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Frequent Users of the Emergency Department: Guiding Patients to Comprehensive and Coordinated Care

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FREQUENT USERS OF THE EMERGENCY DEPARTMENT:
GUIDING PATIENTS TO COMPREHENSIVE AND COORDINATED CARE

ANNE L. DRAEGER

Submitted in partial fulfillment of the
requirement for the degree of
Master of Arts in Nursing

AUGSBURG COLLEGE
MINNEAPOLIS, MINNESOTA
2011

**Augsburg College
Department of Nursing
Master of Arts in Nursing Program
Thesis or Graduate Project Approval Form**

This is to certify that **Anne Draeger** has successfully defended her Graduate Project entitled "**Frequent Users of the Emergency Department: Guiding Patients to Comprehensive and Coordinated Care**" and fulfilled the requirements for the Master of Arts in Nursing degree.

Date of Oral defense **June 20, 2011.**

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Abstract

The purpose of this project is to implement a rural community-based collaborative care network to assist high frequency emergency department users navigate a comprehensive system to access a full range of health care services and decrease reliance on the emergency department. Patients who frequent the emergency department are less apt to receive coordinated treatment of pain and other chronic disease which leads to suboptimal care focusing on symptoms rather than disease management. Nurses who practice in the emergency department identify the pattern of frequent use and lack of care coordination but struggle to provide a connection to preventative services and network of needed community services at the time of the visit. Literature and legislation suggest the use of community-based care collaborative networks as a means to provide more appropriate care and services for chronic disease, access to preventative care, reduction in health care costs, and frequency of emergency department use. Margaret Newman's theory of health as expanding consciousness supports the project through use of pattern recognition by nurses to evolve to a higher level of knowing and connecting with patients to transform their health experience.

Acknowledgements

I wish to acknowledge Elizabeth Keck, whose tireless efforts for care coordination have changed the lives of patients and the views of professionals working in the emergency department. Liz is a mentor, a teacher, a confidant, and a friend. Her knowledge of mental illness and county services has been pivotal to the successful design and development of the program.

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Ellen and Russell, whenever you said, "I am proud of you, Mom," it helped more than you will ever know. It is your time now.

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Frequent Users of the Emergency Department:

Guiding Patients to Comprehensive and Coordinated Care

Chapter One

The United States has a well-developed, complex system of health care and social services at a community, state, and federal level. Despite the availability of less costly care, many patients choose to use an emergency department (ED) repeatedly for chronic and non-acute care needs. Often primary care practices direct patients to ED for evaluation due to a wide variety of services that are readily obtainable with immediate results to assess acute illness. The ED is legislatively designed to be a safety net for the health care system and is obligated to provide treatment regardless of patient's ability to pay. ED care is episodic rendered by unfamiliar providers and does not connect well to long term disease management. High frequency users of ED may lack self-reliance or the ability to connect to more appropriate care and care planning that leads to better disease management. While some hospitals are making efforts to link the high risk ED patient to follow up with providers, little assistance with care navigation and transition is available for vulnerable populations. The purpose of this project is to implement a rural community-based collaborative care network to assist high frequency ED users navigate a comprehensive system to access a full range of health care services and decrease reliance on the ED.

This project, which involves the development of an individualized treatment plan in collaboration with the patient who comes to the ED for healthcare requires coordination and communication between medical, mental health, social, and other needed services. The interdisciplinary team designs and promotes the use of a unique

treatment plan to set patient care goals and communicate care expectations. The goals and expectations offer needed direction for the team when providing care during a visit as well as consistency and coordination of community resources for post visit planning. This project addresses current health care reform approaches shift toward development of service networks to reduce cost and reliance on ED care with the goal of improving health outcomes.

Significance of the Project

Societal Importance

Health care costs have rapidly escalated at an unsustainable rate causing health care reform to take center stage in political debate and legislative forum. In a report by the National Priorities Partnership convened by the National Quality forum reducing ED overuse represents a thirty-eight billion dollar opportunity ("Reducing ED Overuse," n.d.). The Community-based Collaborative Care Network Program, part of the Patient Protection and Affordable Care Act, supports communities in developing system care coordination to assist individuals with comprehensive care management utilizing a network of care and service creating the significance of the project to society (H.R. 3590, 2010).

People who suffer from complex medical conditions and those who combine chronic physical and mental illness requires many resources to address their individual care needs. One person may require the assistance of a case manager specializing in adult mental health, human services for housing and transportation, medical providers including specialists for specific disease management, home care for support following an episode of acute care, and a system that communicates and plans considerate of the

individual. Planning disease management with the patient and developing individualized interventions can reduce the need for ED visits and hospital admissions. Lowering the cost of health care is of great importance to our society to assure affordable access for all.

Importance to Nursing

The unique relationship and influence of nursing care in the hospital setting lends nurse leaders to advocate for the patient and represent their organizational capabilities and interest in community-based collaborative efforts. Performing as a staff nurse and manager in the ED for the past twenty five years has afforded this author ample opportunity as a leader to study patterns of frequent users of emergency services. This population often struggling with somatic symptoms of depression and anxiety are labeled by staff as “frequent flyers” and “drug seekers.” Staff consistently expresses frustration about the waste of time and health care dollars on patients who seemingly fail to follow discharge plans. Staff frustration can lead to incomplete care and staff becoming more judgmental than caring. The importance of this project rests on an innovative and understanding approach that assists nurses in establishing the caring and supportive relationship every patient deserves. Reviewing the care of patients who used this project’s rural ED setting more than five times per quarter since April 2009 led to this number as a starting point to define high volume use. Other definitions from published literature will be studied to support the use of coordinated resources at the level of use.

Importance to Patient Care

Care coordination efforts to assist this population begin with searching for patterns of undetected or absent disease management, social and illness complexity, and vulnerability. For individuals who may benefit from system care coordination, the

assistance of a social worker is offered, patient goals established, and help accessing community resources is provided for sixty days. While the program has reduced the overall number of ED visits and related health care costs, success of the program relies heavily on social worker diligence.

Conceptual Framework

Nursing Theory

Margaret A. Newman's theory of Health as Expanding Consciousness (HEC) centers on pattern recognition and will be used for project perspective and grounding. Newman's theory challenges a shift from the traditional view of health as an absence of disease to a unitary pattern which includes disease (Newman, 2008). In a foundational view of the project patients and providers are able to shift from an illness centered approach to Newman's personal experience of the individual as unitary whose "health transcends disease" (Newman, 2008, p. 3). Care coordination between providers and services offers an individual support during times of illness and health (Newman, 2008).

Newman's theory calls for pattern recognition and suggests illness may provide clues to what is happening to the individuals in their personal life with or without their conscious awareness that is communicated through illness. Individuals who frequent EDs may experience a negative bias from health care professionals. Patients who frequent the ED may be more vulnerable to negative outcomes due to the existing bias. Risk is also present for providers and staff when treating frequent visitor who may short cut standards of care due to an abundance of testing in recent visits. Pattern recognition of presenting health concerns can lead to addressing other less obvious diagnoses such as anxiety and depression. Recognition of patterns including the time of day of an ED visit

may also lead to revealing significant social issues such as lack of transportation, homelessness, lack of ability to pay for prescriptions, and other economic and social influences.

Beyond the traditional ED's categorization based on a patient's chief complaint, Newman's theory offers grounding for nursing insight and influence in seeing the whole person leading to a higher understanding of the individual's story and to an important nurse-patient relationship. Nurses spend more time with the patient. In the quiet moments of bedside care, often individuals share subtle statements the nurse recognizes as clues to causative factors for the onset of pain. This nursing insight leads to better choices for care and treatment. Newman's theory offers a new paradigm for viewing health characterized by uncertainty and unpredictability which may seem disorganized but is thinking that transcends objectivity toward participatory knowledge and treatment of the individual as a whole (Newman, 2008).

