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# Patient and Nurse Experiences in a Rural Chronic Disease Management Program

## *A Qualitative Evaluation*

**Erica A. Davisson, MSN, RN-BC, and Elizabeth A. Swanson, PhD, RN**

**ABSTRACT**

**Purpose:** Rural status confounds chronic disease self-management. The purpose of this qualitative, descriptive study was to evaluate the nurse-led "Living Well" chronic disease management program reporting patient recruitment and retention issues since program initiation in 2013. The Chronic Care Model (CCM) was the guiding framework used to reinforce that interdisciplinary teams must have productive patient interactions for their program(s) to be sustainable.

**Primary Practice Setting:** A rural, Midwest county clinic's chronic disease management program.

**Methodology and Sample:** Observations, interviews, and within- and across-case coding were used. Patients' responses were analyzed to identify (1) reasons for recruitment and retention problems and (2) program elements that were viewed as successful or needing improvement. A convenience sample of 6 rural, English-speaking adults (65 years or older, with no severe cognitive impairment) with at least one chronic condition was recruited and interviewed.

**Results:** Themes emerged related to nurse knowledge, availability, and value; peer support; overcoming barriers; adherence enhancement; and family/friends' involvement. Patients reported engagement in self-management activities because of program elements such as support groups and productive nurse–patient interactions. Interdisciplinary communication, commitment, and patient referral processes were identified as reasons for recruitment and retention issues.

**Implications for Case Management Practice:** Findings substantiated that certain elements must be present and improved upon for future rural programs to be successful. Interdisciplinary communication may need to be improved to address recruitment and retention problems. It was clear from patient interviews that the nurse coordinators played a major role in patients' self-management adherence and overall satisfaction with the program. This is important to case management because results revealed the need for programs of this nature that incorporate the vital role of nurse coordinators and align with the CCM value of providing a supportive community health care resource for patients with chronic disease.

**Key words:** *chronic disease management, nurse value, qualitative methodology, self-management*

According to the United States Department of Agriculture (2015), nearly 15% of the U.S. population lives in rural counties. In addition, nearly half of the U.S. population reports having one or more chronic conditions (Anderson, 2010; Schneider, O'Donnell, & Dean, 2009). It is well known that self-management of chronic conditions is essential to prevent complications. Chronic disease self-management is confounded by the fact that Americans living in rural settings have increased poverty levels, lower education, and a poorer health status (Rural Health Information Hub, 2014; United States Department of Agriculture, 2015). To make things more complex, 77% of rural U.S. counties qualified as health professional shortage areas in 2009 (Weigel, Ullrich, Shane, & Mueller, 2015). Since 2010, more than 1.7 million Americans had their rural hospital closed and now have inferior access to health care (Kaufman et al., 2016). In a survey of U.S. rural health care stakeholders, access to quality health care was

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Address correspondence to Erica Davisson, MSN, RN-BC, University of Iowa College of Nursing, 101 College of Nursing Bldg, 50 Newton Rd, Iowa City, IA 52242 (erica-davisson@uiowa.edu).

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the single most important priority to improve rural health and remove rural status as a U.S. health care disparity (Bolin et al., 2015). Despite barriers in rural settings, there is evidence that rural individuals may be more activated to participate in preventive health events and understand the value of such services to self-management (Harvey & Janke, 2014; Murimi & Harpel, 2010; Potvin, Gauvin, & Nguyen, 1997). These findings suggest that more effort should be put into implementing chronic disease programs, as well as evaluating existing programs in rural settings.

For this research study, the Chronic Care Model (CCM) by Wagner (1998) was used as a guiding framework. According to the CCM, to address the self-management challenges faced by people with chronic illness, a delivery system linked with complementary community resources is necessary. There are three settings in which chronic care takes place: (1) the community, (2) the health care system, and (3) the provider system. Elements within the CCM are (1) the community resources, (2) the health system, (3) delivery system design, (4) self-management support, (5) decision support, and (6) clinical information systems. The goal of the CCM is to make enhancements to organizations so that interdisciplinary teams may have productive patient interactions across settings. Productive interactions are defined as the creation of environments and relationships that promote shared knowledge, respect, problem solving, and understandable communication with patients (Wagner, 1998). In the current acute care-oriented system, the care of patients with chronic disease involves an uninformed, passive patient interacting within a system of health care professionals who are unprepared to address chronic needs (Bodenheimer, Wagner, & Grumbach, 2002; Wagner, Austin, & Von Korff, 1996). The six elements of the CCM serve as a guide to improving chronic disease management in order to have activated patients productively interacting with a prepared interdisciplinary team. For chronic disease management programs seeking to assist patients with self-management, this means moving thinking away from the traditional way of providing patient education—knowledge attainment and didactic counseling—to a focus on building upon patients' baseline knowledge of their condition and confidence in their ability to self-manage (Bodenheimer et al., 2002; Wagner et al., 2001).

