An Exploration of Patient Satisfaction in a Nurse Practitioner–Led Clinic

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Abstract

A unique and innovative model of primary healthcare (PHC) delivery began at the Sudbury District Nurse Practitioner Clinics (SDNPC) in 2007. Significant growth and development has taken place since the opening of this new model of PHC delivery. Now that SDNPC is operating at full capacity, an evaluation was warranted of patient experiences with clinic services and the level of overall patient satisfaction. A survey of clinic patients was conducted in the spring of 2011. Results demonstrated high satisfaction with clinic services. Some areas were identified for review, including the level of accessibility to same-day appointments and rationale for patient use of walk-in clinics and emergency department care. One of the strengths and benefits of this model of NP care was demonstrated in this evaluation, whereby a majority of patients identified that they had received counselling about a lifestyle issue and, of those patients, most reported a resulting positive health-related behavioural change. Ongoing comprehensive evaluation is important to ensure that services are efficient and directed to optimal patient health outcomes.

Introduction

The purpose of this evaluation was to explore the experience of patients who received healthcare services from the Sudbury District Nurse Practitioner Clinics (SDNPC). In particular, the evaluation was focused on determining the level of patient satisfaction with accessibility to clinic services and healthcare received at the clinic. Participants were also asked if they had made any lifestyle changes as a result of counselling during clinic appointments. Finally, participants were invited to make recommendations on how the services at SDNPC could be improved.

SDNPC opened its doors in 2007, signifying the birth of a unique and innovative model of delivering primary healthcare (PHC). SDNPC was the first NP-led clinic in Ontario to receive approval and funding to develop all aspects of governance and operations related to PHC delivery. Within months of opening SDNPC, the premier of Ontario announced the development of 25 additional clinics, making the Sudbury model the archetype for future nurse practitioner–led clinics (NPLCs) in Ontario (Heale and Butcher 2010).

The NPLC model was envisioned in response to a significant number of "unattached" patients (those without a PHC provider) in the Sudbury area. Unattached patients, along with the professional experiences of NPs in the area, lobbying from NPs in the community and from professional nursing organizations, and strong community and governmental support, resulted in the NPLC model becoming a reality (Heale and Butcher 2010). An overarching goal of SDNPC was to increase accessibility to PHC services as well as to offer high-quality, comprehensive, evidence-based care that helps patients reach an optimal state of health and well-being.

Individuals without a PHC provider are left with few options when it comes to accessing healthcare services. Many attend walk-in clinics or the local hospital emergency department. Unattached patients do not enjoy the same benefits of health promotion, preventive screening, health education and monitoring of chronic conditions that are received by those who belong to a PHC centre (Howard et al. 2008). The focus of the NPLC model is to register unattached patients (DiCenso and Wyman 2008). By taking on unattached patients and providing them with comprehensive care, NPLCs are part of the solution of healthcare reform and Ontario's growing PHC challenge (MOHLTC 2011).

The core of the NPLC model is comprehensive PHC through an interprofessional team approach. The concept of an interprofessional team approach is understood as one in which the various disciplines in the team interact in a coordinated and mutually respectful manner, using common terminology, and which includes the patient at every step of the decision-making process (Sheehan et al. 2007; Jessup 2007).

Each patient registered with the clinic was assigned to a NP for the majority of PHC needs. As the primary care provider, the NP works with the patient and the members of the interprofessional team to ensure that each plan of care incorporates the expertise and feedback of all team members. Additional members of the interprofessional team include physicians, a pharmacist, a registered nurse, a social worker and a dietitian. This interprofessional team approach is integral to meeting the healthcare needs of individuals, their families and their communities (Heale 2012).

Evolution of the SDNPC Model

Tremendous growth and change have taken place in the SDNPC organization during its first four years. The mandate of taking on unattached patients has meant that people who have registered to become new patients of the clinic had typically not been receiving regular PHC services, in some cases for years (Heale 2012). In an earlier evaluation of clinic services, it was discovered that a new medical diagnosis was discovered for 37% of all new registrants to SDNPC (PRA Inc. 2009). Further, the new patients had multiple health problems, which made them more complex to manage. As a result of the complexity of the patients registering with SDNPC, the process of assessing, diagnosing and stabilizing patients initially slowed the overall intake process. Patients with complex health conditions often required ongoing assessment over several visits in order to determine their current health status and to establish the most appropriate interprofessional treatment plans (Heale 2012).

