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Factors Associated With Integrating Self-management Support Into Primary Care

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Purpose
The purpose of this article is to expand the understanding of self-management support by describing factors that contribute to implementing a comprehensive self-management program in primary care.

Methods
Four rural health centers in medically underserved areas participated in a study to document the implementation of a self-management program. This program consisted of a social marketing plan and decision-making tools to guide patients in making self-management behavior changes. The stages of change constructs of the trans-theoretical model were used to design the social marketing plan. Key informant interviews were conducted at 6-month and 9-month intervals to document the implementation process. A standardized set of questions was used in the interviews. The data from the interviews were analyzed using content analysis techniques.

Results
One of the principle findings is that self-management support requires putting a system in place, not just adding a new component to primary care. The health centers that fully implemented the self-management program made an organizational commitment to keep self-management on the agenda in management meetings, clinical staff set the example by adopting self-management behaviors, and patient self-management support was implemented in multiple patient care venues.

Conclusion
Primary care centers with limited financial resources are able to integrate self-management support into their system of chronic illness care.
A burgeoning body of literature has documented the effectiveness of chronic disease management, and specifically the use of the chronic care model, for disease management in primary care settings. For example, Renders et al\textsuperscript{1} and Bodenheimer et al\textsuperscript{2} conducted systematic reviews of the literature and found strong evidence for the effectiveness of these approaches. To be effective in primary care settings, disease management requires substantial organizational change.\textsuperscript{3} To this end, a series of studies has identified interventions that support primary care system change. The focus of this literature has been on delivery system design interventions and clinical information systems\textsuperscript{1-15}

Less is known about how to implement self-management support in chronic disease management.\textsuperscript{3} Self-management support refers to activities in the clinic that prepare and empower patients to have a central role in their health care, including goal setting, action planning, problem solving, and follow-up.\textsuperscript{3} Wagner identified 2 common problems in implementing self-management support. One is that self-management support tends to be brief and occur outside the medical encounter. Second is that many providers assume it is new jargon for didactic teaching. Other problems are lack of time for the give and take that is required, the lack of reimbursement for self-management interventions, the burden of documentation, and, in small practices, the lack of ancillary staff (certified diabetes educators, dieticians, etc) to carry out the self-management interaction with patients.\textsuperscript{5,16,17}

The purpose of this article is to expand the understanding of self-management support by describing factors that contribute to implementing a comprehensive self-management program in 4 health centers. The program was developed by a team from the Center for Rural Health at Marshall University as part of the Robert Wood Johnson Foundation Diabetes Initiative. This national program funded self-management and community support grants for diabetes care in 14
settings in the United States that serve diverse high-risk audiences. Integration of self-management support into primary care is 1 of 8 components of organizational capacity for self-management support identified and assessed by the Assessment of Primary Care Resources and Supports for Chronic Disease Self-management tool developed by the primary care sites of the Diabetes Initiative.

**The Self-management Program**

The self-management program consists of a social marketing plan and decision-making tools for patients to use in primary care settings. The team from Marshall used the transtheoretical model as a framework for designing this program. First, using a structured planning process, the team created 3 behavior change messages: “Balance Your Plate,” “Choose to Move, and “Kick the Habit.” Then, using the stages of change concepts from the transtheoretical model, communication and self-management tools were created for each stage of change. For example, posters with the messages and a project logo were developed for those in the precontemplation stage and placed around the clinic. For those in the contemplation stage, clinics had a “Wall of Fame” with pictures and testimonials from local people who had adopted self-management behaviors. A self-assessment form for those in the preparation stage indicated patients’ stage of readiness to adopt a behavior change. For patients in the action stage, the project staff created informational and action-planning booklets around each message. Patients in the maintenance stage were given a “Passport” booklet to monitor their progress. Patients in the action and maintenance stages were also referred to support groups, group exercise classes, and the Stanford Chronic Disease Self-management Program (CDSMP), which were offered at the health centers. Providers were given the option to use referral cards that included information about these programs.
Methods

Implementation Setting

Four rural primary care centers in West Virginia, all of which are either federally qualified rural health centers or 330 federally funded clinics, volunteered to test the implementation of this program for self-management support. These centers agreed to implement the program and participate in a series of interviews to document its implementation over a period of 12 months.

Each center identified a team that would oversee the program’s implementation. The staff members chosen to participate in the study were selected by the CEO or medical director at each health center. They were all involved in the promotion of self-management within the clinic. The participants varied by clinic but included medical directors, CEOs, nursing directors, chronic disease managers, registered nurses, physician assistants, behavioral health specialists, diabetes educators, and social workers. None of the sites had certified diabetes educators.

Key informant interviews were used to document the process of implementing the self-management program. The process began with a planning meeting with the team at each clinic. Three to 4 staff members participated at each health center. Each team decided how the social marketing program would be implemented and determined the roles that clinic staff would have in self-management support. This planning meeting was regarded as the initiation point in the study. Follow-up key informant interviews were conducted 6 and 9 months after the initial planning meeting. The data were collected using a combination of in-person and telephone interviews with the key informants. It should be noted that the Marshall team provided training
and technical assistance in self-management to the health centers throughout the study period, including training course leaders for the Stanford CDSMP.

