

Comparing the characteristics and attitudes of physicians in different primary care settings: The Ontario Walk-in Clinic Study*

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Background. In Canada, walk-in clinics (WICs) are a focus for debate about access to and the costs and quality of primary care. While WICs may offer patients easier access through longer hours and shorter waits, it has been argued that they may also lead to unnecessary utilization, duplication of services, lack of continuity of care, decreased quality and increased costs.

Objectives. The main objectives were to analyse the characteristics and attitudes of physicians working in different family practice types including WICs.

Methods. We analysed the results of a 1998 survey of 728 primary care physicians in Ontario to compare physicians working in WICs with those working in solo and group family practices.

Results. Our survey found that few physicians worked most or all of their hours in WICs; most worked in WICs and other family practice types. Compared to family physicians in solo and group practices, physicians working in WICs saw more patients who were not their regular patients, patients without appointments and children. They reported slightly higher frequencies of problems such as backlogs (patient queues) and patients who had sought care from other doctors for the same problem. WIC physicians were less satisfied than other physicians with their relations with patients. They were, however, more satisfied with the availability of consultation, support staff, hours, income, and vacation coverage. Further, WIC physicians assessed the quality of care in WICs to be neither better nor worse than that in other family practices.

Conclusions. We conclude that there are important similarities as well as differences, between physicians in WICs and those in more conventional family practices. The assessments of primary care physicians do not support the generally negative reputation of WICs. Instead, greater consideration should be given to the system-level issues which produce demand for WICs.

Keywords. Canada, family practice, walk-in clinics.

Introduction

Since the 1970s when they were first reported in the US,^{1,2} and the 1980s when they began appearing in Canada's western provinces,³ walk-in clinics (WICs) have been a

focus for controversy and debate around the organization and delivery of primary care.^{4–6} On the one hand, some observers have argued that WICs fill important gaps in primary care resulting from an unwillingness or inability on the part of family physicians to provide timely access to care particularly outside of regular working hours and on weekends. In this connection, informal surveys conducted in Canada have found that after 5:00 pm, many family practices routinely refer patients to hospital emergency departments (EDs), house call services, and WICs.^{5,7,8} Supporting this, studies conducted in both Canada and the US have concluded that many patients perceive difficulties in gaining timely access to their regular family physicians and that as a result, they may seek care not only in WICs, but in hospital EDs where care is most expensive and continuity of care is most problematic.^{4,9–17}

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On the other hand, WICs have been criticized as opportunistic “fast-food medicine” and a source of “fragmented, intermittent care”.⁵ By providing quick “convenience store” access to care, WICs have been seen to encourage needless and inappropriate demands on the health care system and duplication of services particularly when WIC patients seek follow-up care from their regular family physician. According to critics, WICs may undermine continuity of care if different physicians, with limited or no access to a patient’s medical records, treat the same episode of illness; they may promote inappropriate utilization of tests, treatments, and prescription drugs as a result of inadequate or incomplete information about the patient’s medical condition and history; and they may compromise quality of care by employing physicians with less than ideal qualifications and commitment.^{18,19}

Such arguments warrant careful consideration. In Canada and the US, WICs play an important and possibly expanding role albeit with little evaluation or direction from policy-makers.^{3,13,18,20–23} In the UK, WICs are expanding as a matter of government policy, although with little systematic evidence to guide their expansion.^{6,24} Here, we note key similarities and differences between WICs in Canada and the UK. In both countries WICs are seen to involve the provision of first contact care, extended hours, generalist care, and walk-in access with minimal follow-up or continuing care.⁶ In the UK, nurse practitioners have taken a lead role in WICs; in Canada, family physicians are the main providers of care in WICs.²⁵ This is important because even under universal government health insurance, most Canadian physicians, including those in WICs, remain private entrepreneurs (i.e. not public employees), paid on a fee-for-service basis, with few restrictions on where they work or how they organize or conduct their practices. Physicians may choose to work in one or more practice settings and there is no formal obligation for them to provide after hours care even to their own patients. Similarly, there are few restrictions on where Canadian patients seek primary care: they may choose at any time to visit their regular family physician, a walk-in clinic, a hospital emergency department, or any combination of these without incurring direct costs (although the health care system will incur costs). Thus, in Canada, WICs have arisen within a primary care ‘non-system’ in which there are few supply or demand-side constraints; physicians and patients both have considerable latitude to make choices, even if these choices pose real or potential problems.