In addition to the complexity of its patients, SDNPC did not have fully designated space nor a full complement of healthcare providers until recently. In an attempt to address some of these physical issues, a second site was opened in the town of Lively in the summer of 2010, a few kilometres from the original downtown Sudbury site. The expansion allowed for the hiring of additional healthcare professionals, such as a social worker and dietitian, who would ultimately provide services to patients at both sites. Many challenges were encountered in the initial years. Among these was the delivery of comprehensive PHC services within the restrictions of a limited NP scope of practice, high patient complexity, reduced space and partial staff complement (Heale 2012). In 2011, changes were made to NP regulations through Bill 179, which expanded the NP's scope of practice through such means as open prescribing and the addition of controlled acts such as dispensing. With the additional space and human resources, as well as much-needed legislative changes such as the passing of Bill 179 in fall 2011, SDNPC was able to provide care to thousands of people across Greater Sudbury.

SDNPC has been part of a number of evaluations. Its board of directors conducted a patient satisfaction survey after the clinic had been open for a year. The purpose of the evaluation was to determine the level of patient satisfaction and identify areas of concern or need, including areas for improvement. There was overwhelming satisfaction with the clinic as a whole and with NP care in particular. One important outcome of this initial assessment was the implementation of extended clinic hours one day per week to better accommodate patient schedules (Heale 2008).

In a previous study conducted in 2009, the Ontario Ministry of Health and Long-Term Care requested an evaluation of SDNPC, including a review of the NP model of care and patient experience. The 2009 evaluation confirmed a high level of

satisfaction with the NPLC model of care. The report identified that patients had a good understanding of the NPLC model and that the model worked well. The evaluation provided additional data about the NPLC model from the perspective of staff and government, and expanded on patients' experience (PRA Inc. 2009).

Once both sites became operational and a full staff complement was achieved, the need for further evaluation of the clinic model became apparent. The intention was not to repeat previous evaluations but rather to consider questions that had yet to be addressed related to specific issues. One additional catalyst for this evaluation was information provided by the chief nursing officer of Health Sciences North (formerly Sudbury Regional Hospital) during an annual general meeting. The hospital identified a decrease in ER visits in 2009 that it attributed to the increase in PHC services in the area (D. McNeil, personal communication, 2010). Because it was one of the only new PHC initiatives to become available during that period, SDNPC was considered to be making a difference, evidenced by an overall reduction in patient visits to the local ER. This information helped to inform the current SDNPC evaluation, with a stronger focus on access to clinic services.

Summative evaluations or feedback from patients about their experience as members of SDNPC is important (Metcalfe et al. 2008). With SDNPC fully operational, a process evaluation and outcome assessment were warranted, including verification that a program or service was meeting targeted goals (Metcalfe et al. 2008; Rossi et al. 2004). An overarching goal of SDNPC was to increase accessibility to PHC services as well as to offer high-quality, comprehensive, evidence-based care that helps patients reach an optimal state of health and well-being. With these criteria in mind, an evaluation was undertaken to examine the delivery of healthcare services, the extent to which current operations were meeting the needs and expectations of the patients and the level of patient satisfaction related to their experience with SDNPC.

Patient Satisfaction

Establishing a definition of "satisfaction" as it applies to patients and the healthcare system has been difficult. Even so, the concept has been used in healthcare research for decades because it offers one measurement of the success in delivery of healthcare services (Crow et al. 2002). A systematic review of research related to patient satisfaction identified two groups of factors affecting satisfaction: (a) the characteristics of the respondents, such as age, health status and health outcomes, and (b) health services delivery. There is consistent evidence that the most important factor in patient satisfaction is the therapeutic relationship with the practitioner (Crowe et al. 2002). In addition, the value that patients assign to an aspect of the healthcare system affects their level of satisfaction (Staniszewska

and Ahmed 1999). For example, Penchansky and Thomas (1981) determined that there is a link between accessibility to healthcare services and level of satisfaction with the healthcare system.

