

**Transitional care planning:**

**A pilot study to explore patient, hospital, and primary care perspectives**

By: Kara Hall

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## Table of Contents

ACKNOWLEDGEMENTS .....	III
ABSTRACT.....	IV
BACKGROUND .....	1
METHODS .....	3
Settings.....	3
Participants.....	3
Data collection .....	4
RESULTS .....	5
Barriers at the system and infrastructure level.....	5
Barriers in care team level .....	7
Barriers at patient Level.....	9
DISCUSSION.....	11
CONCLUSION.....	15
REFERENCES .....	17

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## **ABSTRACT**

“The care plan is a holistic, dynamic and integrated plan that documents important disease prevention, treatment goals and plans of care” (Dykes, 2013). This thesis reports an exploratory study that used a qualitative approach, which included field observations and semi-structured interviews, to understand the barriers and current process of care planning. A thematic analysis identified barriers at the system, care-team, and patient levels. Specific themes included limited time and resources to establish value-based care, inconsistent/vague role definitions across settings, disconnections in care team communication, inconsistent care planning definitions and goals, current processes/strategies, patients’ lack of knowledge of care planning, and social behavioral determinants that prevent patients from engaging in their care planning. While the barriers identified in this study provide opportunities for human factors in the redesign of process and support tools; further research is necessary to fully understand the care plan process.

## **BACKGROUND**

Critical information is lost during transitions of care contributing to high rates of health care use and spending as it exposes patients to lapses in quality and safety in care (Naylor, 2011). Two hundred and forty billion dollars a year are attributed to poorly coordinated care as a result of unnecessary hospitalizations, emergency room visits, treatments, and medication expenses. These adverse effects are related to the gaps in communication; care management and the reliability of information (Dykes, 2013). These disconnections in communication can threaten the health and safety of patients. (Naylor, 2011)

Care coordination is thus a critical component of value-based care, a healthcare delivery model where providers are paid based on the quality of care. The Affordable Care Act of 2010 established a variety of programs to support transitional care and procedures to improve the quality of care (Naylor, 2011). In the progress report to Congress on the National Strategy for Quality Improvement in Health and Human Services Department it was quoted a “Conscious patient-centered coordination of care not only improves the patient experience, it also leads to better long-term health outcomes, as demonstrated by fewer unnecessary trips to hospital, fewer repeated tests, fewer conflicting prescriptions, and clearer advice about the best course of treatment.” (Lamb, 2014)

The care plan “is a holistic, dynamic and integrated plan that documents important disease prevention, treatment goals and plans of care” (Dykes, 2013). As described by the C-CDA the purpose of a care plan, represents one or more plan(s) of care, with the purpose to reconcile and resolve conflicts between the various plans of care created across multiple settings. Both plans of care and care plans include goals and required team members to involve patients in their creation;

as the number of plan(s) of care grows the complexity of reconciliation becomes more complicated. The care plan works as a longitudinal coordination the overlapping plans of care.

Historically, care planning has been led predominantly by nursing staff with the primary care serving as the hub. The Affordable Care Act of 2010, has moved care planning towards an interdisciplinary process requiring collaboration among care team members in their development. These care plans are rarely shared across settings leading to miscommunications and fragmentation of services. A research study in 2009 collected information on advanced care planning via phone interviews to identify barriers to advance care-planning (ACP) steps and identify common themes. Extensive research has been conducted on advance care planning with the involvement of the patient and care givers in their plans. These studies may shed some light on the barriers affecting care planning as they have directly involved patients and care givers in their development. In a study by Schickendanz (2009), six barriers were identified including ACP perceived to be irrelevant, personal barriers, relationship concerns, information needs, health encounter time constraints and problems with advanced directives.

A study collecting surveys and interviews by Dykes (2013) in Hospitals, emergency rooms, acute care facilities and home health services provided evidence of the limited knowledge on care planning. This study specifically found there to be “variation in the types and formats of information” provided in care plans upon transition of patients. The barriers identified included “lack of clarity related to nomenclature, regulatory requirements, content, communication and messaging standards, care plan governance, and care team ownership and participation.”

This thesis reports an exploratory study that investigated multiple perspectives in transitional care planning, emphasizing the context of care coordination as larger than the individual work activities of a single care coordinator. This study was a first step to a larger project led by the

principle investigator Dr. Sharon Hewner from the School of Nursing at the University at Buffalo to apply a human factors based, patient-centered approach in redesigning the care planning processes and support tools to achieve more structured and effective communication across healthcare settings. More specifically, this exploratory study aims to gain an understanding of the barriers in the care planning support of transitional care in acute and primary care settings with diverse staffing and practice patterns.

