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Perspectives in Practice

Patients' Perspectives on Wait Times and the Referral-Consultation Process While Attending a Tertiary Diabetes and Endocrinology Centre: Is Econsultation an Acceptable Option?



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ABSTRACT

The goal of this study was to establish patients' perspectives on the acceptability of wait times, the impact of wait times on their health and the possibility of using electronic consultations (eConsultations) to avoid visits to specialists. A 2-stage patient survey (self-administered and with a follow-up telephone call) and a chart audit was conducted on a sequential sample of patients attending their initial consultations in a tertiary diabetes and endocrinology centre. Patients' perspectives on actual and ideal wait times, the impact of waiting for access, the effectiveness of the referral-consultation process and attitudes toward eConsultations as an alternative to traditional referral-consultations were collected. The study involved 101 patients (22% for diabetes, 78% for endocrinologic conditions), whose comments were collated and categorized. Of the 101 patients who completed the survey, 61 also completed telephone interviews. The average wait time was 19 weeks; the median 10 weeks. More than 30% of patients waited longer than 6 months and 6% waited longer than 1 year. Overall, 90% of patients thought that the maximum wait time should be less than 3 months. While waiting, 58% of patients worried about a serious undiagnosed disease, 30% found their symptoms had affected their daily activities and 24% had to miss work or school due to symptoms. Of the patients, 46% considered eConsultation a viable alternative to face-to-face visits. Excessive wait times for specialist care remain barriers and have negative impacts on patients. Wait times significantly exceeded times patients considered acceptable. eConsultations provide acceptable alternatives for many patients, and they reduced the number of patients requiring traditional consultations.

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RÉSUMÉ

Le but de cette étude était d'établir les points de vue des patients sur l'acceptabilité des temps d'attente, les conséquences des temps d'attente sur leur santé et la possibilité d'utilisation des consultations en ligne pour éviter les visites auprès de spécialistes. Une enquête en 2 phases menée auprès des patients (autoadministrée et par un appel téléphonique de suivi) et une vérification de dossiers étaient réalisées sur un échantillon séquentiel de patients allant à leur première consultation dans un centre de soins tertiaires offrant des services en diabétologie et en endocrinologie. Les points de vue des patients sur les temps d'attente actuels et idéaux, les conséquences de l'attente sur l'accès, l'efficacité du processus des consultations d'orientation et les attitudes à l'égard des consultations en ligne en tant que solution aux consultations d'orientation traditionnelles étaient colligés. L'étude comptait 101 patients (22 % souffrant de diabète, 78 % souffrant d'affections endocrinologiques), dont les commentaires étaient colligés et catégorisés. Parmi les 101 patients qui remplissaient le sondage, 61 réalisaient également les entrevues téléphoniques. Le temps d'attente moyen était de 19 semaines; la médiane, de 10 semaines. Plus de 30 % des patients attendaient plus de 6 mois et 6 % attendaient plus de 1 an. Dans l'ensemble, 90 % des patients étaient d'avis que le temps d'attente devrait être de moins de 3 mois. Durant l'attente, 58 % des

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patients s'inquiétaient d'avoir une maladie grave non diagnostiquée, 30 % trouvaient que leurs symptômes avaient nui à leurs activités quotidiennes et 24 % devaient s'absenter du travail ou de l'école en raison des symptômes. Parmi les patients, 46 % considéraient la consultation en ligne comme une solution viable aux visites en personne. Les temps d'attente excessifs pour les soins de spécialistes demeurent un obstacle et ont des conséquences négatives sur les patients. Les temps d'attente excèdent significativement les temps d'attente considérés comme étant acceptables par les patients. Les consultations en ligne offrent des solutions acceptables pour plusieurs patients, puisqu'elles réduisaient le nombre de patients nécessitant des consultations traditionnelles.

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Introduction

Wait times for specialist appointments are serious barriers to patient care. A study comparing access to care among 11 countries found that Canada had the second longest wait times, with 41% of patients waiting more than 2 months for appointments with specialists (1,2). The median times between patient referrals and specialist appointments have increased from 3.7 weeks in 1993 to 9.5 weeks in 2011 (3). There are no published benchmarks concerning ideal wait times for diabetes or endocrinology consultations. A survey of specialists in the United States found that the average wait time for an endocrinology consultation was 37 days, compared to 10 days for general internists and 17 days for neurologists (4). A quality-improvement initiative in Calgary, Alberta, used a target wait time of 12 to 26 weeks for routine endocrinology consultations (5), though whether these targets were met has not yet been published.