In this paper we analyse data from a 1998 survey of family physicians in Ontario, Canada’s largest and most populous province, to compare the characteristics and attitudes of physicians working in three different, but comparable, community-based practice types: solo family practice, group family practice and walk-in clinics. Our purpose is to evaluate, from the practitioner’s

point of view, issues connected with the organization and operation not only of WICs, but of WICs in comparison to these more conventional family practice types.

In the sections below, we begin by describing our data and methods. We then describe the characteristics and attitudes of family physicians working in different practice types and use multiple regression to estimate the extent to which observed differences can be attributed to practice type or to the characteristics of the physicians working in them. In a concluding section we summarize our findings and suggest implications for understanding WICs.

Methods

The survey of physicians reported in this paper was conducted as part of the multi-stage, multi-university Ontario Walk-In Clinic Study. Because available evidence suggested that WICs were concentrated in large urban areas,^{18,20} this survey, as well as other elements of the larger study, focused on Ottawa, Kingston, the Greater Toronto Area, Hamilton-Wentworth, Burlington and London. Ethics approval was received from the University of Toronto, the University of Western Ontario, and McMaster University.

The survey design was informed by an earlier review of the literature, focus groups of physicians, semi-structured interviews with key informants in academia, government and the medical profession, and by the results of a survey of primary care organizations in Ontario conducted in October 1997.²⁶ In addition to providing detailed information about different practice types, this earlier organizational survey generated a list of physicians working in WICs.

Our base sample of physicians was selected randomly from the computerized listings of the *Canadian Medical Directory*. All family physicians and GPs in active practice in the geographic areas identified above were eligible. To ensure sufficient numbers of WIC physicians to allow for valid comparisons, we added physicians ($n = 92$) identified in the earlier organizational survey as working in WICs. Questionnaires were mailed to 1264 eligible physicians. An extensive follow-up regime, modelled on the Dillman method,²⁷ consisted of reminder cards, additional questionnaires, telephone calls to non-respondents, and a final certified mail package. This produced 728 completions and an effective response rate of 57.6%, a rate comparable to other physician surveys reported in the literature.^{28–31}

The characteristics of our sample are consistent with previous surveys of Ontario physicians.^{32–36} They are also consistent with unpublished data from the College of Physicians and Surgeons of Ontario (CPSO) accessed through one of the authors (EW). While the CPSO data do not specifically identify WICs, they show, for example, that in 2000, 77% of physicians in solo practice

and 61% of those in groups (self-defined) were male (compared to 72.7% and 54.3% in our sample); that solo physicians worked 39 hours per week and group practice physicians 38 hours per week (compared to 44.6 and 39.8 hours in our sample); and that solo and group physicians had been in practice for 25 years and 19 years respectively (compared to 25 years and 19 years in our sample). Differences probably reflect the fact that our survey was focused on urban areas where female and more recently established physicians are over-represented, and that CPSO workload estimates do not adjust for time off as ours do.

The survey asked physicians about their last typical working week. First, physicians were asked to record their total hours in practice as well as total hours on-call; then they were asked how many of these hours they had spent working in different practice types including solo family practice, shared/group family practice, and WICs. Where applicable, physicians were asked to describe each of these practices; they could thus describe up to three different community-based family practices in which they worked.

Because initial analysis confirmed that a majority of physicians worked in more than one practice type, but few worked a majority of their hours in WICs, we identified three mutually exclusive categories: physicians who had worked more than half (51%+) of their total hours in a solo family practice ($n = 266$); those who had worked more than half (51%+) of their total hours in a group family practice ($n = 281$); and those who had worked more than a third (33%+) of their total hours in a walk-in clinic ($n = 47$). To ensure that no physician occupied more than one category, physicians working in WICs were categorized initially and removed from further consideration; we then categorized physicians working in solo and group practice. Physicians who worked most of their time in hospital emergency departments or in some combination of practice types without meeting

the hours threshold for any one type, were excluded, reducing the number of cases for this analysis to 594.

In the analysis we initially employ cross-tabulations, means and appropriate statistical tests to describe and compare the characteristics and attitudes of family physicians in WICs, solo practices, and group practices. We subsequently employ multiple regression and ANOVA to analyse the extent to which observed differences may be attributed to practice type, or alternatively, to the characteristics of physicians working in different types. Our method involves regressing two 'blocks' of explanatory variables measuring, respectively, practice type (WIC versus solo and group family practice) and physician characteristics (age, year of graduation, gender, certification, payment method, and owner status) on independent variables measuring practice characteristics and attitudes. Each block of explanatory variables is first entered into the multiple regressions alone (e.g. all variables in a block are entered simultaneously without entering variables in the second block), and then after the second block has been entered. The variance estimates generated thus allow us to assess the marginal (or net) increase in the variance explained by practice type and by physician characteristics. We can thus determine the extent to which observed differences associated with practice type may in fact be due to differences in the characteristics of physicians (e.g. WIC physicians may be predominately younger females, compared to physicians in solo practice who may be predominately older males).

