Increasing Attendance at Scheduled Appointments for Group Classes at a Diabetes Education Center

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IN BRIEF "Quality Improvement Success Stories" are published by the American Diabetes Association in collaboration with the American College of Physicians, Inc., and the National Diabetes Education Program. This series is intended to highlight best practices and strategies from programs and clinics that have successfully improved the quality of care for people with diabetes or related conditions. Each article in the series is reviewed and follows a standard format developed by the editors of *Clinical Diabetes*. The following article describes an effort to improve attendance at scheduled appointments for group classes at a Pennsylvania diabetes education center.

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Describe your practice setting and location.

The Diabetes Education Center at Pennsylvania Hospital, a member of the University of Pennsylvania Health System, is located in center city Philadelphia, Pa. This urban center serves an ethnically diverse population. Attendees of a group education class for people with a diagnosis of type 2 diabetes include 70% women and 30% men; age-groups served include >65 years (20%), 45–64 years (50%), and 18–44 years (30%); and the population is racially/ethnically diverse, including African Americans (52%), Caucasians (40%), Latin Americans (24%), Asian Americans (14%), and Indian Americans (<1%) (1). The team consists of a registered nurse/certified diabetes educator, a registered dietitian, a public health educator specialist, and a public health intern.

Describe the specific quality gap addressed through the initiative.

The project focused on increasing attendance at scheduled appointments for the Diabetes Education Center's group classes. The standard process for scheduling an appointment was the same for all patients. Patients were referred to the center by a health care provider or contacted the center themselves. The diabetes educator scheduled an initial, private, 1-hour appointment. During this initial appointment, the educator described the group class in detail and informed the patients about the availability of parking passes and bus tokens for attendees. The majority of no-show patients were African-American women between the ages of 18 and 64 years (78%). Among male patients, no-shows for group classes were equally divided (50% each) between African-American and Caucasian participants.

According to the American Diabetes Association's (ADA's) Standards of Care (2), diabetes education is crucial to improving quality of life for people with diabetes. The center thus collected data over a 12-month period to ascertain how to improve its no-show rate.

How did you identify this quality gap? In other words, where did you get your baseline data?

The center identified the no-show quality gap by monitoring the atten-

dance rate for all scheduled appointments for group education classes. Once a patient was scheduled for a group class, the team monitored the number of times the patient attended the class. If a scheduled patient was a no-show, the public health intern called the patient and asked why the appointment was missed.

Over a 6-month period, it became evident that there was a pattern to the no-shows. The education coordinator created an Excel spreadsheet on which were recorded each patient's name, date of birth, telephone number, date of appointment, pre-appointment confirmation call date, outcome (attended or no-show), and, if no-show, the reason for not attending.

Summarize the initial data for your practice (before the improvement initiative).

The initial data were collected from 365 patients who were scheduled for a group class appointment from January through June 2017. During the 6-month period, 278 (77%) attended group class; 76 (22%) were no-shows, and 11 (<3%) called to reschedule (Supplementary Figure S1).

According to the Centers for Disease Control and Prevention (3), ~1 million people participated in diabetes self-management support programs recognized by the ADA or the American Association of Diabetes Educators in 2016. The *Healthy People 2020* target for adults with diabetes in the United States receiving formal diabetes education is 62.5%—an increase of 10% over previous levels (4).

Common reasons for a missed appointment were transportation issues, other health issues, timing of the class schedule, school/work conflicts, weather, personal reasons not disclosed, or just forgot (5) (Supplementary Figure S2).

What was the timeframe from initiation of your quality improvement (QI) initiative to its completion?

This was a 1-year QI project beginning 1 January 2017 and ending 28 December 2017. The first 6 months were for data collection; the last 6 months were for implementation of the intervention and post-intervention data summary.

Describe your core QI team. Who served as project leader, and why was this person selected? Who else served on the team?

The director of the Diabetes Education Center served as the project leader because of her years of experience, knowledge of diabetes, and ability to encourage staff participation. The team also included the center's registered dietitian, public health educator specialist, public health intern, and education coordinator.

Describe the most important changes you made to your *process* of care delivery.

During the data collection phase (January–June 2017), it became evident that transportation was the main barrier for patients to keep their appointments at the Diabetes Education Center. A team meeting was scheduled to discuss a way to provide transportation services to patients. The center partnered with a sponsor, the Diabetes Education Research Center, which agreed to help offset the cost of travel to the center by offering one free parking pass or two bus tokens to each participant scheduled to attend.

Summarize your final outcome data (at the end of the improvement initiative) and how it compared to your baseline data.

The post-intervention data are from 335 patients who were scheduled for a group class appointment from July through December 2017. During that 6-month period, 262 patients (80%) attended group class; 70 (19%) were no-shows, and 3 (<1%) called to reschedule (Supplementary Figure S3). Our procedure is standard for all patients. The diabetes educator who is scheduled to see the patient is responsible for placing a reminder call the day before the appointment unless the appointment is on a Monday. In that case, the patient is called on the Friday before the scheduled appointment.

The purpose of this project was to identify and explore the reasons why so many patients with diabetes chose not to keep their group class appointments and to decrease the no-show rate. Patients' travel time to the Diabetes Education Center ranged from 5 minutes to 1 hour. Once transportation was identified as the top reason for no-shows, parking passes and bus tokens were offered to patients who were scheduled to attend the group class. Post-intervention data revealed that only three patients used the parking passes, and the bus tokens were not used because patients who rode the bus had already purchased monthly transportation passes.

What are your next steps?

The next step is to delve deeper into the reasons why patients are not showing up for their scheduled group class, using the 5 Whys. The 5 Whys approach is a root cause analysis using five open-ended questions to help identify the root of the problem rather than its symptoms. The goal is to decrease the no-show rate and thereby achieve a positive QI outcome, by developing a different approach through redesign, implementation, and sustainability (6).

What lessons did you learn through your QI process that you would like to share with others?

This QI process was an eye-opener for staff at the center. Through data collection, interventions, and post-intervention data summary, it became evident that patients must be ready to make a change such as attending a diabetes education class. If a patient is not ready, the change will not occur. For a patient to move forward to successfully manage diabetes, the patient has to accept the role of "change agent." It is the patient's readiness to commit to behavioral changes that will ensure successful diabetes man-

agement (7). The staff must be aware of the importance of asking open-ended questions and not presuming to know the reasons why a patient is a no-show for an appointment.

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