

Use of walk-in clinics by rural and urban patients

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abstract

OBJECTIVE To compare use of walk-in clinics by rural and urban family practice patients and to describe patients' perceptions of the quality of care in physicians' offices.

DESIGN Questionnaire completed by patients in family physicians' offices.

SETTING Nine community-based family practices located in rural and urban areas of Alberta.

PARTICIPANTS Patients who had visited their family physicians' offices during April, May, June, or July 1997. Response rate was 89.6% (403 of 450 questionnaires were completed).

MAIN OUTCOME MEASURES Use of walk-in clinics, patients' perceptions of the quality of care in physicians' offices.

RESULTS Overall, 27.5% of patients (22.2% of rural, 35.5% of urban patients) attended walk-in clinics in the 6 months before visiting their family physicians' offices: 43.3% went during weekdays when their family physicians' offices were open. Significantly more rural (91.1%) than urban (60.7%) patients felt they could contact their doctors during evenings and weekends ($P.004$). Significantly more urban (67.2%) than rural (33.3%) patients did not call their own physicians before going to walk-in clinics ($P.002$). Patients who attended walk-in clinics were more likely ($P.01$) than patients who did not to rate their family physicians' office hours poor to good (27.9% vs 15.6%).

CONCLUSIONS Many patients attending the offices of community-based family physicians in both urban and rural areas of Alberta also attend walk-in clinics. Family practice patients attend walk-in clinics primarily because their own physicians' offices are less convenient.

résumé

OBJECTIF Comparer le recours aux cliniques sans rendez-vous par les patients de pratiques familiales rurales et urbaines, et décrire la perception qu'ont les patients de la qualité des soins aux cabinets des médecins.

CONCEPTION Un questionnaire rempli par les patients dans des cabinets de médecins de famille.

CONTEXTE Neuf pratiques familiales dans la communauté situées dans des régions rurales et urbaines en Alberta.

PARTICIPANTS Des patients qui s'étaient rendus au cabinet de leur médecin de famille en avril, mai, juin ou juillet 1997. Le taux de réponse s'élevait à 89,6% (403 questionnaires sur 450 ont été remplis).

PRINCIPALES MESURES DES RÉSULTATS Le recours aux cliniques sans rendez-vous, les perceptions des patients de la qualité des soins aux cabinets des médecins.

RÉSULTATS Dans l'ensemble, 27,5% des patients (22,2% chez les patients ruraux et 35,5% chez les patients urbains) avaient consulté des cliniques sans rendez-vous dans les six mois précédant leur visite au cabinet de leur médecin de famille: 43,3% s'y sont rendus durant la semaine, alors que le bureau de leur médecin de famille était ouvert. Un pourcentage considérablement plus élevé de patients ruraux (91,1%) par rapport aux patients urbains (60,7%) avaient l'impression qu'ils pouvaient communiquer avec leur médecin en soirée ou les fins de semaine ($p,004$). Un nombre beaucoup plus élevé de patients urbains (67,2%) que de patients ruraux (33,3%) n'ont pas téléphoné à leur propre médecin avant de se rendre à la clinique sans rendez-vous ($p,002$). Les patients qui se sont rendus à des cliniques sans rendez-vous étaient davantage susceptibles ($p,01$) que ceux qui n'y étaient pas allés d'accorder aux heures d'ouverture du bureau de leur médecin de famille une cote de faible à bonne (27,9% contre 15,6%).

CONCLUSIONS Plusieurs patients qui fréquentent des cabinets de médecins de famille basés dans la communauté, tant dans les régions urbaines que rurales en Alberta, vont aussi dans des cliniques sans rendez-vous. Les patients de médecins de famille consultent des cliniques sans rendez-vous principalement parce qu'il est moins pratique de se rendre au cabinet de leur propre médecin.

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Cet article a fait l'objet d'une évaluation externe.