## AIMING FOR IMPROVEMENT IN THE "LIVING WELL" PROGRAM

This qualitative, descriptive study was designed to evaluate a rural chronic disease management program at a critical access hospital in the Upper Midwest, called "Living Well."[1] The patient population includes adults with a diagnosis of heart failure, diabetes, and chronic obstructive pulmonary disease (COPD) referred to the program through their primary care provider (PCP) and other health care personnel (i.e., cardiac rehabilitation nurses, physical therapists, respiratory therapists, pharmacists, and nurses) involved in the patients' care both inpatient and outpatient. Patients are referred to the program on the basis of personal judgment by the health care professional. A lack of timely patient referrals to the program as identified by the program nurse coordinators was what initially drove the development of this study.

*The purpose of this qualitative, descriptive study was to evaluate the "Living Well" program by obtaining patient perspectives and researcher observations from the diabetes, heart failure, and COPD classes.*

Subsequently, the study was designed to address the needs identified by nurse coordinators of the "Living Well" program. In their role, the nurse coordinators of this program reported a need to recruit patients with other chronic diseases, retain patients in the program, obtain more patients in general, and increase timely patient referrals to the program by their providers. Therefore, the purpose of this qualitative, descriptive study was to evaluate the "Living Well" program by obtaining patient perspectives and researcher observations from the diabetes, heart failure, and COPD classes. Research questions to be answered by this study included the following: (1) What are the reasons for recruitment and retention problems? and (2) What program elements are successful or need improvement? Understanding the struggles and successes of rural chronic disease management programs is important because rural patients experience reduced access to care, as evidenced by the fact that 80 of 99 counties in this Midwest state are primary care health professional shortage areas (Health Resources & Services Administration Data Warehouse, 2017). Collecting firsthand program experiences of these patients is a logical first step in evaluating this rural, supportive community health care resource.

## PROGRAM ELEMENTS

To assist patients with self-management of their condition(s), the critical access hospital in this rural, Midwest county began a new chronic disease management program ("Living Well") in 2013, which included transitional care assistance and classes tailored to particular patient conditions (COPD, diabetes, and

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[1] "Living Well" is the name of the chronic disease management program that was evaluated using a qualitative descriptive design with patient interviews and observations.

heart failure). Patients requiring additional self-management support and an enhanced understanding of their condition process are referred. One of the two chronic disease nurses then call or visit the patient (if inpatient), inviting them to classes. A signed referral document is then obtained from the PCPs.

The nurse coordinator assigns patients to three classes (one every 2 weeks). Patients and/or family members may attend the classes. At the beginning of each class, vital signs (blood pressure, oxygen, and heart rate), weight, and a review of the patients' medications individually with the pharmacist are discussed. The PCP is then faxed and/or called with patient updates and/or any health care personnel concerns. Patients are called every week for follow-up. Medication adherence, weight documentation, and concerning signs and symptoms are discussed. Patients are also reminded of appointments and upcoming chronic disease classes at this time. Patients are discharged from the program at the end of the three classes but may continue attending, if desired or the need arises.

Other health care professionals involved include PCPs, the chronic disease nurse coordinator, the certified diabetes educator nurse/chronic disease nurse, the cardiac rehabilitation nurse, the pharmacist, the physical therapist, the respiratory therapist, and the dietician. The diabetes educator nurse takes COPD and heart failure classes in addition to diabetes classes. For diabetes, she conducts monthly "diabetes coffee club" meetings (open to anyone with diabetes) and hosts "Living Well With Diabetes" sessions in which the disease process, medications, nutrition and meal planning, exercise, stress management, and self-management support topics are covered. Hemoglobin A1c levels are also monitored, and she frequently follows up with participants via phone. The nurse coordinator and the diabetes educator nurse tag team the heart failure and COPD classes. The group or individual education sessions include the following: how to manage the disease, low sodium diet, label reading, alcohol restrictions, medications, monitoring/recording weight changes, coping mechanisms, and exercise. These classes may involve the cardiac rehabilitation nurse, the pharmacist, the physical therapist, the respiratory therapist, and/or the dietician at some point during the course.

