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Original Research

Implementing Specialized Diabetes Teams in Primary Care in Southern Ontario

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ABSTRACT

Objectives: This study explores the implementation processes of integrating specialized diabetes teams into primary care in southern Ontario, Canada.
Methods: In-depth qualitative interviews were conducted with 23 patients, 20 diabetes educators and 16 primary care physicians. In addition, group debriefing sessions were conducted and field notes were collected from diabetes educators and diabetes education program managers to further explore the day-to-day issues of implementation. Data were analyzed using an inductive content analysis approach.
Results: Analysis revealed 3 main themes: Right Place, Right Time, Right Service: the convenience and comfort of local care, timely, preventive management and delivering person-centred care; Creating Partnerships: generating intervention buy-in, formal discussion, service agreements, site orientation and team development; Operational Complexities and Strategies: access to electronic medical records and documentation, referral and scheduling procedures, and costs and resources.
Conclusions: Because situating diabetes teams in primary care currently involves using existing healthcare structures and human resources, pragmatic methods of fostering successful implementation of this model of practice are required. The utility of this model was perceived as being viable, and benefits were visible to all study participants. Strategies to facilitate implementation include outlining roles and expectations by educators and the primary care providers' team in the beginning, investment in the intervention by all stakeholders, and clear channels of communication that allow educators to perform their roles and leverage opportunities for team collaboration in patient care. Further evaluation of implementation processes can serve to expand this model of practice, which has proven so far to be favourable to the players involved.

Mots clés :
Soins aux diabétiques
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Mise en œuvre
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Services aux patients
Soins de santé primaires
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Intégration des services
Soins spécialisés

RÉSUMÉ

Objectifs : La présente étude examine les processus de mise en œuvre de l'intégration des équipes spécialisées en diabète aux soins primaires de l'Est ontarien, au Canada.
Méthodes : Des entretiens en profondeur étaient menés auprès de 23 patients, 20 éducateurs en diabète et 16 médecins de premiers recours. De plus, des séances-bilan étaient menées, et les notes d'observation des éducateurs en diabète et des gestionnaires du programme d'enseignement sur le diabète étaient recueillies pour examiner plus en détail les problèmes quotidiens de la mise en œuvre. L'analyse des données était réalisée au moyen de l'approche inductive d'analyse de contenu.
Résultats : L'analyse révélait 3 thèmes principaux: le service approprié, au moment opportun et à l'endroit souhaité: la commodité et le confort des soins de proximité, au moment opportun, la prise en charge préventive et la prestation de soins centrés sur la personne; la création de partenariats: susciter l'acceptation des interventions, la discussion formelle, les ententes de service, l'orientation des sites et la consolidation d'équipe; les difficultés et les stratégies opérationnelles: l'accès aux dossiers médicaux électroniques et à la documentation, les procédures d'aiguillage et de planification, ainsi que les coûts et les ressources.

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Conclusions : Puisque la situation des équipes en diabète aux soins primaires comporte actuellement l'utilisation des structures de soins de santé et des ressources humaines existantes, des méthodes pragmatiques pour favoriser la réussite de la mise en œuvre de ce modèle de pratique sont requises. L'utilité de ce modèle était perçue comme étant viable, et les avantages étaient visibles pour tous les participants de l'étude. Les stratégies pour faciliter la mise en œuvre sont les suivantes: la définition initiale des rôles et des attentes des éducateurs et de l'équipe de prestataires de soins primaires, l'engagement de toutes les parties aux interventions et des voies de communication claires qui permettent aux éducateurs d'assumer leurs rôles et d'exploiter les possibilités de collaboration entre les équipes de soins aux patients. Une évaluation plus approfondie des processus de mise en œuvre peut servir à étendre ce modèle de pratique, qui, jusqu'à présent, s'est avéré favorable pour les parties concernées.