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During the last decade, walk-in clinics have established themselves strongly as providers of primary health care services in most urban and metropolitan areas of Canada. The effect of walk-in clinics on primary care is demonstrated by results of a poll indicating that about one third of Ontario residents visit walk-in clinics every year.¹ Similar results were found in Alberta where 27.5% of patients who lived in a metropolitan area and identified themselves as having regular family physicians also used walk-in clinics.²

Growth in use of walk-in clinics has occurred without a clear understanding of the quality or cost-effectiveness of the care provided in them. Physicians, governments, and professional organizations have diverse and strongly held views on the care provided by walk-in clinics compared with the care provided in traditional office settings.

Concerns have been expressed about the quality of care provided by walk-in clinics, including "double-doctoring," lack of continuity of care, provision of less complex or intense care than that provided in other primary care settings, and higher costs for visits.³ A recent study⁴ undertaken using Ontario Health Insurance Plan (OHIP) data found little difference between the care provided in walk-in clinics and in family physicians' offices in terms of overall costs, number of patients seen, and follow-up costs.

Almost no evidence exists on how walk-in clinics influence the patterns of care provided in rural settings. It has been assumed that most patients receiving care in walk-in clinics are from urban or metropolitan areas, and that walk-in clinics have had little effect on health care in rural settings. Given the large proportion of Canadian practices considered rural and access to rapid transportation, walk-in clinics could affect provision of care in rural areas in the same way they do in urban settings.

This study compares use of walk-in clinics by family practice patients in urban and rural settings and examines the effect of patients' perceptions of various characteristics of physicians' offices on use of walk-in clinics. Results of the study provide further insight into the factors that influence the way family practice patients use the health care system and into areas of

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dissatisfaction with the care provided by family physicians. The study was approved by the Health Research Ethics Board of the University of Alberta's Faculty of Medicine.

METHODS

Study design

This survey examined patients' use of walk-in clinics in relation to perceived quality of care in the offices of full-time community-based family physicians in Alberta. A random sample of 11 eligible urban and rural practices in Alberta, that were participants in the Alberta Family Practice Research Network (AFPRN) and whose physicians had volunteered to participate in a study on prevention in family physicians' offices, were selected for this study. At the time of the study, approximately 500 of the estimated 2200 family physicians in Alberta were members of AFPRN. Practices were stratified by urban and rural location. One urban practice was excluded from the study because it operated solely as a walk-in clinic, and one practice declined to participate, resulting in a study sample of nine practices.

Rural practices were defined as practices in communities with populations of <6000 people. The rural practices were located 20 to 147 km from large cities with walk-in clinics. The study was undertaken from April to July 1997.

Survey questionnaire

The survey questionnaire was developed from a combination of the Physician Office Quality of Care Monitor (POQCM)⁵ questionnaire and questions on use of walk-in clinics used in a previous study.² The POQCM questionnaire was used to measure patients' perceptions of the quality of care provided by physicians' offices, using a 5-point Likert scale ranging from excellent to poor. The POQCM questionnaire had been tested for construct and predictive validity and internal scale reliability.

The original POQCM measured seven factors of physician office care: physician care, nurse care, front office services, accessibility, facility characteristics, testing services, and billing. For this study, the questionnaire was modified to reflect the Canadian health care system by deleting questions that related to billing procedures. A covering sheet included with the questionnaire explained the purpose of the survey, provided instructions on when to complete the questionnaire and how to return it, and indicated that refusal to participate in the survey would not affect patients' care.

RESEARCH

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Patient selection

Each practice was requested to recruit 50 consecutive patients 18 years old and older to complete the questionnaire. Office staff, in most cases receptionists, approached patients to participate. In offices with fewer staff, it was sometimes impossible to approach every consecutive patient, so the next consecutive eligible patient was approached.

Patients' consent was implied by completing and returning the questionnaire. Patients were asked to complete the questionnaire after seeing the doctor but before leaving the office. The identity of those completing questionnaires was unknown to both study investigators and practice staff; questionnaires were returned to practice staff in individually sealed envelopes and couriered to study investigators. Each patient completed only one questionnaire. Survey results were reported to each practice only as grouped data.