Results

Practice characteristics

Table 1 presents means and confidence intervals for variables measuring key characteristics of the WICs, solo and group practices in which physicians worked during their typical working weeks. The Eta^2 coefficients range

TABLE 1 *Practice characteristics by practice type*

Practice characteristic	Practice type			Eta ²
	Walk-in clinic	Solo family practice	Group family practice	
Regular patients (%)	25.5 (15.5–35.5)	94.8 (93.6–96.0)	90.0 (88.4–91.6)	0.60*
Patients without appointment (%)	71.8 (58.2–85.3)	20.6 (17.1–24.2)	17.7 (14.8–20.7)	0.17*
Children (%)	30.4 (24.7–36.1)	19.8 (18.2–21.5)	23.7 (21.9–25.5)	0.04*
Hours worked per week (all practice types, excluding on-call)	37.8 (32.3–43.3)	44.6 (43.4–45.8)	39.8 (38.4–41.3)	0.04*
Hours on-call per week (all practice types)	15.7 (3.5–27.9)	37.6 (31.0–44.2)	24.8 (20.0–29.6)	0.02*
Hours worked per week (main practice type)	21.0 (17.3–24.8)	41.8 (40.6–43.1)	36.6 (35.1–38.0)	0.19*
Minutes per scheduled patient-visit	14.0 (10.5–17.5)	14.1 (13.5–14.8)	13.8 (13.1–14.4)	0.00
Number of physicians ^a	47	266	281	

Data are given as mean (95%CI) except ^a where given as n . *Significant at 0.01.

Eta² ranges from 0 to 1. It measures the proportion of total variance in a dependent variable (e.g. % regular patients) accounted for by practice type.

from 0 to 1 and measure the proportion of variance in each practice characteristic explained by practice type. Exact wordings of survey items are given in the Appendix.

Physicians working in WICs reported seeing smaller but still considerable proportions of regular patients (25.5%) compared to physicians in solo (94.8%) and group practices (90.0%). Conversely, WIC physicians saw higher proportions of patients without appointments (71.8%) compared to physicians in solo and group practices who saw smaller but still considerable proportions of these patients (20.6% and 17.7%). WIC physicians also saw more children (37.8%, 19.8% and 23.7% respectively).

Physicians working in WICs and in group practices reported similar total numbers of hours worked during typical weeks (37.8 and 39.8 hours respectively); solo physicians averaged significantly longer hours (44.6). However, as compared to WIC physicians, physicians in solo and group practice spent more of their total hours in their main practice type: solo practitioners averaged 41.8 hours in their solo practice; group practice physicians, 36.6 hours in their group practice; and WIC physicians, 21.0 hours in their WIC. Solo physicians reported significantly longer hours on-call (37.6 hours) compared to physicians in groups (24.8) and in WICs (15.7). There were no measurable differences by practice type in time spent per patient-visit (averaging 14 minutes).

Physician characteristics

Significant variations in physician characteristics were observed by practice type (Table 2). Physicians working in WICs graduated from medical school around 1980 while group practice physicians graduated about a year earlier (1979) and solo practice physicians graduated around 1973. Physicians working in WICs had been in their WICs about 6 years, compared to 15 years for group and 19 years for solo physicians. Women were more likely to be in group practice (45.7% of physicians in groups were women) and in WICs (38.3%) than in solo practice (27.3%). Physicians certified by the Canadian College of Family Physicians (CCFP) were more likely

to be in group practice (59.1%) and in WICs (51.1%) than in solo practice (45.5%). Solo practice physicians were more likely to own their practices (92.5% were owners) compared to physicians in group practices (76.5%) and WICs (12.5%).

Problems in practice

Physicians were asked how frequently they encountered specific problems in their practices (Table 3). Responses ranged from 1, 'none of the time', to 7, 'a great deal of the time'. The Eta² coefficients reveal statistically significant but modest differences by practice type. Note that few scores are higher than 3.5, the response scale midpoint, indicating that most physicians did not see any of these problems with great frequency.

