George B. Miller, MB, ChB, CCFP Stephen Nantes, MD, CM, CCFP

Walk-in Clinics and Primary Care: Review of the Literature

SUMMARY

Walk-in clinics have proliferated rapidly in many areas of Canada and the United States. Patients who attend these clinics have illnesses that are similar to those seen in family physicians' offices, yet walk-in patients perceive their symptoms to be more urgent and present at a much earlier stage of their illness than patients who attend their family doctor. Research has not yet proven that the opening of walk-in facilities lowers the demand for traditional primary care services; therefore the cost-effectiveness of walk-in clinics needs further evaluation. (*Can Fam Physician* 1989; 35:2019–2022.)

Key words: family medicine, practice patterns, walk-in clinics

RÉSUMÉ

On constate une prolifération rapide des cliniques sans rendez-vous dans de nombreuses régions du Canada et des Etats-Unis. Les patients qui fréquentent ces cliniques souffrent de maladies semblables à celles que l'on rencontre dans les bureaux des médecins de famille; les patients des cliniques sans rendez-vous perçoivent cependant leurs symptômes comme étant plus urgents. Ils se présentent à un stade beaucoup plus précoce de leur maladie comparativement aux patients que l'on retrouve dans les bureaux privés des médecins de famille. La recherche n'a pas encore prouvé que l'ouverture de ces cliniques sans rendez-vous a permis de réduire la demande de services traditionnels en soins de première ligne; il est donc nécessaire de pousser plus loin l'évaluation de ces cliniques sans rendez-vous en termes de coût-bénéfice.

Dr. Miller, a Fellow of the College, is a family physician in Kitchener-Waterloo and is a member of the Ontario Chapter Executive of the College of Family Physicians of Canada. Dr. Stephen Nantes is a family physician in Kitchener and is Chairman of Continuing Medical Education for the Department of Family Practice, Kitchener-Waterloo Hospital. Requests for reprints to: Dr. George B. Miller, 535 Belmont Ave. W., Kitchener, Ont. N2M 5E9

THE "walk-in" system of primary health care is not a new concept. In the early part of the century, it was the traditional pattern of general practice. Later, however, as the population grew and as financial barriers to health care disappeared, family physicians were much more in demand and so they introduced appointment systems to solve the growing problem of crowding during the busiest parts of the day. Most physicians adopted this system, but some physicians continued to operate their practices without appointments. A few physicians still practise on a "walk-in" basis.

For this discussion, a walk-in clinic is defined as "a facility that is physically separate from a hospital, has extended-hours service, and which accepts patients without requiring either an appointment or a referral." This definition excludes hospital emergency departments, out-patient clinics, public health clinics, and university health services. Although it could be argued, justifiably, that these are often walk-in facilities, their inclusion would broaden the definition too much for the purpose of this paper.

Commercial Clinics

Although some family physicians have always run their practices on a "walk-in" basis, the concept of commercial walk-in clinics—clinics owned and operated by businessmen or by a partnership of businessmen and physicians—is a relatively new phenomenon. These new, commercial clinics first appeared in the United States,[1] where they were known as "freestanding emergency centers" (FECs) or "urgent care centers." The first FEC was established in Delaware in 1973.[2] In 1983 there were 1100 clinics in the U.S.[3]; by November 1985, the number had risen to over 2500.[4] It has been estimated that in 1990 there may be 5500 clinics throughout the U.S., with over 100 million patient visits per year,[2] although there are some indications that the continued growth is now slowing.[5]

Walk-in clinics began appearing in western Canada during the early 1980s and are now an established part of primary care in British Columbia, Alberta, Saskatchewan, and Manitoba. The clinics are primarily an urban phenomenon,[6] and although their numbers are growing in Quebec and

Ontario, they have yet to make an impact on the Maritime provinces. They typically offer a range of paramedical, investigative, and procedural services not normally found in the traditional family physician's office. One survey of 34 Ontario walk-in clinics[6] showed that the main services offered were laboratory facilities (82%), X-ray examinations (79%), electrocardiographic tests (68%), pulmonary function tests (53%), and physiotherapy (18%). Other services mentioned were sports medicine, nuclear medicine, social services, optometry, massage therapy, chiropractic, electrolysis, and tanning salons.

The Ontario Chapter of the College of Family Physicians of Canada (CFPC) recently tried to identify the number of clinics operating in Ontario.[6] Using the definition above, their Committee on Health Care found only 13 walk-in clinics that had been in existence before December 1986. Most were traditional family practices, some established as long as 30 years before, that had never moved to the appointment system. Between December 1986 and November 1987, however, the number of walk-in clinics had risen to 54. By May 1988 there were 105 clinics in operation.

