

Creating a Participatory Office Practice for Diabetes Care

The Diabetes Master Clinician Program is a project that encourages participation in care through a disease registry, group visits, empowering patients and office staff.

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"Diabetes is the most demanding chronic illness. It challenges every fiber of a patient's body and spirit and demands a system of care that ministers to the biological, social and psychological aspects of the illness."(1) It takes a "participatory office practice" to accomplish this task.

Abstract

Diabetes is a chronic condition that requires active participation by both the patient and various members of the physician's office staff to achieve optimum outcomes. By creating an office environment in which the staff and patients function as a "participatory village," where everyone involved in the care process is actively involved in important clinical management tasks, better outcomes can be achieved. This paper describes the structure and function of a primary care practice that is functioning as a "participatory village" in caring for its diabetic patients.

Introduction

Studies have shown that reaching evidence based goals for hemoglobin A1C (HbA1c or A1c), low-density lipoprotein cholesterol (LDL), and blood pressure (BP) significantly reduces complications (2,3) and costs (4) for patients with diabetes. Fortunately, effective therapeutic options are available for reaching these goals. But, even with our best efforts, less than 50% of diabetic patients are able to reach these goals individually and reaching all three at the same time occurs in only 7 to 10% of diabetic patients. (5) Difficulty in reaching these goals creates frustration and distress for clinicians, office staff, and patients. For patients to be successful, it requires a major reorientation. They must become accustomed to maintaining strict compliance with dose of multiple medications, must endure frequent needle sticks, accept significant food restrictions, participate regularly in an exercise program, and make multiple visits to health care

providers, to name a few of the changes needed to effectively face their diabetic condition. An additional challenge is the incorporation of these changes into a lifestyle that is strongly influenced by their culture, belief system, values, socioeconomic status, family conditions, religion, psychosocial status, and wellbeing. All of these challenges and barriers tend to result in significant degree of "diabetes distress.(6)" A two-question screening instrument can be administered to determine patients' diabetes distress.(7) Staff and physician diabetes distress usually mimics the patient's scores.

Knowledge of the pathophysiology and pharmacology of diabetes and diabetes treatment forms the foundation for patient care. It facilitates writing scripts and monitoring chemical changes but this knowledge alone is not sufficient. In order to achieve desirable outcomes, diabetic patients must become effective self-managers of their disease. The clinician and other team members serve as coaches that provide information for them to more effectively manage their illness. Patient participation is critical to effective self-management. Effective coaching combines the biological, social, and psychological aspects of the illness. This combination creates the needed energy to face the daily struggles of diabetes (for both the clinician and the patient). Care that does not include recognition and understanding of these aspects of the disease leads to frustration, anger, disappointment, fatigue, disorganization, and burnout for both the clinician and the patient. This also leads to a sense of failure and "diabetes distress" for office staff, clinicians, and patients. "Diabetes distress" leads all three groups to feel that nothing can be done and, from that point, tend to convey this message through actions, words, and nonverbal behavior. This article discusses some of the tools for overcoming "diabetes distress" and for developing a "participatory village" in the primary care office setting.

Tools for Developing a Participatory Office Practice

An effective participatory office practice includes a diabetes registry for measuring gaps in care, effective use of office staff (medical assistants and nurses), empowering patients to self-manage their disease, and group visits. (8,9,10) Appropriate delegation of some tasks to office staff aids early recognition of "diabetes distress," allows the clinician more time to focus on patients who need help with distress and the ability to more effectively address and eliminate barriers to optimum care. Staff often recognizes barriers because patients may be more comfortable sharing with them. Informing patients and family members that they are important members of the diabetes team and are partners in their care helps empower patients to be better self-managers. Office systems can be used to inform patients and family of barriers, how to overcome them, and when and where to seek help. Offices without these systems of care are not usually able to create a participatory environment.

How do patients describe their feelings and concerns?