## **METHODS**

### **Settings**

This study took a qualitative approach that includes field observations and semi-structured interviews to understand the care planning process and the current barriers. The setting for this pilot study was at healthcare facilities in the City of Buffalo, New York, focusing on primary care practices and acute hospitals currently providing care coordination services. The selected sites included Elmwood Health Center (EHC) and the Family Health Center and Hospital of the Erie County Medical Center (ECMC).

### **Participants**

*Clinicians.* For the study, the principle investigator recruited twelve clinicians total from Elmwood Health Center, ECMC Hospital and ECMC Family Center. The criteria for the recruitment of these providers included an expertise in transitional care. Therefore we interviewed care coordinators, discharge planners, care managers, physicians, or other nursing staff in the office. Clinicians who did not actively participate in transitional care were excluded from the study. In total, we interviewed five clinical staff from Elmwood Health Center, four primary care staff at ECMC and three inpatient clinicians at ECMC.

*Patients.* The care coordinators at the primary care office receive daily electronic admission, discharge, and transfer notification (ADT) for patients who are discharged from the hospital and emergency department. We asked for recommendations from the staff about who should be contacted for a follow up interview. The designated individuals needed to be recently, within the last few months, discharge from the hospital and were expected to be adults with a pre-existing chronic illness (DM, COPD, HF, CKD for example). Patients with cognitive impairment or language barriers, those who didn't live in Buffalo, patients who could not be reach to set up an interview, and those who could not give informed consent were excluded from the study.

In total, the researchers interviewed 3 patients shortly after their hospital admission and discharge. Patient 1 was a white male, over the age of fifty. He was discharged from the hospital after an infection and was in need of a catheter. Patient 2 an adult, white male was hospitalized because of complications related to his drinking habits. Patient 3 was an adult, African American male in his sixties was discharged from the hospital after complications with his blood pressure.

### **Data collection**

Study personnel conducted field observations and interviews with care team members at the two clinical sites, and interviewed patients at their home or at work.

Interviews were guided by open ended questions that focused on how the flow of information is currently being facilitated by care plans. Interviews with clinicians included questions such as “How do you define care planning?, What are your goals for the patient when developing a care plan?, What is your process when developing a care plan?, Who makes up your care planning team?, What tools do you use to develop a care plan?”. Conversations with patients focused on the questions such as “Do you know what a care plan is, and if so - what is it?, How were you involved in your care plan during your discharge process?, Did they [clinical staff] ask what your health

goals were?, Did you have any contact with the primary care after your discharge from the hospital?, Did they ask you prior to making the appointment whether it worked best for you?, what support did the hospital give you?, Did the doctor give you any instructions regarding your health goal?”.

Without recording any conversations, interviews, and observations were recorded in field notes during the interviews and organized/synthesized immediately after each interview by the research team. Analyses was iterated within the research team for several rounds to identify themes and patterns.

## **RESULTS**

A number of themes emerged from the pilot field study have been grouped into three categories:

- 1) Barriers at the system and infrastructure level;
- 2) Barriers in care team functioning;
- 3) Barriers at patient level

The themes are summarized below with brief interpretive comments.

### **Barriers at the system and infrastructure level**

*Limited time and resources to establish value based care.* The ultimate goal of care planning is to be leverage across settings to improve population health and reduce the cost of care (Dykes, 2014). To accomplish this, the care team will need to leverage electronic health technology to create a care plan that will transcend across care settings (Dykes, 2014). Technology connecting the care facilities included in this study are not yet in place creating major barriers in communication. A nurse summed the current system up: “The system is not perfect and people fall through the cracks”.

From our interviews and observations, it was apparent there was limited time and resources available to establish a patient-centered plan for every patient. One nurse interviewed was concerned that it would lead providers to “ultimately discharging patients from their practice once they have done all they can do for the patient because providers will be receiving low scores of standard benchmarks.” The same nurse also commented on how long it took her (one year) “to wrap [her] head around the idea of value-based service” regarding their role/goals in this new delivery model.

*Inconsistent or vague role definitions across settings.* It is important to note that the role of a care manager is not always separate from the primary care nurse who carries out the post-discharge follow up interviews. The care coordinator in the primary care and hospital setting had a similar nursing background as the care manager in the hospital setting both have been trained as care coordinators for their associated facilities. Though discussed by several of the care managers one specifically stated “the minimal understanding by other professionals [Doctors, nursing staff] of the care manager’s job role and how it affects their patients.” Furthermore, some interviewees were unclear about the role or purpose of their own position, e.g., one care manager found it hard to find the purpose of care plans, and it was unclear to her the difference between clinical notes and care planning.