Complexity Science

The challenges for nurses and nurse leaders are many and often center on the conflict of practicing a caring profession in a complex, chaotic, and rapidly changing environment. Complexity science, although not an exclusive nursing theory, offers insight on complex systems and inter-connectivity and calls for the ability to adapt and create change at an individual level yet remain "coevolved" with the rest of the system (Zimmerman, Lindberg, & Plsek, 2001, p. 9). Nurses who work in hospitals practice in environments complex science defines as complex adaptive systems (CAS). This project relies on nurses to connect the needs of the patient with the complex community of health care services. Complexity science provides the framework for nursing understanding of

“interpreting events” such as an ED visit and connecting with the larger CAS of health care. (Zimmerman et al., 2001, p. 13)

This project is centered on coordinating care for the whole patient based on the patient’s concept of health and personal goals. A unique treatment plan, formulated with the patient, communicates the goal and plan of care to organize providers of physical and mental health, and social and community services. Developing the project in the context of new legislation proposals for community-based programs positions the community for responding to the future of health care reform. Nursing theory and literature review are used to understand who are frequent users of the ED, the effectiveness of multidisciplinary coordination, and the impact of the nurses’ and social workers’ roles in the ED. Using the current climate regarding healthcare reform as a backdrop positions the project as a proactive and innovative approach to multidisciplinary care in the ED setting.

Chapter Two: Literature Review

This project begins with a literature study of profiles and patterns to identify characteristics of high volume ED users. Empirical data will also be reviewed to study the impact of frequent users on ED crowding. As a theoretical framework for considering the nurse-patient relationship and care of this complex and vulnerable population, Newman's theory of expanding consciousness will be reviewed. Applications of complexity science will assist in understanding the challenges of this population's patient care and transforming the practice environment. In addition, multidisciplinary collaboration and conceptual approaches will influence this project model development and provide insight into the current climate of professional segmentation. Finally, a study of the proposed community-based care collaborations proposed in the Patient Protection and Affordable Care Act will assist with forming the goals and proposed structure of this project.

Background

Many assumptions are made about who is frequenting and crowding ED's. Crowding is of concern because EDs experienced a 36% increase in patient volumes from 1996 to 2006 (Pitts, Niska, Xu, & Burt, 2006). Assumptions include that frequent users account for a great deal of long ED waits because they cause congestion, that those who choose ED rather than less expensive care options have either no insurance or participate in one of the government plans with no out-of-pocket expense and no financial consequence, and that this population's high use of the ED has a significant impact on the rising cost of health care for the insured. A 2010 systematic literature

review of multiple studies of frequent users of ED's in the United States refutes many of these myths while attempting to define a frequent user.

Although this project defines high volume use as more than five visits in three months or per quarter, literature defines volume from two to twelve per year with prevalence for defining high volume use as four visits in a twelve month period (LaCalle & Rabin, 2010). Patients who use the ED at least four times per year represent 4.5% to 8% of all ED patients and 21% to 28 % of all ED visits (LaCalle & Rabin, 2010). Because these percentages represent a considerable portion of the ED volume, focusing on this population could identify opportunities to reduce ED overcrowding. One study illustrated general there are fewer ED visits per person until an individual reaches seven or more annual visits seemingly representative of the population of higher volume users (Hunt, Weber, Showstack, Colby, & Callaham, 2006). Many studies suggest a lower threshold to define high frequency user than proposed by this project. A different study examines patients at a threshold of twenty visits or more per year similar to this project definition (Ruger, Richter, Spitznagel, & Lewis, 2004). The Ruger group in their study of very-high-frequency users offers less specificity of characteristics of the group other than they tend to present with less acute complaints, have shorter length of visit, and are less likely to need admission (Ruger et al., 2004).

To understand characteristics of high volume ED users, relevant literature defines four to twelve annual visits as frequent use. In general, within this group, 83% are less than 65 years old and 60% categorized themselves as white for ethnicity. In addition 63% define their physical health as poor and 50% claim poor mental health. Poor health is also associated with low income; 33% are living at or below the poverty level (Hunt et

al., 2006). A nurse-authored study performed at an urban hospital in Minnesota gives a more detailed view of the characteristics of frequent users. Using a threshold of 10 visits per year, the frequent user profile is female (76%), median age of 35 years, White (55%), single (69%), living alone (69%), and unemployed (78%), with a primary care provider (80%) (Milbrett & Holm, 2009). The Milbrett and Holm study also lists top chronic conditions in the population: chronic disease (58%), smoker (48%), psychiatric illness (36%), asthma (20%), chronic pain (18%), and migraine (14%). The same research lists chief complaints accounting for 43% of visits include abdominal or flank pain, low back pain, and headache or migraine. A general patient characteristic profile emerges from a review of relevant literature.

General public interest in reducing costs of health care has resulted in current public policy debate on the impact of the uninsured. Many studies examining ED use of the insured and uninsured are available for review and the target population of this project is a study of the impact of coverage on health care choices. Those supporting universal health care coverage aim efforts at the uninsured. However, the uninsured represent only 15% of frequent users and interestingly are no more likely to be a frequent user of ED care than those who enjoy health care coverage (LaCalle & Rabin, 2010). Studies have validated high ED use by Medicare and Medicaid patients representing 35% of total visits and 31% of total expenditures. This higher percentage within the high volume user group is an over representation when compared to the general number of individuals on public assistance programs (Peppe, Mays, & Chang, 2007). Because a third of this user population is in public assistance programs, a valuable partner for care

coordination would be case managers from agencies that administer public coverage programs.

Complex health issues and demographic trends are essential to planning for the unique needs of high frequency users. Studies suggest 66% of high volume ED users have one or more physical conditions and 16% have both physical and mental conditions and compares to the total general population with 47% with physical conditions and only 5% with both physical and mental conditions (Peppe et al., 2007). This population tends to be sicker and needs a multidisciplinary care approach using both medical and psychiatric providers and service. In addition, 31% of visits for high ED users are related to a chronic medical condition compared to 16% of the total population. Of significance is that 86% of this population has used other outpatient visits (Peppe et al., 2007). This data further supports coordination of care with outpatient clinic providers.

How frequent users make the choice to visit the ED is important to note. One study asked if a lack of a primary care source increased the likelihood of choosing ED care. Of frequent ED users, 73% reported they had a regular source of care (Weber, Showstack, Hunt, Colby, & Callahan, 2005). Authors of a second study suggest as many as 93% have an identified primary care provider (Blank et al., 2005). Other literature suggests no correlation between ED use and a lack of appointment availability or dissatisfaction with primary provider (Weber et al., 2005). Although patients do not seem to choose the ED because they do not have a primary care provider relationship or clinic appointment capacity, one study suggests pain is a primary indicator for choosing the ED. Blank et al. (2005) found 27% of ED visits relate to pain. Common discomfort related presentations for high users include abdominal pain, chest pain, and asthma

suggesting pain relief is more likely to draw frequent users to ED care than a relationship with a provider.

Less research is available about social indicators for high volume ED users. One study attempted to look at connection between a lack of social support and decision to use the ED. Researchers found most high volume users have friends, relatives, or a church connection. This population is very likely to be unemployed: 88% unemployed versus 12 % unemployed in the general population at the time of the study (Blank et al., 2005). This information suggests the need for additional study of ED high frequency users to understand the effect of unemployment on health and health care access. Additional research is needed to understand social stressors and indicators related to this project population to correlate impact on frequently choosing the ED for care concerns.

Theoretical Foundation

Newman and Health as Expanding Consciousness

To provide effective care, nurses need to recognize the multidimensional characteristics and patterns of high frequency ED users. ED nurses must also strive to eliminate bias and disdain often demonstrated by department staff toward frequent users. Nurses can meet the challenges of a non-judgmental approach with what Newman calls “expanding our consciousness” of the individual beyond their disease related complaint to understanding their meaning of health (Newman, 2008, p. 5). During each ED encounter, nurses are challenged to consider how this moment of illness fits into the total pattern of the individual rather than the episodic quick fix care some ED nurses may find appealing. ED nurses may understand their journey into health as expanding consciousness better understood by examining Newman’s unique personal experiences

and their influence on her theory which emphasizes the nurse's transformative presence within the patient care relationship and health care environment.

