Improving awareness, accountability, and access through health coaching

Qualitative study of patients' perspectives

Clare Liddy MD MSc CCFP FCFP **Sharon Johnston** MD LLM **Hannah Irving** MA **Kate Nash** MSc **Natalie Ward** PhD

Abstract

Objective To assess patients' experiences with and perceptions of health coaching as part of their ongoing care.

Design A qualitative research design using semistructured interviews that were recorded and transcribed verbatim.

Setting Ottawa, Ont.

Participants Eleven patients (>18 years of age) enrolled in a health coaching pilot program who were at risk of or diagnosed with type 2 diabetes.

Methods Patients' perspectives were assessed with semistructured interviews. Interviews were conducted with 11 patients at the end of the pilot program, using a stratified sampling approach to ensure maximum variation.

Main findings All patients found the overall experience with the health coaching program to be positive. Patients believed the health coaching program was effective in increasing awareness of how diabetes affected their bodies and health, in building accountability for their health-related actions, and in improving access to care and other health resources.

Conclusion Patients perceive one-on-one health coaching as an acceptable intervention in their ongoing care. Patients enrolled in the health coaching pilot program believed that there was an improvement in access to care, health literacy, and accountability, all factors considered to be precursors to behavioural change.

EDITOR'S KEY POINTS

- For patients with diabetes, health behaviour is a critical part of achieving good glycemic control; however, patients often need support to modify their health behaviour for the better. Patients in this study were part of a pilot program in Ottawa, Ont, in which one-on-one health coaching was part of their ongoing care.
- Patients responded positively to the program. It increased their awareness of how diabetes affected their bodies and health. Having a better understanding about the consequences of health behaviour helped patients change their attitudes toward optimal self-management.
- Patients expressed a high degree of confidence in the ability of coaches to help them meet their health goals. Coaches assisted patients in accessing more timely care and, in some cases, also coordinated care within patients' regular care teams or with other services in the community. Patients believed the program improved their access to care.

This article has been peer reviewed.
Can Fam Physician 2015;61:e158-64

Des patients mieux informés, plus responsables et accédant plus facilement aux soins grâce à un conseiller en santé

Une étude qualitative sur l'opinion des patients

Clare Liddy MD MSc CCFP FCFP **Sharon Johnston** MD LLM **Hannah Irving** MA **Kate Nash** MSc **Natalie Ward** PhD

Résumé

Objectif Vérifier ce que pensent les patients de la présence d'un conseiller en santé au sein de leur équipe soignante et vérifier l'expérience qu'ils en ont.

Type d'étude Recherche qualitative à l'aide d'entrevues semi-structurées enregistrées et transcrites mot à mot.

Contexte Ottawa, Ontario.

Participants Onze patients de plus de 18 ans qui étaient à risque ou avaient un diagnostic de diabète de type 2 et qui participaient à un programme pilote de coaching en santé.

Méthodes On a établi l'opinion des patients à l'aide d'entrevues semi-structurées. À la fin du programme pilote, on a interviewé 11 des patients en se servant d'un échantillonnage stratifié afin de maximiser la variation.

Principales observations Tous les patients ont trouvé leur expérience avec le programme de coaching positive. D'après eux, ce programme s'est montré efficace en améliorant leurs connaissances sur la façon dont le diabète affecte leur organisme et leur santé, en les rendant plus responsables d'adopter un comportement sain, et en améliorant l'accès aux soins et aux autres ressources du système de santé.

Conclusion Les participants croyaient qu'un coaching individualisé avait sa place dans leur traitement habituel. Ceux qui avaient participé au programme pilote croyaient qu'il leur assurait un meilleur accès aux soins, améliorait leurs connaissances en santé et les responsabilisait, ces facteurs étant tous considérés comme précurseurs de changements comportementaux.

POINTS DE REPÈRE DU RÉDACTEUR

- Les diabétiques doivent avoir un comportement sain pour atteindre un contrôle adéquat de leur glycémie; toutefois, ils ont souvent besoin d'aide pour modifier leur comportement. Les patients de cette étude participaient à un programme pilote à Ottawa, Ontario, dans lequel ils profitaient d'un coaching individualisé (*health coaching*).

- Les patients ont bien apprécié le programme qui leur faisait prendre conscience de la façon dont le diabète affectait leur organisme et leur santé. Mieux comprendre les conséquences d'un bon comportement les aidait à changer leurs habitudes et ainsi à mieux gérer leur santé.

