A Qualitative Exploration
of a Patient-Centered Coaching Intervention
to Improve Care Transitions
in Chronically Ill Older Adults

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ABSTRACT. Persons with chronic illness frequently find they need to navigate the health care system but are ill equipped to do so. Using interview data from 32 participants, this study explored patients’ experiences with a coaching intervention that provided patients with support and tools to enhance self-management during care transitions. The findings suggest the efficacy of the model in enhancing self-management, particularly because it fostered the perception of a caring relationship, leading to greater patient investment in the program. Future research should seek to explore which patients are most ready and able to benefit from this type of intervention. doi:10.1300/J027v25n03_03 [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <http://www.HaworthPress.com>] © 2006 by The Haworth Press, Inc. All rights reserved.}

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BACKGROUND

Chronic illness affects nearly half the U.S. population and accounts for three quarters of health care costs in the United States (Hoffman et al. 1996). Due to the decentralized structure of the U.S. health care system, persons with chronic illness and their caregivers must navigate this complex health care system without preparation or skills to do so (Lorig 1993). In the absence of adequate support and follow-up, chronically ill patients may experience a number of problems during transitions between care settings and providers. Quality of care and patient safety are jeopardized by factors such as incomplete or inaccurate information transfer between settings and practitioners, inappropriate or absent follow-up care, conflicting advice about illness management, and difficulty reaching appropriate practitioners when questions or problems arise (Forster et al. 2003; Harrison & Verhoeof 2002; van Walraven et al. 2002). Ultimately, these problems lead to and are compounded by unnecessary re-hospitalization, medication errors, increased costs, confusion and distress (Coleman et al. 2004, 2005; Naylor 2000; Naylor 2002; Weaver et al. 1998).

In the current health care delivery context, patients who are knowledgeable about their condition and its management and who are able to communicate effectively with care providers are more likely to have their needs met during the series of transitions following hospitalization. These "activated patients" patients are defined as those who believe in the notion that the patient is a critical component of the health care team, and who have the skills and knowledge to "manage their condition, collaborate with health providers, maintain their health functioning, and access appropriate and high-quality care" (Hibbard et al. 2004, 1010). One mechanism through which patient activation may be facilitated is educational interventions that enhance patient self-efficacy and provide tools to support self-management and communication with providers. Existing research suggests the following on successful patient education interventions are: (1) They are patient centered; (2) They seek to increase patient confidence and communication; and (3) utilize a facilitator/provider who subscribes to the empowerment philosophy (Arnold et al. 1995). A patient-centered approach is essential with older adults, who tend to be more passive in patient/provider interactions,

KEYWORDS. Educational tool, personal health record, care transitions, coaching, self-management, patient-centered, chronic illness
leading them to experience more confusion and communication difficulties with providers (Roter 2002). Further, patients who are able to supply the practitioner with the appropriate materials and information are more likely to achieve the desired result, whether that is medication, treatment protocol, or other resources.

THE STUDY

The aim of the present study is to explore patients’ experiences with an innovative intervention providing one-on-one coaching to enhance patient self-management throughout care transitions. The concept of transitional care is defined as “a set of actions designed to ensure the coordination and continuity of health care as patients transfer between different locations or different levels of care within the same location” (American Geriatrics Society 2002). The Care Transitions Intervention is a patient-centered interdisciplinary team intervention designed to improve transitions across sites of care by educating and empowering patients and caregivers to assure their care needs are met during care transitions. This is accomplished by providing patients with tools and structured support that promote knowledge and self-management of their condition as they move between care settings and eventually return home.

The intervention was conducted with two national health care systems that respectively serve over 60,000 and 5,000 patients aged 65 and over in Colorado. Together, these two health care systems include group managed care, IPA (Independent Practice Associates) managed care, and fee-for-service Medicare reimbursement models. The intervention was explicitly designed for older adults with complex care needs stemming from chronic illness. Eligibility criteria for the study included (1) participation in one of the two participating healthcare systems; (2) age 60 or older; (3) should be English-speaking; (4) live within the geographic radius of the study (approximately 1-1.5 hours driving time from downtown Denver); (5) have a telephone; (6) show no evidence of major psychiatric illness; (7) no evidence of dementia (from medical records and a brief mental status screening administered by the study nurses at time of recruitment); (8) not expected to enter long-term care or hospice following the index hospitalization; and (9) hospitalized during the study period with at least one of the following diagnoses: stroke, congestive heart failure, coronary artery disease, cardiac arrhythmia, chronic obstructive pulmonary disease, diabetes, spinal stenosis, hip fracture, peripheral vascular disease, deep venous thrombosis, or pulmonary
embolism. Eligibility criteria were chosen because of the complex care needs accompanying the selected conditions, which lead to a high likelihood of multiple care transitions in a variety of settings following hospitalization.