An average score of 3.5 suggests that physicians working in WICs didn't always feel they had adequate time to discuss issues or concerns affecting their patient's health; solo and group physicians perceived this problem somewhat less frequently (scoring 3.0 and 2.9 respectively). Physicians in solo and group practice were also less likely to perceive 'backlogs' (queues) of patients forcing them to spend less time with each patient (scores of 3.4, 3.8 and 4.5 for solo, group and WIC physicians). When asked how frequently they saw 'doctor shoppers', patients who had sought medical care from many other physicians, physicians working in WICs scored 4.1 compared to 3.0 for both solo and group physicians. Physicians working in WICs were also somewhat more likely to report seeing patients whose condition, in their opinion, really didn't warrant a visit to a doctor (3.9 versus 3.3 for solo and 3.6 for group physicians). Physicians working in WICs reported a slightly higher frequency of patients who should have sought care sooner (3.3 versus 2.9 for solo and group physicians). There were no significant differences in frequency of patients who asked for a particular drug or treatment, although physicians working in WICs were slightly more likely to report ordering a drug or test to end a patient-visit even though it might not be necessary (scores of 2.9, 2.4 and 2.7 for WIC, solo and group physicians).

TABLE 2 Physician characteristics by practice type

Physician characteristic	Practice type			Eta ²
	Walk-in clinic	Solo family practice	Group family practice	
Year of graduation ^a	1980 (1976–1983)	1973 (1972–1974)	1979 (1978–1980)	0.09*
Years in this practice ^a	6.0 (4.0–8.1)	19.4 (18.3–20.6)	15.4 (14.4–16.4)	0.13*
Female respondents (%) ^b	38.3	27.3	45.7	0.03*
Certified respondents (CCFP) (%) ^b	51.1	45.5	59.1	0.02*
Owner (%) ^b	12.5	92.5	76.5	0.24*

^a Data given as mean (95% CI). ^b Categorical (dummy) variable with responses coded 0 (no), 1 (yes); CI not calculated. *Significant at 0.01. Eta² ranges from 0 to 1. It measures the proportion of total variance in a dependent variable (e.g. % regular patients) accounted for by practice type.

TABLE 3 Frequency of problems encountered by practice type

Problem encountered ^a	Practice type			Eta ²
	Walk-in clinic	Solo family practice	Group family practice	
Don't have time to discuss issues	3.5 (3.1–3.9)	3.0 (2.9–3.2)	2.9 (2.2–3.0)	0.02*
Patient backlog	4.5 (4.0–4.9)	3.4 (3.2–3.6)	3.8 (3.7–4.0)	0.04*
Doctor 'shoppers'	4.1 (3.6–4.6)	3.0 (2.8–3.2)	3.0 (2.9–3.2)	0.03*
Condition doesn't warrant visit	3.9 (3.4–4.4)	3.3 (3.1–3.5)	3.6 (3.4–3.7)	0.02*
Patient needed care sooner	3.3 (2.8–3.8)	2.9 (2.8–3.1)	2.9 (2.7–3.0)	0.00
Patient asks for particular drug	3.8 (3.3–4.3)	3.1 (2.9–3.2)	3.3 (3.2–3.5)	0.02*
Order unnecessary drug or test	2.9 (2.4–3.3)	2.4 (2.3–2.5)	2.7 (2.5–2.8)	0.02*

Data are given as mean (95% CI). ^a Responses range from 1 to 7, where 1 indicates that a problem occurs 'none of the time' and 7 that it occurs 'a great deal of the time'. *Significant at 0.01.

Eta² ranges from 0 to 1. It measures the proportion of total variance in a dependent variable (e.g. % regular patients) accounted for by practice type.

Physician satisfaction and attitudes

Table 4 presents measures of satisfaction with practice. Scores range from 1 to 7, where 1 indicates 'not at all satisfied', and 7 'very satisfied'. Most scores are above the scale midpoint indicating moderate to high levels of satisfaction.

WIC physicians scored slightly lower than solo and group physicians on satisfaction with relationships with patients (scores of 5.5, 5.9 and 5.9 respectively); nevertheless, all scores are well above 4.0 on the 7 point response scale. There are no significant differences in satisfaction with quality of facilities. Physicians working in WICs are most satisfied, and solo practitioners least satisfied, with all other aspects of practice in Table 4: availability of consultation (5.7 for WIC physicians versus 5.0 for both solo and group physicians); availability of support staff (5.1, 4.4, and 4.6 respectively); hours

worked (5.5, 4.4, 4.0); income (4.7, 3.6, 4.0); overhead costs (3.8, 3.2, 3.7); and vacation coverage (5.7, 3.6, 4.7).