*Limitations of care planning tools.* The tools mentioned in interviews and observed in visits to the clinical facilities included EMR care plan templates, excel, note books, and the Mercy Adult Stratification Tool. Several issues were identified regarding the current use of the EMR/ care planning tools: (i) poor usability “EMRs to help develop and structure their care plans- although these tools were isolated to one author” the care coordinator described “the care plans are not person centered and dry” as developed through the EMR template; (ii) does not support care

planning sharing or creation by multiple team members for example “at no point, was it observed in the care planning process, at either facility, did care team members collaborate to create a universal care plan”; and (iii) in some cases, care planning personnel were not even aware that such tools exist.

### **Barriers in care team level**

The “care team is a clinical team for a given patient consisting of the health professionals, physicians, advanced practice registered nurses, physician assistants, clinical pharmacists, and other healthcare professionals – with the training and skills needed to provide high-quality, coordinated care specific to individual patients.” (Doherty, 2013) Among the care team, barriers to effective care planning across multiple care settings appear to fall into two main categories—communication and role definitions.

*Disconnection in the communication among care team members.* Care planning occurs at multiple settings within the healthcare system, including hospitals, primary care, and peripheral settings such as pharmacy and health homes. During the transition from acute hospital care to primary care, the care coordinator or care manager at the primary care becomes the center of this transition of care. While the care team members are expected to collaborate to develop a comprehensive care plan for a patient, in reality the care teams we interviewed have little to no communication among the team members; this is limited even within practices.

The care coordinator at primary care commented, “Hospital staff will set up an appointment with the primary care and the patient will still be in the hospital when the appointment is scheduled for” and “primary care will call hospital for information on patients discharge and they will not know any details.” The care managers at each facility created their own isolated care plan. When interviewed, post-discharge, patients were unaware of any care planning activities. Furthermore,

care managers and care coordinators in primary care settings felt the hierarchy of the office-limited communication. The primary care clinicians are frustrated with “the disengagement of hospitals after discharge of patients.”

Throughout the interviews care team members described access work created by fragmentation in transition of patients; this work included reconciling medications, coordinating lab work and scripts prior to visits. The care team feels restricted by limited time, as one care manager described “feeling overwhelmed with patient load - some have five hundred patients that need care planning but one care manager can only handle one hundred and fifty at most.” All individuals interviewed described insurance coverage to be their biggest challenge. This is a barrier for care planning because it results in the majority of time consuming tasks as listed above medication reconciliation, getting procedures covered and rehabilitation covered.

*Inconsistent definitions/goals of care planning.* In our interviews with hospital and primary care management staff, we found that the goals of the hospital and clinical staff do not align. Both described the “difficulty determining the difference between discharge plans and care plans.” Goals described by the hospital staff included “keeping patients from being readmitted, limited admission to patients who need to be admitted, and patients moving efficiently through the ER.” The goals described by the primary care clinicians was “to identify people who need care management and nailing down the details, to resolve problems such as how they will get their medication, air conditioning and help them get to their appointments.” However, they all agreed on the need “to improve the patient’s overall health and to get patients involved in their health.”

### *Current Practices/Strategies*

Each clinician described their own process in which they would develop a care plan. The care manager and care coordinator would utilize the EMR template as a guide but developed the care plans with outside tools including “tracks everything on a spreadsheet outside of their EMR” or a notebook. The care manager at the primary care associated with the hospital would have the plan in “creates own care plan does not record in written form” the understanding right now is “care plans are situational work.”

The care manager at the independent primary care uses strategies when developing the care plan with the patient. The approach to communication was described as “motivational interviewing” used a specific technique - “never tell[ing] the patient they are doing something wrong. Always beginning each meeting with ‘I know you are doing everything you are supposed to be’ or ‘I know you are trying your best’ . On working with outside benefit systems (food stamps and other government funded aid) the care manager described it as “playing the game” as the strategy.