Data analysis

The χ^2 test was used for discrete variables and Fisher's exact test for dichotomous variables, with SPSS 7.5 for Windows. Correction for level of significance for multiple comparisons was undertaken using the Bonferroni⁶ method with a more rigorous level of significance of .01. All confidence intervals are reported at 95%.

RESULTS

In nine practices (five rural, four urban), 403 of 450 questionnaires were completed yielding an 89.6% response rate. The number of questionnaires completed per practice ranged from 33 to 50 with a mean of 45. Of all returned questionnaires, 210 (52.1%) were completed by rural patients and 193 (47.9%) by urban patients.

Attendance at walk-in clinics

Of the 403 patients who completed questionnaires, 385 responded to the question on walk-in clinics: 106 (27.5%, 95% confidence interval [CI] 0.31 to 0.23) indicated they had attended walk-in clinics during the preceding 6 months, 45 (22.2%, CI 0.278 to 0.165) of the 203 rural patients and 61 (33.5%, CI 0.404 to 0.267) of the 182 urban patients. Men and women were equally likely to attend walk-in clinics, but patients who used walk-in clinics tended to be younger than those who did not (**Table 1**).

Table 1. Characteristics of patients who attended walk-in clinics in the 6 months before the survey

CHARACTERISTIC	ATTENDED N = 106 (%)	DID NOT ATTEND N = 279 (%)	P*
Sex			.98
• Men	26 (24.5)	63 (22.6)	
• Women	79 (74.5)	200 (71.7)	
• Not recorded	1 (0.9)	16 (5.7)	
Age (y)			.008
• ≤ 15	9 (8.5)	12 (4.3)	
• 16-35	35 (33.0)	52 (18.6)	
• 36-65	49 (46.2)	167 (59.9)	
• ≥ 66	11 (10.4)	33 (11.9)	
• Not recorded	2 (1.9)	15 (5.4)	
Felt they could contact their own doctors during evenings and weekends	78 (73.6)	221 (79.2)	.30
Called their own doctors before attending walk-in clinics			
• Yes	28 (26.4)		
• No	56 (52.8)		
• Not recorded	22 (20.8)		
Last attended a walk-in clinic			
• ≤ 7 d ago	11 (10.4)		
• > 7 d and < 4 wk ago	18 (17.0)		
• > 4 wk ago	74 (69.8)		
• Not recorded	3 (2.8)		
No. of times attended clinic			
• 1	63 (59.4)		
• 2-4	39 (36.8)		
• > 10	1 (0.9)		
• Not recorded	3 (2.8)		
Time of attendance			
• Mon-Fri 9:00-17:00 h	46 (43.3)		
• Mon-Fri after 17:00 h	18 (17.0)		
• Sat-Sun (weekend)	29 (27.4)		
• Weekdays and weekends	9 (8.5)		
• Not recorded	4 (3.8)		

*Statistical significance at $P < .01$ with χ^2 test.

Of the 106 patients who attended walk-in clinics, 43.3% attended during weekdays (ie, Monday to Friday 9:00 h to 17:00 h) when their family physicians' offices were open, 52.8% did not call their own physicians before attending the clinics, and 10.4% went to walk-in clinics within a week of seeing their own family physicians (**Table 1**). Almost 60% of patients had been to walk-in clinics only once during the preceding 6 months.

Use of walk-in clinics by urban and rural patients is compared in **Table 2**. In rural areas, 91.1% of patients felt they could contact their doctors during evenings and weekends, compared with 60.7% of patients in urban areas ($P.004$). A significantly higher proportion of urban patients (67.2% vs 33.3%) did not call their own physicians before attending walk-in clinics ($P.002$). There was no difference in time or day of the week that urban and rural patients used walk-in clinics.