The total number of walk-in clinics in Canada is unknown. In the U.S., an association keeps statistical records. Originally known as the National Association of Freestanding Emergency Centers (NAFEC), it changed its name in 1984 to the National Association for Ambulatory Care (NAFAC).[2] There is no similar association in Canada to keep track of the facilities. Walk-in clinics are not generally identified as such by provincial insurance schemes, and there is no standardization of clinic names, so telephone listings are generally unhelpful. Gathering demographic data is, therefore, a considerable challenge.

Acceptance

One study of FECs in the U.S. suggested that acceptance of walk-in clinics by various groups depends on whether the group benefits from, or is threatened by, their existence.[7] Thus, acceptance is highest among the general public and among specialist physicians. Hospital administrators are decidedly cooler in their attitudes to walk-in clinics, with emergency physicians and family physicians being least enthusiastic about the concept.

In Canada the pattern may be similar. Articles and letters to the editor in the Canadian lay press are almost all positive about walk-in clinics.[8–11] Hospitals and hospital administrators are much less enthusiastic, reportedly because they sense a threat to the patient volume in their emergency departments,[12] and primary care physicians are very cool to the idea.[11]

At a panel discussion of walk-in clinics at the Annual Scientific Assembly of the CFPC in May 1988, an audience poll of about 60 physicians showed that just over half had adjusted their own styles of practice in response to walk-in clinics.[13] Some physicians, however, are taking a more direct approach to commercial walk-in clinics by setting up their own after-hours clinics in direct competition with the commercial organizations.[12]

Effect on Traditional Services

Few studies have examined the effect of the growth in walk-in facilities on the demand for traditional primary care services. These studies will be essential, however, to determine whether clinics redistribute existing health care funds or result in additional cost.

Emergency Departments

Ferber and Becker, in a 1982 U.S. study,[15] studied the relationship between the growth of walk-in clinics and the number of emergency department visits in nearby hospitals. They studied 94 hospitals in 22 states and found that there was no decline in emergency department visits associated with the opening of FECs in the hospitals' service areas. The authors speculated that walk-in facilities are perceived by consumers as a substitute for family physicians' offices, rather than a substitute for emergency departments.

In Canada the impact of walk-in clinics on the use of hospital facilities is less well documented. One area of Ontario (Barrie) had a drop of 20% to 25% in the emergency department volume following the opening of a physician-run, after-hours walk-in clinic.[12] Another area with a similar system (Kitchener-Waterloo) reported no decrease in the number of patients seen in hospital emergency departments.[15]

Family Physicians

Studies on the effect of walk-in facilities on traditional family practice have focused on the relationship between patients' perceptions of the urgency of their illnesses and the method of health care delivery they choose, rather than on the kind of demographic data investigated by Ferber and Becker.[14]

It has long been known that there is a low correlation between morbidity elicited by objective clinical study and perceived morbidity elicited by patient questionnaire.[16] Many investigators[16–20] have shown that the physician's perception of illness is very different from the patient's. Rosenstock[20] has stated that usage studies based on patient perception of illness "are far superior in their ability to explain than are the more traditional analyses of relationships between demographic factors and the utilization of services," arguing that this superiority lies in the intimate mechanisms linking personal characteristics and behaviour.

Alemagno and co-workers, in a study comparing 400 patients at three FECs with 144 patients at three family practices,[18] measured objective morbidity by recording the diagnoses of patients attending each facility. The ranking of the eight most common diagnoses was the same in the walk-in clinics and the family physicians' offices, and correlated well with national figures for family practice reported by Schneeweiss and associates.[21] From these results, the researchers concluded that FECs were not used for more urgent conditions than family physicians.