The use of electronic consultations (eConsultations) has been shown to reduce wait times for consultations with specialists (6). During eConsultations, primary care providers ask specific patientrelated questions of specialists through a secure network. The patients do not interact with the specialists (6-8). As with any advice given to primary care providers, the specialists are expected to provide reasonable advice, given the information provided. If there is insufficient information, or if the questions cannot be answered without seeing the patients, the specialists are expected to decline the eConsultations and request face-to-face visits. Since 2010, we have offered a multispeciality eConsultation service in our region. We have processed more than 4000 eConsultations and currently offer more than 50 different specialty services, including diabetes and endocrinology. We have demonstrated that approximately 40% of face-to-face referrals can be avoided by using this type of access to specialists' advice (6,7).

Little is known about patients' opinions regarding eConsultations. As quality-improvement initiatives begin to expedite the referral-consultation process and solutions such as eConsultations are further developed, it is essential to consider the patients' points of view. Therefore, the objective of this study was to gain the perspectives of patients attending a diabetes and endocrinology clinic concerning current wait times, the effectiveness of the current referral-consultation process, and the use of eConsultations for potential avoidance of specialist visits (9,10).

Methods

This was a mixed-methods study involving a 2-stage patient survey (self-administered and involving follow-up telephone calls) and chart audits. The setting was an academic centre clinic with 11 endocrinologists and more than 24 000 patient visits annually, of which approximately 22% were new consults and 78% were follow-up visits. All referrals were faxed to a central number, triaged by a physician and assigned a priority of either urgent (to be seen in

fewer than 2 weeks) or routine. Emergency consultations are usually received by phone.

All new patients who attended their initial consultations between June 17 and July 11, 2013, were eligible if they were 18 years of age or older, not cognitively impaired and comprehended English. A written survey was completed within 5 to 15 minutes in a private area in the waiting room prior to their consultations with the endocrinologist. The survey was created on the basis of a review of available literature and consensus (11) and consisted of 24 questions assessing patients' sociodemographic information and perspectives on wait times, the appointment scheduling processes, the impacts of symptoms and conditions on daily activities and the logistics of arriving at the appointment. The perceived effectiveness of the referral processes was determined from the optional opentext comments left at the end of the survey.

Patients who consented to a telephone follow-up interview were called 1 to 2 weeks after their appointments and given a 12-question survey. Two attempts to reach each patient were made. The survey included questions regarding time spent with the specialists, time spent in the waiting rooms, whether they perceived their visits as being efficient and whether any repeat investigations were required. The last question briefly described the eConsultation system available to primary care providers in our region (7). Patients were asked whether they felt an eConsultation with their providers would have been able to replace their face-to-face visits with their endocrinologists. A flowchart outlining the data collection process is shown in Figure 1.

The survey responses were input into a spreadsheet as numeric values and analyzed using comparative graphs and tables. Open text responses were reviewed and categorized by the authors.

The distances travelled by the patients to the appointment were calculated by inputting their postal codes into Google maps and calculating the driving distances. Actual wait times were obtained through chart audit by comparing the dates on which the referral requests were received by fax with the dates at which the appointments occurred.

The Ottawa Hospital Research Institute's research ethics board approved this study.

Results

Of the 240 new patient consults booked, 31 (13%) did not attend their appointments; 103 (48%) did not consent or were not eligible; and 5 (2%) left without completing the survey. Among the 101 participants (48%) who completed the survey, 89 consented to the telephone survey follow up, and 61 telephone surveys were completed (Figure 1).

Participants' demographics are presented in Table 1; 22% of the visits were for diabetes and 78% were for endocrine problems. Other specialists (rather than primary care providers) were the referring physicians in 27% of cases.