- D'après les participants, les conseillers étaient très efficaces pour les aider à atteindre leurs objectifs de santé. Ils leur permettaient d'être traités plus rapidement; dans certains cas, ils assuraient la coordination des soins au sein de l'équipe soignante ou avec certains services communautaires. Les patients estimaient que le programme leur donnait un meilleur accès aux soins.

Cet article a fait l'objet d'une révision par des pairs.
Can Fam Physician 2015;61:e158-64

Nearly 2.5 million Canadians (6.8% of the population) live with diabetes.[1] That number is expected to rise to 3.7 million by 2020,[2] with the annual associated health care costs increasing to $16.9 billion in 2020 from $6.3 billion in 2000.[2]

Despite advances in medical management for patients with diabetes,[2] the quality of care and clinical outcomes remain poor. Only half of patients are meeting glycemic targets,[3,4] while many are affected by complications such as kidney disease, heart disease, and low vision.[3]

In addition to pharmacologic management, achieving optimal glycemic control requires changes in patient behaviour, which can be challenging. Studies show that most patients need some support to make these changes.[5,6] Programs supporting patients in self-management are based on self-efficacy theory[7] and aim to provide individuals with the confidence and tools to set and achieve health behavioural goals.[8] Group programs, such as the Stanford Chronic Disease Self-Management Program, have shown promising outcomes, including improvements in self-efficacy and health behaviour.[9] Self-management programs designed for people living with diabetes have shown decreases in hemoglobin A_{1c} (HbA_{1c}) levels, especially for those whose HbA_{1c} levels were not optimal.[10-16]

However, group programs are only one form of self-management support and are not appealing to all patients. Barriers include timing, accessibility, literacy level, and transportation costs.[17] Furthermore, patients who are referred to diabetes education programs do not always attend[18]; a systematic review found attrition rates from diabetes education services vary from 4% to 57%.[19]

One-on-one focused self-management support programs (health coaching) are a promising alternative to group programs and have been growing internationally for more than a decade. Health coaching was described in 2003 by Lindner et al as "an interactive role undertaken by a peer or professional individual to support a patient to be an active participant in the self-management of a chronic illness."[20]

In an integrative review of 15 randomized health coaching interventions, 6 trials demonstrated statistically significant improvements in 1 or more dimensions of health behaviour, such as nutrition, physical activity, weight management, and medication adherence.[21-23] A rapid review of telephone-based coaching services reached similar conclusions, noting improvements in health behaviour, self-efficacy, and health status.[24] A randomized controlled trial of peer health coaching for low-income patients with diabetes demonstrated a reduction in HbA_{1c} levels of 1.07% in the coached group, compared with a reduction of 0.3% in the usual-care group.[25] To our knowledge, health coaching had not been tested in the Canadian context at the time of our study.

While these programs are tailored to individual needs, the effect of self-management support initiatives is dependent on the community and health system context in which patients manage their health.[26] With this in mind, we implemented health coaching as part of routine clinical care in established interprofessional primary health care teams. The pilot study aimed to assess both the feasibility of implementation and patients' experiences with and perceptions of one-on-one health coaching as part of their ongoing care. This paper reports on patients' experiences with and perceptions of health coaching. The feasibility of implementing the program has been reported in detail elsewhere.[27] Our results will be relevant for primary care and community-based organizations that seek to improve people's ability to manage chronic illness.

METHODS

In 2012, health coaching was implemented as a pilot program at 3 primary health care clinics in Ottawa, Ont. The area has a population of 1.2 million, with approximately half of the residents living in urban Ottawa. Two-thirds of the area residents describe English as their mother tongue, 17% report French, and the rest another language. Twenty percent are visible minorities.

Pilot program

The health care clinics that participated in the health coaching pilot program met the following criteria.

- They offered team-based care for patients living with chronic disease.
- The distribution of patients' language, culture, and social needs were representative of the general population.
- The organizations (2 family health teams and 1 community health centre) differed enough to gauge feasibility.

We used professional rather than peer coaches, as there was little experience in using peer support in our region and because clinics requested a professional-based model. There were 2 to 3 individuals from each site who were offered 11 hours of health coaching training, which was based on the Peers for Progress model but adapted for health care professionals.[28] Based on the transtheoretical model of behaviour change,[29] the program provided health care professionals with practical skills for working with patients with diabetes. These skills included the following: using a confidence scale to assess patients' self-perceived ability to set and achieve health-related goals; recognizing when to promote goal setting and when to provide information and support; having motivational interviewing techniques[30] (ie, open-ended questions); presenting a nonjudgmental attitude; and encouraging patients to explore, as well as consider changing, their current health behaviour patterns. Eight

coaches completed the training; however, 2 of them did not ultimately participate in the program (1 was unable and 1 declined). Of the remaining 6 coaches, 3 had prior training in motivational interviewing and 3 were certified diabetes educators.