Perception of Urgency

The researchers then asked patients to consider a list of theoretical illnesses and rate each illness according to its degree of urgency. The walk-in patients consistently rated these illnesses higher in terms of urgency than the family physician patients.[18]

Lastly, the investigators compared two groups of patients with respiratory tract infection and found that the two groups had markedly different

perceptions of the urgency of their illness. Of the walk-in patients, 34% said they believed that they should be seen within two hours of the onset of symptoms, while none of the family practice patients reported this degree of urgency. A further 19% (total 53%) of walk-in clinic patients said that their infection should be seen within 12 hours, compared with 12% of the group attending their own physician's office. The authors concluded that FECs were not used by patients who had more urgent conditions, but were used by patients who believed their conditions to be more urgent.[18]

These findings were confirmed in Canada by Dr. J. Rizos, who delivered a free standing paper in Montreal at the 1988 Annual Scientific Assembly of the CFPC[13]. He presented the findings of a survey of 416 patients attending a walk-in clinic in Ontario. A similar percentage (37%) of his walk-in patients believed they should be seen within two hours of the onset of symptoms. Fifteen per cent of patients, however, reported that their upper respiratory infection should be seen within minutes, rather than hours.

According to this survey, if the walk-in clinic had not been available, 21% of the clinic's patients would have sought no medical help, 24% would have gone to the hospital emergency department, 27% would have contacted their family physician, and 28% would have attended another walk-in clinic.

The different ways that physicians, nurses, and patients perceive the term "urgent" has been studied by Wolcott.[19] He noted that patients presenting in the hospital emergency department with apparently trivial complaints engender an impatience in medical and paramedical staff, which Wolcott believed might interfere with appropriate treatment. He suggested that physicians and nursing staff should accept the patient's perception of the seriousness of the condition, although it might be markedly different from their own.

Other investigators agree with Wolcott. Stratmann and Ullman, in a study of consumer attitudes to health care in Rochester, New York, state:

> Most people probably realise that the sooner a problem is treated, the sooner their distress will be relieved. For some people, therefore, the discomfort or inconvenience caused by even a common cold is likely to prompt them to seek immediate medical relief from the most accessible professional source.[17]

Stratmann and Ullman state that they consider it presumptuous of physicians to assert that minor illness should not be important to patients and write that patients should not be criticized for failing to conform to professional standards. Like Wolcott, they argue that, in the final analysis, it is the patients' right to determine the method of health care delivery they wish based on their own perceptions of the severity of their symptoms.

Discussion

There has been a large and rapid rise in the number of walk-in clinics in many parts of Canada and the U.S. Relman[22] associates the rise in U.S. walk-in facilities with what he calls the "era of expansion," characterized by rapid growth in hospital facilities and numbers of physicians, coupled with new developments in science and technology. He notes that in the U.S. a final and very important feature of this era was the appearance of investor-owned medical businesses, "which were attracted by the opportunities for profit offered by the open-ended system of insurance payment."

Although the appearance of walk-in clinics in the U.S. at the end of the "era of expansion" may suggest a striking parallel between the U.S. experience and our own, the rates of growth of these facilities in the U.S. and in Canada may be quite different. According to Rylko-Bauer, the profile of American FEC patients is generally that of a younger, white population of relatively high socio-economic status, with over 85% of patients younger than 50 years old.[2] Medicaid and Medicare are the least common methods of payment, leading Rylko-Bauer to the conclusion that FECs are meeting a need primarily for the more prosperous section of U.S. society. The profile of the Canadian walk-in population is unknown, but because of the universal and accessible nature of our health care system, one might expect a more even socio-economic distribution, leading to a higher rate of growth, all other things being equal.

One Canadian survey[6] noted a common assumption among the operators of walk-in clinics that the opening of their facility would reduce the load on hospital emergency departments. This has not been found to be the case in the U.S. and remains to be proven conclusively in Canada. Likewise, the perception that these facilities are used as a replacement for family physicians' offices may be incorrect. In the Ontario study by Rizos, only 27% of walk-in patients would have contacted their family physician had the clinic been unavailable.[13]

Associated with the growth of walk-in facilities is their use by patients who appear to have a lower "threshold of illness" than patients who visit their own family physician. Over one-third of walk-in patients suffering from upper respiratory tract infections who were surveyed in the U.S.[18] and Canada[13] believed that their condition should be treated within two hours of its onset. Indeed in the Canadian survey by Rizos,[13] 15% of patients had expectations in terms of minutes, rather than hours.

The perspectives of patients, physicians, health care workers, and society will always differ. Roper has stated that the rational resolution of these conflicting views is a healthy process.[23] But because of the accessible nature of our health care system, we may not have the option of accepting, without challenge, patients' perceptions of illness that might be completely at variance with those of physicians. The arguments of Wolcott[19] and of Stratmann and Ullman,[17] that we accept absolutely the patient's perspective, may not be workable in Canada. Although our system is termed "health care," it is primarily designed, not for the healthy, but for the sick, who constitute a small but predictable minority of the population at any one time. If the definition of illness were expanded by increasing patient expectations to include the discomforts of normal life, not only could the budgeting of health care become extremely unpredictable, but funding could flow increasingly from the treatment of the sick to the care of the healthy.