A standardized set of questions was developed to record each health center’s experience in implementing the self-management program. The questions were organized into 4 categories: (1) use of self-management materials, (2) integration of the self-management program into the clinical system, (3) staff training, and (4) staff and patient opinions of the materials.

The first category of questions was designed to determine how the behavior change materials were used in the clinic. This included questions about kick-off events, the placement of materials in the clinic, which staff members were using the materials, and, more specifically, when and how. The questions about integrating these self-management tools into the clinic’s system of care included information about staff meetings, designated roles of staff, use of referral cards, and use of self-management skills learned in the staff training. Additional questions were asked to determine if there was a link between the staff members’ training on self-management and their interaction with patients. Finally, the staff’s and patient’s opinions of the behavior change materials were gathered. The same set of questions was used in the follow-up interviews at 6 and 9 months.

Of the 4 health centers, 2 followed through in implementing the self-management program as agreed in the initial planning meeting. The other 2 clinics implemented only selected parts of the program. Using content analysis techniques, the research team identified the factors that were present in the clinics that did implement the self-management program but not present in those that did not. The findings section describes those differences.
Findings

A number of factors emerged from the data analysis. Table 1 presents a summary of the factors that were part of the self-management system in the experience of these health centers.

Leadership was one factor that differentiated the health centers. The CEOs of the clinics that implemented the program participated in the initial decision to adopt the program and continued to make it an agenda item in staff meetings throughout the study period. The other 2 health centers experienced a change in CEOs. The process of changing leadership resulted in the staff’s being reluctant to implement changes without a leader in place. The self-management program was not discussed in staff meetings, even though there was an initial agreement to do so.

Second, the health centers that were successful in implementing the self-management program put in place a comprehensive approach to teaching self-management skills. This was done by sponsoring the CDSMP to train clinic staff on self-management and then followed up by implementing classes for patients. Staff members learned self-management skills and experienced the process of behavior change firsthand. The staff members reported that their participation in the CDSMP training raised their personal awareness of self-management and made them more conscious of engaging patients in self-management. They then followed up by holding the CDSMP for patients. One center sponsored 4 courses, with a total of 42 patients participating, over the course of the study period.

Another factor was that those health centers that designated specific self-management roles for each staff member followed through with implementing self-management. In the centers that did not, staff teams discussed roles but never got around to making specific designations. In the health centers that implemented the self-management program, the action-planning encounter with patients occurred most frequently in one-on-one educational sessions.
by staff, with the specific function of patient education. Because a self-management approach was used instead of a lecture, the staff reported that these sessions were shorter and more efficient.

Medical group visits were a productive setting for self-management support with the health centers in this study. With the changing health care environment and increased physician productivity demands, medical group visits have become a popular approach to delivering care. One of the health centers hosted 8 different group visits a month for a range of chronic diseases. Self-management discussions and action planning were standard activities in the group visit protocol. Medical group visits were scheduled for 2 hours, with 8 to 12 patients in each session. In every session, 30 to 40 minutes were devoted to group discussion, including time for making action plans.

In the health centers where the patient self-management booklets were widely used, they were placed at nursing stations and examination rooms where staff could hand them to patients. Where health centers relied on access in the waiting room, the distribution of materials was substantially lower.

One of the health centers found that placing behavior change referral cards in the examination room increased patient participation in support groups and self-management classes. The referral cards were placed with and made to resemble the prescription pads. Providers found it easy to write a prescription to the walking club, for example, while they also renewed the patient’s medications.
One of the health centers had lay health outreach workers who, among other responsibilities, did home visits. They reported using the self-management materials (booklets, action-planning forms, and passports) with all their home-visit patients who had chronic diseases. None of the other 3 centers had lay workers, so there is no opportunity for comparison with the other sites.

In all 4 health centers, key informants reported that patients understood the 3 social marketing messages of “Balance Your Plate,” “Choose to Move,” and “Kick the Habit.” The how-to booklets for each message, which were also used to initiate action planning, received uniformly positive feedback. Documented feedback indicated that the booklets were popular because of their simplicity. A number of the patients had low literacy skills, so communication through the use of drawings in the booklets was very valuable. The “Balance Your Plate” booklet and handout were the most popular. Patients commented on the simplicity of the plate method and the basic message of filling half their plate with vegetables. It was a change they were willing to make, especially since they were not being asked to change the kinds of foods they ate. Staff members reported that this booklet was easy and quick to go through with the patients. The most frequent comment on the “Choose to Move” booklet was that they could do the exercises in the book at home instead of having to go to a gym, park, or walking track.