Through these various program processes and interactions with other health care professionals involved, the nurse coordinators noted issues with timely communication related to patient referrals. In addition, if patients were referred, it was difficult to get them to attend classes. Qualitative description was deemed the best method to gain a better understanding of these issues through firsthand experiences of rural-dwelling patients who attended the program (Patton, 1990).

# METHODS

## Design

The purpose of this qualitative, descriptive study was to evaluate a rural county's "Living Well" chronic disease management program by obtaining patient perspectives and researcher observations from the diabetes, heart failure, and COPD classes. To obtain a well-rounded evaluation, perspectives from the two nurse coordinators of the program were also obtained through informal interviews. The institutional review board at the University of Iowa approved all procedures for this research project.

## Setting and Sample

The setting for this qualitative evaluation was a rural, critical access hospital in the Upper Midwest. A convenience sample of rural adults with one or more chronic conditions was recruited. A total of six elderly (older than 65 years) adults participated in the study. Inclusion criteria included adults 18 years or older with at least one chronic condition and English-speaking. Exclusion criteria included adults with severe cognitive impairment (as assessed by the chronic disease nurse coordinators).

## Procedures

The researcher's recruitment of patients for this study occurred at "Living Well" program classes beginning May 2015 and continued through September 2015. Group presentations, fliers, and mailed invitations were methods of recruitment. Eligible, willing patients were consented immediately before their face-to-face interview. Audio-recorded interviews occurred in a private room at the critical access hospital and lasted from 20 to 45 min each. A sample list of interview questions can be viewed in Table 1. No compensation was provided. Observations of diabetes classes, a COPD class, and a heart failure class were completed. These were not audio-recorded. The same nurse researcher completed all interviews and observations.

## Data Analysis

Interview data were analyzed to identify (1) reasons for recruitment and retention problems and (2) program elements identified by participants as successful or needing improvement. Within- and across-case coding was completed by the nurse researcher (Ayres, Kavanaugh, & Knafl, 2003). Initial within-case coding was done by writing in the margins of hard copy, transcribed interview data. The first and second rounds of

**TABLE 1**
Sample Patient Interview Questions

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|---|
| What parts of the program have you enjoyed the most? |
| What parts of the program have you enjoyed the least? |
| How has this program influenced your ability to manage your chronic condition(s) at home? |
| Has this program helped you overcome barriers to managing your condition? If so, how? |
| How have you shared your program experiences with family and/or friends? |
| How did the program help you achieve your goals? |
| Do you feel like you *understand* why you are doing all the things that are recommended for managing your condition? |
| If you could pick one thing that the program could improve on, what would that be? |
| Would you recommend this program to others with the same condition? |

within-case coding were completed and then across-case coding was undertaken. Interpretations of interview data were validated through individual review by the research team members not involved in the collection of data. In addition, peer debriefing was used to support validity claims. Research team members were used at check points in the analysis process to confirm appropriate coding labels, suggest alternate interpretations, and make different evaluative judgments of the interview text (Carspecken, 1996). Descriptive validity was enhanced by repeating back patient participants' statements or ideas that the nurse researcher perceived had a certain meaning (Maxwell, 2005). This gave the patient participants the opportunity to clarify or contradict what the researcher interpreted them to say. This process served as a proxy for member checking due to potential challenges that can result in member checks after data analysis, such as the prompting of participants to agree or disagree falsely (Carspecken, 1996). The informal nurse interviews were not included in the thematic analysis because the main aim of this study was to look at the patient's perspective. Personal memos were written throughout the coding process to record any thoughts and reasons for the coding scheme.

## RESULTS

### Profile of Participants

Six individuals from the chronic disease program agreed to be interviewed and observed at the classes. The age range of participants was 64–84 years. All were non-Hispanic White, and five of the six participants were female (83%). The relationship status of participants included separated/divorced (1), widowed (1), single (1), married (1), and living common-law (2). All but one participant was retired. All participants reported two or more chronic conditions. Most participants had diabetes (67%), followed by high blood pressure (50%), heart failure (33%), and COPD (17%).