Described in detail in a prior issue of this journal (Parry et al. 2004) and at www.caretransitions.org, the 30-day intervention is rooted in four conceptual domains, or "pillars," which were derived from patient feedback during an earlier qualitative pilot study regarding the needs of older persons with chronic illness during care transitions (Coleman et al. 2002). The pillars include: (1) medication self-management; (2) use of a dynamic patient-centered record; (3) follow-up with providers; and (4) knowledge/self-management of condition. Each pillar reinforced the overall goals of the intervention, that the patient become more knowledgeable, more activated in managing his or her condition, and more skilled at interacting effectively with members of the health care team. For example, in the medication self-management pillar, goals included that the patient understand what medications to take, why and how to take them, have a working medication management system in place, and know how and who to call with any questions. For the third pillar (follow-up with providers), patients were coached to schedule and complete a follow-up visit with the primary care provider and/or specialist. The transition coaches also used role playing and education to coach patients how to be active participants whose needs and questions were addressed during provider visits.

The four pillars were operationalized through two core components: (1) a series of structured interactions with a nurse Transition Coach, and (2) a Personal Health Record (PHR), which appears in its entirety in an earlier study (Parry et al. 2004). Structured interactions with the Transition Coach included weekly hospital/rehabilitation visits; a home visit occurring 48-72 hours after discharge; three follow-up phone calls at 2, 7, and 14 days post-discharge; and 24-hour pager access to the Transition Coach. Transition coaches were advanced proactive nurses or RNs skilled and trained in education and advocacy with older adults. The role of the Transition Coach was to educate and encourage the older patient and caregiver to become an active and informed participant during care transitions, ensure continuity of care across settings, and educate the patient in self-management of their condition. Thus, the coaches acted as facilitators and educators rather than healthcare providers.

The PHR is a dynamic, patient-centered document that includes a record of the patient's critical medical information, a list of warning signs that correspond with the patient's chronic illness, a transfer checklist, and a sec-
tion to write questions for healthcare providers. Written in lay language, the PHR is generated through chart review and validated by the patient/caregiver, who is charged with updating and maintaining the record. The PHR was introduced during the hospital visit and patients were taught how to record and update information in the PHR during the home visit.

As noted above, the coach interacted with patients during the initial hospital visit, a home visit occurring 48-72 hours post-discharge, and during three follow-up phone calls. The primary purpose of the hospital visit was to introduce the intervention, establish rapport, introduce the PHR and help to prepare patients for discharge. During the home visit, the Transition Coach and patient reconciled pre and post-hospitalization medications, reviewed the proper use and side effects of each medication, made a plan to resolve medication discrepancies, prepared for follow-up visits, reviewed "red flags" (signs of a condition worsening) and discussed the appropriate response to red flags. The follow-up phone calls were used to monitor and reinforce patient progress in each of the four pillars.

METHODS AND DESIGN

Data for this study were collected in 2003 as part of a randomized control trial of the Care Transitions Intervention in Denver, Colorado. Quantitative data were collected from the entire sample (n = 976) to explore the effects of the intervention on subsequent cost and health care utilization. In addition, qualitative data (n = 32) were collected to explore patients’ experiences with the intervention model. The results of the qualitative study are the focus of this paper.