Introduction

In Ontario and across Canada, diabetes education programs (DEPs) have started to develop collaborative partnerships with their local primary care physicians by delivering specialized diabetes services at primary care sites. This collaborative service model between primary and specialty care affords primary care providers (PCPs) and their patients living with diabetes access to certified diabetes educators who offer self-management training and support that are aligned with clinical practice guidelines (1) and the Chronic Care Model (2). Furthermore, it was established primarily to address the many challenges involved in access to and uptake of diabetes self-management education services. Diabetes education services are underused; uptake occurs by only 25% to 30% of Canadians living with diabetes (3,4). Most Canadians with diabetes receive care solely from their PCPs (5), who face challenges in providing optimal diabetes care and self-management support to patients (6–12). Furthermore, less than half of Ontarians and Canadians meet the recommended clinical targets for diabetes management (6,13). These findings demonstrate a need for more effective delivery of diabetes care, education and support.

Clinical practice guidelines are now recommending that diabetes care management be provided by an interprofessional team with specific training in diabetes, or supported by diabetes specialists, in primary care (1). These recommendations are based on current meta-analyses, which demonstrate that various aspects of disease management and quality-improvement strategies that include promotion of self-management, patient education and provision of team care, improve glucose control (14,15) and cardiovascular risk factors (15). Despite the reported benefits of integrating diabetes specialists, such as certified diabetes nurses and dietitians into primary care, translation of this evidence into practice is scarce in the literature; this contributes to the knowledge-to-action gap (16), limiting evidence-informed practices and decisions as well as replications. Implementation research can provide insight that enhances the design, planning and further development of new interventions (17,18). Our research objective was to provide pragmatic information to assist in the translation and transferability of integrating specialized diabetes teams, specifically nurse and dietitian diabetes educators, into primary care. This article's objective is to explore how several primary care sites introduced and implemented this integration.

Methods

The intervention

The specialized diabetes teams were composed of a nurse and a dietitian-certified diabetes educator who provided primarily patient self-management education, coaching, timely treatment adjustment (access to remote glycemic regimen optimization and monitoring via telephone and e-mail), and system navigation support to patients. They also provided primary care physicians with recommendations for medication optimization and decision support for diabetes management. Educators were on site either weekly or monthly, depending on the patient case load. Patients were referred to the educator teams by their primary care physicians. The intervention was targeted primarily to reach patients with type 2 diabetes who had been newly diagnosed, had experienced poor glycemic control, had complications resulting from diabetes or needed insulin initiation. Because patient referrals varied across sites on the basis of physicians' discretion and the site partnership agreement with the DEP, some educator teams also saw patients with insulin glucose intolerance and type 1 diabetes, but the majority of patients seen had type 2 diabetes. Patients who typically require intense and specialized treatment, such as some patients with type 1 diabetes or gestational diabetes and those on multiple daily insulin regimes, were referred to DEPs.

The educator teams saw patients (for approximately a half hour each, with a nurse and a dietitian or together, depending on space availability) to assess patients' level of diabetes self-care, diabetes knowledge and lifestyle habits. The educator team provided individualized patient education and developed treatment priorities and action care plans in consultation with the patients; these plans were shared with the PCPs, who reinforced them during subsequent visits. Case conferences were conducted when major changes to the patients' treatment plans (e.g. insulin initiation, prescription for supplies, dose titration) were considered; thus, the PCPs and educators collaboratively managed patient care. However, some sites did not have PCPs and the diabetes teams concurrently on site. All patients were also encouraged to attend their local DEPs for additional support services (e.g. education classes, workshops, cooking demonstrations, grocery store tours). Half-hour follow-up visits with the educator teams were scheduled over a 1-year period for all patients, during which action plans and patients' goals and needs were reviewed, discussed and, potentially, revised. After the first year, more follow-up visits occurred on the basis of patients' needs and the educators' clinical judgements, such as when patients' glycated hemoglobin (A1C) levels were outside the target range, when patients required insulin initiations or insulin adjustments, or when patients requested additional visits.

Study locations

Diabetes teams were sent to 11 primary care sites in a region of Ontario, Canada, operating between November 2009 and August 2014. Of the 11 primary care sites, 8 were family health teams, 2 were family group practices and 1 was a solo physician practice.

Data collection and participants

Three types of data were collected from the diabetes educators concerning their experiences in implementing the intervention: 1) 18 in-depth, semistructured, face-to-face interviews with 8 nurses and 10 dietitians (including a clinical team lead); 2) 10 quarterly group debriefing sessions with educator teams and program managers and 3) 23 monthly reflective journal entries from diabetes educators across all sites. In-depth interviews were also