Scores on multiple item attitude measures are given in the lower part of Table 4. Scores range from 1 to 7, with scores near 1 on the first measure ('walk-in clinics result in poorer quality care') indicating that care in WICs is judged to be 'better' than care in other primary care settings; scores near 4, that quality is 'about the same'; and scores near 7, that quality is 'worse'. While no scores approach 7 (the quality of care in WICs is worse), WIC physicians express more positive attitudes toward WICs than others: they score 4.4 compared to 5.2 and 5.3 for solo and group practice physicians. A similar pattern is observed on the second measure, 'disapprove of walk-in clinics' which incorporates responses to survey items suggesting that WICs result in the fragmentation and duplication of care, less cost-effective care, and inappropriate

TABLE 4 Physician satisfaction and attitudes by practice type

Satisfaction and attitude variables	Practice type			Eta ²
	Walk-in clinic	Solo family practice	Group family practice	
Satisfaction^a				
Relationship with patients	5.5 (5.0–5.9)	5.9 (5.8–6.0)	5.9 (5.8–6.0)	0.02*
Quality of facilities	5.5 (5.1–5.9)	5.2 (5.0–5.3)	5.4 (5.3–5.5)	0.01
Availability of consultation	5.7 (5.4–6.1)	5.0 (4.8–5.2)	5.0 (4.9–5.2)	0.02*
Availability of support staff	5.1 (4.6–5.5)	4.4 (4.2–4.5)	4.6 (4.5–4.8)	0.02*
Hours worked	5.5 (5.2–5.9)	4.4 (4.2–4.6)	5.0 (4.8–5.1)	0.05*
Income	4.6 (4.1–5.0)	3.6 (3.4–3.8)	4.0 (3.9–4.2)	0.03*
Overhead cost	3.8 (3.3–4.3)	3.2 (3.0–3.3)	3.7 (3.2–3.9)	0.03*
Vacation coverage	5.7 (5.1–6.2)	3.6 (3.3–3.8)	4.7 (4.5–5.0)	0.10*
Attitudes^b				
WICs result in poorer quality care	4.4 (4.1–4.7)	5.2 (5.1–5.3)	5.3 (5.2–5.4)	0.06*
Disapprove of WICs	3.9 (3.4–4.3)	5.1 (5.0–5.3)	5.3 (5.1–5.4)	0.09*

Data given as mean (95% CI). ^a Satisfaction variables range from 1 to 7, where 1 indicates 'not at all satisfied' and 7, 'very satisfied'.

^b Attitudes variables range from 1 to 7, where higher scores measure more negative attitudes toward WICs. *Significant at 0.01.

Eta² ranges from 0 to 1. It measures the proportion of total variance in a dependent variable (e.g. % regular patients) accounted for by practice type.

TABLE 5 Analysis of variance for multiple regressions

Dependent variables	Practice type alone	MD characteristics alone	Practice type net	MD characteristics net	Total variance explained
Practice					
Regular patients (%)	0.60**	0.28**	0.31**	0.04**	0.60**
Without appointments (%)	0.17**	0.06**	0.11**	0.01	0.17**
Hours worked per week (all practice types)	0.04**	0.23**	0.01	0.21**	0.24**
Hours worked per week (main practice type)	0.19**	0.24**	0.05**	0.15**	0.29**
Hours on-call	0.02**	0.04**	0.01*	0.03**	0.05**
Problems					
Backlogs	0.03**	0.03**	0.03**	0.03*	0.06**
Doctor shoppers	0.03**	0.02*	0.02**	0.02	0.03**
Visit not warranted	0.01**	0.02*	0.01	0.03*	0.02**
Satisfaction					
Patient relations	0.01**	0.02**	0.01	0.02*	0.03**
Hours worked	0.04**	0.08**	0.02**	0.06**	0.09**
Vacation coverage	0.10**	0.06**	0.08**	0.04*	0.14**
Attitudes					
WICs result in poorer care	0.06**	0.12**	0.02**	0.07**	0.14**
Disapprove of WICs	0.09**	0.13**	0.04**	0.06**	0.17**

Figures are R² coefficients adjusted for degrees of freedom. *Significant at 0.05. **Significant at 0.01.

prescribing. On this measure, scores are also about the scale mid-point although physicians working in WICs tend to be more neutral (3.9) than solo (5.1) and group practice physicians (5.3).

Multiple regression analysis

Table 5 reports the results of ANOVA conducted as part of a series of multiple regressions. Dependent variables which revealed significant differences in the bivariate analysis are presented in the table. These include measures of practice characteristics (e.g. per cent regular patients), problems in practice (e.g. frequency of patient backlogs), satisfaction (e.g. relations with patients) and attitudes (e.g. walk-in clinics result in poorer care).