Newman described a family health crisis influencing her career choice as well as her view of the patient. During her time spent as family care giver, Newman became aware her mother did not necessarily view herself as sick despite having a lingering and debilitating disease. She formed the idea that health is not the absence of illness but rather one part of the "total pattern of the individual" (Newman, 2008, p. 4). HEC also sheds understanding that a person's pattern is "not changed by simply eliminating the disease" (Newman, 2008, p. 4). Newman (2008) suggested that nurses may look at illness events as a way to draw attention to someone's pattern which "may accomplish for the person what she or he was unable to do otherwise" (p. 5). The patient may be using frequent ED visits for illness seeking help with physical, mental, and social problems. With electronic medical record reviewing past visits are quickly available if nurses choose to look for the pattern to the ED visits. Nurses can link patterns of presentations to the ED with symptoms such as nausea, difficulty breathing, and headache with manifestations of untreated anxiety or depression. Through a deeper understanding of the patient, nurses can find an outlet from frustration with the over user of ED services. Because nurses are often first to see the pattern of visits they can advocate for care coordination to connect the patient with more appropriate care leading to better health outcomes.

Newman (2008) believed "the goal of nursing is not to make people well, or to prevent their getting sick, but to assist them in using the power within as they evolve toward higher levels of consciousness" (p. 5). Further study of Newman leads to how

HEC theory can become part of nursing practice or what is understood to be nursing praxis (Newman, 2008). An essential element of integrating HEC theory into practice calls nurses to become aware of the pattern of the individual by understanding what is meaningful rather than focusing on performing a list of assigned tasks toward elimination of pain or disease. In the hectic motion of attending to tasks often a nurse will become aware their planned actions are less important than addressing a seemingly small personal need which may be equally or more important to the patient's wellness. At this moment nurses come into being with the patient, understand the real needs and become capable of what Newman (2008) calls a "transforming presence" (p. 56) through recognition of the whole person.

In the fast paced environment of the ED, the nurse may be too overwhelmed to consider the whole person. Newman (2008) considers this and offers "the part is a place for being present with the whole" (p. 40). This suggests ED nurses need not understand every facet of the patient but focus on connecting the injury or illness into the pattern of a patient's "life, family, and community" (p. 40). Newman (2008) also suggested nurses may encounter the whole by "stepping right into the parts" (p. 41) and being more than a spectator of the care experience. She further called for the connectedness of the nurse-patient relationship, suggesting nurses should "hang in there" (p. 55) until "insight occurs" (p. 55). For the purposes of this project, the nurse's insight assists with identification of the patient needs and connects the patient to the best care through review and guidance from a unique treatment plan and professional communication about care planning effectiveness.

The high frequency user of the ED often provides a nurse several encounters to find insight into the person, to connect, and transform the patient's care experience. This can happen in the silent moments of bedside care or by making a comment very specific to the person and their situation. A nurse who is fully present with the patient opens the door for a closer nurse-patient relationship (Picard & Jones, 2005). Connecting with the high volume user of the ED offers a unique nursing experience apart from the normal ED user. Nurses develop a better understanding of themselves and the importance of their work through a well established patient-care relationship with those frequenting the ED. The ED nurse who is willing to view a patient visit as one part of the whole patient's view of health is optimally positioned to be a voice for system change through care coordination. The nurse at the bedside is often the first to detect the patient's pattern of high frequency use of the ED and individually advocate for coordination of care and effective transfer of care to the next provider.

Complexity Science

During the past ten years much has been written about the relevancy of complexity science as a framework for leaders in health care. One reason to explain this interest is the frustration with the failure of the current organizational structure to be responsive to the pace of change (Zimmerman et al., 2001). A second reason is recognition of health care as a Complex Adaptive System (CAS). By definition, these systems are "complex, nonlinear, interactive systems which have the ability to adapt to a changing environment" (Lindberg, Nash, & Lindberg, 2008, p. 272). Health care organizations can fail to recognize interdependencies among systems which results in devastating outcomes (Lindberg et al., 2008). For the purposes of this project the

participating organizations are considered CAS serving individuals in a multi-professional effort to provide and coordinate care for high frequency ED users.

CAS develops a theoretical base for coordinating organizations toward the goal of providing care for this project population. CASs is dynamic rather than stable and must be able to adapt quickly and be “poised for change” (Lindberg & Lindberg, 2008, p. 35). Organizations must perform work with awareness of the “interconnected, interdependent, adaptive, and diverse elements” of the care they provide (Lindberg & Lindberg, 2008, p. 35). Each participating organization in the community partnership for care collaboration must seek to understand the goals and key elements of the patient’s care prior to and following patient interaction. The principal of “co-evolution” recognizes one small change to care can have an impact on the patient and patient’s plan of care (Lindberg & Lindberg, 2008, p. 36). CAS also must be thoughtful about the idea of how they are embedded; each professional is embedded in an organization, each organization is embedded in the partnership, and the collaboration is embedded in the community. This project will also call for understanding of how this collaborative effort is embedded in similar models proposed by health care reform.

The current culture of professional and departmental individualism creates a significant barrier for collaboration. Most professionals are not familiar with each other’s practice, expertise, responsibilities, skill, and ethical obligations (Martin-Rodriguez, Beaulier, D’Amour, & Ferrada-Videla, 2005). Nurses and other health care professionals train in professional isolation and hospital cultures remain quite segregated by profession. So nurse can adapt their practice environment to collaborate with other disciplines to assure patients receive the best possible care, they need support to individually “explore,

act on experience, and interact and respond to other agents” within their complex care setting (Wiggins, 2008, p. 13). Complexity science literature stresses the need for new models of nursing care delivery centered on developing partnership with patients, families, physicians and other professionals. Professionals who value system care coordination recognize a broader network of providers and services is needed to support the patient as the patient transition to the next system of care (Lindberg et al., 2008).

Multidisciplinary Care Teams

Despite a great deal of effort, the United States continues to lag in the overall quality of health care with documentation of a lack of reliability and vulnerability to mistakes. Studies suggest patients currently only receive 55% of the care thought to be provided during a health care encounter (McGlynn, Asch, & Adams, 2003). One study suggests a singular element of care delivery can interact with many other components in unexpected ways, unraveling safety so fast that errors cannot be prevented (Riley, 2009). Literature suggests improved safety and reliability occur when teams have members with the “knowledge, skills, and attitudes” (p. 1578) and intent to perform “interdependent tasks” (p. 1578) with a common goal (Baker, Day, & Salas, 2006). This project centers on the knowledge and skills of care coordination team members who are dedicated to viewing their portion of care as interdependent with other services and dedicated to the individual patient’s goal.

The high volume ED user often has a complex medical and social history. One study suggests there is “growing awareness among health care professionals that no one intervention, no one discipline, and no single approach can provide the comprehensive services needed particularly in regard to people with mental health issues” (Rossen,

Bartlett, & Herrick, 2008, p. 387). Care collaboration increases in importance with this project target population as one third identify having a mental condition. The working definition of this project for collaboration is “the processes by which interdependent professionals are structuring a collective action toward patients’ care” (Martin-Rodriguez et al., 2005, p. 133). Because studies suggest clinical outcomes and patient satisfaction are likely to be higher when care is provided by an interdisciplinary team (Lemieux-Charles & McGuire, 2006), this collaboration is imperative.

Interprofessional teams are found to be efficient, effective, and are a gratifying way to offer health care services (Martin-Rodriguez et al., 2005). Imperative to development of a care collaborative model is an understanding of what determinates make a successful collaboration. In a framework the Interprofessional Education for Collaborative Patient-Centered Practice developed, the essential elements of collaboration include interactional, organizational, and systemic factors (Martin-Rodriguez et al., 2005). In practice, the team or interactional factors and organizational factors are interwoven as part of collaboration. In addition to the expected systemic factors of each organization, this project also calls upon legislative influence of health care legislative recommendations for improved interprofessional care coordination.

Essential to the success of an interprofessional team is good communication. Contact between members must be timely and frequent, and members must appreciate, understand, and recognize the contribution and roles of each profession (Rossen et al., 2008). Professionals who are continuously interacting, flexing, and changing plans to meet the needs of patients and families deliver effective care models (Lindberg et al., 2008). Furthermore, collaboration goals should be patient-centered rather than the

current service-centered model. Collaboration should include the patient and family as well as the group of professionals. Health care teams must learn and appreciate the work of others by joining with the patient and family to experience other professional's contribution to care. The focus of future care models is partnership, which is developed through emphasizing positive relationships with efforts toward a mutual goal (Lindberg et al., 2008). This project centers on establishing a goal that is meaningful to the patient and considered therapeutic by the health care team.