### Themes

Nine final themes (after across-case coding) with corresponding participant quotes are presented in this section. Most themes generated from the patient interview data included a reference to the chronic disease coordinator nurse(s). Responses were mainly positive regarding the impact of the program on their chronic disease management.

#### *Nurse Knowledge*

All interviewees mentioned how essential it was to form a supportive relationship with the nurse coordinator(s) (one also serves as the diabetic educator) when facing the challenges of managing their chronic conditions. They appreciated these nurses, as they could advocate for them, and provide knowledge and expertise. One patient mentioned: "I guess it's her knowledge and the way she presents things to you; it's not 'You *have* to do this, but why don't you *try* this?'"

In other words, the nurse coordinator/diabetic educator's knowledge is essential to patients' self-management adherence. Not only is the nurse knowledgeable about health conditions but they also know that a provider-centered method of education delivery is not going to work. Upon observation of a diabetes coffee club meeting, the nurse expected the patients to come with questions, know what their blood glucose levels had been lately, and made them describe their signs and symptoms indicating complications. One patient remarked on a problem the nurse helped her manage: "I panic when I get it (hypoglycemia), and then I get too high, so she's (nurse) given me a lot of hints on how to deal with it. I think I'm doing better."

#### *Nurse Availability*

Most patients stated that the availability of the nurse coordinator/diabetic educator was very important to the success of their self-management. They mentioned that they felt comfortable walking into the office at any time and calling the nurse with issues as they arose. Annual one-on-one time with the nurse coordinator was also highly valued. "If I have a problem, I always get a hold of her (nurse). She does a good job. She calls back later in the day and sees how things are going." The people with diabetes, in particular, mentioned how important it was to have the nurse coordinator/diabetic educator highly available:

"I sometimes have a setback and then if I do, I know I can call her (nurse) and then she can encourage or give me something else to try."

### *Value of the Nurse*

Patients used language that elicited strong appreciation for the nurse coordinator(s), in general. They described how she came to their rescue during times of need:

> I was having trouble with night sweats. She changed my pills. She calls back and checks. She has approval from the doctors to make whatever changes are necessary. Then she'll talk to our Dr. and tell them what she's done and it's okay.

The nurse coordinator/diabetic educator also works on a plan of care that is tailored to each patient's needs. One patient who struggled with needed dietary changes related to both COPD and heart failure described the great amount of effort that the nurse put into working with her: "And bless her (nurse), we worked on a diet program 2 or 3 times."

The nurse coordinator was also described as if she were part of their family. The patients were very comfortable discussing anything with her, even problems unrelated to their chronic condition. They also valued the education from the nurse so much that they wanted her to present information on some of their other health conditions as well.

### *Knowing You're Not the Only One*

Many patients also brought up verbatim that attending the classes with others with the same condition helped them "feel like they were not the only one." One patient commented on the benefits of group meetings: "Fellowship and sharing information that others have, to know you're not the only one in this situation." Another person remarked that this was the best part of the program: "I'd say the comradery with other people with diabetes. Finding out we're not alone. Sometimes we find that we're better off than we thought we were."

Patients were comforted by the fact that others in their own community were dealing with the same condition. During class, they were freely sharing self-management strategies and talking about challenges they face at home. They were truly accepting of not only their own diagnosis but others' as well. This helped them move past the threat of their initial chronic condition diagnosis and on to managing it with a little help from good peer support. One patient with diabetes disclosed: "It is hard to admit sometimes that you've got something like that. Even if you know very well you do, it seems more real if you put it out there."

### *Overcoming Barriers to Self-Management*

The patients discussed how the social interactions with others and the health care professionals involved created a community of learners who empowered each other to overcome contextual barriers to self-management. Not only did group meetings help them overcome barriers but also through the assistance of the nurse coordinator(s)/diabetic nurse, patients with limited resources were able to obtain needed materials for self-management:

> They gave us a little hand-out at the first one which is connected to the sodium intake. They even gave me a scale! So that was helpful to have all of those little tools to make it easy to do that part.