The most common barriers to effective care for diabetes and chronic disease that are noted in the medical literature are inability to pay for medication and supplies, mental health issues, lack of

transportation, literacy, and patient non-adherence. (11, 12, 13) But patients use a different set of words to describe their barriers and distress. The following are statements obtained from telephone interviews with patients in our diabetes registry (10) who were not in good control (A1C of 8% or higher):

- "I do not feel like I have been educated about diabetes. I am not sure which symptoms are associated with diabetes and which ones are not."
- "I am a stress-eater and a comfort eater. I have a hard time eating the right foods. I feel frustrated because even when I try to eat right and control my blood sugar, it is uncontrollable and doctors can't seem to explain why."
- "I feel like I have good control of my diabetes. (HbA1c is 11.1) I am aware of diabetes complications but try not to focus on them."
- "I quit taking Lipitor because it made my vision worse. I am almost blind. Once my vision improves I will try another cholesterol medication. I hope to see an eye doctor soon."
- "My doctor has never talked to me about depression but I see a psychiatrist for mental illness."
- "It doesn't do any good to worry about my diabetes because I can't do anything about it?"
- "I am having trouble affording most of my diabetes care supplies. I borrow test strips from a neighbor. No one has spoken to me about depression but I have issues with it."
- "I do not exercise because of bone spurs and joint aches."
- "My biggest challenge is keeping my sugar leveled off. Getting motivated to eat properly and exercise is hard. Trying to stay on a diet is hard. My sugar goes up and down."
- "It is hard to schedule time to take my insulin during the day. Sometimes it's hard to find foods to eat when I am hungry that won't make my sugar go high."
- "I now take insulin but don't do it right and forget to take it sometimes. I have breast cancer and take lots of medicine and get depressed with it all."
- "I am not exercising because of back pain and swollen ankles. Want to start walking when these issues go away."

How does the office team discover these concerns and feelings in the patient? The next section reviews some ways we have discovered to accomplish this in our practice.

Tools for Discovering Distress and Creating a "Participatory Office Practice" in Diabetes

The first tool, mentioned above, is the diabetes distress screening instrument.(7) This instrument can be administered to the patient prior to the visit with the clinician. It contains two simple questions: "Do you feel overwhelmed by the demands of living with diabetes" and "feeling that I am failing with my diabetes regimen." This is graded on a scale of 6 for each question, with 5 and 6 meaning it is a serious problem. If the entire office staff is aware of the diabetes registry and its reports then they are aware of which patients are not reaching their goals. The office encounter usually begins with the front office staff that greets the patient when they enter. They administer the screening questions and, if the score is high, (8 or more), they ask the patient to complete the 17-item distress score.(7) The patient will give the completed instrument to the nurse or medical assistant who places them in the exam room and obtains their vital signs. They review and score the diabetes distress instrument and place it on the chart for clinician review. They will then give the patient the "patient report card" from the diabetes registry (see Table 1). The staff person will quickly review the report card with the patient. If the patient has not had a recommended lab test, immunization, or eye exam, the staff person will order it, following a protocol decided at a team meeting led by the physician. An example might be obtaining a urine sample for urine microalbumin or initiating a referral for an eye exam. The staff person is empowered to feel like an active member of the team. Involving office staff more meaningfully in the care process increases job satisfaction and increases their value in the eyes of the patient. (14). Both the patient and staff person are participating in diabetes care, and feel both informed and empowered.

Multiple functions can be performed by office staff to increase the capacity of the physician. There is so much work that needs to be done to provide optimum care and never enough time to do it. If a function can be done effectively by a member of the staff, it should be delegated. Office policies can be created that guide staff to order evidence based, yearly labs or immunizations, or routine ordering of tests that need to be performed on a regular, scheduled basis for patients with a chronic disease like diabetes. It is a better use of the physician's time to perform such tasks as keeping up to date on the latest standards, interpreting lab and imaging results, and counseling patients who refuse to undergo testing. Physicians do not have a good track record of performing routine activities unless they have an effective office system for delegation.

	Goal		Nov 2010	May 2009
Weight			235	240
B/P	Less than 130/80 Best 120/80		125/80	148/88
Tests				
HbA1c (sugar for 3 months)	Less than 7 Best if 6		6.5	8.5
LDL (lousy cholesterol)	Less than 100 Best if 70		170	165
HDL (happy cholesterol)	Greater than 40		37	35
Triglycerides (a bad fatty substance)	Less than 150		150	250
Medication				
Aspirin (prevents heart attacks)	Take daily		Yes	Yes
Important Yearly Activities	Goal	Status	Next Test Due	Most Recent Test
Eye Check (to prevent blindness)	1 time a year	Overdue	5/22/2010	5/22/2009
Foot Check (to check for sores and numbness)	1 time a year	Completed	5/22/2011	5/22/2010
Urine Micro Albumin (to check for kidney failure)	1 time a year	Overdue	5/22/2010	5/22/2009
Flu Shot (to prevent flu)	1 time a year	Completed	11/22/2011	11/22/2010
Pneumovax(to prevent special pneumonia)	Once in lifetime 2 times if first given before age 65	Overdue		
Smoking is dangerous to your health and increases the complications of diabetes.	Please stop smoking.		Current Smoker	Current Smoker

How Does the Physician Create and Facilitate the Office Team as "The Participatory Village?"