At all 4 health centers, it was difficult to get the direct involvement of medical providers. A few physicians reported that they were able to occasionally discuss self-management, but no one reported doing so on a consistent basis, other than using the self-management prescription pads. Physicians stated that the complex medical management of chronic disease consumed their time in the examination room. Table 1 presents a summary of the factors that were part of the self-management system in the experience of these health centers.
Discussion

An overarching lesson from the experience of these 4 health centers is that self-management support is a matter of putting a system in place, not just having tools available along with a few staff members working with patients. All of the health centers had a core of self-management champions, but in the 2 where there was less consistent implementation of the program, the champions facilitated self-management on their own without it occurring anywhere else in the organization. Thus, it was not enough to just have a couple of educators promoting self-management. Where it worked, health centers used the social marketing campaign (based on the transtheoretical model model), trained staff members, and engaged patients in multiple settings.

First, as with the other components of the chronic care model, there has to be direct support from senior management. In the 2 centers that had this support, self-management was discussed in staff meetings, roles were assigned, and activities were monitored. This pattern stood out in the reports from these health centers and was clearly lacking in the other centers.

A health center that promotes self-management behaviors for its patients begins by having its staff model behavior change. It practices what it preaches. The most successful center started by making skills training part of its employee wellness program. Staff members learned skills and processes that benefited them personally and professionally. It brought self-management to the forefront of their work, and they could engage patients based on personal experience. Empathy can be a powerful educational tool.

Health centers that integrated self-management support successfully had multiple opportunities for working with patients, including patient education encounters, medical group visits, self-management classes, and home visits by lay workers. Using multiple venues means
more patients are served, and it creates an atmosphere of self-management throughout the organization, which is reinforcing. In the medical group visits, health center staff could observe how patients engaged each other in planning and following through on their action plans. The importance of this observation is that patients not only are instructed by a professional but also learn from and encourage each other.

An instructive finding was in regard to where self-management did not occur. In the initial planning discussions with the health center staff, they and the Marshall technical assistance team expected that 1- to 2-minute action-planning encounters could occur in the examination room. In no case did this occur consistently. The most common response from medical providers was that there were simply too many medical problems that needed to be addressed in a very short time frame and that they did not have time for action planning.

Given the work load of primary care providers and time constraints in the current system of care, it is not practical to expect that providers can add time for self-management discussions with patients. For providers to be involved in self-management support, other things need to be taken away or the system of patient care needs to be changed to support their role in self-management.

Thus, a health center that integrates self-management support finds multiple ways to deliver medical care. The medical group visit is one innovation that dramatically changes the traditional examination room medical encounter. It is an ideal environment for actualizing the concept of team medical care. The medical provider is free to concentrate on medical problems while other team members are simultaneously dealing with preventive screening, laboratory results, education, and so forth. The combination of teamwork and the group setting results in such efficiency that there is ample time for discussing goal setting, action planning, and problem
solving for behavior change. Medical group visits can be one of the mainstays of medical care, as evidenced by the 1 center that had 8 medical group sessions each month.

**Limitations**

While this study generated recommendations on how to implement self-management support, it did not verify whether patients maintained behavior changes or whether patients had better outcomes because of their participation. In addition, it cannot claim that the particular self-management program that was implemented in this study is any more effective than another program. Certainly, there are many different ways to implement self-management support. There is no one way to integrate self-management into primary care; it likely will have to be tailored to the unique circumstances of each health center.

The sample size for this study is small and is from one geographic area. Thus, its recommendations cannot be broadly generalized. One factor that affects the health centers in this project is that they see patients regardless of their ability to pay. Consequently, their business model cannot support a wide array of ancillary staff; they operate with the bare minimum of staff. For example, in the 4 clinics in this project, there was only 1 certified diabetes educator, and no center had a registered dietician. The implementation of self-management support could be very different in settings with a stronger financial base and more staff resources.

**Conclusions**

It is possible to integrate self-management support in health centers that work with an underserved population. It can be done by using a systematic approach that incorporates social marketing, uses educational tools based on action planning, and implements a structured program for teaching self-management skills. In addition, organizational systems can be changed without
disrupting patient care. In this study, the organizational changes were making self-management a standard agenda item in management meetings, distributing specific self-management teaching roles among numerous staff members, and using multiple patient care venues that included self-management support.

Modeling self-management was another important factor that did not add cost or staff time. Health center staff members were able to communicate and encourage patients on a personal level that was unstructured but effective. Practicing what one preaches can be a powerful communication tool. These factors contributed to self-management’s being part of the ethos of the institution. Thus, even with limited financial resources, primary care centers in this study were able to integrate self-management support into their system of chronic illness care.

References


Table 1

Factors Associated With Integrating Self-management Support

- Senior leaders commit to integrating self-management in their health center.
- Self-management is a regular item on the agenda of management meetings.
- A core group (more than 1 person) of staff members are self-management champions in the health centers.
- A self-management program is implemented that includes a social marketing campaign and behavior change tools.
- Clinic staff members are trained in self-management skills using a comprehensive approach.
- Clinic staff model self-management by adopting healthy behaviors for themselves.
- Health center staff has designated self-management roles so that the responsibility is not on 1 or 2 people.
- Health centers use multiple venues for engaging patients in self-management including, one-on-one patient education, medical group visits, self-management classes and home visits by lay health workers.
- Self-management materials are placed at nursing stations and examination rooms where they are immediately accessible.
- Prescription pads for prescribing self-management activities are placed in the examination room.