The future of walk-in facilities in

Canada will most likely be determined by their cost-effectiveness. The Scott task force,[24] in its second interim report released to the Ontario government in February 1989, stated that—regardless of the method of health care delivery—three major objectives must be maintained:

- the needs of the public must be met without unnecessary duplication of services;
- medical services must be maintained to acceptable professional standards for acute and continuing care; and
- the costs for these services must constitute effective use of public monies.

It is the extent to which walk-in clinics conform to these ideals that will determine their role in primary care. As we in Canada enter the "Era of Cost Containment" described by Relman,[22] the survival of new methods of health care delivery will depend increasingly on their ability to demonstrate effectiveness not only in terms of patient satisfaction, but also in terms of fiscal responsibility. ■

Acknowledgements

We would like to thank Ms. Inese Grava-Gubins and Ms. Lynn Dunikowski for their assistance in our literature review.

References

1. Johnson Robert Wood Foundation. *Preliminary Survey of Free-standing Emergency Centers*. Silver Spring, MD: Orkand Corporation, 1979 Feb.

2. Rylko-Bauer B. The development and use of freestanding emergency centers: a review of the literature. *Med Care Rev* 1988; 45(1):129–63.

3. Moxley J, Roeder P. New opportunities for out of hospital health services. *N Engl J Med* 1984; 310:193–7.

4. Berliner HS, Burlage RK. The walk-in chains—the proprietarization of ambulatory care. *Int J Health Serv* 1987; 17(4):585–93.

5. Lutz S. For-profit chains retreat from ambulatory business. *Modern Health Care* 1988 June 3:74–80.

6. Miller GB, Mah Z, Nantes S, Bryant W, Kayler T, McKinnon K. Ontario walk-in clinics: preliminary descriptive study. *Can Fam Physician* 1989; 35:2013–17.

7. Shaffer DJ. A survey of Washington state freestanding emergency centres. *Ann Emerg Med* 1984; 13(4):259–62.

8. Mullens A. Clinic with walk-in care opens doors. *Vancouver Sun* 1986 Oct 7:B1.

9. Campbell D. Walk-in clinics alter way MDS do business. *Winnipeg Free Press* 1986 Nov 6:42.

10. Walk-in clinics provide quick service for people on the move. *Halifax Chronicle Herald* 1986 Aug 23:4W.

11. Cansino B. Walk-in clinics take hold in the west. *Globe and Mail* 1983 April 14:9.

12. Rowlands J. After-hours clinics—"do it or lose it." *Ontario Med Rev* 1988 Jan:10–9.

13. Chouinard A. ASA Montreal 1988. What's wrong with walk-ins? *Can Med Assoc J* 1988; 139:63–4.

14. Ferber MS, Becker LJ. Impact of freestanding emergency centers on hospital emergency department use. *Ann Emerg Med* 1983; 7:429–33.

15. Walk-in emergency clinic for Cambridge (and another clinic is planned for Kitchener). *Ontario Med* 1987 Dec 7:6.

16. Bice TW, White KL. Factors related to the use of health services. An international comparative study. *Med Care* 1969; 7(2):124–33.

17. Stratmann WC, Ullman R. A study of consumer attitudes about health care: the role of the emergency room. *Med Care* 1975; 13(12):1033–43.

18. Alemagno SA, Zyzanski SJ, Silko GJ. Urgent care centers: what does "urgent" really mean? *Fam Pract Res J* 1986; 6(1):12–21.

19. Wolcott BW. What is an emergency? Depends on whom you ask. *J Am Coll Emerg Physicians* 1979; 8(6):241–3.

20. Rosenstock IM. The health belief model and preventive health behaviour. *Health Educ Monogr* 1974; 2(4):354–86.

21. Schneeweiss R, Cherkin D, Hart G. The effect of including secondary diagnoses on the description of the diagnostic content of family practice. *Med Care* 1984; 22(11):1058–63.

22. Relman AS. Assessment and accountability. The third revolution in medical care. *N Engl J Med* 1988; 319(18):1220–2.

23. Roper WL. Effectiveness in health care—an initiative to evaluate and improve medical practice. *N Engl J Med* 1988; 319(18):1197–220.

24. Scott GWS. Task force on the use and provision of medical services. *Second interim report*. 1989 Feb.