Several barriers make it difficult for physicians to lead teams. Time constraints and lack of reimbursement are mentioned as prominent barriers. But we believe lack of training, a paucity of role models, and inadequate experience serve as the key underlying barrier for effective team leadership. Health care reform will likely change the reimbursement model in primary care. Meaningful use, "accountable care," regional data exchange, and patient centered medical homes, all part of health care reform plans, demand office redesign based on functioning office teams. The physician alone functioning with an assistant by his side will not work. The "old system" does not support participation and is not an effective model for optimum chronic disease care. Physicians will need to adopt a new skill set that includes team facilitation skills, use of registries to identify and resolve care gaps, and group visits to help patients who are not achieving goals through usual office care.

Team facilitation skills are based on soliciting questions rather than "telling" or "providing knowledge" to team members. Knowledge alone does not change behavior. Adult learners (including patients) need to be convinced that the solution relates to them and their perception of the disease or problem. Unfortunately, most physicians have been exposed to models that have featured "telling" rather than "asking." Staff and patients do not have the knowledge to prescribe the correct medication but they do know what will be required to persuade them to carefully follow a medication regimen or work a new task into their workday. Observation of primary care office teams often reveals a failure to engage because key leaders tend to dominate the meeting agenda and staff members tend to be hesitant to speak up in meetings. (15)

An important function of team meetings includes review of population-based reports from the diabetes registry. Tables 2, 3, and 4 are examples of population reports from a practice. Table 2 compares goal achievement of the practice with all other practices in the DMCP project. There are several gaps in care that this practice might consider addressing as a team, including results of HbA1c, annual performance of dilated eye exams, documentation of sensory foot exams, and obtaining urine microalbumin measurements. A similar table is available that details the results of each clinician's patient population. Table 3 can be used to address the HbA1c issue. It is a list of patients who are not at goal for A1c. This report can also be used to choose patients who may benefit from group visits. Table 4 can be used to address the issue of obtaining dilated eye exams, sensory foot exams and urine microalbumin. This table is a list of all the patients who have not had one of these yearly activities performed. The physician, staff champions, and team leaders typically take responsibility for downloading these reports from the registry and presenting them to the practice team.

Table 2: Report that Indicates Number of Patients Meeting Standards of Care Goals.

Clinic ID		HbA1c	LDL	B/P	HbA1c, LDL, B/P
99	% That Met Goals	52%	49%	48%	19%
All Clinics	% That Met Goals	56%	57%	56%	24%
Goals		<7.0	<100	<130/80	
	Goals	All Clinics	Clinic 99 Averages		
# of Patients		16,051	280		
# of Visits		50,457	759		
Weight		211	200		
BMI		34	32		
B/P	130/80	132/77	128/74		
Dilated Eye Exam	Once a year	17%	8%		
Foot Exam	Once a year	28%	10%		
HbA1c	<7	7.3	7.1		
Total Cholesterol	<200	180	172		
LDL	<100	100	92		
HDL	M:>40 F: >50	46	46		
Non-HDL	<130	134	126		
Triglycerides	<150	174	163		
Urine Micro Albumin	Once a year	26%	7%		
Pneumovax	Once	28%	20%		
Flu Shot	Once a year	19%	31%		
Daily ASA	100%	47%	40		

Table 3: Report that indicates the most recent HbA1c at different risk levels-similar reports are available for LDL, Non-HDL, Triglycerides and BP.

Clinic Number 99	Very High Avg. =>9	High Avg. > 7 & <9	Target 7.0 or <
Number of Patients	50	102	111

Patient list of HbA1c from Highest to Lowest

Record Number	Names	Avg. HbA1c	# of tests	# of visits
240		13.4	1	2
243		13.2	1	1
07		13.0	2	2
211		11.8	1	2
227		11.6	2	3
115		11.6	1	1
15		11.5	2	3
05		10.6	1	1
42		10.4	3	3
10		10.3	3	3

Table 4: Checklist expands to a list of patients who have not completed an eye exam in last 365 days.