The patient satisfaction study strove to identify basic demographic characteristics of the participants and their responses with respect to key issues about health services delivery at SDNPC, such as accessibility of appointments and patients' interaction with their primary NP healthcare provider. The demographic characteristics were compared to the participants' rating of level of satisfaction with the SDNPC. A snapshot of patient experiences and overall impression of the SDNPC model was thereby achieved.

Methodology

Evaluation of patient experiences with clinic services and their overall level of satisfaction was conducted through a survey. The survey questions were developed based on previous clinic evaluations, a literature review of related concepts, the professional experience of the researchers and anecdotal feedback from patients. Basic demographic information, such as gender, age and employment status, was collected during the course of the evaluation. Questions in the patient survey addressed accessibility and included the length of time to obtain a routine appointment and whether same-day appointments were available. Another goal of the survey was to determine which options for PHC services were taken by the patient if a clinic appointment wasn't available when they felt it was required. Specifically, we wanted to determine to what extent SDNPC patients were accessing other services, such as local ER departments or walk-in clinics. Questions relating to scheduling and alternatives were included. Patients were asked to respond to questions specific to their experience over the previous six months, a period that corresponded with the clinic's attaining a full staff complement and optimum space. Respondents were asked questions about lifestyle changes that they had made as a result of their encounters with NP-focused care. Finally, patients were asked to rate their overall satisfaction with the clinic on a five-point Likert scale and were given the opportunity to include comments about clinic services.

A convenience sample of 1,865 people was obtained from the SDNPC patient database. Those eligible for the survey were over the age of 18, had registered as patients at SDNPC and had a home address in the Sudbury region. Each eligible person was mailed a survey package, which included a copy of the survey and cover letter in English and French, as well as a stamped return envelope. The study was approved by SDNPC's board of directors as well as Laurentian University's Research Ethics Board.

Results

Analysis of the survey responses was conducted in several ways. Data from the survey questions were coded and entered into a statistical program file. Frequency statistics provided the basis of analysis for the demographic data and checked-off responses to questions. Responses to open-ended questions were analyzed by descriptive analysis using coding and identification of major themes from the comments provided.

Of the 1,865 surveys that were mailed, a total of 682 surveys were returned within a period of 3 months. This translated into a 36.5% response rate. Of these, 435 (63.7%) respondents were female and 230 (33.7%) were male. There were 17 (2.5%) respondents who did not identify their gender. (The age range of the respondents is presented in Table 1.)

Table 1. Age ranges of survey participants

	Frequency	Percentage
18–29	74	10.9
30–39	92	13.5
40–49	105	15.4
50–59	172	25.2
60–69	124	18.2
70+	109	16.0
Missing	6	0.9
Total completed surveys	682	100.0

Twelve (1.8%) of the surveys were completed in French. Respondents were asked how long they had been registered at SDNPC. The majority, 52.8% (n=360), had been registered with the clinic for more than two years, followed by 26.5% (n=181) for one to two years and 19.8% (n=111) who had been registered for less than a year.

Respondents were asked to state, on average, the length of time it took for them to obtain a routine appointment. The largest number of respondents (249 or 36.5%) chose the "1–2 weeks" category. Of the remaining respondents, 112 (16.4%) chose "less than 1 week"; 144 (21.1%) chose "2–3 weeks"; and 101 (14.8%) chose "more than 3 weeks." Another 63 (9.2%) chose "not applicable," and 13 did not respond

to the question. These 76 respondents likely did not require an appointment over the last six months.

Patients were asked to respond to several short-answer questions. Three hundred sixteen indicated that they had received counselling about a lifestyle issue. Of these, the majority identified that they had quit or reduced smoking, or that they had made other positive changes to their lifestyle, such as improved diet or increased exercise. Many respondents identified the effects of their targeted lifestyle changes including weight loss, lowered BP and improved management of chronic disease. Still others identified positive changes in stress management, compliance with treatment plans or implementation of prevention strategies such as immunizations.

