

Walk-in clinics: implications for family practice

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To understand better the reasons for the growth in popularity of walk-in clinics in Canada we surveyed 321 patients with a regular physician in Toronto who attended a walk-in clinic in the same city over a 16-day period in February 1988. They were asked their reason for attending the clinic, their perception of the urgency of their problem, their choices as alternatives to walk-in clinics and their satisfaction and concerns with the type of care received at the clinic. The three most common reasons for attending the clinic were convenient location (in 33% of the cases), inability to see their regular physician soon enough (in 16%) and no appointment needed (in 13%). Most (80%) of the patients felt that they needed medical attention within 24 hours after the onset of their problem. Most (83%) of the respondents would have sought medical attention at another walk-in clinic, from their regular physician or at an emergency department had the clinic been closed. Only 36% and 18% of the patients respectively responded that their regular physician worked evenings or weekends. Most of the visits to the clinic were outside regular weekday business hours. The level of satisfaction with the service received at the clinic was high. The extended hours and no-appointment philosophy of walk-in clinics, coupled with family physicians' reluctance to work evenings and weekends, have made such clinics an attractive option for patients with primary care problems that they believe require prompt attention.

Pourquoi le public préfère-t-il de plus en plus les services de consultation externe ou extra-hospitaliers? La présente enquête porte sur 321 consultants ayant un médecin personnel à Toronto qui se sont présentés à un tel service de consultation dans cette ville sur une période de 16 jours en février 1988. On s'informe des raisons de leur visite, de leur estimation du degré d'urgence de leur situation, de services de consultation autres que le service externe dont ils auraient pu se prévaloir et de leur degré de satisfaction ou d'inquiétude au sujet de la façon dont ils ont été traités. Ils donnent le plus souvent comme raisons la commodité du lieu (33% des cas), l'impossibilité de voir le médecin personnel dans un délai désiré (16%) et la possibilité de consulter sans rendez-vous (13%). La plupart (80%) des répondants estiment qu'ils croyaient avoir besoin de consulter dans les 24 heures de l'apparition de leurs symptômes. La plupart (83%) d'entre eux auraient consulté leur propre médecin, se seraient présentés à un autre service de consultation externe ou encore se seraient présentés au service d'urgence d'un hôpital si le service en question avait été fermé. Seuls 36% des répondants disent que leur médecin personnel travaille en soirée et 18% en fin de semaine; or la plupart des visites en service externe ont lieu en dehors des heures normales hebdomadaires de travail. On se dit fort satisfait des services rendus. Il semble que vu le peu d'inclination des médecins de famille à travailler en soirée et en fin de semaine, la longueur des heures d'ouverture des services de consultation externe et la consultation sans rendez-vous les rendent intéressantes pour le traitement en première ligne de malades croyant que leur état nécessite des soins immédiats.

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None of the authors had ownership or investment interests in the clinic in this study. Dr. Rizos is currently a part owner of the Westmount Urgent Care Clinic, Kitchener, Ont.

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Reflecting a pattern that was established in the United States in the mid-1970s the presence of walk-in clinics is now being felt in Canada. These clinics offer primary health care on a no-appointment basis, are open usually 12 to 16 hours daily, 7 days a week, and are physically and administratively separate from hospitals.

Walk-in clinics have been castigated by critics as "fast-food medicine"; some health care professionals have expressed concern about the quality of care and follow-up.¹ Supporters claim that such clinics are the consumers' response to insensitive traditional delivery systems that are too inaccessible to many because of limited hours and thus force people to seek primary health care in crowded emergency departments.²

In an attempt to understand better the reasons for the growth in popularity of walk-in clinics in Canada we examined why patients who have a regular physician attend such clinics, how they perceive the urgency of their problem, their choices as alternatives to walk-in clinics and their satisfaction and concerns with the type of care received at such clinics.

Methods

During a 16-day period in February 1988 a two-part questionnaire and an information sheet were given to all patients seeking medical attention at a walk-in clinic in Toronto. The information sheet briefly explained the purpose of the study and informed patients that their answers would be confidential and that their decision about whether to participate in the study would not affect their care at the clinic.

We excluded patients with an appointment, those presenting for follow-up of a previous problem and those who saw one of the physicians at the clinic as their regular family physician. Patients who could not speak English or were too ill to complete the questionnaire were also excluded. If the patient was a child the parent was asked to complete the questionnaire.