As noted earlier, the explanatory variables, entered into the regressions in two 'blocks', measure practice type (dummy variables for WIC and solo practice with group practice the omitted category), and physician characteristics (year of graduation, years in practice type, and dummy variables for female, certification, and owner). Table entries are R² coefficients, adjusted for degrees of freedom; these measure the proportion of variance explained when each 'block' of explanatory variables is entered alone into the regressions, and when it is entered after the first block. The first set of coefficients (practice type alone) thus measure the explanatory power of practice type without considering the correlated effects of physician characteristics; the estimates for practice type net reveal its impact after differences in physician characteristics are taken into account. The estimates of total variance explained measure the combined effects of practice type and physician characteristics. Note that because of the positive correlations

between practice type and physician characteristics, these total estimates are normally smaller than the simple sum of their effects when entered into the regressions alone.

Table 5 reveals that a substantial proportion (0.60 or 60%) of the variance in percentage of regular patients is accounted for by practice type alone; these effects predominate even when physician characteristics are controlled statistically. Although not presented in the table because of space limitations, the regression coefficients confirm that WIC physicians see the smallest, and solo physicians the largest proportions of regular patients. The regression coefficients also indicate that, regardless of practice type, women physicians tend to see more regular patients than do their male colleagues.

Practice type also exerts a predominate, though less marked impact on percentage of patients seen without an appointment; alone, practice type accounts for 17% of the observed variance. When practice type is controlled, physician characteristics have no significant impact. In contrast, physician characteristics have a significant impact on hours worked per week; males work longer hours than females whatever their practice type. A similar pattern is observed for hours on-call and hours in main practice type where women log fewer hours than men. Thus, while high percentages of patients without appointments appears as a defining characteristic of WICs, observed differences in hours can in large part be attributed to different gender ratios in different practice types, a finding supported by previous research.³²

Consistent with the bivariate analysis, the regressions account for relatively modest proportions of variance in frequency of problems encountered in practice. Frequency of backlogs is a function both of practice

type and physician characteristics (WIC physicians and certified family physicians perceive more backlogs). Frequency of 'doctor shoppers' is statistically related to practice type (WIC physicians report seeing more of these patients), while frequency of patients whose visit was not warranted is most strongly affected by physician characteristics (female physicians report higher frequencies than males).

Similarly complex patterns of effects are observed on measures of physician satisfaction. With respect to relations with patients, only physician characteristics persist in the multiple regressions (certified physicians and those who have worked in their practice setting for more years are more satisfied). Physician characteristics also impact on satisfaction with hours worked (females tend to be more satisfied than males). However, practice type has a more marked impact on satisfaction with vacation coverage (WIC physicians are most satisfied while owners are least satisfied).

Practice type and physician characteristics both exert a significant influence on attitudes toward WICs. WIC physicians have more positive attitudes than other physicians, as do women, more recent graduates, physicians with fewer years in their practice type, and certified physicians; physicians who own their practices are least positive toward WICs.

Discussion

Ongoing debate around walk-in clinics rests on two assumptions: first, that WICs have characteristics which clearly distinguish them from other primary care practices; and second, that these characteristics pose actual or potential problems for practitioners, patients and the health care system.⁶ Our findings suggest qualifications on both counts.

First, while we observed differences between WICs and more conventional community-based family practice types, we also observed important similarities. Physicians working in WICs do, in fact, see fewer regular patients, greater numbers of patients without appointments, and greater numbers of children; however, some walk-in care is provided in solo and group family practices, while a considerable proportion of WIC patients have appointments. To the extent, therefore, that walk-in behaviour poses real or potential problems, such behaviour is not restricted to WICs alone, nor are regular patients found solely in conventional family practices.

With respect to workloads, the data suggest that WIC physicians do not provide as many hours of care as family physicians in other comparable community-based practice types: they work fewer hours per week and fewer hours on-call. Differences are especially marked in comparison to solo practitioners who log the most hours per week and the most hours on-call. Differences are less marked in comparison to group physicians: the

Confidence Intervals for group and WIC physicians actually overlap. We found no significant differences in average time spent per patient visit by practice type. The key difference appears to be in time spent in main practice type: while physicians in solo and group practices spend most of their working hours in these practices, few of the physicians working in WICs spend more than two days per week in their WICs. Even though we concentrated our study in urban areas where WICs are most prevalent and over-sampled physicians working in WICs, we were unable to find more than a few who spent the majority of their time in their WIC practices. This could be seen to suggest that WIC physicians are less committed professionally, and by extension, that the quality of care they provide in WICs may not be up to par. However, we recall that for most of their hours, WIC physicians work elsewhere, often in conventional family practices, where their commitment and the quality of the care they provide is less likely to be questioned. In addition to sharing other organizational characteristics, WICs and family practices share physicians.