At the end of the survey, the participants were simply asked how they felt SDNPC services could be improved. Responses to this question fell into several categories. The majority of respondents identified issues related to access, such as booking of appointments, including increasing the availability of same-day appointments, decreasing the time to obtain an appointment and considering extended hours. Some of the respondents demonstrated a lack of understanding of the interprofessional clinic model in identifying the need to see their "doctor." At the same time, many participants identified the need for a second appointment with the clinic physician to have medications renewed because of the limitations imposed by the NP drug list during the evaluation timeframe.

Accessibility was addressed in several "yes/no" questions. Table 2 lists these and other survey questions, along with the frequency and percentages of responses. Issues related to wait times to get an appointment and accessing other forms of PHC other than those offered by the SDNPC were also explored. For those who felt they required a same-day appointment, 38.9% (265) felt that they had not been able to obtain one, while 19.8% of those who felt a same-day appointment was needed were successful. With respect to the utilization of other services, 38.1% (260) of the respondents accessed a walk-in clinic, 24.6% (168) visited an ER department and 10.3% (70) contacted Telehealth during the last six months. Of these, 11.3% (77) required an admission to hospital.

Participants were asked to rate their level of satisfaction with the clinic on a five-point Likert scale. The majority of the respondents were either satisfied or very satisfied with the services that they received over the last six months (Figure 1).

The level of patient satisfaction was compared to several variables using a chi-square analysis. Higher levels of satisfaction were significantly associated with access, such as shorter wait times to schedule a routine appointment (p=.000), the ability to obtain a same-day appointment if needed (p=.000) and waiting less than 15

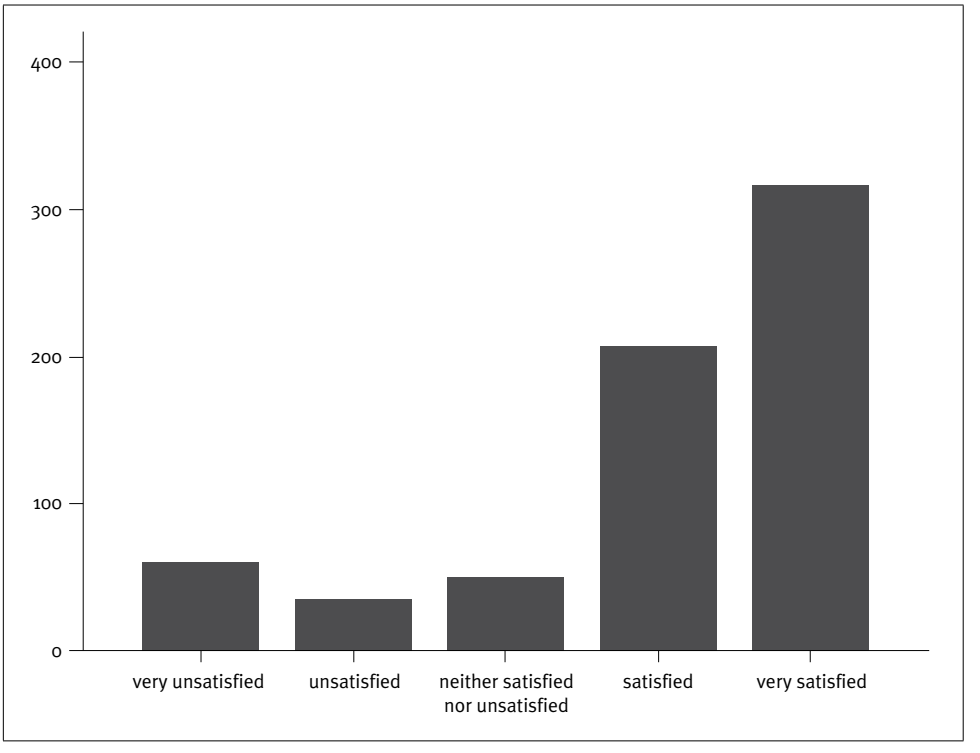
minutes from time of scheduled appointment to see a healthcare provider (p=.000). In addition, satisfaction with the clinic was significantly higher in those who did not attend a walk-in clinic or emergency department (p=.002). There were no significant differences in satisfaction between patients who were admitted to hospital and those who were not, or between those who called Telehealth and those who did not.