The clinic was located in a small shopping mall in the eastern part of the city. The mall was on the ground level of an apartment complex and was about 50 m from a subway stop. The clinic was open 7 days a week; the weekday hours were 7 am to 9 pm and the weekend hours 10 am to 6 pm. The clinic had been open for 6 months at the time of the study.

The questionnaire was completed anonymously. The first section, which was completed by the patients while they were waiting to be seen, ascertained their demographic characteristics and the reasons for their visit. The second part, completed after they had been seen by a physician, determined

their satisfaction with the visit and with walk-in clinics in general.

The completed questionnaires were placed in an envelope identified by four numbers: the study number, the patient's chart number, the date and the time of arrival at the clinic. The questionnaire itself was identified only by the study number. The only information not obtained by the questionnaire or marked on the envelope was the physician's diagnosis. This was later extracted from the patient's chart by one of us.

Results

During the study period 722 patients were seen at the clinic; of the 487 who met the selection criteria 416 (85%) completed the questionnaire. A total of 328 respondents (79%) had a regular physician; 321 (98%) of them had a regular physician in the metropolitan Toronto area.

We focused our study on the group of 321 patients. In 87% of the cases the regular physician was a family physician, in 6% a pediatrician and in 5% another specialist; in the remaining 2% the patients did not specify the specialty. Females accounted for 60% of the patients. The average age was 25.7 years.

The most important reasons given by the patients for attending the clinic are in Table 1. The 10 most common medical problems seen at the clinic are shown in Table 2.

Most (83%) of the patients would have sought medical attention elsewhere had the clinic been closed (Table 3). Although 24% said that they would have gone to the emergency department we referred only 1% (two patients) there for treatment. Most (80%) of the patients felt that they required medical attention within 24 hours after the onset of the problem (Table 4).

Although all of the patients had a regular physician most (75%) did not try to contact him or her before coming to the clinic. Most (73%) felt that they

Table 1: Most important reasons for attending walk-in clinic given by 321 patients who had a regular physician in the same city as the clinic

Reason	No. (and %) of patients
Convenient location	107 (33)
Could not see regular physician soon enough	51 (16)
No appointment needed	43 (13)
No waiting	12 (4)
Would receive better care than at physician's office	7 (2)
Other	20 (6)
No answer	81 (25)

could be seen by their physician within 24 hours because of an urgent problem, and 63% considered this waiting time acceptable.

The reasons why the patients attended the clinic instead of seeing their regular physician were as follows: the physician was off duty (in 31% of cases), they could not see their physician soon enough (in 30%), and they preferred the clinic (in 11%).

Table 5 notes how many patients had a regular physician who worked either evenings or weekends or was on call. Relatively few patients (24%) said that it posed no problem for them to see their regular physician during his or her office hours. Most (55%) of the visits to the clinic were outside the regular weekday work hours of 9 am to 5 pm.

When asked whether it mattered to them that they might see a different physician at each visit to a walk-in clinic not many (20%) of the patients said Yes. Furthermore, only 20% were concerned by the absence of their medical records at the clinic.

Most (83%) of the patients were satisfied with the help that they had received (Table 6). Most (61%) felt that the service was similar to that usually given by their regular physician; a small proportion (17%) felt that it was better.

Most (83%) of the patients felt that walk-in

clinics were necessary to meet at least some of their health care needs. Very few patients (1%) said that they did not intend to attend a walk-in clinic again.

Discussion

Our examination of the reasons why the patients with a regular physician chose to attend the walk-in clinic helps to illustrate why such clinics have proliferated in most Canadian cities. Since the specialty most represented in this group of regular physicians was family practice the family practitioner has an important lesson to learn about the growing popularity of walk-in clinics. Although one-third of the patients in our study felt that convenient location was the most important reason for choosing the clinic, it was but one of many reasons. Most of the patients said that either their regular physician was unavailable or they felt that they could not see him or her soon enough.

Table 2: Diagnoses among patients attending walk-in clinic

Diagnosis	No. (and %) of patients
Respiratory tract infection	
Upper*	136 (42)
Lower	28 (9)
Rash	20 (6)
Soft-tissue injury	16 (5)
Soft-tissue infection	13 (4)
Sprained limb	11 (3)
Gastroenteritis	9 (3)
Laceration	9 (3)
Headache	8 (2)
Conjunctivitis	7 (2)
Other†	64 (20)

*Includes otitis media and sinusitis.

†Each of the remaining diagnoses constituted less than 2% of the total.

