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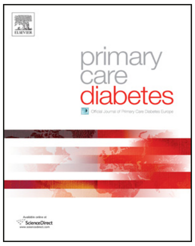

Original research

Multidisciplinary coordinated care for Type 2 diabetes: A qualitative analysis of patient perspectives

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ABSTRACT

Aims: To explore the patient perspective on coordinated multidisciplinary diabetes team care among a socioeconomically diverse group of adults with type 2 diabetes.

Methods: Qualitative research design using 8 focus groups (n = 53). We randomly sampled primary care patients with type 2 diabetes and conducted focus groups at their primary care clinic. Discussion prompts queried current perceptions of team care. Each focus group was audio recorded, transcribed verbatim, and independently coded by three reviewers. Coding used an iterative process. Thematic saturation was achieved. Data were analyzed using content analysis.

Results: Most participants believed that coordinated multidisciplinary diabetes team care was a good approach, feeling that diabetes was too complicated for any one care team member to manage. Primary care physicians were seen as too busy to manage diabetes alone, and participants were content to be treated by other care team members, especially if there was a single point of contact and the care was coordinated. Participants suggested that an ideal multidisciplinary approach would additionally include support for exercise and managing socioeconomic challenges, components perceived to be missing from the existing approach to diabetes care.

Conclusions: Coordinated, multidisciplinary diabetes team care is understood by and acceptable to patients with type 2 diabetes.

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1. Introduction

Optimal diabetes care is interdisciplinary and complex. For example, even a patient with well-controlled diabetes might regularly see a physician, a diabetes nurse educator, and a dietitian just for direct diabetes management. To address difficult-to-control diabetes, or prevent or manage diabetes complications, the number of providers expands considerably: endocrinologists, ophthalmologists, and podiatrists might all be a regular part of some individuals' care. When possible, team provision of comprehensive diabetes care is the recommended approach, ideally as part of the patient-centered medical home, with team members working at the top of their license [1,2]. This differs from prior care models, in which the individual doctor–patient relationship was the paramount, and often the sole, relationship.

Very little is known regarding the patient experience of care in the relatively new team care model, and important questions remain unanswered: do patients feel that care is coordinated or fragmented [3]? Do patients feel deprived of time with individual providers [4]? Do patients see themselves as part of the team, or, as one recent study of interprofessional team meetings found, might some feel that "They are talking about me, but not with me" [5]? Further, patient perceptions of care quality may diverge from other quality assessments used in healthcare [6].

Our academic medical center implemented a diabetes team care model within 20 primary care practices that were part of our practice-based research network between 2012 and 2014 [7]. The model shifted the focus of diabetes care from a model that centered on the doctor–patient relationship with referrals to certified diabetes educators and dietitians as needed, to one that emphasized more protocolized, multidisciplinary care involving practice-based nurses and dietitians, embedded locally in clinics [7]. An evaluation of the model found significant improvement in glycemic control for patients with hemoglobin A1c >9.0% [7]. In this project, we sought to understand the patient experience of diabetes care and patient perspective on team care, as well as to determine preferences for the provision of ideal diabetes care, both to shape the model and to identify any potential pitfalls of this approach. Specifically, our goal was to obtain patient perspectives that could drive implementation of patient-centered diabetes care in the primary care setting.

2. Methods

2.1. Setting and study sample

The study was conducted in an academic primary care network with 20 affiliated primary care practices in eastern Massachusetts. The diabetes population of the primary care network was approximately 12,000 at the time of the study. Practice types were diverse, including hospital-based academic practices, small group practices, and community health centers. The program has been previously described in greater detail [7]. In brief, the program had the following core elements, shared by all practices: (1) A physician leader for support of the project, (2) A nurse (or nurse practitioner) diabetes champion who managed a population health diabetes registry, served as a single point of contact for patients, and coordinated diabetes management plans with the patient's primary care physician and specialists, and (3) An assigned dietitian who accommodated and expedited referrals for nutrition counseling [7]. The diabetes champions used management protocols that specifically incorporated motivational interviewing techniques, scheduled 'check-ins' that were not tied to a clinic visit, and evidence-based protocols for insulin initiation and titration [7]. Implementation varied across clinics in two main ways—whether or not the dietitian was located on site, and whether the practice added other members of the practice to their core care team, such as medical assistants or front desk staff. All diabetes team care members attended semi-annual conferences to support program implementation. Our sampling strategy took variation in implementation into account, aiming to enroll participants from practices with team care approaches representative of the range of model implementation.

Eligible patients were adults (age >18 years old) with diagnosed diabetes who received their primary care at a network primary care practice. All patients included in the study had type 2 diabetes.

2.2. Focus group guide development

The focus group guide was developed via an iterative process. The authors included topics that covered issues in the development and enactment of the team care, drawing from the Chronic Care Model [8,9], shared decision making models [10], theory of planned behavior [11], and models of diabetes self-management [12]. The guides contained open-ended questions and prompts. These were then reviewed and modified based on the suggestions of multi-disciplinary practitioners (dietitians, nurses, psychologists, and physicians) involved in diabetes care, but outside of the study team. The modified guide was then tested in a pilot focus group of individuals with diabetes (not analyzed thematically), and further modified based on feedback from this session.

2.3. Procedures

This study used standard qualitative research approaches. Participants were identified by electronic health record review, and then approved for contact by their primary care provider. Up to 5 attempts were made to contact participants. Participants who participated in the focus groups received $25. Descriptive data regarding the participants (e.g., recent hemoglobin A1c and average of up to 3 recent blood pressure readings) were collected from the electronic health record.

We conducted 8 focus groups (n = 53) from December 2014 to March 2015. Focus groups sizes ranged from 4 to 9 participants, and lasted approximately 90 min. Enrollment continued until thematic saturation was reached. Groups were conducted by one of the authors (SAB) and audio recorded.

Focus group recordings were transcribed verbatim. We used an iterative process to develop the coding framework [13]. Each transcript was coded independently by 3 reviewers. Using the immersion/crystallization technique [14,15], issues and

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