Table 2. Responses to survey questions

	Yes	No	N/A	Missing
I have been able to see a nurse practitioner for a same-day appointment, if needed.	135 (19.8%)	265 (38.9%)	268 (39.3%)	14
Since joining the clinic, I have never had to wait longer than 15 minutes past my scheduled appointment time to see a healthcare provider.	447 (65.5%)	216 (31.7%)	10 (1.5%)	9
I have a medical condition(s) that requires regular medical appointments at the clinic.	227 (33.3%)	376 (55.1%)	69 (10.1%)	10
Since joining the clinic, my medical condition(s) is under better control.	309 (45.3%)	51 (7.5%)	311 (45.6%)	11
I have received counselling from a member of the healthcare team about a lifestyle issue (e.g., food choices, exercise, smoking cessation, etc.).	316 (46.3%)	184 (27.0%)	175 (25.9%)	7
I have made improvements to my lifestyle as a result of the counselling received by the clinic staff (e.g., started exercising, decreased or stopped smoking, etc.).	251 (36.8%)	121 (17.7%)	274 (40.2%)	36
Since joining the clinic, I have been to a walk-in clinic for a health issue for me, or for a child in my family.	260 (38.1%)	391 (57.3%)	2 (0.3%)	29
Since joining the clinic, I have been to a hospital emergency department for a health issue for me, or for a child in my family.	168 (24.6%)	486 (71.3%)	654 (95.9%)	28
Since joining the clinic, I have been admitted to hospital for a medical condition (other than childbirth).	77 (11.3%)	575 (84.3%)		30
Since joining the clinic, I have called Telehealth for a health issue for me, or for a child in my family.	70 (10.3%)	582 (85.3%)	1 (0.1%)	29

There was no significant difference in satisfaction with the clinic based on gender. There was, however, a difference in level of satisfaction based on age, whereby the youngest group of patients tended to be less satisfied with the clinic services in particular when it came to accessing same-day appointments. This was also noted in the group aged 70 and over who expressed lower levels of satisfaction than middle-aged counterparts.

Figure 1. Levels of satisfaction



Patients who indicated that they had achieved better control of a medical condition since joining the clinic were significantly more satisfied with the clinic (p=.00). In addition, patients who received counselling about a lifestyle issue (e.g., food choices, exercise, smoking cessation, etc.) also tended to be more satisfied with the clinic (p=.000).

Discussion

The goal of the evaluation was to determine patients' experience with SDNPC services and their overall level of satisfaction. The results outlined areas of success in healthcare delivery, as well as areas for improvement. What is clear is that there appears to be a high level of satisfaction among patients of the SDNPC who participated in this survey.

The level of satisfaction is increased with accessibility to routine appointments and the ability to schedule same-day appointments if required. Satisfaction decreases when patients seek care in walk-in clinics or the

ER. Presumably, many ER visits were warranted, given that 11.3% of the participants indicated that they were hospitalized during the review period. However, the level of acuity or appropriateness of the care sought in walk-in clinics and the ER was not reviewed, and a comparison with the patterns of use by the general population is not known. Therefore, the rationale for and appropriateness of the use of these services is not known.

Several strategies could be implemented within the clinic operations to address appointment delays and patterns of seeking care from external sources. One option is the implementation of advanced access scheduling. Advanced access is a system for scheduling appointments that opens up a large percentage of same-day appointments without the requirement of additional healthcare providers and staff (Fournier et al. 2012). Another option is a review of expanded hours, which may better meet the needs of working parents (Howard et al. 2008). Work to evaluate and strengthen the interprofessional team approach may increase patient accessibility to clinic services (McCallin 2001; Sheehan et al. 2007). Finally, because many patients did not have a PHC provider prior to registering with the clinic, the only source of ongoing care was likely walk-in clinics and the ER. Patient awareness of the clinic model is important to encourage appropriate use of walk-in clinics and the emergency department as alternatives to care.