The current work of the social worker in the ED has relied heavily on the single professional's vigilance and diligence toward moving the patient toward that person's personal goal. Key to the project is establishing with organizations essential elements for creating a collaborative environment for care coordination and collaboration. The second key determinant is an environment supportive of interprofessional collaboration. Core to the project is each organization's recognition of complexity of care coordination within the environment. A shared value among organizations is recognizing the value of coordinating care and offering support by factoring in needed time to link with other professionals during a patient's visit. A lack of linking patients with other services during or after an ED visit results in more ED visits.

Health Care Reform

On March 23, 2009, President Barack Obama signed into law significant health care reform (HCR) including the Patient Protection and Affordable Care Act (H.R. 3590, 2010). HCR remains at the center of debate. One year after the law was signed, 14 states filed legal challenges to the constitutionality of the health-care overhaul. Some state courts are ruling portions of HCR are illegal, and many people are predicting the

final ruling will likely come from the U.S. Supreme Court. The new Republican majority in the U. S. House of Representatives in 2011 approved a bill entitled “Repealing the Job-Killing Health Care Law Act” seeking repeal the Patient Protection and Affordable Care Act claiming HCR will result in the loss of 650,000 jobs according to a report from the Congressional Budget office (“Patient Protection and Affordable Care Act”, 2011). Despite the debate, this act is in effect and seeks to expand coverage, control health care costs, and improve the health care delivery system.

This project is centered on improving health care delivery by developing a community-based collaborative care network program (CCCNP) for high volume ED users. Grants for establishing networks have been awarded to a limited few, and future funding is uncertain. This project’s goals and design elements will be based on the model suggested in the Patient Protection and Affordable Care Act (H.R. 3590, 2010). The bill states the goal of establishing a CCCNP is to reduce the use of unnecessary ED services and targets the uninsured or underinsured to cease from using the ED for primary care needs. The methods suggested include screening ED users for eligibility for other government health programs, providing follow up care and management of chronic disease for better outcomes, and encouraging health care professionals to coordinate care. Other CCCNP program goals center on preventative services and assuring a “community-wide safety net” of services (H.R. 3962, 2009).

The literature review has provided several key elements for design of the project program but has identified gaps in empirical study. In the studies reviewed about characteristics of the high volume ED users, lack of insurance, social support, or access to clinic provider appointments are not barriers to accessing other healthcare. A gap is

finding quantitative studies on elements of decision-making for choosing the ED over other available services. The identified inequity of high volume user is they tend to report feeling sicker and report a higher likelihood of having chronic medical and psychological conditions than the general population. The CCCNP program outlines coordination efforts should focus on the uninsured but studies suggest those lacking insurance are no more likely to over use the ED than those with adequate private health insurance.

Despite literature searches for application of HEC to ED nursing practice, few studies linking Newman's theory to the ED nurse-patient relationship are found. Key to the project program design is consideration of Newman's HEC theory for acceptance as a working framework for the nurse-patient ED interaction and relationship. While nursing praxis using the HEC theory offers many positive insights specific to the chronically ill and pattern study of the frequent ED user, it suggests a major ED nursing culture shift. Nurses adapting Newman's theory will experience a major shift away from the current primary focus on the current presentation for services to viewing each visit connection to viewing the whole person.

Other gaps of the literature review include a lack of study comparing the high volume ED user patient experience from others. The significance of the patient experience for high frequency users as it relates to choosing the ED over the primary care provider presents a significant gap in qualitative research. However, available for consideration are the stories shared with this project's ED social worker from individuals during professional interactions. This project's high frequency users expressed finding the ED a less than caring environment. Patients tell of experiencing care providers'

outward expressions of frustration regarding their return to the ED and disrespectful scrutiny of their request for pain medication. In case management of this population inequities exist in all discipline's professional commitment to working with this population.

Literature discussing interdisciplinary collaboration suggests effective teams and team cultures will require a significant change in health care organizations, professional education, and practice cultures. The literature supports diversity of providers and key determinants for successful interprofessional team collaboration. Perhaps the most difficult determinant is assuring that individuals have an organizational collaborative culture. The nature of a community collaborative program suggests the merging of several organizational philosophies with competing individual priorities. Less information is available about influencing organizations toward a common goal with a shared interest in contributing resources and willingness to adapt to the needs of the professional and patient. The philosophy values dependence rather than independence so competition between health care providers may further challenge creating successful community care collaboration.

The project is to implement a rural community-based, collaborative care network for high frequency users of the ED using published literature to understand their unique characteristics while eliminating bias. An interdisciplinary team approach will be used to coordinate services considering evidence-based practice for successful collaboration of the professionals and commitment from their organizations. Newman's HEC will provide the theoretical framework for the nurse-patient relationship and advocacy for identifying and connecting this vulnerable population to appropriate care with improved

outcomes. The goals of the project align with legislative recommendations for CCCNPs in consideration of current health care reform initiatives.

Chapter Three: Development of Project Model

The purpose of this project is to implement a rural community-based collaborative care network to assist high frequency emergency department users navigate a comprehensive system to access a full range of health care services and decrease reliance on the ED. The project uses a population-based planning approach which includes identification of the population, tools and techniques to assist in determining the population health care needs, understanding of current resources needed to achieve project goals, and elements of services required to accommodate the needs of the populations (McCullough, 2001). This chapter will describe the project design including goals, approach, processes, and tasks. The project process is based on the praxis model of care aimed at assisting high frequency ED users to utilize appropriate and essential service based on Newman's theory of health as an expanding consciousness (Picard & Jones, 2005).

According to McCullough, (2001) population-based planning offers several advantages in planning health care. Health care leaders benefit from hearing the population's need from those who use their services. In this inquiry, leaders must be open to learn from system users where organizations fail in access and meeting health care needs. Another value of using population-based planning is the joint establishment of a project model reflective of the s-specific network of health care services and providers. Collectively defining and reviewing system data provides insight into how services are interrelated and the intentional and unintentional effects of change. McCullough also suggests models for health care change must be constructed "versatile enough to allow for change without major renovation" (p. 26).

Background

Initial interest for this project came 2 years ago when hospital leaders and nurses shared concerns about a trend of disconnection to primary care and lack of care coordination for high volume users of the ED and obstetrical services. Individual attempts by staff nurses to contact community and clinic services were sporadic and difficult when services were closed. The ED visit could not provide patients meaningful assistance with issues contributing to their well being such as chronic addiction, undiagnosed anxiety, domestic violence, lack of food and housing, and the means to pay for prescriptions and other social and medical services. Similar to the rural hospital ED staff experience, a study also found some frequent users to be “socially disadvantaged with multiple medical and psychiatric disorders and myriad of social problems” (Shumway, Boccellari, O’Brien, & Okin, 2008, p. 155). The ability to address social issues would require a new care model and integration of other professions to the ED patient care team.

Hospital leaders decided to add the role of a social worker to the team for assessing, planning and connecting individual patients with other community health services. Auerbach and Mason (2009) suggest social work is effective in connecting patients with community services which can prevent further stress and possible “deterioration of functioning” (p. 316) for vulnerable patients seen in the ED. The director of Human Services was consulted for advice on program development. The Human Services director suspected many of the high volume ED users were also recipients of other public services and believed the organizations had an opportunity to form a unique collaboration among in-reach community-based services. A task force was

formed with members from key community organizations for program design and planning including the hospital ED, county Human Services, the local mental health clinic, and a county-based purchasing organization for Medicare and Medicaid recipients. The four organizations assisted in designing the program named for the function: the System Care Coordination Program (SCCP). The organizations lend program support and guidance through a steering committee.

Project Model

Goals

The SCCP provides care coordination for a vulnerable subset of the high frequency users of a rural ED. Expanding on the original program goals and in alignment with the Patient Protection and Affordable Care Act (Patient Protection and Affordable Care Act H.R. 3590, 2010) a CCCNP was developed with the following goals:

- To encourage health care providers to coordinate their efforts to assure the most vulnerable patient populations seek and obtain primary care.
- To increase preventative services including screening and counseling, to those who would otherwise not receive such screening to improve health, reduce complications, and cost.
- To provide a mechanism for improving both quality and efficiency of care for vulnerable individuals with an emphasis on those most likely to remain uninsured or underinsured.
- To manage chronic conditions to reduce their severity, negative health outcomes, and expense.