The study employed a qualitative descriptive design. The framework for data collection was deductively-derived, reflecting the structure of the intervention through the construction of questions that asked about patients’ experiences with the core intervention components: the Transition Coach, the PHR, and the four conceptual domains (medication management, follow-up, warning signs, and use of a health management system). Since a primary focus of this inquiry was to understand the patient perspective on the intervention, the interviews also included a series of open-ended questions asking patients to talk about their experience more broadly. All interviews used an open-ended, semi-structured format.
Recruitment/Sample

In addition to the age, demographic, diagnostic, and other eligibility criteria required for the parent study (as described earlier), eligibility criteria for the qualitative study also included completion of the intervention in the last 30-45 days. From this initial sample, the informant pool for the data reported herein was purposively constructed to contain a relatively equal proportion of respondents by gender and eligible diagnoses. Participants were invited to participate in either an individual interview or a focus group interview. Six subjects elected to be part of a focus group interview and the remaining 26 subjects chose to be interviewed individually. Characteristics of the 32 participants are presented in Table 1. The sample is representative of the target population in the geographical area where the study was conducted on all demographic information presented. All patients in the study reported having an informal caregiver.

Facility A was associated with a health care system using a group managed care model and Facility B was associated with a health care system using an IPA model. The 26 subjects who participated in individual interviews were nearly equally divided between Facility A (14 patients) and Facility B (12 subjects). All 6 subjects who participated in the focus group were associated with Facility A. Parallel focus group data collection at Facility B was not possible due to barriers related to the lower socioeconomic status, advanced age, and increased impairment level of this population—factors that significantly limited participants’ mobility and ability to attend a focus group meeting. Caregivers accompanied eight participants during the interview process. All participants had at least one of the qualifying diagnoses for the study and 72% of the sample had two or three qualifying diagnoses, with hypertension, chronic obstructive pulmonary disease, and coronary artery disease occurring most frequently.

Data Collection

The researchers called patients at home 30-45 days after intervention completion to invite the patient to participate in an individual or focus group interview. Individual interviews were conducted in patients’ homes and the focus group was conducted in a conference room at Facility A. All interviews lasted approximately one hour, were audiorecorded, augmented with field notes, and tapes were transcribed verbatim.
TABLE 1. Participant Demographic Data (n = 32)

<table>
<thead>
<tr>
<th>Age</th>
<th>Range</th>
<th>61-96 years</th>
<th>Mean</th>
<th>78</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>White</td>
<td>29 (91%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>2 (6%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>1 (3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
<td>19 (59%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>9 (28%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>3 (9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>1 (3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Level</td>
<td>Elementary</td>
<td>1 (3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior High</td>
<td>5 (16%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>19 (59%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade School</td>
<td>1 (3%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>6 (19%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>14 (44%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>18 (56%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility</td>
<td>A</td>
<td>20 (92%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>12 (38%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data were collected in accordance with the University of Colorado Health Sciences Center’s procedures for the ethical treatment of human subjects (Protocol approval # 02-533). Prior to each interview, the researcher explained the study verbally, reviewed information about voluntary participation and confidentiality, and provided a written copy of the consent form for each participant. Complete understanding of the consent form was confirmed through participant summary and participants were provided ample opportunity to ask questions.

Data Analysis

Interview data were analyzed using analytic induction, deduction, and negative case comparison (Glaser & Strauss 1967). Data collection,
transcription, and analysis occurred simultaneously in order to focus and better inform the research effort. Data were coded line by line and then grouped into categories. Lincoln and Guba’s (1985) recommendations for ensuring the rigor of qualitative data were employed, including techniques such as triangulation of investigators in data collection and analysis, peer debriefing, negative case comparison, and audit trails to ensure credibility, applicability, and consistency.

RESULTS

When asked about their experiences with the intervention, participants replied in terms of three overlapping categories: (1) Continuity throughout the care transition, (2) self-management knowledge and skills, and (3) the coaching relationship.

Continuity Throughout the Care Transition

Participants consistently cited the importance of participating in a program that provided continuity and direction at each stage of the care transition. Several participants noted how the program made them feel more comfortable during transitions:

It fills in the gap and tells you where to go and who to see. Otherwise a lot of people would be lost, like we were (386).

When patients replied to questions about specific intervention components, the themes of continuity and follow-up surfaced repeatedly. For instance, the primary purpose of the hospital visit was to establish a relationship with the patient prior to discharge. Many patients had difficulty remembering what was said at the hospital visit, but a striking number of patients (24/32) noted the confidence that this visit instilled in them:

The thought that someone was going to follow up encouraged me (774).

Patients often characterized the function of the home visit and the phone calls in a similar manner, stating that they felt supported, comforted, and safe.
Self-Management Knowledge and Skills

Coaching in Self-Management

Using the home visit and the PHR as service delivery mechanisms, the Transition Coach’s primary objective was to impart health management skills and knowledge to patients. Patient reports suggest that the interactions with the coach were effective in enhancing self-management in two main areas: medication management and knowledge acquisition with respect to warning signs and adverse effects of medications.

