

Physician Assistants as Chronic Care Coordinators—An Interdisciplinary Patient-Centered Approach to Managing Diabetes

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ABSTRACT

With an aging population and an increasing number of people living with chronic disease, Canada's primary care system is in need of change. Healthcare must better incorporate prevention and patient education in the battle against chronic disease. This article explores the growing role of Physician Assistants (PAs) in enhancing access to appropriate care for the chronically ill, using an example of a PA working as part of a family physician practice in Northern Ontario to improve the care of its diabetic patients.

RÉSUMÉ

Avec une population vieillissante et un nombre croissant de personnes vivant avec une maladie chronique, le système de soins primaires canadien est en besoin de changement. Les soins de santé doivent mieux intégrer la prévention et l'éducation des patients dans la lutte contre les maladies chroniques. Cet article explore le rôle croissant des adjoints au médecin (AM) dans l'amélioration de l'accès aux soins appropriés pour les patients vivants avec des maladies chroniques. Ceci sera illustré par le biais d'un exemple d'un AM travaillant dans une pratique de médecine familiale au Nord de l'Ontario pour améliorer les soins de ses patients diabétiques.

INTRODUCTION

The delivery of primary care is rapidly evolving in Canada as our healthcare system is overwhelmed by the challenges of an aging population and the increasing burden of chronic disease [1]. The advent of Physician Assistants (PA) is changing the human landscape of healthcare delivery, particularly in rural settings. These newer players may hold the key to improving not only timely access to primary care, but also the quality of care, by spending more time engaged in preventative care and managing chronic illness. PAs can assist in a supportive role, but also in more specialized functions such as managing subsets of a physician's practice. This commentary reviews the role of a PA as a diabetes care coordinator in a Northern Ontarian physician's office.

ADDRESSING CHALLENGES OF PRIMARY CARE AND CHRONIC ILLNESS

Implementation of timely access to healthcare has been a continuing challenge in primary care and medicine in general. With the shift in healthcare towards increasing emphasis on prevention and management of chronic disease, we must ensure that access is not only timely, but also appropriate [1]. PAs have been part of the non-military healthcare system in Ontario since 2007 [2]. In Ontario, both the University of Toronto and McMaster Uni-

versity offer two-year, Canadian Medical Association Accredited PA Programs [2]. PAs have been shown to be well-accepted by the public, as well as safe and effective primary care providers [3–5]. The involvement of PAs has also been shown to improve timely access to healthcare [4]. Physician Assistants are well positioned to improve not only access to care, but the quality in time spent managing and educating chronically ill patients. Time and time again, it has been shown that “chronic disease interventions that positively affect patient well-being necessarily include systematic efforts to increase patients' knowledge, skills, and confidence to manage their condition” [6]. This can be an important niche for PAs.

Physicians often do not have the time to engage in non-problem-based patient education and lengthy follow-ups required by complex chronic illnesses such as diabetes. For example, only 45% of diabetics in the U.S. receive the optimal care they need [7]. With poor glycemic control, we see increased serious comorbidities such as myocardial infarction, stroke, blindness, and kidney disease [8], which are burdensome for patients and for the medical system [9]. It is in everyone's interest to refocus efforts on preventative medicine and incorporate more thorough management of diabetes. We have an opportunity to offer more personalized care with greater access through the use of PAs to provide supplementary patient follow-ups and education. Physicians

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have in fact been asking for more support in the form of “non-physician providers to assist with chronic illness management” [10]. Though the exact role of PAs is not fully defined in relation to physicians [7], this may be one avenue where the use of PAs can fundamentally change the way we approach the delivery of care to the chronically ill; thus, evolving towards a more patient-centered approach with more prevention through increased access and education.