- To reduce the number of ED visits and hospitalizations for high frequency users of the ED
- To screen and assist individuals who use the ED for government health programs.

Population

The process of identifying the vulnerable subset of high frequency users of the ED starts from either early nurse recognition or retrospective review of patients who frequently present to the ED. Nurses are often first to recognize “times of chaos” for the patient (Picard & Jones, 2005, p. 69). Newman’s HEC theory views health and illness as “rhythmic fluctuations of a single life process” (Picard & Jones, 2005, p. 68). Nurses are able to identify fluctuations in health for individuals as noted by frequent use of the ED and repeated presentations related to pain. Nurse’s early recognition of individual vulnerability is of benefit for early entry into care coordination. HEC theory suggests the nurse must have insight into the pattern of a patient (Picard & Jones, 2005). In the SCCP, nurses take action for program referral when they recognize the pattern of failed treatment plans and when it appears the patient is having difficulty managing a social situation or chronic disease. HEC theory calls this nursing insight and taking the “appropriate subsequent action” the “transformative moment” between nurse and patient (Picard & Jones, 2005, p. 69). Along with the early identification by the nurse, a retrospective multi-professional review is performed quarterly.

The quarterly retrospective review provides a safety net for vulnerable patients whose patterned use of the ED has not been recognized by the staff. This review is led by the ED social worker and conducted with nursing and physician leadership who have

direct care experience with the patient. The team reviews the reason for the patient's visits, the plan at the time of discharge from the ED, and the connection to the next ED visit. As the literature suggests, vulnerable patients frequently present with pain and other symptoms associated with anxiety or depression such as nausea, difficulty breathing, and headaches (Milbrett & Holm, 2009). The recent addition of the physician to the care coordination review team has resulted in referring patients to the SCCP who may present with chronic disease but show signs of depression or anxiety. The identified vulnerable patient is contacted by the social worker to determine if the individual is willing to participate in the SCCP.

System Care Coordination

Literature supports case management being effective in reducing ED use and cost (Shumway et al. 2008). Patients who come to EDs often believe they have a serious condition needing immediate attention and access to other services is unavailable (Auerbach & Mason, 2009). The ED nurse recognizes the patient's pattern of disconnection from services while searching for help and understanding. A patient can find connection and solace in turmoil when the nurse is fully present, accepting, and reflective of the patient's pattern allowing the nurse and patient to "pulse as one" (Newman, 2008, p. 35). The experience can create awareness of the "transforming presence" (p. 29) of nursing and influence on providing meaningful and effective care elevating professional satisfaction (Newman, 2008). The nurse initiates care collaboration by sharing patient insight with the ED social worker for assisting beyond the visit. The social worker helps the patient identify the reasons for frequently using the ED and talks about past use of other services and providers. Based on the conversation,

the patient is asked if he or she would like to engage in services from the system care coordinator. The services include permission to access their health information from other agencies, develop a plan of care, and get the benefits of a CCCNP (Patient Protection and Affordable Care Act, H.R. 3590, 2010) such as:

- Gaining or reestablishing access to more appropriate health services
- Enrolling in applicable public or private health insurance programs
- Obtaining referrals to and assistance with accessing primary care providers
- Obtaining appropriate care for chronic conditions
- Receiving assistance with housing, job search, and other social needs

Several tools assist in developing an individualized plan of care. A functional assessment and 60 day community support plan is obtained if the patient is receiving case management; if not, the ED social worker completes the assessment and plan with active patient participation. (See Appendix A and B)

The social worker may also use two other tools for the individualized treatment plan. The first is a Level of Care Utilization System (LOCUS). The LOCUS uses placement criteria such as risk of harm and functional status to determine the appropriate level of community and support services for those living independently or determines the need for medically monitored or acute care (American Association of Community Psychiatrists, 2000). The LOCUS assessment provides common standards and a uniform language of severity to communicate with other providers and determine care need. The second tool is the Patient Health Questionnaire (PHQ-9). The questionnaire is used to assess patients and initiate a dialog about mental health symptoms and depression. The

PHQ-9 allows the patient to score the level of energy, ability to sleep, and ability to focus over the past 2 weeks (Kroenke, Spitzer, & Williams, 2001). The scoring system offers a means to introduce underlying depression which can go undetected by the patient or ED staff and providers.

The assessments, screening questionnaires, and 60-day plan help determine the care needs of the patient. Care input and direction is sought from multiple professionals from a variety of providers and services to assure primary care involvement for treatment of chronic medical conditions, appropriate referral, and review of terms of participation and coverage of public health programs. The intricacy of care coordination suggested in this project model can be understood through the lens of complexity science and the community of providers and services as a CAS. Complexity science suggests health care leaders should expect community care planning to be non-linear, have uncertainty and surprises, and “feed-forward and feed-backward” information (Lindberg et al., 2008, p. 74). New models will rely upon the development of relationships of professionals when seeking creative approaches to improve the quality of care within CAS (Lindberg et al., 2008).

Information from the patient and care considerations and recommendations from multiple professionals and services are compiled into a unique treatment plan (UTP). The UTP includes information on the patient’s living arrangements, community service involvement, psychiatric care, primary care, an outline of specific care guidelines, and an area for special care considerations. A copy of the UTP is sent to providers and organizations assisting with the care of the patient as a means of communication and a guide for care delivery. (See Appendix C)

The patient may experience periods of stress, confusion, fluctuation, and disorganization as they adapt to the plan of care. Newman's HEC theory views health and illness as "rhythmic fluctuations" (Picard & Jones, 2005, p. 68) that occur between a human and their environment. During a period of frequent ED visits, the patient can be in a period of life fluctuation. A nurse who has sensitivity to the person as a whole can identify social and personal stressors influencing the patient's state of well-being. The ED nurse can identify the patient's state of disorganization and through caring and understanding influence the patient's openness to the SCCP. When a patient is willing to engage with a social worker he or she often expresses a lack of desire to use the ED yet finds the ED the best option and temporary respite when attempting to balance health care needs with challenging personal issues such as separation from family, disconnect from primary providers, exacerbation of chronic illness, loss of job, and lack of funds for medications. The individual personal and social issues require accessing a broader care network through the SCCP.

Implementation

The patient is offered a great deal of support as an individualized care plan is developed and care is coordinated between providers and health program professionals. For 60 days, the ED social worker spends time with the patient reconnecting him or her with a primary provider for health screening, mental health case manager for evaluation of current treatment plan for anxiety and depression and other mental health needs, and with human services and health program network addressing financial and coverage concerns. The reconnection to services involves the social worker accompanying the patient to a clinic visit for care planning with primary care providers and appointments

with community-based support services. The Social Worker is able to reach into organizations and assure the patient is able to make a timely follow-up visit, use a clinic visit for establishing dialog with primary care providers for clarity and direction of care, and assist the patient to keep appointments by reminders and transportation. The ED Social Worker is able to get all of the service players working together for the patient and assist in navigating the CAS of healthcare.

At the end of the 60-day period, the UTP is in place and the patient is expected to be reconnected with services and providers. The social worker performs daily monitoring of ED visits to identify patients who may be experiencing a lapse in the care plan as evidenced by a return to use of the ED for primary care. The UTP may need adjustment for new issues that arise for the patient or changes in provider recommendations for care or in health care coverage following the 60-day period of system care coordination. If the patient is experiencing significant personal, social, or health issues, the social worker may need to enter into additional time with the patient to assure further transition to community-based care from appropriate professionals.

Interprofessional Collaboration

Interprofessional care teams working for the patient have shown improvement in clinical outcomes and patient satisfaction, while rewarding for professionals (Lemieux-Charles & McGuire, 2006). Hospitals are recognizing the importance of deliberate and informative transitions as patients move between professionals and care settings because of shortened length of stays. The hospital is one of the many CAS where a patient seeks care in the SCCP. This project helped many professionals in a rural community recognize the interconnectivity and interdependence suggested by complexity science

theory. Participating organizations and professionals were motivated to participate in collaborate care and services because they shared interest in the same patients who were frequently accessing ED for primary care often because of social and personal dilemmas. The social worker guides the patient for approximately 60 days acting as a broker to health care programs and social services. The intent is to connect or reconnect the patient with care coverage, providers, and services negating the need for repeated ED visits while accessing appropriate care and support.