The home visit, generally occurring within 48 hours of discharge, was consistently cited as the most beneficial component of the intervention. Patients’ reports suggest it was an ideal location for patient learning and problem solving:

I appreciated the home visit most of all—when she came over here and talked to me and we went over some of the medicines I was taking . . . by the time I got home from the hospital, I was more relaxed; I was in my own environment (166).

Not only were patients more comfortable in the home setting, but the coach had direct access to the patients’ medications, allowing comprehensive medication review, correction of medication errors or discrepancies, and fostering the development of an ongoing medication management system.

I was real glad when [coach] came to my house and sat down at the table and I sat on the other side. We sat right there and opened up, got all the medications straightened out (119).

I think the home visit was most beneficial to my wife and me. Because with these prescriptions—now I am down to about 5 prescriptions—but when I first went home, I had all kinds. And it’s kind of hard to schedule those and she [coach] got a pill dispenser and coached my wife in how to do it; it simplified it real good, we’re comfortable with it (29).

Coaches and patients collaborated to resolve any discrepancies and clarify understanding about who (doctor, nurse, etc.) should be contacted to clarify any remaining questions.

In addition, many patients described how the coach helped them learn to understand one’s condition, identify warning signs of a worsen-
ing condition, identify medication interactions, and how to properly use medications:

They sent me home from the hospital with that nebulizer. I had no idea how to use it, which medication to put in it, nothing, because they [hospital staff] never told me what to do. They just said, "Here, it's yours. Take it home and use it." So she [coach] helped us out with that, she was helpful (386).

Respondents also mentioned the ways in which the Transition Coach's home visit and calls supported effective communication with practitioners by encouraging patients to create a list of questions, and engaging them in role playing exercises to practice getting their questions answered. Approximately one-third of the respondents did not articulate or evidence improved self-management. The reasons for this likely parallel those given for non-use of the PHR (described in the following section).

The Personal Health Record as a Self-Management Tool

While respondents generally valued the Transition Coach's services, responses to the PHR were mixed. All patients in the intervention were provided with a PHR, but only half the patients interviewed reported actually using it. These patients reported using the PHR to track, organize, and learn about their medications and as a communication aid during hospital readmissions and follow-up visits with their primary care physician and/or specialists. These patients reported feeling more prepared to function as active participants in health care interactions because they had a resource they could reference when the doctor asked them questions or during an acute health situation:

I take it (PHR) with me and here I mark down the amount of these pills I was taking and when they question me... in fact, that's why I have it out. I'm going to take it with me when I go to the doctor today so that he realizes what I've been taking (166).

Specifically, patients stated that the PHR helped them with medication recall, tracking dosages, and side effects.

However, approximately half the interviewees reported not using the PHR. The primary reasons cited included preference for an existing system, ambivalence about managing one's health/general disempowerment, and lack of support or validation from health care practitioners. PHR non-users tended to be located on the polar ends of the self-man-
agement continuum. Those patients who were most highly activated already had an effective system in place and (rightly) saw little need for the PHR. In contrast, the other end of the continuum included patients who undoubtedly needed enhanced self-management skills, but were disinterested and unconvincing that they should assume a more active role in managing their health information.

These individuals often relied on passive or disorganized medication management systems (such as memory, notes kept in multiple locations, etc.) or exhibited an external locus of control, citing that their practitioners already had all of the information contained within the PHR and knew about the patient’s most recent hospital visit. Because of the decentralized nature of U.S. health care system and the poor transmission of information between settings and practitioners, this assumption was often incorrect. However, ambivalent or negative feedback about the PHR from physicians often reinforced this perception, as evidenced by the following comment: “We took it (PHR) to the doctor and I showed it to him but he didn’t seem to appreciate it . . . he just opened it and said, ‘I don’t need that’(C88).”

The Coaching Relationship: Importance of the Caring Relationship

The primary objective of the Transition Coach was to impart knowledge and health management skills to patients. Their comments suggest that it was essential that the coach be perceived as knowledgeable, experienced, organized, and interested in order to elicit patients’ involvement. However, comments about competency and knowledge were closely accompanied and often explicitly linked with statements about caring:

It made me feel like someone cared and was paying attention to me (188).