A practical provider-initiated purposive sampling approach[31] was used to recruit patients older than 18 years of age with or at risk of diabetes. Primary care providers who consented to the study identified adult patients (>18 years of age) with or at risk of diabetes and who they perceived would benefit from health coaching. We encouraged the primary care providers to identify hard-to-reach individuals (ie, patients who had not attended self-management or diabetes education programs in the past). To participate, patients required sufficient proficiency in English, French, or Somali to communicate with their health coaches (literacy was not mandatory). All patients who met these criteria were eligible. Primary care providers referred the identified and eligible patients to the program. Enrolment was voluntary. No incentives to participate were offered. Patients interested in participating provided written or oral consent and completed a baseline survey.

Participating patients received 6 months of access to health coaching. Coaches held initial meetings with patients in person; subsequent appointments were conducted via e-mail communications, telephone calls, face-to-face meetings, or a combination of these methods. Meetings were 30 to 60 minutes in duration, as determined by the coach's schedule. A biweekly schedule for meetings was recommended but not mandatory. Additionally, coaches were encouraged to attend patients' diabetes visits if permitted by the primary care providers.

Design

We used a qualitative research design involving semi-structured interviews to assess patients' perceptions of health coaching. Interviews were conducted in English, French, or Somali. A stratified sampling approach was used to ensure maximum variation across all 3 clinics. Health coaches invited patients to be interviewed. Not all participants could be contacted for various reasons (eg, out of the country, did not respond). Coaches were not asked to make repeated efforts to contact these individuals, as those who had agreed were representative of the participants in terms of sex and first language. Thirteen individuals agreed to participate and were telephoned by the research team to confirm a date and time for the interview. Of these 13 individuals, 2 declined to participate when reached by telephone. The purpose of the interviews was to understand the patient experience with, and acceptability of, health coaching. Interviews included general questions (eg, about patients' method and frequency of contact with health coaches), as well as specific questions about patients' experiences with the program. Patients were asked to comment on the role that health coaches played in their general care; whether they had noticed any difference in the care they received from coaches as opposed to their general practitioners; and whether they would be interested in access to continued health coaching services. Patients were also asked about the effect of the program on different areas of their care and health, and were asked to suggest changes that might improve the program. We continued to conduct interviews until theme saturation was reached.

Eleven interviews were conducted by telephone, recorded, and transcribed verbatim by a third party. Thematic analysis was used to identify both implicit and explicit themes within the data.[32] The data analysis team included 2 physician-researchers (C.L., S.J.), the site implementor (K.N.), a research project coordinator (H.I.), and a qualitative research consultant (N.W.). Analysis team members closely examined the interview transcripts, reading and rereading to identify themes and patterns in the data. The data analysis team met 3 times over 5 months to discuss the broad concepts and themes that emerged from the data and to evaluate and consolidate themes. Transcripts were reexamined to look for conflicting data and to ensure that our analyses remained true to the data. A matrix[33] was developed by the coordinator and the consultant, organizing the data to answer the research questions, and was reviewed by the other analysis team members to ensure accuracy and reliability.

The study was approved by the Ottawa Hospital Research Ethics Board, the Public Health Agency of Canada's Research Ethics Board, and the Bruyère Continuing Care Research Ethics Board.

FINDINGS

A total of 46 patients participated in the health coaching pilot program. Twenty-four (52%) of the participants were male. Twenty-four (52%) participants reported their mother tongue as English, 16 (35%) as French, and 6 (13%) as another language. Of the 39 participants who completed a written survey at baseline, 25 (64%) had some college or university education. Also, 39 (85%) participants had a diagnosis of diabetes and 23 (59%) of them had at least 1 additional chronic condition. Six patients did not complete the program.

The HbA_{1c} levels were available for 28 participants, 17 of whom had reductions in their HbA_{1c} levels. Twenty-five patients had low-density lipoprotein cholesterol (LDL-C) levels recorded at baseline and at 6 months; 16 patients had decreases in their LDL-C levels of between 0.3 and 1.6. mmol/L. Twenty-nine patients had blood

pressure readings taken both at baseline and approximately 3 months after beginning their health coaching. Fifteen of these participants had a lower diastolic blood pressure recorded at the second time point; in 6 cases, there was a decrease in diastolic blood pressure of more than 10 mm Hg.