ROLE OF A PA AS DIABETES CARE COORDINATOR AT A FAMILY PRACTICE IN SUDBURY

The Northeastern Ontario Medical Offices (NEOMO) consists of a group of four family physicians whose practice includes over 2,000 diabetic patients. It recently secured Inter-Professional Health Provider (IHP) funding to hire a new Physician Assistant. The goal of this initiative is to “promote the building of small interdisciplinary and collaborative teams to enhance the access to and the delivery of quality primary care” [11]. Of the many responsibilities delegated to the new PA, what stands out as particularly effective and innovative is the PA’s role as the “Diabetes Care Coordinator”. This role addresses barriers to quality chronic care such as: “rushed practitioners not following established practical guidelines, lack of care coordination, lack of active follow-up to ensure best outcomes [and] patients inadequately trained to manage their illnesses” [12]. The PA’s role did indeed provide for improved access and follow-ups, and enhanced patient education.

The PA was tasked with improving access and follow-up care by identifying high-risk diabetic patients who had sub-optimal control, and meeting with them on a monthly basis, as opposed to every three months, to help them get back on track. This provided more face-to-face support time with a primary care provider, with more time for activities such as foot exams and therapeutic counselling. The PA was also tasked with coordinating care with other health entities such as hospital discharge teams and working with hospital staff to enhance diabetic education.

The key piece in the battle against chronic disease is focusing on a patient-centered approach by educating patients in self-management. As stated by the Canadian Diabetes Association, “You are the most important member on your health-care team” [13]. To address this need, the new NEOMO PA was tasked with providing free in-house educational sessions for the practice’s diabetic patients and their families. One class in a series of four tailor-made sessions is delivered once a week. The sessions are entitled: “Nutrition and Labels”, “Blood Glucose Targets Monitoring and Hypoglycemia”, “Complications and Exercise Education”, and “Pharmacotherapy”. They are held at the Northeastern Ontario Medical Offices, a setting that patients are familiar with.

The format is a town hall-style presentation, open to discussion and questions. This allows participants to benefit from group counselling and facilitates sharing of tips and recommendations amongst the participants and questions directed to the PA. Such group education sessions have been shown to significantly reduce HbA1c levels [14]. In fact, diabetic self-management education programs have also been found to significantly improve blood pressure, fasting glucose, lipid profile, physical activity, and the patient’s knowledge of their own condition [15], as well as compliance with medication [16]. Many patients arrive with their own pre-prepared questions, which illustrates the interest and need for such interventions, and for more regular contact with primary care providers for the chronically ill. Such courses already exist in the community, but this one has the added benefit of being facilitated by the same primary care provider the diabetic patients see for their care. This strengthens the therapeutic alliance, provides continuity of care and adds a familiar face to both encounters.

As part of this education initiative, a Diabetes Passport was created and is being provided to all diabetic patients at the clinic. This tool was designed to serve as a reminder of the guidelines to be followed and to help patients track their progress. The PA uses this tool to promote self-management and encourages patients to bring it to the diabetes education sessions and visits to review with the PA. The Passport tracks target values and frequency of tests such as HbA1c, ACR, eGFR, BP, LDL-C and TG. It includes sections on foot self-exams, eye doctor visits, exercise recommendations, hypoglycemia and how to detect its early symptoms. Education materials and Passports specifically have been shown to aid with compliance and patient understanding, and to improve health [16–18]. This reinforces the proactive direction of having a PA as chronic care coordinator to dedicate time to essential aspects of patient care for the chronically ill, something that physicians are struggling to find time to do. It is not only a matter of having more boots on the ground in primary care, but of carving out specific complimentary roles among disciplines. Indeed, as the PA profession expands in Canada, it will be crucial to better define its role in relation to nurses and physicians.

CONCLUSION

The use of PAs in chronic care management is no silver bullet, but it represents a growing trend and promising new direction in Canadian primary care. With the increased focus on patient-centered care, increased access and patient education, this case has illustrated how PAs can serve to improve not only timely access to primary care, but also improve its quality of services for chronic care patients.