The nurse coordinators were the catalysts for breaking down self-management barriers. Their caring behaviors, persistence, and continuous encouragement helped participants get through tough times: "By not letting me quit. Insisting that I keep returning and if I have a problem and I don't think I'm gaining, (saying) *you will be*." In addition, the nurse coordinator recruits specialist providers to come talk about self-management strategies. Patients think the specialist providers, such as the podiatrist or optometrist, are helpful: "All the people that she had come in and talk to us are informational and helpful." However, it has been a difficult task getting them to commit to coming. One patient stated, with some frustration: "They never commit. Committing to an hour program … to an hour talk … to help the group understand that particular area." Another said: "She (nurse) does a good job, an excellent job of telling us everything, but it would just be nice if they (physicians) would commit." The patients have confidence in the nurse coordinator's persistence of asking specific providers to come to the classes: "I bet she'll (nurse) get him one of these days. I bet she'll keep trying anyway…." This shows complete trust in the nurse coordinator's abilities and a desire to learn more about overcoming self-management strategy barriers, but a gap in interdisciplinary communication and commitment to the program by some providers remains.

### *Improved Awareness of Self-Management Needs*

Patients seemed to be more confident in identifying changes they needed to make to successfully manage their condition. They mentioned that by reporting back to the group on goals achieved or how they resolved a health-related problem, other patients were encouraged to adhere to self-management and note any gaps in their regimen: "Before, we didn't know if we get really overheated with activities during the summer or anything, we didn't know that was going to affect our blood sugar. We know now!"

The nurse coordinator/diabetic educator would bring up a different topic(s) at each meeting to answer any questions posed at the previous session and/or address self-management struggles: "We've found, through ___ (nurse), that it's really important to watch the number of carbs per meal. Because if you don't, and you don't have enough … so I carry my glucose tablets everywhere." Another patient from the heart failure class commented: "The reminder that salt intake was really important was the best part of it for me."

One well-received educational activity that the heart failure class did to improve self-management knowledge was to play "Healthopoly: Heart Failure Edition," which was a board game that the nurse coordinators created. The pharmacist, the dietician, and the nurse took turns moving across the board, picking up question cards, and asking the participants about their heart failure self-management understanding. A patient was fond of this strategy and commented: "I understand the value of using a vehicle like that to teach things."

### Group Comradery

The patients cited the social environment as a positive influence on their health-related decision-making. The diabetes coffee club was clearly a group that knew each other well and freely shared their struggles, often joking about them. They shared funny medical stories about calling Medicare and various clinic appointments. On the topic of getting his eyes dilated before the next meeting, one patient said: "Next time we meet, I'll have sunglasses on!" The nurse replied, jokingly: "That's okay. We'll accept you."

They are like family—the nurse coordinator and patients. They know what is going on in each other's lives and look forward to meeting. One patient commented on how she desired to more fully accept her diagnosis of diabetes by coming to a meeting: "I felt that it's time for me to learn more and to visit with the other people. We share recipes." As a patient stated about the frequent meetings: "If it goes on for a length of time, it becomes a social thing as well as informational."

### Adherence Enhancement

The patients each had a clear, agreed-upon plan of care that the nurse coordinator was very knowledgeable about. Before beginning the class topic of the day, the nurse would go around the table, asking how their blood glucose levels had been and following up about any tests, procedures, appointments, and questions. If the conversation needed to be private or would take a longer conversation, the nurse told the patient that she would talk to them after class. The patients seemed to completely trust the nurse coordinator, which made them desire to make lifestyle changes to self-manage. It was as if they wanted to report back to her and the others on how successful they were managing at home in order to receive an "Atta boys, that's a good one!" as one of the patients said someone exclaimed upon hearing that their 6-month hemoglobin A1c was within normal limits. One patient commented: "She (nurse) can't make you do it, you've got to want to do it. She makes you want to do it."

At a diabetes coffee club meeting, the nurse went through recommended goals for the patients, which included protecting the kidneys, blood pressure control, blood glucose control, hemoglobin A1c goal of under 7%, avoiding nonsteroidal anti-inflammatory drugs (NSAIDs), following up with the PCP regularly, smoking cessation, and exercise. Patients then began asking questions about the reasons they should have these goals—why NSAIDs were bad, what causes blood glucose to become elevated, and so forth. A discussion ensued, which helped narrow down individual care plans, as different patients had different insulin regimens, signs/symptoms with different blood glucose levels, and lifestyle issues.