With respect to the second assumption, that WICs either promote, or are associated with real or potential problems, our findings are equivocal. The data suggest that physicians working in WICs do experience a somewhat higher frequency of problems with patients related to lack of time, patient backlogs, doctor shoppers, and patients whose conditions don't warrant a visit to a physician. However, frequencies of such problems are moderate for all physicians and differences by practice type are modest; as well, differences can be attributed in part to physician characteristics.^{32,35} For instance, compared to solo physicians who tend to be older males who are not certified as family physicians, those in WICs tend to be younger females who are certified; it seems plausible that older physicians with older and more established patient populations will encounter or perceive fewer problems than younger physicians with younger and less established patient populations (including higher proportions of children). Younger, certified, female physicians have been associated with more psycho-social, patient-centred approaches to care;^{32,35} they may be more sensitive to problems regardless of practice type.

Physician characteristics also influence satisfaction and attitudes. While a majority of physicians expressed satisfaction with most aspects of their work, physicians working in WICs were somewhat less satisfied with their relationships with patients. However, this finding did not persist in the multiple regressions: less established physicians in all three practice types were less satisfied. Physician characteristics also prevailed with respect to hours worked: women reported higher levels of satisfaction than men even after practice type was controlled. Practice type exerted its strongest influence on satisfaction with vacation coverage: physicians working

in WICs were more satisfied than other physicians. Overall, WIC physicians were more satisfied with the organizational features of their practices than other physicians.

Perhaps most importantly, WIC physicians, most of whom also worked in family practices, judged that care is neither worse nor better in WICs than in these other practices. Of course, lacking data which document the actual number and characteristics of WICs in Ontario, we cannot dismiss the possibility that our survey disproportionately gathered responses from WIC physicians in more established and possibly better managed WICs, thus contributing to an overly optimistic assessment. However, it seems unlikely that this would account for the relatively temperate assessments of WICs by physicians in solo and group practices; while less positive, these attitudes fall short of condemnation of WICs. Hinting that issues of economic competitiveness and physician autonomy may also play a role, the multiple regressions showed that physicians who owned their practices were consistently more critical of WICs than physicians who were not owners. In our earlier focus groups, some physicians in traditional family practices complained that by ‘skimming off the easy stuff’ (i.e. patients with relatively minor problems), WICs caused them to see more patients with more complex problems, thus increasing workloads, but under fee-for-service, also making it more difficult to maintain incomes.^{15,21}

In summary, therefore, our survey results are consistent with previous research studies of walk-in clinics in Ontario which have failed to demonstrate either that there are substantial differences between WICs and other family practices, or that WICs pose inordinate problems for physicians, patients and the health care system as a whole.^{12,13,18} Indeed, our data suggest that WICs may be seen to offer some advantages to physicians and patients. In our focus groups and key informant interviews, some physicians remarked that WICs were attractive to newer physicians because they allowed them to enter practice without the burden of building up a practice from scratch, and that WICs could also be attractive to more established physicians because they allowed for less administration, more predictable incomes, and more manageable hours. For patients, WICs were seen to fill a gap between increasing expectations for timely access to care and a perceived decrease in the availability of family physicians.^{15,21}

These findings raise important issues not simply about WICs, but about other forms of family practice as well. In this connection, we were struck by the fact that solo physicians were least satisfied with key aspects of their practices even though they were more established and perceived fewer problems with patients. One part of the answer may lie in the workload estimates: because they work alone, solo physicians work longer hours and they spend substantially more time on-call than other family physicians. Solo physicians also have less access to

peer support, vacation coverage is more problematic and, particularly under fee-for-service, their incomes are more sensitive to changes in demand. This finding is consistent with a well established literature in Canada,^{33,37–39} which suggests that while solo practice promotes physician autonomy, solo physicians also carry heavier administrative and economic burdens, have less access to colleagues, less predictable hours and incomes, experience more difficulties ‘keeping up’ in rapidly evolving areas such as prescribing, and they must stretch further to provide continuity of care for their patients.³⁵ Ongoing health system restructuring initiatives which result in fewer hospital beds, shorter hospital stays, and more patients with complex continuing care needs in the community, will stretch these physicians even further.⁴⁰ Our regression results also remind us that the medical profession is increasingly demographically diverse, and that more recently-established physicians, and growing numbers of women in medicine, may choose to balance professional and personal responsibilities in ways which put a greater emphasis on the latter.^{21,32}

On the demand side, even if patients prefer to see their own family physicians, they may perceive that they do not have that option.^{4,13–17,21} Indeed, to some degree, this perception appears to reflect fact: a substantial proportion of the family practices in our organizational survey did not provide after hours coverage,²⁶ nor, in Ontario, is there any real obligation for physicians to provide such coverage even to their own patients. Of course, WIC patients are younger, they are less likely to have chronic conditions requiring continuing care, and they may also be less likely to tolerate waits particularly when alternatives are accessible without direct cost. In this connection, Canadian Medicare makes no distinction between demand based on demonstrated need and demand motivated by other factors such as convenience; the needs of a working parent requiring timely care for a sick child are not differentiated from the demands of a ‘doctor shopper’.