Table 4: Acceptable waiting period for medical attention after onset of the problem

Waiting period	No. (and %) of patients
Minutes	48 (15)
1-2 hours	71 (22)
2-12 hours	83 (26)
24 hours	55 (17)
Several days	24 (8)
More than 1 week	12 (4)
Other	7 (2)
No answer	21 (6)

Table 5: Number of patients with a regular physician who was available during evenings or weekends or was on call

Response	Availability; no. (and %) of patients		
	Evenings	Weekends	On call
Yes	117 (36)	57 (18)	95 (30)
No	142 (44)	170 (53)	104 (32)
Do not know	42 (13)	73 (23)	96 (30)
No answer	20 (6)	21 (6)	26 (8)

Table 3: Alternative choices for medical attention had walk-in clinic been closed

Alternative choice	No. (and %) of patients
Another walk-in clinic	91 (28)
Regular physician	89 (28)
Emergency department	77 (24)
Nowhere	52 (16)
Other	9 (3)
No answer	3 (1)

Table 6: Patients' level of satisfaction with walk-in clinic

Level of satisfaction	No. (and %) of patients
Extremely satisfied	110 (34)
Very satisfied	87 (27)
Satisfied	72 (22)
Slightly satisfied	8 (2)
Not satisfied	7 (2)
No answer	37 (12)

Why the patients who felt that the waiting period to see their regular physician for an urgent problem was acceptable still chose to attend the clinic was partially answered by the availability of their physician outside usual weekday business hours. Few of the physicians apparently made themselves available during this time. Furthermore, fewer than 25% of the patients said that it posed no problem for them to see their regular physician during his or her office hours. Most of the visits to the clinic were outside the usual business hours.

Although the level of satisfaction with the service at the walk-in clinic was high relatively few of the patients chose the clinic because they felt that they would receive better care there than at their physician's office. Thus, convenient location and availability of health care outside conventional hours (as opposed to dissatisfaction with their regular physician) were apparently among the most important factors in choosing to attend a walk-in clinic.

A physician's location is usually fixed. However, appointment scheduling and hours of operation could become more flexible to accommodate patient needs. In response to the competition from walk-in clinics some family physicians have introduced evening or weekend hours, or both, to their practices. Furthermore, some groups of physicians have added walk-in clinic services to their practices.³

The range of problems seen at the walk-in clinic in our study represented a cross-section of the primary care problems seen at most family practitioners' offices. As the study was done in February it was not unexpected that upper and lower respiratory tract infections constituted most of the problems.

One of the aims of walk-in clinics is to treat patients who have been going to an emergency department for nonurgent problems.⁴ As demonstrated in our study most of the problems treated at the clinic did not require emergency care. However, it has been estimated that 30% to 81% of visits to emergency departments are nonurgent.⁵⁻⁸ In our study fewer than 1% of the patients were referred to the emergency department, yet a much larger number of the patients said that they would have gone to an emergency department had the clinic been closed. Since hospital care tends to be more expensive than ambulatory care it may be more economical for patients to attend a walk-in clinic than an emergency department. The answer to this question will, however, have to await further studies.

It is of some concern that 16% of the patients in this study said that they would not have sought medical attention elsewhere had the walk-in clinic been closed. These patients (or a portion of them) may represent an unnecessary expense to the health care system, as they may be attending a walk-in clinic mainly because of the convenience it offers.

The number of patients who felt that they required medical attention within 24 hours, or within minutes in some cases, appears to be high considering the range of diagnoses and the low number of patients who were actually referred to the emergency department. However, even though the physician's perception of urgency may differ from that of the patient's it is ultimately the patient who decides when and where to seek medical attention. One of the reasons cited for the success of walk-in clinics is that they are used by patients who perceive their problems to be urgent.⁹ Family physicians may be able to avert patient visits to a walk-in clinic by educating them as to which problems require prompt attention and which ones can wait.

One of the criticisms of walk-in clinics is the lack of continuity of care. This was not of major concern among the study patients. Fewer than 25% were bothered by either the possibility of seeing a different physician each time or the absence of their medical records. Many of the problems seen at the clinic were episodic, usually requiring only one visit. This would imply that patients are capable of deciding which problems they consider are appropriate for a walk-in clinic.