### **Barriers at patient Level**

*Patients' lack of knowledge about care plans.* Patients play a critical role in their care planning. Care plans have been envisioned with “the individual [patient] at the center of care.” The patients were interviewed after being discharged from the hospital many of the patients were unaware of the care plans developed for them. When asked “Do you know what a care plan is?” patients we interviewed responded “no”, “no, I’m not hundred percent positive what a care plan is” and “when someone tries to take care of someone who cannot take care of themselves,” which is not an accurate interpretation. However, once explained what a care plan is, these patients were able to

identify how they were involved in their care plan during their discharge. For example, one patient stated:

“They [the hospital] asked me how I was planning on progressing, moving forward, and my intentions and plans were - follow up appointment, and part of what I was in for was alcoholism, so they asked about AA, getting a sponsor, and going to meetings. They did ask me about goals and plans.”

One patient reported that their goal, as stated to the discharge nurse, prior to discharge from the hospital, was “I’d like to get rid of my catheter” whereas some goals are health-related but not addressed by the provider team already “[need to gain weight] I actually lost 20lbs and a lot of it was muscle mass.” Participants also acknowledged that they received health related advice, such as following a low sodium diet (to manage blood pressure); however, conflicting advice also crept in during the patients discharge: “One of them told me I wasn’t supposed to take a bath but then another one told me well why not? Because I like taking baths!” Overall patients seemed to recognize the care plans being created for them, but not directly involved with them. These experiences resulted in an unclear understanding of their purpose, or how the care plan would be monitored or managed by the care team.

*Social behavioral factors that prevent patients from engaging in their care plans.* Many of the social behavioral factors act as barriers for patients and providers themselves. The issues affecting patients and clinical staff at this level included but are not limited to “a patient’s indifference to their own health, patients not cooperating.” A patient described “I haven’t been to a doctor in 40 years because I’ve been pretty healthy.” One of the care coordinators stated that “It is important to get patients to buy into the process of care planning and this care take time.”

Transportation was identified, as a barrier for patients at every level through care planning this issue seemed to be resolved. It was established on all levels of care planning to check if a patient had transportation before leaving the hospital or scheduling an appointment. Each patient

interviewed acknowledged being asked multiple times if they had transportation to get to their follow up appointment. The patients and clinicians also described barriers such as functional ability; social behavioral limitations: ability to read, understands their health, and remembers appointments. These highlight as described by the care manager “the greater impact of social systems” these have been ignored in the past. The work done to resolve the social behavioral barriers faced by patients was described by the care manager at a primary care facility as “some patients take a few hours where some patients take a full day.”

It is interesting to note, the success stories of transitional care planning shared by the interviewed care coordinators centered on the social behavioral needs. In one case, the patient identified their goal and priority as their housing needs, which the care team helped by assisting this patient submit multiple subsidized housing applications. In another case, the patient could not afford their medications, so the care manager helped them switch to medication covered by their insurance and improved medication adherence. From these examples, it is clear that the care team cannot address health-related goals without addressing other social or economic needs; it also illustrates the scope of the care planning work beyond the medical requirements that clinicians are trained for.

## **DISCUSSION**

This study identified barriers to the care planning at the system level (limited time and resources to establish value-based care, inconsistent or vague role definitions across settings, limitations of care planning tools), care team level (disconnection in the communication among care team members, inconsistent definitions/goals of care planning, current practices and strategies) and patient level (patients’ lack of knowledge about care plans, social behavioral factors that prevent patients from engaging in their care plans).

This pilot study aimed to further understand the complex multi-level process of care planning and to begin to discern the barriers of the current process, for the larger project, to design requirements for health information exchange and clinical decision support tools that would facilitate shared understanding of the patient experience across care settings, anticipate patient needs and minimize care coordinators' workload.

*Limited time and resources to establish value-base care* represents a critical barrier to the successful implementation of care planning. To provide a comprehensive care plan, care managers/coordinators must communicate effectively between facilities and specialties. The care managers explained one-hundred and fifty patients being the max a care manager could coordinate for although this facility had five hundred patients that needed care planning completed.

Throughout the interviews, it was observed and discussed that many hours of a care manager's day are spent conducting follow up calls, reconciling medication and navigating through the EMR and HIE tools at the facility. This is consistent with a similar observational study in a primary care of a Community Health Center observed the role of primary care nursing and care coordination facilities. The study showed the majority of time was spent in medication administration, phone calls, charting and paperwork; leaving them with only 15% of their time for care coordination. Although our study focused on the care coordinator's role in care planning without the addition of nursing tasks, the studies were consistent in their observations. All clinicians described non-primary job role tasks are taking up excessive amounts of their time. (Anderson, 2012)

Care coordination, roles are needed to support the triple aim: improving the quality of care, improving the health of communities and simultaneously reducing healthcare costs. During the interviews it became clear, the vague and inconsistent definition behind the roles of care coordinators showed a result of tension within the practice settings. The theme of *Inconsistent or*

*vague role definitions across settings* represents the discussion of frustration around this topic discussed during the interviews. For example, one of the clinicians described, “there is little understanding by other professionals of their job as care managers and how it affects their patients.” This misunderstanding of roles can result in a disregard for care plans altogether. In all locations, the doctors on staff did not review the care plans at any point in their development.