Eye Check *
Daily ASA
Foot Check
Flu Shot
Urine Microalbumin

Pneumovax

Name	Date of last exam
Jane Doe	01/15/2008
Mickey Mouse	10/11/2008
Sam Spade	09/15/2008
Santa Clause	07/07/2007
Lotta Dough	05/14/2007
Prince Charming	01/24/2008
James Dean	01/22/2007

Table 5 is an example of what happens when a practice delegates and empowers its staff to perform many of the routine tasks. This practice reviewed its data as a team and developed strategies for addressing the gaps in care. Their strategies included policies that empowered staff to perform monofilament foot exams, obtain urine microalbumin tests, and give immunizations for influenza and pneumovax if they were indicated. Staff changes that facilitated this included requesting information from the ophthalmologist or optometrist following their eye exam, inquiries to the patient as to whether they followed up on the eye exam referral and arranging for an optometrist to visit the office periodically to perform the exams on site. All of these activities illustrate signs of increased participation by all members of the team (the "village").

Table 5: Change in one practice over an 8-month period.

	Start	8 mo's later
Dilated Eye exam	2%	59%
Foot Check	10%	82%
Urine Micro Albumin	6%	63%
Pneumovax	32%	76%
Flu Shot	1%	66%
Daily Aspirin	45%	65%

Team care improves health outcomes and reduces costs by increasing the number and quality of services provided. The delegation of additional tasks to the office staff free the physicians to perform the tasks best suited for them. The key is the physician is involved in the creation and management of the team and is engaged and providing leadership to the team.

Group Visits

Group visits (GV) can help empower patients to better self-manage their diabetes.(8) They are conducted in a supportive setting where patients feel safe asking questions and expressing concerns about their disease. Eight to 12 patients usually attend the two-hour visit. The first hour is led by the nurse or medical assistant office team member. The second hour is led by the patient's usual physician or other clinician. Participation is enhanced and changes are more sustainable when the group visit is led by the team that provides usual care for the patient. Relationships have been previously established, and a GV takes advantage of that relationship and can help sustain it. The physician usually uses evaluation and management codes such as 99213 or 99214 to record charges for their group visit time.

Multiple studies demonstrate the value of group visits for diabetes and other health problems. Results indicate improved patient and clinician satisfaction (15,16) along with better quality of care and reduced use of the emergency department and other specialist visits (17,18). Studies in the diabetes setting have demonstrated improved metabolic control, improved learning, problem-solving ability, and quality of life as a result of participation in GV(19,20). A recent four-year trial that included 815 non-insulin dependent patients younger than age 80 who were randomized to either group or individual care demonstrated that patients who received care in group visits had lower HbA1c, LDL, and BP levels and improved health behaviors, quality of life, and knowledge of diabetes. (21)

Surveys of 350 GV patients in the author's group visit collaborative indicate that group visits strengthen the trust between the physician and the patient. Patients feel that they know their physician and nurse better and develop a sense that they have the power to control "their diabetes." One of the main advantages noted was hearing from other patients who have the same disease that they do. Confidence is a powerful tool and group visits help build it. More information about the diabetes registry and group visit is available at http://www.fafp.org/diabetes_mc.html.

Patients who will benefit most from group visits are those whose diabetes is not well-controlled (hemoglobin A1c level higher than 8%, an LDL cholesterol level higher than 130 mg/dL, or blood pressure higher than 140/90 mm Hg).

Summary

Empowering all members of the office team (including the patient) to actively participate in diabetes care will create a diabetes participatory village. Diabetes is a self-managed disease, and without patient participation, effective care is not as likely. Patient empowerment is not likely to come about if an effective office team is not in place. The Diabetes Master Clinician Program is an example of how this might occur in a primary care office setting. This article focuses primarily on the internal office team. This does not mean that the team members outside the office, such as diabetes educators, dietitians, and other physicians, are not important. Unfortunately, when the concept of teams is discussed in the chronic disease literature, the members of the primary care or internal office team are seldom mentioned. Articles usually state that the primary care physician does not have time, or cannot be expected devote significant time, to assessment and management of diabetes problems. As a result, the external office team and the internal office team are not coordinated, and neither is the care. This one-sided approach to "team" is leading to lack of communication, coordination, and poor diabetes care. Both sides need to sit down at the same table and realize what the other side is doing. An effective "participatory office practice " will have empowered internal and external teams that work together.

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