Patients' perceived wait times for their appointment, actual wait times (based on date of faxed referral) and ideal maximum wait times

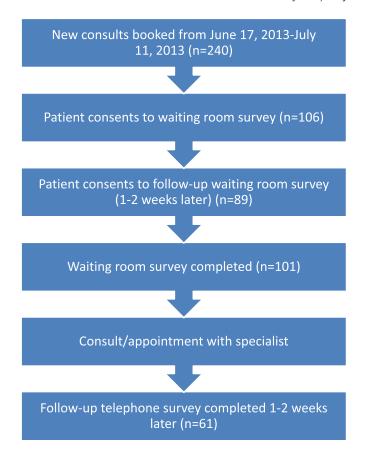


Figure 1. Flowchart outlining the data collection process.

are compared in Figure 2. Overall, there was agreement between the patients' perceived and actual wait times. The average wait time to see a specialist was 19 weeks, and the median was 10 weeks. More than 30% of patients (n=33) waited longer than 6 months and 6% waited for longer than 1 year. Only 9% of patients felt 3 to 6 months was the ideal maximum wait time, compared to 67% who felt it should be less than 1 month. To attend their appointments with specialists, 44% of patients had to miss work or school, 9% had to arrange for childcare and 19% required someone to accompany them to the appointments.

Waiting for an appointment had significant negative impacts. A majority (58%) were worried about serious undiagnosed diseases while waiting. One third (30%) of patients found that their symptoms had interfered with their normal activities of daily living and their social or recreational activities while waiting for their appointments, and a quarter (24%) found that their ongoing symptoms had prevented them from attending work or school.

Of the participants, 23 left optional comments about the referral process, 16 indicated they were frustrated with the wait times to see specialists or the logistics of booking appointments. Examples included:

- "I'm not certain why there was a delay. I do know there was confusion at my doctor's office about faxed material to the hospital not being received, creating delays and rescheduling."
- "The first day the clinic called me to book an appointment I was giving a bath to my infant. It was 3 weeks or more after the Dr. sent referral. Then it took me a month of calling daily to actually get a person to talk to for a booking of 10 months later!! Very frustrated. 'Free' health care doesn't help if people die waiting for appointments!"

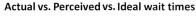
Of the 61 patients who participated in the follow-up telephone survey, 87% thought that their appointments with the specialists were useful (score of 4 or more of 7); 72% thought they were

Table 1Patient demographics

Characteristics (n=101)	
Gender	
Male	38%
Female	62%
Age	
Age range	18-85 years
Median age	48 years
Employment sector	
Public sector	32%
Private sector	12%
Self-employed	13%
Not-for-profit organization	5%
Domestic or homecare	5%
Other	33%
Reason for visit	
Diabetic consult	22%
Endocrine consult	78%
Method of transportation to appointment	
Bus	12%
Relative dropped them off	10%
Walked	3%
Car	73%
Taxi	1%
Referrer	
Patient's usual primary care provider	59%
Specialist physician	27%
Walk-in clinic physician	5%
Emergency room physician	3%
Nurse practitioner	3%
Other	4%

efficient; and 85% thought that the specialist physicians had the right information available at the times of their visits. Patients' perceived times spent in the waiting rooms and with the physicians are displayed in Table 2. Roughly one-third of patients (38%) had to repeat tests that they had already had prior to their visits. Of those patients who waited more than 6 months (n=22), 50% repeated their tests, compared to 30% of the patients who waited fewer than 6 months for their appointments. Only 3 patients (5%) had been back to see their referring physicians since the specialist appointments, all of whom said that their family doctors had the correct information at their follow-up appointments.

Of the patients, 46% (n=28) considered eConsultations acceptable alternatives to face-to-face visits, with perceived benefits including reduced travel time, e.g. "It's difficult for me to travel and I live far so it could have been beneficial" and faster responses, e.g. "I could have gotten an answer a lot quicker!" Those who did not think eConsultations would be beneficial stated that they would feel more confident talking to a specialist directly ("It's important to see the specialist to feel more secure.") Patients without family doctors also expressed that eConsultations wouldn't be ideal for



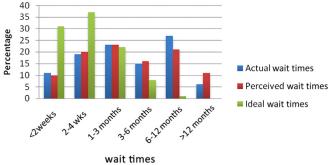


Figure 2. Patients' perceived, actual and ideal wait times.