The work of care managers’ leans towards reactive instead of planned and organized (Anderson, 2012). This research was relevant between settings and clinicians as there was not a consistent tool to create a collaborative care plan. The *limitations of care planning tools* ultimately create fragmentation in the communication required of the Comprehensive Shared Care Plan. The clinicians discussed difficulty in finding patient information within the current systems, the inability of EMR systems to communicate; there is not a consistent template for care plans used between/within facilities. This is consistent with previous research has shown a substantial variation in the types and formats of care plans making it difficult to communicate (Dykes, 2013).

The themes are interrelated considering how the theme of disconnections in the communication among care team members can act as a catalyst several of the barriers found within this study. When there are gaps in communication in care coordination, the content and reliability of the information in the transition of care can put the patient’s safety at risk. These limitations are opportunities for human factors engineers to engage in and develop user-friendly systems to help in the collaboration and development of care plan. To provide a comprehensive care plan, the care team members must have a clear understanding of the universal goal/purpose of the care plan. In multiple interviews, clinicians described being unclear of the purpose of the care plan. The field of care management has been described as “so big with so much more to be known” (Mazanec, 2018).

The responses from care team members falling into the *inconsistent definitions/goal of care planning* theme had similar responses. Several of the clinicians discussed difficulty navigating the care planning as they were “unclear” on the purpose of the care plan – many discussed difficulty differentiating between discharge plans and care plans. In a study in 2018, participants found it more challenging to strategic plan for care coordination than workshops in communication, pain, and symptom management (Mazanec, 2018).

As a result of the barriers, clinicians have developed *current practices and strategies* to enable the development of care plans. Clinicians discussed ways of connecting patients with their care plans referred to “motivational interviewing.” The strategies were commonly used to overcome social/behavioral barriers faced by patients such as access to food stamps. One of the clinicians described their experience with the benefit’s systems as “playing the game.”

In our observations, there was a mix between the use of a care plan template within the facilities EMR, Excel and hand written care plans. These current practices and strategies need to be further investigated through the use of Cognitive Work Analysis to further understand the process of care planning. Research conducted by Sasso (2015) investigated the cognitive workload comparing print nursing process versus computerized nursing processed. The research showed that computerized nursing process had lower cognitive workload then nursing staff who used a printed nursing process. (Sasso, 2015)

The communication between care plans cannot stop at the clinician level, it must be patient-centered, reflecting a patients’ values and preferences. Communication can be challenging as a *patients’ lack of knowledge about care plans and social behavioral factors prevent patients from engaging in their care plans*. The barriers to care planning transcend beyond individual practices; it is critical to involved patients in the development of their care plans. This is made clear by a

study conducted by Jeffs et al. in 2012 on the perspectives of patient and family on threats to patient safety during transitions of care finding the three key threats included “lacking information, getting “funneled through” too soon, and difficulty adjusting to the shift from total care to almost self-care.” These threats to patient safety could be minimized by the development of a patient-centered care plan; although, Technologies need to be developed to help enable the interoperability of care plans across settings and allow to collaboration with all members of the care team.

This study has several limitations. The study had a small sample size of twelve clinicians and three patients. Subjects were not randomly selected. The care manager at ECMC primary care selected the patients for convenience. The study is an exploratory pilot and should not be generalized.

## **CONCLUSION**

This exploratory study based on interviews and field observations, identified the barriers by conducting one-on-one interviews with clinical staff and patients to understand their experiences. In addition to interviewing a number of clinical staff from both acute and primary care settings, the study also engaged several patients in interviews shortly after hospital admission and discharge to illicit their experiences with the care planning process, thus providing additional insights regarding patient involvement in care planning.

As a result, we were able to identify barriers at the system level (e.g., infrastructure, inconsistent role definitions across settings, lack of support tools), care team level (e.g., disconnection in communication, current process/strategies, vaguely defined jobs, limited resources), and at the patient level (lack of understanding about the care planning process and social-behavioral determinants). While these barriers identified provide opportunities for the redesigning of process and design of decision support tools, it is also important to recognize the

further need to define the tasks of care planning personnel, and ensure that any tools designed should support their adoption of the new practices.

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