Care in physicians' offices

Quality of care in physicians' offices was assessed on six factors: accessibility, facility characteristics, front office services, physician care, nurse care, and testing services. Of all these factors, only one element of accessibility, convenience of office hours, was significantly associated with use of walk-in clinics (**Table 3**). Patients who perceived the convenience of their family physicians' office hours as being poor or good tended to use walk-in clinics more than those who perceived them as very good to excellent.

Comparing rural and urban patients revealed that rural patients perceived that their doctors were more accessible (ease of seeing the doctor, $P.04$) and facilities better (convenience of location, $P.000007$; ease of parking, $P.006$) than patients in urban areas. Rural patients' perceptions of their physicians' advice for staying healthy ($P.0078$) were significantly poorer than those of urban patients.

DISCUSSION

Results of this study show that 27.5% of patients attending family physicians' offices in urban and rural areas of Alberta also used walk-in clinics and that many visits to walk-in clinics occurred during hours when their family physicians' offices were open. These results are similar to those of previous studies^{1,2,7} undertaken during the last 5 to 10 years and suggest that the proportion of patients attending family physicians' offices and also using walk-in clinics has stabilized at existing rates.

The main reason identified in this study for patients to attend walk-in clinics was the convenience and ease of access of walk-in clinics. Because many patients did not attempt to contact their own physicians before attending clinics and attended during hours when their own physicians' offices would be expected to be open, family physicians should consider these patient perceptions in management of their practices.

Table 2. Use of walk-in clinics by rural or urban location

FACTOR	RURAL N = 45 (%)	URBAN N = 61 (%)	P*
Felt they could contact their doctors during evenings and weekends			.004
• Yes	41 (91.1)	37 (60.7)	
• No	3 (6.7)	18 (29.5)	
• Not recorded	1 (2.2)	6 (9.8)	
Called own doctors before going to walk-in clinics			.002
• Yes	18 (40.0)	10 (16.4)	
• No	15 (33.3)	41 (67.2)	
• Not recorded	12 (26.7)	10 (16.4)	
Last attended walk-in clinics			.68
• ≤ 7 d ago	5 (11.1)	6 (9.8)	
• > 7 d and ≤ 4 wk ago	9 (20.0)	9 (14.8)	
• > 4 wk ago	29 (64.4)	45 (73.8)	
• Not recorded	2 (4.4)	1 (1.6)	
No. of times attended clinic			.86
• 1			
• 2-4	25 (55.6)	38 (62.3)	
• > 10	17 (37.8)	22 (36.1)	
• Not recorded	1 (2.2)	0	
	2 (4.4)	1 (1.6)	
Time of attendance			.05
• Mon-Fri 9:00-17:00 h	25 (55.6)	21 (34.4)	
• Mon-Fri after 17:00 h	5 (11.1)	13 (21.3)	
• Sat-Sun (weekend)	9 (20.0)	20 (32.8)	
• Weekdays and weekends	3 (6.7)	6 (9.8)	
• Not recorded	3 (6.7)	1 (1.6)	

*Statistical significance at $P < .01$ with χ^2 test.

Effect on provision of care in rural areas

This study also reveals that a significant proportion of family practice patients (22.2%) in rural Alberta attended walk-in clinics even though they had to travel some distance. This finding is somewhat surprising given that walk-in clinics have been considered largely an urban phenomenon. Although only 11% of rural patients attending family physicians' offices used walk-in clinics (CI 0.024 to 0.203), a lower rate than urban patients, these findings have implications for providing primary health care in rural settings. First, family physicians in rural settings should be aware that some of their patients use walk-in clinics and that this will affect the continuity of care of these patients. Second, in an era of regionalization of health care in many provinces, this pattern of care

Table 3. Rating of characteristics of physicians' offices and use of walk-in clinics in the previous 6 months: Some participants did not rate some items.