As most of the data came from a patient-completed questionnaire our findings have some inherent limitations. We were unable to verify the patients' responses, and we may have failed to include adequate choices for the questions asked. Obviously this study cannot be considered the final statement on walk-in clinics. It has, however, provided a probe into the public's perspective on this type of service, and we hope that it will stimulate further studies into this growing form of health care service.

Conclusions

Despite their critics walk-in clinics have managed to proliferate throughout the United States and Canada. In doing so they have highlighted some of the shortcomings of the traditional primary care delivery system. The competition from walk-in clinics has already forced family practitioners to alter their mode of health care delivery to better accommodate the needs of their patients.

Walk-in clinics offer convenient location and extended evening and weekend hours for primary health care problems on a no-appointment basis. These features, coupled with the family practitioner's reluctance to work outside regular business hours and crowded emergency departments, have made walk-in clinics a very attractive option for patients, as demonstrated by the high degree of satisfaction with the walk-in clinic service in our study and the patients' intention to use the service again.

Adult

The recommended dosages of CIPRO® are:

Location of Infection	Type/Severity	Unit Dose	Frequency	Daily Dose
Urinary Tract	Mild/Moderate	250 mg	q 12h	500 mg
	Severe/Complicated	500 mg	q 12h	1000 mg
Lower Respiratory Tract	Mild/Moderate	500 mg	q 12h	1000 mg
	Severe/Complicated*	750 mg	q 12h	1500 mg
Bone & Joint				
Skin & Soft Tissue				
Infectious Diarrhea	Mild/Moderate/Severe	500 mg	q 12h	1000 mg

* e.g. hospital-acquired pneumonia, osteomyelitis.

Depending on the severity of the infections, as well as the clinical and bacteriological responses, the average treatment period should be approximately 7 to 14 days. Generally, treatment should last 3 days beyond the disappearance of clinical symptoms or until cultures are sterile. Patients with osteomyelitis may require treatment for a minimum of 6 to 8 weeks and up to 3 months. With acute cystitis, a five-day treatment may be sufficient.

Impaired Renal Function

Ciprofloxacin is eliminated primarily by renal excretion. However, the drug is also metabolized and partially cleared through the biliary system of the liver and through the intestine (see Product Monograph: HUMAN PHARMACOLOGY). This alternate pathway of drug elimination appears to compensate for the reduced renal excretion of patients with renal impairment. Nonetheless, some modification of dosage is recommended, particularly for patients with severe renal dysfunction. The following table provides dosage guidelines for use in patients with renal impairment. However, monitoring of serum drug levels provides the most reliable basis for dosage adjustment. Only a small amount of ciprofloxacin (<10%) is removed from the body after hemodialysis or peritoneal dialysis.

Creatinine Clearance mL/min (mL/s)	Dose
> 30 (0.5)	No dosage adjustment
< 30 (0.5)	Use recommended dose once daily or half the dose twice daily
and patients on hemodialysis or peritoneal dialysis	

When only the serum creatinine concentration is available, the following formula (based on sex, weight and age of the patient) may be used to convert this value into creatinine clearance. The serum creatinine should represent a steady state of renal function:

Males: $\text{Weight (kg)} \times (140 - \text{age})$

$72 \times \text{serum creatinine (mg/100mL)}$

Females: $0.85 \times \text{the above value}$

To convert to international units, multiply result by 0.01667

CHILDREN

The safety and efficacy of CIPRO® in children have not been established. CIPRO® should not be used in prepubertal patients (see WARNINGS).

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CIPRO® 250—each tablet contains ciprofloxacin hydrochloride monohydrate equivalent to 250 mg ciprofloxacin.

CIPRO® 500—each tablet contains ciprofloxacin hydrochloride monohydrate equivalent to 500 mg ciprofloxacin.

CIPRO® 750—each tablet contains ciprofloxacin hydrochloride monohydrate equivalent to 750 mg ciprofloxacin.

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	Strength	Tablet Identification
Bottles of 50	250 mg	Miles 512
	500 mg	Miles 513
	750 mg	Miles 514
Unit Dose Package of 100	500 mg	Miles 513
	750 mg	Miles 514

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Although initially designed for patients with episodic injuries or illnesses many walk-in clinics have extended their services to include a traditional family practice. Some family practitioners are changing their office hours and are offering walk-in service to their patients in order to meet their needs better.

Further study of walk-in clinics is warranted to examine such issues as their organizational structure, management and ownership, physicians' reasons for working at walk-in clinics, which patients will most likely attend walk-in clinics and the implications of such clinics for the health care system.

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