Table 2Patient responses to follow-up survey

Response	n (%)
How long did you spend in the waiting room b	pefore
seeing the physician?	
<5 minutes	16 (10)
5-10 minutes	20 (12)
10-15 minutes	21 (13)
15-20 minutes	7 (4)
20-25 minutes	10 (6)
>25 minutes	26 (16)
How much time did you spend with the physic	cian
during the appointment?	
<5 minutes	0 (0)
5-10 minutes	8 (5)
10-20 minutes	39 (24)
20-25 minutes	10 (6)
>25 minutes	43 (26)

^{*} Percentages are calculated from the 61 patients who participated in the followup telephone survey.

them, e.g. "It wouldn't be useful in my situation because I am not seeing the doctor that referred me again and I don't have a family doctor." Several patients expressed the idea that this method might be more beneficial for follow-up visits instead of initial consults, e.g. "I needed to see the doctor (specialist) for my first visit but it may be useful for follow-ups."

There was no significant correlation between the amount of time patients waited for appointments and whether or not they thought eConsultations could be beneficial in their situations (Figure 3).

Discussion

In our study, wait times significantly exceeded the times participants considered acceptable. Although 72% of participants felt the referral system was efficient, many left comments expressing frustration with wait times and the logistics of booking appointments. Most patients (68%) expected to be seen by specialists within 1 month of their referrals, and 90% expected to be seen within 3 months. These expectations are in line with those reported in a 2010 study assessing patients' perspectives on wait times for gastrointestinal consultations in Canada (11).

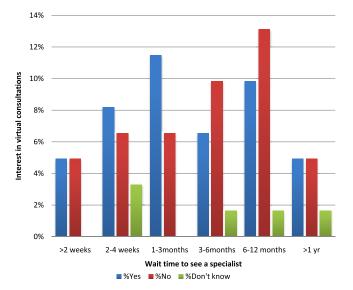


Figure 3. Wait times vs. interest in virtual consultations.

Across Canada, the estimated cost of waiting for treatment after appointments with specialists in 2012 was \$982 million (10). There are very few data concerning the indirect costs of waiting from the times of referral to the actual appointments with specialists. Nearly half of the patients in our study had to miss school or work to attend their appointments, and almost a quarter missed school or work while waiting for their appointments as the results of ongoing symptoms. Because of the increased wait times, tests and investigations are being repeated, and these costs are incurred by the healthcare system. Longer wait times have been associated with increased mortality (12). Almost one-third of patients felt that their ongoing symptoms interfered with their social or recreational lives, and more than half of the patients (58%) felt worried or anxious while waiting for their appointments.

Although eConsultations cannot replace traditional consultations in which detailed histories or physical examinations are essential to forming opinions or in the cases where specialized procedures are required, we have demonstrated that 50% of eConsultations directed to endocrinology from primary care providers can be answered without the need for face-to-face consultations (7). Patients had mixed views about the role eConsultations could play in reducing the time to access specialists' advice, but overall, approximately half identified them as potential options in their cases. Patients considered the benefits to include less travel time, less time away from work, no need to arrange child care and quicker response times. However, some patients were skeptical about not being able to see specialists face-to-face or felt eConsultations were not options because they did not have family physicians. Given the interest in expanding the role of eConsultations in various healthcare regions, patients' perspectives on this innovative strategy will be important for the future planning and implementation of eConsultation services.

Our experience has several limitations. Our study is set in a single location, so our findings may not necessarily be extrapolated to other sites or regions. Also, our study showed a higher proportion of referrals from other specialists than has been reported elsewhere (13). This may be explained by the fact that we are an academic teaching hospital and see patients with more complex problems, and they are likely to be seeing other specialists. Referrals from other specialists have been associated with shorter wait times when compared to wait times to see family doctors (13); therefore, our findings may not be comparable to those of clinics with more typical distributions of referral sources. Last, the majority of our data were self-reported and thus susceptible to recall bias.

Conclusions

Patients with diabetes and endocrinologic problems continue to experience long wait times for appointments with specialists, and this is a barrier to effective healthcare. There are opportunities to challenge the traditional referral-consultation model, including using eConsultations to reduce wait times and improve outcomes. However, the development of any new strategies should include patient engagement and feedback.

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