Further support is provided to the SCCP through a steering committee with leaders from participating organizations. The steering committee analyzes a variety of data to measure the ability of programs to serve the population and meet goals of the program including:

- Number of people served
- Most common health problems treated
- Impact on emergency department use
- Improvements in access to primary care
- Management of chronic conditions in the population
- Demographics characteristic of the population of insured and uninsured
- Impact in billed and paid services by county-based purchasing organization for Medicare and Medicaid recipients.

The steering committee operates with shared principles of mutual respect for each professional contribution to care, shared decision making, transparency of organizational concerns, and benefits gained from the program. The program has proven effective in care coordination as evidenced by a significant reduction in the number of ED visits and

hospitalizations suggesting cost savings, patient satisfaction, and effective use of system resources and services.

The ability of the program to reduce ED visits, hospitalizations, and cost to government funded health care programs has received notice from public policy makers at both a county and state level. Last month the steering committee worked with district state representatives to enact legislation for billing of the SCCP services. A member of the steering committee and social worker testified before the Health and Human Services Committee. The SCCP is currently funded by the four participating organizations.

Areas for Improvement

Securing long term funding for the SCCP is of concern to the four organizations currently funding the program. Some of the participating organizations have profitability that supports the community program while others must annually defend the cost through evidence of actual reduction in paid services. Program benefits such as improved patient care outcomes, use of provider time, and access to social work referrals are realized by some organizations who do not contribute financial support. Tension exists when organizations benefit without supportive funding. The funding inequity suggests while organizations may be ready to participate in collaborative care they may not be prepared to participate in funding.

Prioritizing access for patients who frequently use the ED has also been a struggle. Patients with a high level of self-determination to connect with medical and social service professionals are frequently challenged to receive timely service. The social worker performing system care coordination quickly realized that overburdened case managers and filled clinics were often unaware of the high frequency use of the ED

by patients they were regularly seeing and treating. ED providers instructed the patient to communicate with their primary care provider following an ED visit without knowing of other providers and services key to the patient's health and well-being. The patient often needed to connect with human service case workers or adult mental health case managers to assist with social and mental health issues. Primary care providers were unaware of the frequency of a patient's ED visits unless they took time to review records at a follow-up clinic appointment. A significant remaining patient need is a welcome portal and a system to assure timely acute care follow up appointments are made and kept by the patient. A lack of resources prevents identifying patients who have lapsed public health program funding. Lack of resources for prescriptions can lead to an ED visit where the patient can get immediate pain medication and a few days' supply of prescription medication. Patients often neither are unaware of the validity of health care coverage nor know who to contact with coverage questions. A better connection is also needed between the patient and social worker or purchasing organization for Medicare and Medicaid recipients.

The SCCP offers ED nurses the opportunity for transforming nursing practice through HEC praxis. The unique relationship developed with high volume users provides the nurse the opportunity to reflect on the individual's pattern of ED use and connect with the patient. Through this connection the nurse can act early to identify the vulnerable patient for early interventions and be what Newman (2008) called a "transforming presence" for the patients (p. 56). System care coordination links CAS by developing a UTP with input from a wide variety of professionals within a community network of care and services. No program embodies the future of health care reform, but the SCCP

demonstrates collaboration among professional healthcare providers as an interdisciplinary team can improve patient care outcomes by using less expensive community resources to reduce dependence on costly ED care to meet primary healthcare needs.

Chapter Four: Discussion and Evaluation

The SCCP's purpose is to assist health care providers to coordinate care and assure the vulnerable high frequency user of the ED is afforded a comprehensive care management program including a variety of community services to decrease use of the ED for healthcare. Beyond the provider role, the program mirrors other targeted outcomes from the Patient Protection and Affordable Care Act (H.R. 3590, 2010) including:

- To increase preventative services including screening and counseling, to those who would otherwise not receive such screening to improve health, reduce complications, and cost.
- To provide a mechanism for improving both quality and efficiency of care for vulnerable individuals with an emphasis on those most likely to remain uninsured or underinsured.
- To manage chronic conditions to reduce their severity, negative health outcomes, and expense.
- To reduce the number of ED visits and hospitalizations for high frequency users of the ED.
- To screen and assist individuals who use the ED for government health programs.

Each of these goals will be discussed in the context of the SCCP with evaluation criteria for this project, concluding with a comparative review of other ED case management programs.

Discussion of Program

After gathering a detailed history of health and services from the patient, the establishment of short term goals with the patient begins to identify critical service needs. Newman's focus on pattern recognition guides the professional completing the patient history to assist the patient to identify his or her pattern of turbulence and health. The use of HEC as a theoretical foundation offers "opportunity for reflection on the pattern and a shift in perspective" (Picard & Jones, 2005, p. 16) for both the patient and professional. The shift in perspective gives patients a broader view of their health and launches discussion of other services such as counseling and preventative services that could provide better management of their immediate health care needs and management of chronic illness. Once established, the next steps are to assist with provision of health care services.

Debt and overdue bills can play a large role in choosing the ED for care and accessing non-acute care services. The ED is legislatively required to provide services regardless of the patient's ability to pay yet continues to bill for services. Vulnerable people who are stressed by money owed to private clinics and confused by health care coverage may find the ED an easy choice. ED services are very expensive and a large debt for which the patient is responsible can accumulate in a short time. The ED registration information and patient history of payment issues assists the SCCP coordinator with screening and determining the patient's health care coverage.

The Medicare and Medicaid programs are a CAS subject to fluctuations in funding due to significant governmental budget deficits on a state and national level. In addition to program funding vulnerability, the menu of available programs can be

difficult to navigate for the vulnerable, who find daily living complicated. A call by the SCCP connecting with program coordinators at the county Human Services offices can quickly determine the government health program history. The SCCP coordinator can determine eligibility and enroll the patient in a government health program that meets the person's assessed need for services. The efficacy of the SCCP in regard to screening and assisting individuals who use the ED should expand to include data collection of successful government health program enrollment of the uninsured. Attaining data related to the number of patients enrolled who frequently use the ED can offer insight and influence changes or dropping programs not meeting the needs of enrollees.

Successful management of chronic disease relies on the use of preventative services such as screening and counseling as part of the individual plan of care. With increased use of the ED as a main source of care, patients can become disconnected from primary care providers and mental health counselors. Patient support to reestablish key relationships with physicians and counselors through timely appointments after an ED visits is important. Often, the SCCP social worker accompanies the patient to appointments to assist with travel and review the unique treatment plan (UTP) with the provider for further plan development. An increase in number of primary services utilized with decreased use of ED is a primary data point for program efficacy and cost savings to assure program longevity. Overall disease management can be measured by a decrease in hospitalizations for this population and documentation of other elements of health promotion such as routine lab screening, nutrition education, and compliance with preventative medication protocols.

The sustainability of the program rests on improving health, managing chronic disease, and decreasing the dollars spent on health care. At this time the services provided in the SCCP are not revenue generating, but the program is expected to migrate health care dollars from high cost acute care to lower cost preventative managed care. Funding programs like the SCCP will require pilot programs to network with private insurance carriers and purchasing agents of government programming to determine the financial impact on billed and paid services.

The SCCP is unique in its collaboration with the county based purchasing agent for Medicare and Medicaid to determine the financial impact on users of government health programs. Collaboration between case management professionals employed by the county- based purchasing agent and the SCCP social worker has produced several benefits. This partnership from the inception of the programs has assured access to data that measures the impact of the program on billed services with payment received. The savings is a metric used to evaluate the effectiveness of organizational programs. The demonstration by SCCP of lower cost to government health programs would provide powerful support of multi-professional care coordination and promote interest in funding. Early program results suggest reduction in county based purchasing agency costs have led to current legislative efforts supporting care coordination as a cost-effective billable service. For sustainability, the SCCP must continually prove demand demonstrated by the number of people served as well as cost reduction of paid services by government health programs.