The fact that people are interested in you, that there’s somebody who has the ability and is trained and interested in your welfare (539).

Participants identified the interrelated elements of competence, caring, and rapport as central to the success of the coaching relationship, and by extension, the intervention.

Further, over half the respondents mentioned the importance of meeting the coach in person, and many explicitly mentioned how the face-to-face contact made in the hospital and home visits served to build rapport
and increase patient confidence to ask questions and express concerns: "Her coming was very important, because when you talk with her, you know the person you're talking with . . . I knew I could call her, I knew who I was speaking to (524)."

**DISCUSSION**

Patients consistently reported positive interactions with the coaching intervention, and many provided specific examples of the ways in which the intervention contributed to enhanced self-management knowledge and skills, and a deepened sense of safety and mastery during the transition home after an acute episode. Over half the patients reported increased self-management knowledge/application. The continuity of the intervention was consistently cited as a strength of the program, providing patients with a sense of safety, connection and direction across the care transition. The home visit was specifically cited as a critical component that allowed the one-on-one teaching of self-management skills and establishment of rapport with the coach. Patient comments suggest that the follow-up function of the visits and calls was equally important to the actual content of the coach interactions because of the sense of safety, well-being and confidence it generated. Thus, in addition to the specific services provided and skills taught, the fact that the coach followed up with patients throughout and after the care transition made a significant positive impact on patients' sense of well-being.

The data suggest that the impact of the intervention on self-management skills may be related to the patient's perception of the coach/patient relationship as a caring relationship. The prevalence of comments about rapport and caring, suggest that competence alone may be insufficient to engage patients in the self-management aspects of the intervention. Rather, it is possible that the combination of competence and the perception of a caring relationship may have been responsible for eliciting the engagement of patients.

The perception of caring may have been enhanced by the structure of the intervention, which was explicitly designed to promote the accessibility of the coach and to provide continuity throughout the transition via regular follow-up with one provider. Patient comments suggest that perception of caring was shaped by the coach's accessibility, frequent follow-up, and by virtue of having several face-to-face interactions over the course of the transition. While these aspects of the coaching rela-
tionship were intentionally implemented to improve continuity, the discovery that they fostered a perception of caring was unexpected.

If, indeed, a perception of being cared for contributed to the intervention's success, this is important to note since many established follow-up interventions involve a nurse previously unknown to the patient making initial contact with the patient via telephone after the patient has returned home. This issue also warrants further inquiry to better understand what approaches contribute to patients' perceptions of caring.

Finally, the data suggest that dismissive physician attitudes toward displays of patient activation may discourage some patients from taking an active role in managing their health. Likewise, supportive physician attitudes may reinforce self-management. Physician responses to patients' fledgling self-management efforts (such as bringing the PHR to a follow-up visit) appear to be particularly critical for less activated patients, who are in greater need of reinforcement generally. If coaching models promoting self-management are to be truly effective, physicians and coaches need to work together to explicitly support patients' efforts in this direction.

**CONCLUSION**

Patients' responses and engagement with the key aspects of the intervention are related to several factors, including patients' willingness to engage in self-management, and the perception of a caring relationship with the Transition Coach. The support, accessibility and competence of the coach appear to have laid the groundwork for self-management training by building rapport. Perception of a caring relationship was reported as an important component in patients' experience of the intervention, paralleling the importance of the actual content of the intervention.

The data presented in this paper suggest the advantages of an intervention design rooted in principles of self-management and continuity. As noted by the respondents, the importance of the home and hospital visits with the same coach in developing rapport and establishing a caring relationship cannot be overlooked. Future research should seek to explore in greater detail just how essential these factors are in the success of the intervention achieving its goals, as well as in patient satisfaction. Future research should also seek to explore targeting strategies that may help researchers and practitioners more readily identify those older adults who are the best candidates for activation/coaching-based interventions.
While this study highlighted the difficulties in facilitating self-management in chronically ill older adults, it also demonstrated the utility of the coaching approach for certain patients. Limitations in validity and generalizability include the small sample size, the possibility of social desirability effects, and the relatively high education level of the sample—a factor known to positively influence the propensity for patient self-management. Future research should seek to better understand which patients are most able to benefit from this type of intervention.

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