Conclusion

In conclusion, while interpretation of the results of our physician survey should be tempered by an awareness of methodological limitations, including the fact that we have not measured the costs or quality of care directly, they suggest that walk-in clinics must be analysed within their broader context. In the case of Ontario, WICs exist within a universal health insurance system which, while eliminating economic barriers to care, has emphasized choice over accountability. Compared to an ideal of timely access to a cost-effective, integrated continuum of high quality primary care, WICs have clear shortcomings. However, our data remind us that WICs share important characteristics with other community-based family practices, and that in the context of the current

'non-system' of primary care, they may even offer some advantages to physicians and patients. Solutions to the walk-in clinic 'problem' must therefore take into account demand and supply-side factors at the systems level which have contributed to their establishment and persistence.

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Appendix

Exact wording of questionnaire items

Items introduced in Table 1 (practice characteristics by practice type)

- Of all the patients you saw [during your last typical week], what percentage were your *regular patients*, i.e. patients for whom you are their family doctor?
- During your last typical week, how many patients did you personally see . . . without an appointment?
- Of the patients you saw in your last typical week, about what percentage were children (15 and under)?
- During your last typical *week*, about how many hours in total did you work as a physician (excluding on-call)?
- How many hours did you work on-call?
- During your last typical *week* (excluding on-call), about how many hours did you work in *each* of the following practice settings? Family practice—solo practice; Family practice—shared/group practice; Family practice—community health centre (CHC); Family practice—health service organization (HSO); After hours clinic (AHC); Walk-in clinic (WIC); Emergency Department (ED); Other (please specify)
- If you schedule patients, how long is your average *scheduled patient visit*, excluding first visits and annual physicals?

Items introduced in Table 2 (physician characteristics by practice type)

- In what year did you graduate?
- How many years have you worked in this practice setting?
- Are you . . . male . . . female?
- Are you certified as a specialist in any of the following . . . Canadian College of Family Physicians?
- In each practice setting, are you an owner/partner?

Items introduced in Table 3 (frequency of problems by practice type)

How frequently do the following occur in each practice setting in which you work?

- You [don't] have time to discuss issues or concerns which may be affecting the patient's health
- A 'backlog' of waiting patients forces you to give less time than you would like to each patient you see
- You see patients who have received care from many other physicians

- You see patients whose medical condition really doesn't warrant a visit to a doctor
- You see patients who should have received medical care earlier for their medical condition
- A patient asks you to prescribe a particular drug
- You prescribe a drug or order a test to end a patient visit even though you think it may not be necessary

Items introduced in Table 4 (physician satisfaction and attitudes by practice type)

Thinking about your current work as a physician in each practice setting, how satisfied or dissatisfied are you with:

- Relationship with patients
- Quality of facilities
- Availability of consultation
- Availability of support staff
- Number of hours worked
- Income
- Overhead costs
- Availability of vacation coverage

Multiple-item measures

The measures of attitudes are multiple-item variables constructed by first selecting groups of related questionnaire items and then confirming their dimensionality by use of factor analysis and reliability coefficients (alphas). Variable scores were computed by summing and averaging the values of the component items; in some cases the response scales were reversed so as to be consistent with the "direction" of the other items. The advantage of these average scores is that they conserve the original response scales which in this case range from 1 to 7 so that higher scores represent more negative attitudes toward walk-in clinics.

Walk-in clinics result in poorer quality care (Alpha = 0.81)

- The training and qualifications of physicians working in WICs is the same, better or worse than physicians in family practice?
- Compared to physicians in family practice, the ability of the walk-in clinic physicians to make decisions in the best interests of their patients is the same, better or worse?
- The overall quality of primary care provided in WICs is the same, better or worse than in family practices?

Disapprove of walk-in clinics (Alpha = 0.81)

- WICs lead to the fragmentation of care
- WIC visits are often [less] cost-effective than emergency department visits
- WICs lead to the overprescription of medications such as antibiotics
- WICs lead to duplication of primary care services
- The government should [discourage] the development of more WICs in response to hospital restructuring