Patient interviews

Interviews were held in English (7), French (3), and Somali (1), representing all 3 clinics. There were 8 male participants and 3 female participants. When asked to describe their overall experience with the health coaching program, all 11 patients said it was positive. The health coaching program was effective in increasing patients' awareness of the effects of diabetes on their bodies and health, building accountability among patients for health-related actions, and improving patients' access to care and other health resources.

Increasing awareness. Coaches were instrumental in helping patients better understand how diabetes affects their health. "Right now, it helps me more to understand the behaviour of the situation, like what is diabetic [sic] and what's the cause of all this." (Patient 7)

Patients' improved health literacy allowed them to reflect on their situation and associate their actions (or inaction) with their health, which in many cases led patients to take concrete steps to improve their health. "It opened my eyes, actually, to what I'm eating and how it's affecting me, that's for sure." (Patient 6)

Patients also described how coaches helped them develop a heightened awareness of their behaviour, allowing them to make the changes necessary to improve their health.

> I learned how to check my sugar level regularly and what foods to eat when. I also learned the value of exercising; even climbing stairs can be an exercise. (Patient 11)

Building accountability. The importance of patient accountability and joint responsibility was expressed in all the interviews. Working with a coach appeared to help patients recognize that they needed to play an active role in managing and improving their own health. Patients also seemed to develop a sense of joint responsibility for their care through the coaching process. Participating in the program helped patients take ownership of their health.

> The program. This method, self-driven, it makes us responsible. And so, you can't blame one or the other. "Oh, I couldn't because they didn't have that to eat," or "that wasn't there," or even "I had no choice." So making you responsible [for your actions or inactions]. (Patient 10)

Patients expressed appreciation for the biweekly meetings, where coaches held patients accountable for their actions or inactions and the associated consequences.

> It keeps me honest .... Well, so that if I know I'm working with someone that has access to my information and my dietary habits and whatnot, then that will mean that I'm going to try and stay within my dietary, good dietary, habits. (Patient 6)

Some patients found that being monitored motivated them and increased their personal accountability. "It's important to be able to sit with somebody and talk about it and to be monitored. If I know that I'm monitored, I'm gonna be acting upon it." (Patient 4)

Improving access. Patients expressed appreciation for coaches' flexibility, specifically in regard to their availability at different times and by different methods. "You didn't have to go anywhere, you could do it at home, or you could do it in the offices. You know, anywhere you could find 10, 15 minutes." (Patient 1)

Coaches facilitated timely access to the information and the support patients needed to make healthy decisions. "Well I'd have to say I was more involved [in my care] because I could communicate with somebody, and also ask questions." (Patient 3)

Coaches provided patients with advice on a range of issues, including pain management, diet, and vitamins. Patients expressed a high degree of confidence in the coaches' ability to answer their questions and help them meet their health goals. Coaches also assisted some patients in accessing more timely care, and helped coordinate care within their regular care teams, between physicians and specialists, or with new services in the community. "[My coach would] help me make appointments, so it was very fluid again .... Instead of saying, 'In 3 weeks you'll get a phone call,' it was all more immediate." (Patient 3)

DISCUSSION

We assessed patients' experiences with and perceptions of one-on-one health coaching as part of their ongoing care. This approach was acceptable to both male and female patients, with diverse education and backgrounds and across a range of primary care clinic settings. Like other health coaching programs,[34,35] one-on-one coaching is more acceptable to men than self-management groups are, which tend to have low levels of male participation.[36]

Providing people with the right care, at the right place, and at the right time is considered to be a key aspect of high-quality health care delivery.[37-39] Haggerty et al[40] defined 2 distinct kinds of accessibility: first-contact accessibility

(ie, "[t]he ease with which a person can obtain needed care [including advice and support] from the practitioner of choice within a time frame appropriate to the urgency of the problem"); and accessibility-accommodation (ie, "[t]he way primary health care resources are organized to accommodate a wide range of patients' abilities to contact health care clinicians and reach health care services").