The SCCP has opportunity to significantly change the perceptions of nurses and other professionals regarding the high frequency ED user. ED patients receptive to care-

planning and engaged in preventative and counseling services allow for professionals to readily connect the ED visit with other providers. Understanding the individual patient's needs can alter staff suspicion of the purpose of an ED visit from opportunity to obtain narcotics to what HEC explains as a state of chaos where the patient feels lost and uncertain how to move forward. Newman suggests the patient and nurse "come together and move apart" (Newman, 2008, p. 35). The nurse and other professionals become a "transforming presence" (Newman, 2008, p. 29) through recognition of the patient pattern, providing insight into the relationship between lack of coordinated care and illness, and by assistance in returning the patient to a meaningful provider relationship aimed at health promotion (Newman, 2008).

The UTP offers ED staff information on the comprehensive plan for the individual and direction for optimizing the ED visit and post visit care. As the UTP adds value for ED staff to effectively treat patients, nursing praxis occurs including both the "personal and environmental issues" (Newman, 2008, p. 21). Using HEC, nursing praxis calls for "a dialog of an evolving pattern of meaning, insight, and action" of individual's social and personal situation may motivate staff to early advocacy of patient's participation in the SCCP (Newman, 2008, p. 21). A personalized care experience may also lead to reducing stress and assisting the patient to regain his or her sense of place in the world through a nurse being the "connecting link" with a network of caregivers (Newman, 2008, p. 84). Viewing the purpose of the ED visit solely for narcotic pain relief may result in missing key causative factors such as emotional or financial despair resulting in headaches or abdominal pain. ED staff who advocate for patient participation

in the SCCP offer a meaningful way to support the patient's social and emotional need contributing to their well-being.

The efficacy of individualized care plans and clinical case management for ED frequent users has mixed results in literature describing several trials (LaCalle & Rabin, 2010). Expected outcomes of effective case management such as cost-effectiveness or cost-containment, utilization of non-acute preventative and counseling care, and decrease in ED visits and hospital admissions are the determinants. In one study, evidence suggests ED case management can effectively reduce ED visits and common psychosocial problems among ED users such as homelessness, lack of insurance or social security income, and other unmet financial needs (Shumway et al., 2008). Case management effectively reduces the number of ED visits and ED related costs (LaCalle & Rabin, 2010). Consensus on actual cost savings has not been reached according to published studies. Some argue there is a shifting of cost versus actual cost savings when patients reduce ED visits but increase use of primary and specialty care providers (Shumway et al., 2008). Issues that complicate studying high frequency ED users by a single hospital or programs include the multi-ED user and turnover within the identified group (LaCalle & Rabin, 2010). The SCCP shared the same challenges in determining cost savings and cost effectiveness of care coordination. An additional consideration is the impact of small rural versus larger urban community settings for coordination success.

This project is a community-based collaborative care network program (CCCNP). The CCCNP allows a case manager to navigate within and between community services by means of patient authorized release of information. Rather than

referring the patient to community services, the coordinator assists with transportation, support, and advocacy during provider appointments. The SCCP social worker can assist with meeting criteria for the patient to remain eligible for government health programs such as online registrations, seeking and obtaining part time employment, and searching for alternative sources for prescription coverage and housing. Case management trial models similarly performed interviews to determine key psychosocial problems using a variety of tools and offered appropriate professional follow-up appointments with needed services (Shumway et al., 2008). Other models offered traditional discharge and follow-up planning for ED patients (Auerbach & Mason, 2009). The SCCP program remains unique in comparison to other case management programs as it affords direct and continued personal and physical assistance in reestablishing relationships with providers, counselors, and human services.

The variability in model tools and assessment criteria cause difficulty in comparing this project model for care coordination with others. A lack of similar program design in other case management trials with defined community providers and ongoing program oversight by participating organizations adds to the difficulty of finding a comparative model to benchmark outcomes. The program design relies heavily on community resources rather than evidence-based models. In retrospect, a careful evidence-based literature review prior to program design could have afforded programs with enough similar characteristics to offer opportunity for comparative review.

Determinants of Success

A secure data base provides the ability to enter patient specific information participating in the SCCP. Key data includes the date of enrollment, number of visits and

hospitalizations in the past 12 months prior to care coordination and after engaging with a network of community services and providers. The following are the primary determinants of success:

- Decrease in the number of ED visits and hospitalizations within 12 months of initiation of care management.
- Increase in the number of visits to primary care, health promotion, and counseling services within 12 months of initiation of care management.
- Continued low use of the ED for chronic disease management following the 60 day period of participation in the SCCP.
- Reduction in the overall number of patients using the ED more than 5 times per quarter.

The financial impact on reducing costs for patients enrolled in government health care programs relies on reports generated by the county-based purchasing organization for Medicare and Medicaid recipients. Using a similar 12 month window prior to and after care coordination, the following measurements of individual members are evaluated:

- Reduction in billed ED services as it relates to decreases in number of visits.
- Reduction in paid ED services by government health programs.
- Reduction in billed in-patient hospital services.
- Reduction in paid in-patient hospital services.
- Increase in the use of health promotion programs.

The steering committee has responsibility for ongoing program cost effectiveness, reporting of program goals and measurements to appropriate governing bodies, and assuring appropriate case load management for the program social worker.

This project offers a care coordination model that mirrors suggestions by current health care reform legislation allowing early positioning of the SCCP as a model of a CCCNP. The program design creates potential to improve the overall health of those unlikely to access preventative and counseling care for more effective management of chronic disease and psychosocial issues. Like other previous care coordination, this project is intended to reduce the use of the ED through offering clinical case management to willing high frequency users. While actual cost savings for billed services may be labile due to funding and variations in the population served, the program may achieve cost neutrality over time with improved patient outcomes. ED staff and community providers and participants are apt to gain professional satisfaction from a program that provides early advocacy to assist individuals move from feeling lost to appreciating support by community health care providers and services.

Chapter Five: Conclusion

Nurse as Transforming Presence

Newman (2008) offers nurses can be a “transforming presence” for patients who frequent the ED by searching for patterns of use and connecting visits for pain or disease management with the whole person including their sense of self, support, and environment. The high frequency user of the ED provides a nurse several encounters to find insight into the person, to connect, and transform the patient’s care experience. The ED nurse who is willing to view a patient visit as one part of the whole patient’s view of health is optimally positioned to be a voice for system change through care coordination. The nurse at the bedside is often the first to detect the patient’s pattern of high frequency use of the ED and advocate for coordination of care and effective transfer of care to the next provider or needed community services.

The high frequency ED user presents a challenge for ED nurses as they are particularly vulnerable for progressive and long term effects of poor care coordination with a higher rate of chronic physical and mental conditions while suffering from multiple social stressors such as unemployment and poverty. Of greatest concern is the difficulty to effectively treat chronic disease and diminish health inequities through access to health promotion screenings and testing often partially or completely unaddressed in ED care. Community-based care collaboration such as suggested in this project, affords the ED frequent user needed support and provides for individualized care planning to assist with reconnecting and accessing a full network of services from appropriate providers and community services.

Newman's (2008) approach to search for patterns and de-emphasize symptoms provides the ideal framework for evaluating needs of the high frequency ED user. Further research and study of nursing praxis based on the HEC theory is essential to determine the efficacy of translation of theory to the ED setting. In addition, qualitative studies are needed to determine if pattern recognition for an individual patient makes a difference in their future choice to access health care through the ED verses a broad range of community services. Newman (2008) suggested connectedness centered on "individual and local partnerships" is needed in the world; she further suggests nursing may be the "link in the needed reformulization of the health care system" yet offers little specific insight into nursing's role (p. 87). The nurse well versed in HEC theory may approach community care collaboration as a new venue to integrate theory with practice.

Community Collaboration

The steering committee is currently reassessing other provider and service partners for involvement in the SCCP including primary medical and other community mental health clinics. Physician leadership within the ED has been added to the quarterly review process and a primary care provider has recently agreed to assist in determining if a similar vulnerable population of high volume users may benefit from care coordination in the non-acute setting. Adding the physician role to the review team offers an additional perspective which is helpful assessing patients who have the combination of complex medical and mental health issues for benefit from the SCCP. Each organization needs to continue to consider the efficacy of its services, access, and programs to reduce patient reliance on the use of ED as a safety net.

