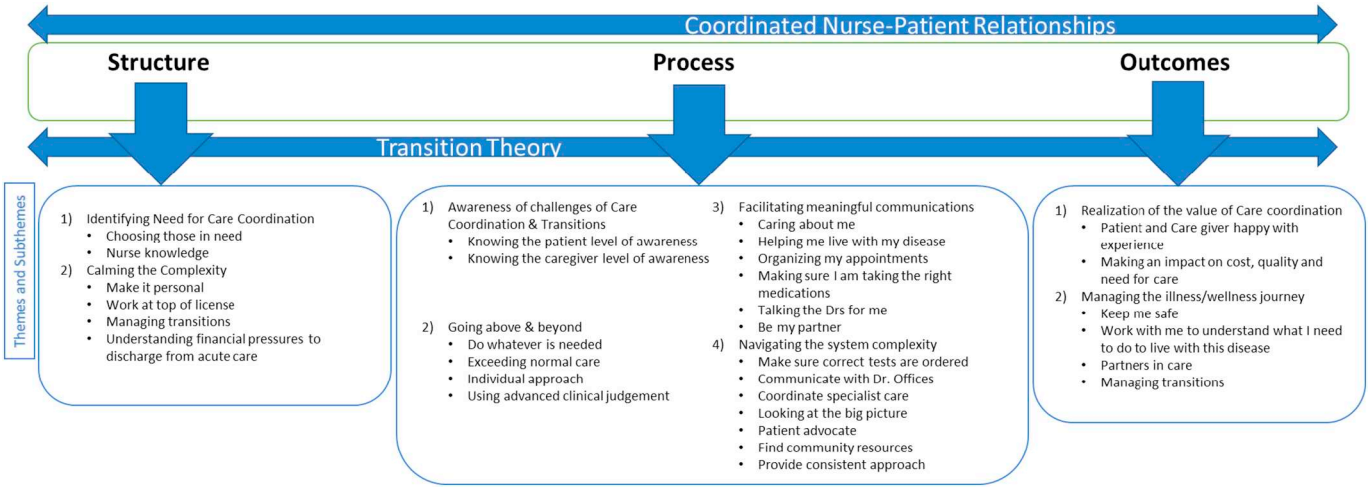


**Fig. 2.** The results of the metasynthesis - influence of transition theory.

managing the illness/wellness journey for the patients. The associated derived subthemes were: (1) the patient and care giver happiness with the care coordination experience, (2) making an impact on cost, quality and need for care, (3) keeping the patient safe, (4) working with the patient to understand what they need to do to live with their disease, (5) being partners in care coordination, and (6) managing the transitions for patients.

> "*My partner and I, we really appreciated this because we'd have a closer follow-up, we felt confident…I felt reassured to know that there was a team there*"
>
> (Hudon et al., 2016)

## 5. Discussion

Navigating system complexity is analogous in many ways to navigating waves in an ocean to get to a destination. Making sure the correct tests are ordered, the right communication is occurring with physician offices, coordinating specialist care, being a patient advocate, finding resources needed, providing consistent approaches to care, and taking the time to look at the big picture for the patient is like the process of navigation through bumpy waters in the ocean.

The results of the metasynthesis are diagramed in Fig. 2 to illustrate that the structure of the coordinated nurse-patient relationship, the process of starting the coordinated nurse-patient relationship, and the outcomes of a coordinated nurse-patient relationship are interrelated and influenced by transitions theory. As the analysis unfolded, the process of starting and having a coordinated nurse-patient relationship was far more complex than originally perceived, the effects of transitions was higher than expected, and the applicability of transition theory to the results of these studies was identified. The integrated view, illustrated in the metasynthesis, provides nursing leaders with additional insight into factors that promote an effective coordinated nurse-patient relationship.

## 6. Limitations

Limitations in the studies were primarily related to sampling and relying on participant accounts of their experiences (Waring et al., 2016). There was a variability in the way Advanced Practice Nurses (APNs) determined the content of the case summaries (Bradway et al., 2012). The primary author was the single reviewer of the literature for inclusion/exclusion. The authors discussed the limitations and believe the limitations do not impact the overall study results.

## 7. Implications

Quality of care for individuals undergoing a transition of care, many with complex healthcare needs, is often fragmented and unsafe, yet emphasizes the need for measuring and improving care coordination (Lamb, 2014). Given the exceptional outcomes in acute care settings with nurse dose studies, the extensive research completed on the positive impact of nurse dose (Manojlovich et al., 2011), and the identification of the importance of nurse dose (*coordinated nurse – patient relationship*) in this study, the authors recommend that tools and instruments for quality leaders need to be developed to measure the impact of nurse dose in the coordinated nurse-patient relationship.

## 8. Conclusions

Nursing is concerned with growth and development, health promotion, and coping with the demands of the human experience of illness and recovery. The work of nurses in coaching and supporting persons through major life transitions, including those precipitated by the journey of chronic illness, is a core component of care coordination. Transition theory introduces a broader view that includes relationships, change over time, and the personal situations and contexts (Meleis et al., 2000). By examining the structure, process, and outcomes of the Coordinated Nurse-Patient relationship as perceived by nurses, patients, and caregivers, quality leaders can use this valuable information to evaluate program effectiveness. Careful consideration should be given to the outcomes and the importance of managing and navigating the complexity of transitions of care for patients living with chronic illnesses.

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