A higher level of satisfaction is a reflection of the care provided at the clinic, such as better control of medical conditions and lifestyle counselling. The large percentage of respondents who identified that they had received lifestyle counselling is congruent with NP surveys indicating that 23% of NP practice is health promotion (CRaNHR 2008). The positive lifestyle changes that were made as a result of counselling received by SDNPC patients reflects the value of a model of care that is holistic and interprofessional, and that integrates the patient in decisions about care. However, the health outcomes that were identified by the survey respondents were not confirmed with clinic data. An added qualitative analysis and confirmation of health status in patient charts would have provided richer data about patients' experience with the clinic (Davies et al. 2010).

There was less satisfaction among the older age group than among those in the middle-age range. What is not known from this study is whether there is an association between age and the level of complexity, or acuity of health conditions, in the older sample. Future research should target the evaluation of appropriate patient load for NPs in NPLCs based on the complexity and

level of acuity of the patient's health problems and subsequent accessibility to appointments and patient satisfaction with healthcare service.

NP regulation affects the delivery of care and, ultimately, patient satisfaction. In response to the question about how service at SDNPC could be improved, patients identified the need to see the physician for renewal of some prescriptions as a source of frustration. At the time that the survey was conducted, NPs in the province of Ontario were restricted to following established drug lists from which to prescribe. The list had long been identified as a significant barrier to NP practice, and one that contributed to some of the patient dissatisfaction related to access that was expressed in the survey (HPRAC 2009). Fortunately, on October 1, 2011, the College of Nurses of Ontario, in response to the implementation of Bill 179, established revised Standards of Practice for Nurse Practitioners (CNO 2011). One element is the removal of the list of drugs from which NPs could prescribe. Although controlled substances are still outside NP prescriptive authority, the legislative changes will create a more streamlined and efficient care path for patients, because NPs no longer have to consult with physicians for such things as simple medication renewals.

Sudbury is a northern community with a medium-sized population, which may not be representative of larger urban settings or more rural settings. For the most part, SDNPC patient demographics and past experiences with the healthcare system are unique to this geographic area. The same evaluation, performed at various NPLCs across Ontario, would offer insights into the NPLC model, rather than focus on one organization.

Conclusions

In order to identify what is effective and what requires improvement, there is a need for organizations to conduct ongoing and frequent evaluations of the services they deliver to their patients (Hills and Carroll 2012). Although patient satisfaction with the SDNPC model is high, past evaluations, in addition to the recent survey results, have demonstrated that there is room for improvement. Timely access remains an important criterion for consumers of PHC services throughout the healthcare system, and Sudbury is no exception (Howard et al. 2008). Extended clinic hours and the potential for open access scheduling is an option the SDNPC can accommodate, which would demonstrate that patient satisfaction is important and that NP-led clinics would continue to remain leaders and role models for PHC delivery. Given the high level of complexity of many of the patients registered at SDNPC, an

evaluation of appropriate patient–provider caseloads is warranted. By determining the ideal number of patients that each NP should oversee, the clinic may be able to further address the issue of increasing access to appointments.

Research to identify patient understanding and perceptions about clinic accessibility is warranted. Also, a review of clinic data may be used to confirm patient health outcomes. The unique features of an NP-led, interprofessional model of care are worthy of further exploration, and could be realized with a comprehensive evaluation strategy that includes all operational NPLCs in Ontario.

The NP-led clinic model has proven to be a successful strategy in addressing the large number of unattached patients in Ontario. The responses to the survey suggest that as a result of accessing PHC services at SDNPC, participants have made positive lifestyle changes such as quitting smoking, eating better or becoming more active. Ongoing evaluation confirms that the patients value the NP-led clinic model of care. Continued review will provide additional evidence about the effectiveness of the model in ensuring optimal health.

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