The SCCP is a first attempt to coordinate ED care with other essential community services. While the program has been successful in developing many unique treatment plans, gaining timely non-acute care provider participation has been a challenge. Next steps to consider are the use of a standard treatment plan template populated by the patient and social worker with focused sample care directive statements completed by the provider. An example of care directive statements would include using a phrase indicating directions for preferred pharmacy or directives for home care nurse communication including the functionality to quickly type a name and telephone number. Provider participation must focus on facilitation of completing a UTP with little effort given the time constraints of busy clinic environments.

The most difficult insight came from patients who continue to repeatedly use the ED despite how uncaring they were treated by frustrated ED staff. Their frequent use continued because disconnection from primary providers and services left them feeling the ED was their only choice. The bias shown by ED staff toward high frequency ED users resulted in a negative patient experience. The program social worker has provided education for nurses to help understand that often patients have no language for depression or anxiety; nurses must look beyond presenting complaints. The expression of pain, nausea, shortness of breath, and other physical symptoms are often the expression of how other stressors are influencing their health and well being. Even motor vehicle collisions and other forms of trauma can be tied to emotional distress for high frequent ED users. A provider network engaged in care collaboration and focused on the needs of the individual is needed to help a patient find their place in the community.

The greatest lesson learned from this project is more than one organization is needed to provide a patient with complete health care. To provide optimal care for the complex population of high frequency ED users requires a broad and well connected network of providers and services to reduce health inequities and address an individual's chronic health care and social needs. Each organization must be willing to start with this common understanding and accept the care currently provided is likely uncoordinated and ineffective and needing connectivity to a network of services. Participating organizations may discover they have poor access and contribute to ineffective care transitions causing patients to overuse the ED and under use their services. Organizations who can accept their weaknesses and are willing to probe barriers to access and program limitations are optimally positioned to address underserved vulnerable populations such as the high frequency ED users.

The strength of this project is the connectivity to health care reform initiatives to improve health while reducing the cost of care for the consumer and for government assisted health care plans. The program has received important recognition demonstrated by a recent state legislative proposal for reimbursement of care coordination. The SCCP needs to be replicated to determine the program's ability to adapt to other counties and care networks, appreciate cost savings, and reduce ED visits and hospital admissions while providing opportunity for comparison of outcomes. Successful care coordination programs are well situated for possible future funding through health care reform legislation.

Health care reform may also advance the professional nurse toward leadership in care coordination. The leader role will call upon nurses to actively participate in care

transition planning from an internal and external perspective. Nurses are strategically positioned to assess and identify patients who are disconnected from primary and preventative care. The educational background of a nurse is needed for complex disease specific care coordination. Creating a multi-professional approach to care coordination offers nurses the opportunity to collaborate and guide patients toward safe, effective, and coordinated care. Community collaboration is difficult and demanding in a society that values competition and still struggles with organizational transparency. Care collaborations are like other relationships; they take a great deal of time and understanding. Other organizations are beginning to make inquiries about care coordination since the program is starting to demonstrate successes such as improving the patient care experience, reducing the use of the ED, and appreciating a reduction in health care costs. As the elements of the program are shared, the smaller size of the community and positive organizational relationships that existed prior to the start of the program is suggested by others as contributing factors. Specific demographics within the community may have contributed to the project's success, however those involved believe it can be reproduced among other healthcare networks.

Communities interested in designing care coordination for high volume users of the ED must begin by discovering the depth of overuse of the ED. The first step recommended is collecting dates of visits and coded diagnosis of those who use ED more than five times per quarter. This provides the means to find patterns of use related to chronic conditions and a potential case management volume. The definition of frequent user may need to be altered to assure the number of patients qualifying for care

coordination meets the available staff resources. Many models, including this project, should be studied for fit, methodology, and intended outcomes.

Lessons Learned

The objectives for this project have frequently guided decisions during program development and remain unchanged. Providing care coordination for over 90 individuals has influenced the methods developed to connect patients to a network of needed services. For those involved with the project there have been many moments of personal and professional growth, enlightenment, and lessons learned. Participating project members have gained knowledge about other services, found opportunities to improve organizational performance, faced the effects of bias on the care experience, and realize many of these patients are willing participants in improving their health and social situation. If given the chance, the steering committee would have performed a more intensive preliminary search for program models to allow for comparison of patient outcomes and program success. During program development, a new president was elected and health care reform legislated. Program leaders need to stay connected to politically driven changes directed toward health care to continuously align efforts with reform.

This project's goal is to create a network of providers and services willing to alter current programs and practices to coordinate care for vulnerable high frequency users of a rural ED. Through the efforts of ED staff, the program coordinator, and steering committee the program has been successful in reducing the number of ED visits and hospitalizations, reducing costs for those who are enrolled in government health programs, and improving care and communication through the use of the unique

treatment plan. Patients have been willing to participate and permit organizations to communicate to assist in accessing health promotion and prevention services rather than remain in the pattern of frequent use of the ED. Nurses are fulfilling the role of what Newman (2008) called “the connecting link” (p. 87) for coordination by partnering for our mission of “caring in the human health experience” (p. 87). Community-based care collaboration partners well with health care reform by guiding patients toward comprehensive, coordinated care to impact positive change.

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Appendix A

60 Day Community Support Plan		
Name: _____		
Phone: _____		
Address: _____		
Functional Assessment Area	Short Term Objective	Plan-client and team role
Functional Assessment Area	Short Term Objective	Plan-client and team role

Appendix B

Functional Assessment Tool		
1. Mental health symptoms	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
2. Mental health service needs	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
3. Use of drugs or alcohol	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
4. Vocational functioning	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe Problem _5)Extreme Problem	Describe functional impact of mental health symptoms: Strengths and resources:
5. Educational functioning	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
6. Social functioning, including use of leisure time	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
7. Interpersonal functioning, including relationships with family	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
8. Self-care and independent living capacity	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:

9. Medical health	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
10. Dental health	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
11. Obtaining and maintaining financial assistance	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
12. Using transportation	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
13. Other area: specify	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and resources:
14. Other area: specify	_1)No problem _2)Slight problem _3)Moderate problem _4)Severe problem _5)Extreme problem	Describe functional impact of mental health symptoms: Strengths and Resources:
Interpretive summary:		
Are ARHMS services recommended at this time? _Yes _No		

Appendix C

Unique Treatment Plan

Patient: John Doe

Date of Birth: 08/23/1963

MR # 858587

ED CARE PLAN

Date: 10/23/09

Living Arrangement: Mr. Doe lives with his wife and two children. He has limited income and is in a considerable amount of debt. His wife works full-time and Mr. Doe is on Disability. Mr. Doe cares for his two children.

County Involvement: Mr. Doe has an adult mental health case manager, Amy Smith, from South Central Human Relations Center. Ms. Smith would like to be notified when Mr. Doe comes into ED. She can be reached at 999-9999. ED staff can contact Lou Kline if Mr. Doe comes into ED and she can notify Ms. Smith if ED staff desire.

Psychiatric Care: Mr. Doe's psychiatrist is Dr. Wilman. He is getting medications set-up in a medication tray set up by Paula Day at the Human Relations Center. Mr. Doe has participated in Dual Recovery Program. He only completed phase one of the program. Mr. Doe has seen Dan Walsh, therapist at the Human Relations Center. See attached personal crisis plan from his mental health care providers.

Family Physician: Mr. Doe's family physician is Dr. Clancy. Currently, Mr. Doe is seeing Dr. Clancy every two weeks to gain better control over his diabetes and migraine headaches. Dr. Clancy is aware of Mr. Doe's increased ED visits.

Care Plan: Dr. Clancy has a standing order at the infusion clinic for Mr. Doe to get treatment at the clinic for his migraine headaches. If he feels a migraine is starting, he should go to the clinic during the day to get treatment instead of waiting until he needs emergency care. Mr. Doe also has been enrolled in Diabetes Management Program through South Country Health Alliance. Please see attached letter from Dr. Clancy about the use of narcotic medications with Mr. Doe. If a prescription is needed for Mr. Doe outside of the Emergency Department, it needs to be called in to Sterling Drug if it is during the hours Sterling Drug is open, to ensure Paula Day is aware of the medication. If Mr. Doe presents after pharmacy hours and requires a prescription outside of hospital, please leave a message for Lou Kline at 72262 and she will notify Paula Day of the script.

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