CHARACTERISTIC	ATTENDED CLINIC N (%)	DID NOT ATTEND CLINIC N (%)	P*
ACCESSIBILITY			
Can get through to office by telephone easily			.03
• Poor-good	21 (20.0)	33 (11.9)	
• Very good-excellent	84 (80.0)	244 (88.1)	
Doctor available on telephone			.54
• Poor-good	30 (42.2)	74 (42.0)	
• Very good-excellent	41 (57.7)	102 (58.0)	
Nurse available on telephone			.38
• Poor-good	13 (5.0)	40 (18.3)	
• Very good-excellent	69 (84.1)	179 (81.7)	
Time between making appointment and visit			.40
• Poor-good	23 (22.5)	58 (21.3)	
• Very good-excellent	79 (77.5)	214 (78.7)	
Waiting time to see doctor			.59
• Poor-good	26 (31.0)	86 (35.0)	
• Very good-excellent	58 (69.0)	160 (65.0)	
Convenience of office hours			.006
• Poor-good	29 (27.9)	43 (15.6)	
• Very good-excellent	75 (72.1)	232 (84.4)	
Ease of seeing doctor			.03
• Poor-good	20 (19.4)	30 (11.2)	
• Very good-excellent	83 (80.6)	238 (88.9)	
Ease of arranging follow-up visits			.17
• Poor-good	11 (12.2)	19 (8.1)	
• Very good-excellent	79 (87.8)	216 (91.9)	
FACILITY CHARACTERISTICS			
Convenience of location of doctor's office			.06
• Poor-good	23 (21.9)	40 (14.5)	
• Very good-excellent	82 (78.1)	235 (85.5)	
Convenience of parking			.07
• Poor-good	44 (44.4)	89 (35.0)	
• Very good-excellent	55 (55.6)	165 (65.0)	
FRONT OFFICE SERVICES			
Courtesy of office receptionist			.32
• Poor-good	11 (10.4)	23 (8.3)	
• Very good-excellent	95 (89.6)	254 (91.7)	
Registration process			.28
• Poor-good	12 (11.8)	24 (9.1)	
• Very good-excellent	90 (88.2)	240 (90.9)	
Courtesy of staff taking call			.18
• Poor-good	13 (12.4)	24 (8.7)	
• Very good-excellent	92 (87.6)	253 (91.3)	
Comfort of waiting room			.50
• Poor-good	17 (16.0)	43 (15.5)	
• Very good-excellent	89 (84.0)	235 (84.5)	
TESTING SERVICES			
X-ray technician's personal manner			.33
• Poor-good	16 (44.4)	58 (50.4)	
• Very good-excellent	20 (55.6)	57 (49.6)	
Ease of getting x-rays done			.50
• Poor-good	9 (16.1)	24 (17.5)	
• Very good-excellent	47 (83.9)	113 (82.5)	
Ease of getting laboratory tests done			.21
• Poor-good	8 (11.8)	31 (17.0)	
• Very good-excellent	60 (88.2)	151 (83.0)	
TESTING SERVICES (continued)			
Test results obtained promptly			.26
• Poor-good	20 (25.0)	45 (20.6)	
• Very good-excellent	60 (75.0)	173 (79.4)	
Cleanliness of treatment area			.33
• Poor-good	7 (7.4)	25 (9.7)	
• Very good-excellent	88 (92.6)	234 (90.3)	
Signage in the facility			.23
• Poor-good	17 (20.0)	54 (24.9)	
• Very good-excellent	68 (80.0)	163 (75.1)	
PHYSICIAN CARE			
Amount of time spent with doctor			.54
• Poor-good	17 (16.3)	44 (16.7)	
• Very good-excellent	87 (83.7)	220 (83.3)	
Thoroughness of doctor's care			.57
• Poor-good	14 (13.6)	37 (13.6)	
• Very good-excellent	89 (86.4)	235 (86.4)	
Doctor overall			.50
• Poor-good	10 (9.6)	25 (9.1)	
• Very good-excellent	94 (90.4)	250 (90.9)	
Coordination of care over time			.38
• Poor-good	11 (14.1)	24 (12.0)	
• Very good-excellent	67 (85.9)	176 (88.0)	
Doctor's personal manner			.53
• Poor-good	8 (7.5)	20 (7.2)	
• Very good-excellent	98 (92.5)	259 (92.8)	
Instructions for follow up			.53
• Poor-good	13 (13.1)	34 (13.6)	
• Very good-excellent	86 (86.9)	216 (86.4)	
Advice to stay healthy			.11
• Poor-good	13 (13.8)	46 (20.4)	
• Very good-excellent	81 (86.2)	180 (79.6)	
Outcome of medical care			.33
• Poor-good	15 (15.5)	48 (18.2)	
• Very good-excellent	82 (84.5)	216 (81.8)	
Questions answered after visit			.51
• Poor-good	15 (17.0)	41 (17.7)	
• Very good-excellent	73 (83.0)	190 (82.3)	
Explanation of care given			.46
• Poor-good	14 (14.7)	41 (16.0)	
• Very good-excellent	81 (85.3)	216 (84.0)	
Respect for patient's privacy			.50
• Poor-good	6 (6.3)	18 (7.1)	
• Very good-excellent	89 (93.7)	235 (92.9)	
NURSE CARE			
Nurse's personal manner			.37
• Poor-good	8 (9.0)	17 (17.2)	
• Very good-excellent	81 (91.0)	219 (92.8)	
Nurse's skills and expertise			.47
• Poor-good	10 (12.5)	30 (13.8)	
• Very good-excellent	70 (87.5)	187 (86.2)	
Questions answered by nurse			.44
• Poor-good	9 (12.0)	27 (13.7)	
• Very good-excellent	66 (88.0)	170 (86.3)	
Nurse overall			.41
• Poor-good	7 (8.0)	24 (9.8)	
• Very good-excellent	80 (92.0)	221 (90.2)	