The finding of improved access to care is especially noteworthy, considering the patient sample already had access to interprofessional primary health care teams. As health coaching includes regular follow-up, it was not surprising that some participants indicated experiencing an increase in frequency of seeing health care providers. However, improvements to access while participating in the program went beyond a simple increase in the number of visits. Health coaching, by nature, enables patients to access tailored advice and ongoing support that are linked to their own health goals through a variety of channels. Improved access to care motivated participants to take charge of their own care management. This finding supports the health coaching approach and suggests that health coaching is an important consideration for interprofessional primary health care teams trying to support patients in undertaking behavioural change. Similar findings of accountability have been reported elsewhere.[41,42] For instance, Caldwell et al conducted a qualitative analysis of health coaching sessions focused on weight loss and found that the structure of sessions involving setting the next appointment encouraged patients to be accountable to their goals.[43]

Some of the perceived benefits of the program, such as improved health literacy, mirror those found in similar programs in other health system contexts.[44-46] Our sample of participants represented a diverse group, with almost half having less than a high school education. Patients developed an increased awareness of the consequences of poor health behaviour, which helped change their attitudes toward optimal self-management and was often linked to basic principles of disease management, such as healthy food choices and physical activity. This suggests that participants lacked an understanding of such concepts before receiving health coaching, despite already having had access to regular primary health care, lifestyle, and education support.

In contrast, Buntin et al[47] found that patients enrolled in a disease management coaching program were already receiving better care. In addition, studies of self-management interventions have shown that for patients who are already at target HbA_{1c} levels, it is unlikely that self-management interventions will further reduce them.[13,48] These studies suggest that patients with the poorest control of their diabetes will benefit the most from self-management support.

Viewing the data through the lens of the transtheoretical model of behaviour change[29] on which these programs are based, themes derived from the patients' reported experience suggest that this program supports the foundations for behavioural change by specifically affecting attitudes toward self-management and, perhaps equally important, increasing patients' perceptions of their ability to manage their own care through increased access, awareness, and accountability. Other studies examining patients' perceptions of health coaching interventions have also identified awareness and accountability as recurring themes.[49-51]

Limitations

We did not design this study to assess who would benefit the most from health coaching but rather for whom it would be an acceptable intervention. This study included a diverse sample of patients with existing access to regular primary health care and interprofessional teams. However, the findings of improved perceived access to care would likely only be more relevant to patients with lower baseline access to primary health care.

Nonresponse bias has to be considered when discussing evaluation limitations.[52] Many factors might have influenced nonresponse. For example, those who had a less satisfactory experience with health coaching might have been less likely to participate in interviews. This study was not designed to ensure participants received HbA_{1c} and LDL-C tests at specific times, so the quality of clinical data collected depended on what was available in the patients' health records. Other studies have met similar challenges.[53] Although some positive trends were observed, it is not possible to attribute causality to health coaching alone.

Conclusion

Patients found one-on-one health coaching to be an acceptable intervention in their ongoing care. Patients believed the health coaching program was effective in increasing awareness of how diabetes affected their bodies and health, in building accountability for their health-related actions, and in improving access to care and other health resources. Further research is needed to evaluate changes to clinical outcomes and to determine which patients experience the greatest benefits.

Dr Liddy is Director of Research (Interim) at the C.T. Lamont Primary Health Care Research Centre of the Bruyère Research Institute and Associate Professor in the Department of Family Medicine at the University of Ottawa in Ontario. **Dr Johnston** is Clinician Investigator at the C.T. Lamont Primary Health Care Research Centre of the Bruyère Research Institute and Assistant Professor in the Department of Family Medicine at the University of Ottawa. **Ms Irving** is Research Project Manager with the Care of the Elderly Research Program at the Bruyère Research Institute. **Ms Nash** is Chronic Disease Self-Management Outreach Facilitator at the C.T. Lamont Primary Health Care Research Centre of the Bruyère Research Institute. **Dr Ward** is a consultant for the C.T. Lamont Primary Health Care Research Centre of the Bruyère Research Institute and Part-time Professor in the Department of Sociology and Anthropology at Mount Allison University in Sackville, NB.

Acknowledgment

We thank all the patients and health care providers who participated in this study. We also thank Ottawa writer and editor **Joan Ramsay** for her work on this manuscript.

Contributors
Dr Liddy conceived the project, and contributed to the study design, data analysis, and manuscript writing. **Dr Johnston** contributed to the study design, data analysis, and manuscript writing. **Ms Irving** participated in the collection and analysis of the data, as well as the drafting of this article. **Ms Nash** contributed to the data analysis and drafting of the manuscript. **Dr Ward** participated in the data collection, analysis, and drafting of the article. All authors reviewed the manuscript and approved the final submitted version.

Competing interests
None declared

Correspondence
Dr Clare Liddy; e-mail **cliddy@bruyere.org**

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