Patients believed that their agreed-upon care plans and having to report back to a group assisted them in taking full responsibility for their health. Overall, the program made them feel like health behavior changes were more manageable: "It (program) gives you inspiration. They teach you to not be a quitter." Another motivated patient mentioned the importance of the face-to-face meetings in keeping her on-task at home: "If I didn't have to report to anybody, I probably wouldn't do it. That again, as I said, you have to have control of yourself. And you can't say, I'll do it tomorrow. Do it today."

### Need Improvement in Family/Friends' Chronic Disease Knowledge

Every patient expressed a desire to have "family support meetings" and/or more education materials to give families and friends. Although patients reported improvements in their own knowledge and abilities to self-manage, they felt like their family/friends did not understand the disease process and what they were going through: "My husband just doesn't understand it. I can explain and explain and explain." Similarly, a patient stated: "Sometimes you feel like it (the only one). In your own family, you know, if you're the only one. And they don't understand." Another commented on the inability of their family to understand the self-management aspect of diabetes: "I think they would be surprised because a shot doesn't fix it … there's a lot more to it than that." However, a patient mentioned that the nurse coordinator was taking steps to enhance family and friends' understanding: "She's (nurse) going to get some literature for us to give to our family so they understand."

## DISCUSSION

In this qualitative, descriptive evaluation of rural residents in the "Living Well" chronic disease management program, nine main themes emerged from patient interviews: *nurse knowledge*, *nurse availability*, *value of the nurse*, *knowing you're not the only one*, *overcoming barriers to self-management*, *improved awareness of self-management needs*, *group comradery*, *adherence enhancement*, and *need improvement in family/friends' chronic disease knowledge*. These themes highlight the program elements that may help with patient recruitment and retention. Main themes that these "Living Well" patients identified as successful elements of the program were related to (1) health benefits (living well with their condition and managing symptoms), (2) practical delivery aspects (nurse continuity, flexibility, availability, assistance with overcoming barriers, and services to enhance self-management), and (3) social and peer support (importance of involving/educating family and friends, and sharing experiences with group members). The nurse and peer support was clearly the main benefit of the program, which is imperative in rural areas where people may be more socially isolated (Baernholdt, Yan, Hinton, Rose, & Mattos, 2012). These patient-identified program elements may need to be capitalized on and marketed to improve patient recruitment and retention. The *improvement in family/friends' chronic disease knowledge* is the main area that could be enhanced to increase patient satisfaction and retention, as this was a recurrent negative comment during the interviews.

Themes aligned with the CCM in that patients emphasized the importance of their relationships with the nurse coordinators and their peers. For a health care delivery system to have productive patient interactions, the CCM stresses that having community resources to assist with self-management is absolutely necessary. This "Living Well" program is exactly what the CCM recommends—a community-based health resource that draws on both social relationships and education to engage their community members with chronic conditions (Wagner, 1998). The "Living Well" program aligns with the linked elements of the CCM. For example, the "Living Well" program's peer support groups (community resource) help patients develop self-management skills (self-management support). In addition, the interdisciplinary team relies on the strong nurse coordinator role as an essential figure to support patient self-management (delivery system design) through frequent meetings, phone calls, and being on call. In this way, the nurse coordinator assists patients with integrating evidence-based guidelines into their chronic disease self-management (decision support). Finally, the nurse coordinators provide timely reminders for patients because they have access to patient data that they use to facilitate individual patient care planning (clinical information systems) (Bodenheimer et al., 2002).

One element that needs improvement from a CCM perspective is the delivery system design. There is a strong reliance on the nurse coordinators to manage all program aspects. Even though the "Living Well" program delivers team care to an extent, the nurse coordinators are more involved than other team members. This aligns with survey results of chronic disease management programs in which half of programs describing themselves as delivering team care had vastly more involvement by nurse specialists (Wagner, Davis, Schaefer, Von Korff, & Austin, 2002). Because the nurse coordinators are explicitly seeking help to improve this rural program, a more team-based delivery system design may be needed. According to the Institute of Medicine (2010),

> Nurses are already committed to delivering high-quality care under current regulatory, business, and organizational conditions. But the power to change those conditions to deliver better care does not rest primarily with nurses, regardless of how ably led or educated they are; it also lies with governments, businesses, health care institutions, professional organizations and other health professionals.... (p. 4)