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REFERENCES

1. Vedel I, Monette M, Beland F, Monette J, Bergman H. Ten years of integrated care: backwards and forwards. The case of the province of Québec, Canada. *Int J Integr Care*. 2011;11 Spec Ed:e004.
2. Health Force Ontario. Ontario's Physician Assistant Initiative. Queen's Printer For Ontario, 2015. [Last Modified: March 10, 2015]. [Cited April 4, 2015]. Available from: http://www.healthforceontario.ca/en/M4/Ontario%27s_Physician_Assistant_Initiative.
3. Doan Q, Hooker RS, Wong H, et al. Canadian's willingness to receive care from physician assistants. *Can Fam Physician*. 2012;58(8):e459–e464.
4. Hooker RS, Everett CM. The contributions of physician assistants in primary care systems. *Health Soc Care Community*. 2012;20(1):20–31.
5. Doan Q, Sabhaney V, Kissoon N, Sheps S, Singer J. A systematic review: the role and impact of the physician assistant in emergency department. *Emerg Med Australas*. 2011;23(1):7–15.
6. Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. *Health Affairs*. 20, no.6 (2001):64–78.
7. Everett CM, Thorpe CT, Palta M, Carayon P, Gilchrist VJ, Smith MA. Division of primary care services between physicians, physician assistants, and nurse practitioners for older patients with diabetes. *Med Care Res Rev*. 2013;70(5):531–541.
8. Manns BJ, Tonelli M, Zhang J, et al. Enrolment in primary care networks: impact on outcomes and processes of care for patients with diabetes. *CMAJ*. 2012;184(2):E144–E151.
9. McBrien KA, Manns BJ, Chui B, et al. Health care costs in people with diabetes and their association with glycemic control and kidney function. *Diabetes Care*. 2013;36(5):1172–1180.
10. Reid RJ, Wagner EH. Strengthening primary care with better transfer of information. *CMAJ*. 2008;179(10):987–988.
11. Ministry of Health and Long Term Care, Ontario, Canada. Inter-Professional Health Provider Funding Application For Primary Health Care Patient Enrolment Model Groups. Queen's Printer for Ontario; 2009-2010 [updated 2013 Aug 19; cited 2015 Mar 10]. Available from: <http://www.health.gov.on.ca/en/pro/programs/ihp/>.
12. Improving Chronic Illness Care. The Chronic Care Model. "Copyright 1996-2015 The MacColl Center. The Improving Chronic Illness Care program is supported by The Robert Wood Johnson Foundation, with direction and technical assistance provided by Group Health's MacColl Center for Health Care Innovation". [cited 2015 Mar 10]. Available from: <http://www.improvingchroniccare.org>.
13. Canadian Diabetes Association. Living with Type 2 Diabetes. 2015. [cited 2015 Mar 10]. Available from: <http://www.diabetes.ca/diabetes-and-you/living-with-type-2-diabetes>.
14. Merakou K, Knithaki A, Karageorgos G, Theodoridis D, Barbouni A. Group patient education: effectiveness of a brief intervention in people with type 2 diabetes mellitus in primary health care in Greece: a clinically controlled trial. *Health Educ Res* 2015 Feb 26. pii: cyv001. [Epub ahead of print].
15. Molsted S, Tribler J, Poulsen PB, Snorgaard O. The effects and costs of a group-based education programme for self-management of patients with type 2 diabetes. A community-based study. *Health Educ Res* 2012;27(5):804–813.
16. Gold DT and McClung B. Approaches to patient education: emphasizing the long-term value of compliance and persistence. *Am J Med*. 2006;119(4 Suppl 1):S32–S37.
17. Dijkstra RF, Braspenning JC, Huijsmans Z, et al. Introduction of diabetes passports involving both patients and professionals to improve hospital outpatient diabetes care. *Diabetes Res Clin Pract*. 2005;68(2):126–134.
18. Dijkstra R, Braspenning J, Grol R. Implementing diabetes passports to focus practice reorganization on improving diabetes care. *Int J Qual Health Care*. 2008;20(1):72–77.