*Statistical significance at $P < .01$ with Fisher's exact test.

Key points

- About 28% of patients (22% rural and 36% urban) attended walk-in clinics in the 6 months before visiting their family physicians' offices.
- Of these, 43% attended during weekdays when their family physicians' offices were open.
- The main reason for using walk-in clinics was perceived lack of access to their own family physicians.

Points de repère

- Environ 28% des patients (22% en milieu rural et 36% en milieu urbain) avaient fréquenté une clinique sans rendez-vous dans les six mois précédant leur visite au cabinet de leur médecin de famille.
- De ce nombre, 43% étaient allés durant la semaine alors que le bureau de leur médecin de famille était ouvert.
- Le principal motif expliquant la visite à la clinique sans rendez-vous était la perception d'un accès insuffisant à leur propre médecin de famille.

must be recognized in assessment of manpower needs and allocation and management of regional health care resources.

Limitations

There are some limitations to this study. The physicians randomly selected for this study were volunteer members from AFPRN and might have different practice characteristics from other family physicians in Alberta. The study was undertaken in urban and rural practices in Alberta so practices in other areas of Canada might not show the same patterns of care due to provincial differences in delivery of health care services.

Results of this study would not be applicable to remote practice settings. Although randomly selected, the number of practices surveyed for this study (nine) was perhaps too few to obtain a broad enough range of reasons for using walk-in clinics, based on differing practice characteristics. The waiting room sample of patients used in this study might not necessarily represent all patients in the practice nor patients who do not have family physicians. There is also the potential for bias due to memory recall, as patients were required to remember whether they had attended walk-in clinics during the preceding 6 months.

CONCLUSION

A notable proportion of patients attending the offices of community-based family physicians in both urban and rural areas of Alberta also attended walk-in clinics. The rate of increase in use of walk-in clinics appears to have stabilized at existing levels. Family practice patients seem to attend walk-in clinics primarily because they perceive they have limited access (inconvenient office hours) to physicians' offices. Further evaluation is needed to compare the outcomes of care provided in traditional family physicians' offices with that provided in walk-in clinics. ♦

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