During all patient interviews, the nurse coordinator(s) was mentioned as the most valuable asset to the program—arguably, the key to patient recruitment, retention, and program sustainability. The nurses created a truly patient-centered environment that promoted engagement of the participant. This aligns with Hobbs' (2009) patient-centered care dimensional analysis, which found that nurse–patient therapeutic engagement was the practice sustaining the patient during an episode requiring service use. This involves allotting time, knowing the patient, and establishing a relationship. "This process occurs during nurse–patient interaction, sustained during successive interactions, and reinforced by the information practices of a particular setting" (Hobbs, 2009, p. 52). By continuing to follow up with participants (making sure they did

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not feel alone in self-management), providing needed resources, being highly available and responsive to individual needs, and much more, the nurse coordinator(s) made these patients feel cared for—as if they had a partner in care. Similarly, a qualitative study of a heart failure disease management program by Whitty et al. (2012) found that patients valued the program because it was mostly tailored to their needs and provided continuity of nursing care (able to build a relationship with the nurse and the nurse could recognize deterioration). Like this study's participants, those from Whitty et al. (2012) also liked the availability of a nurse on call.

Interdisciplinary communication and commitment could be improved upon to increase recruitment and retention of patients. The nurses said there was a need for improvement in communication related to patient referrals (need for more frequent and prompt referrals to the program), and the patients voiced the concern that providers were not committed to the program activities once they were referred. This delays critical self-management education and support for these rural-dwelling adults with chronic conditions who are, in fact, very receptive and interested in enhancing their knowledge (Harvey & Janke, 2014; Murimi & Harpel, 2010; Potvin et al., 1997). These findings align with those from Wagner et al. (2002), who found that the majority of programs struggled to find the best way to communicate with primary care to optimize care coordination and appropriate referrals. Furthermore, survey responses emphasized that active support and commitment from leadership, such as a medical director, were important to program success. This is because new programs require culture changes in an organization, and "supporting a philosophical match between the administrative leadership, program innovators, and the provider team(s) becomes necessary" (Wagner et al., 2002, p. 78). In addition to lapses in interdisciplinary team communication and commitment, the nature of a rural setting may contribute to patient recruitment and retention issues. The fact that the average critical access hospital length of stay for patients is 96 hrs may be a barrier to recruiting patients in the rural acute care setting (Department of Health & Human Services, 2016). However, it is still unknown why patients are not getting timely referrals to the program from their PCPs in the outpatient setting. More research into program referral processes by speaking to PCPs in this rural setting would be a logical next step.

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In conclusion, patient perceptions were mainly positive and emphasized the value of nurse–patient interactions. This program is reflective of the need for programs of this nature, as it incorporates the vital role of nurse coordinators and aligns with the CCM value of providing a supportive community health care resource that complements patients' chronic disease self-management. Problems with patient recruitment and retention may lie in the nurse- and patient-reported interdisciplinary team's lack of commitment to the program and an overreliance on nurse coordinators to manage all program aspects. To be CCM-based, the interdisciplinary team needs to communicate more efficiently by establishing a standardized method of identifying eligible patients and making appropriate referrals to the "Living Well" program instead of simply relying on personal judgment.

Despite needed improvements in delivery system design and barriers in rural settings, this nurse-prompted evaluation revealed the depths of impact from the "Living Well" chronic disease management program through the essential patient voice. One patient, truly motivated and confident to manage her condition at home because of the program, said it best:

> I think a lot of this you have to do on your own. It is good to find out what others think or what others are doing. But you are the sole owner of yourself. And it's up to you what you want to do with it.

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**Erica A. Davisson, MSN, RN-BC,** is a PhD candidate and research assistant at the University of Iowa College of Nursing. She also continues to work as a staff nurse at the University of Iowa Hospitals and Clinics. Her research focuses on staff nurses' decision making during discharge planning for patients with heart failure.

**Elizabeth A. Swanson, PhD, RN,** is Associate Professor at the University of Iowa College of Nursing. Dr. Swanson is the author of 64 journal articles and book chapters and 11 edited books. She is a part of a work group defining the value of the discipline of nursing. Dr. Swanson serves as a reviewer for five nursing journals.

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