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Walk-in primary medical care centres: lessons from Canada

Melvyn Jones

Editorial by Hutchison

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The current reforms of the United Kingdom's primary healthcare sector intend to improve accessibility to health care.[1] One of the proposals is to introduce "walk-in" primary care centres.[2] The intention is to pilot "a series of nurse led centres which can be used on a 'drop in' basis, providing minor treatment, health information and self help advice."

The Canadian medical system has many similarities to the British system. Canada's health system is funded through general taxation (and Medicare premiums),[3] and its general practitioners (family physicians) have a gatekeeper role to secondary care in most provinces. Canada has had walk-in centres for over 20 years. However, these centres are a doctor led service. The lessons learnt in Canada about walk-in centres may be relevant to the NHS. In this article I review the available literature about Canadian walk-in centres.

Summary points

- United Kingdom and Canadian health care have many similarities, and Canada has had walk-in primary care centres for over two decades
- United Kingdom walk-in centres will be nurse led (with limited prescribing), unlike the Canadian centres, which are doctor led
- Evidence exists of lack of continuity between walk-in centres and general practices in Canada
- Patients are mainly adults under 35 and children with minor medical conditions (respiratory infections)
- Elderly people and those with chronic medical conditions attend relatively less
- Walk-in centre costs represent about 3% of total first contact health expenditure

Methods

I conducted a search using standard techniques on Medline and PubMed, with manual search and search by author. The MeSH phrases used were "walk-in," "primary care," "family medicine," and "ambulatory care."

I have included papers from Canada and the United Kingdom. Papers from the United States and other countries and those covering open access to secondary care or special needs groups (such as drugs programmes) were excluded. The initial PubMed search identified 147 items, and Medline identified 66. Further examination showed a total of 28 (24 included) relevant articles including service evaluations, letters, and a literature review from 1989. The table shows the papers presenting original data. There were no published evaluations of nurse led walk-in clinics in Canada.

Background

Walk-in centres are defined as "a facility that is physically separate from a hospital, has extended hours of service, and which accepts patients without an appointment or a referral."[13] They are a feature of many healthcare systems, particularly the United States, Australia, and Canada. Walk-in centres originated in the United States as free standing emergency centres in 1973, bridging the gap between "family physicians and overburdened emergency departments, by providing a non appointment service."[13] They evolved into "urgent care centres" in the 1980s, with a greater primary care role and a diminishing role in emergency care. These centres crossed into Canada in 1979.[7]

There are two main types of service in Canada. A walk-in centre has extended opening hours and little connection to local doctors. The second model is the "after hours" services (similar to general practice cooperatives in Britain) with links to family practices.[8] Large numbers of walk-in clinics and after hours services operate in Canada, but the exact number is not available as they are not recognised as separate health providers from other family physician services.[5]

Walk-in primary care clinics in Canada can provide an extended range of investigations and treatments. Some also include pharmacies, social services, physiotherapy, secondary care services,[14 15] and commercial services such as tanning salons.[5]

Continuity of care

Continuity of health care is one of the main concerns with walk-in centres. Borkenhagen raises "concern

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Summary of studies relevant to Canadian walk-in centres

Authors	Year	Study setting	Nos in study	Methods
Feldman and Cullum[4]	1984	Paediatric walk-in centre	400 families (99% response rate)	Cross sectional, administered patient questionnaire
Miller et al[5]	1989	Walk-in centre	42 clinics (77.8% response rate)	Descriptive study of service provision
Rizos et al[6]	1990	Walk-in centre	416 (85% response rate)	Cross sectional, patient questionnaire
Bell and Szafran[7]	1992	Family practice	145 attended walk-in centre, 386 not attended walk-in centre (94% response rate)	Retrospective survey, patient questionnaire
Rachlis[8]	1993	After hours clinics	1511 cases	Retrospective notes survey
Burnett and Grover[9]	1996	Emergency departments	200 "consecutive patients" (99% response rate)	Cross sectional, patient questionnaire
Grad et al[10]	1998	Family practice (hospital based)	584 (71.7% response rate)	Cross sectional, patient questionnaire
Weinkauf and Kralj[11]	1998	All primary care incuding emergency departments	8 million consultation billing claims	Cross sectional study (using billing data)
Szafran and Bell[12]	2000	Family practice	403 (89.6% response rate)	Retrospective survey, patient questionnaire

about fragmentation of care and inadequate follow up [of] chronic conditions."[14] Only 47% of Toronto clinics routinely inform the patient's general practitioner of the attendance, although 79% do so on request.[5] Although 79% of patients attending these centres in one study had a regular doctor, most (75%) had not tried to contact him or her.[6] Only 20% were concerned that they saw a different doctor at each visit.[6] Szafran and Bell also found that although 73-79% of patients could contact their own doctor during evenings and weekends, only 26% did so before attending.[12]

After hours centres attract a different patient base, with 96.5% of patients having a general practitioner.[8] In a survey of a paediatric clinics (regarded as primary care in some provinces), only 39% of carers had tried to contact their doctor.[4] This is despite 85% having a paediatrician and 67% a general practitioner.

Workload

A retrospective survey of family practice patients found that use of walk-in centres was high, with over a quarter (27.3%) of patients having visited in the past six months; 37% of these had visited more than once.[7] Eight years later use remained at 27.5% (95% confidence interval 0.23 to 0.31).[12] Feldman and Cullum found that 95% of patients had attended a paediatric walk-in clinic more than once within the past 12 months and 43% within the past month.[4] In a hospital based family practice population, 38% of patients attended a walk-in clinic for "their last emergency."[10] Weinkauf and Kralj's study of billing shows that walk-in consultations constitute 2.5% of all first patient contacts and that after hours services constitute 1.4%.[11]

The only published study examining the interaction of walk-in centres and emergency departments describes events leading to the visit but not the impact on workload; 62% of patients attending the emergency department had general practitioners, and 59% had used walk-in clinics.[9]

Unmet medical need

The most common reasons for attending walk-in centres were their convenient location, minor medical problems, and convenient hours.[7] A long wait for an appointment with the patient's own doctor was only the fourth most common reason.[7] Rizos et al found a third of users attended because of the convenient location and 16% because "they couldn't see their doctor soon enough."[6] Among people using the paediatric walk-in clinic, 39% used it because of the range of services and "convenience of the hours."[4]

Szafran and Bell found that 43% of patients used walk-in clinics during weekday hours of 9 am to 5 pm, 18% after 5 pm, and 29% at weekends.[12] Weinkauf and Kralj observed that 20% of patients at walk-in centres attend at the weekend, compared with only 4% at "office based" practices.[11]

The illnesses of patients attending walk-in centres reflect those seen in primary care. The most common diagnosis is upper respiratory tract infection (ranging from 33% to 51% of cases).[8 6 11] Chronic conditions are seen more frequently in general practices than in walk-in centres: diabetes (2.0% *v* 0.4% of case load), hypertension (6.4% *v* 1.5%), and osteoarthritis (1.8% *v* 0.3%).[11] Family planning consultations are more common in walk-in centres than office based practice (2.0% *v* 1.3%).[11]

User demographics

Centre users in one study were predominantly female (68%), aged 20-29 (30%), and not working.[7] This may, however, reflect the population attending family practices. A recent study found that 74% of those attending walk-in clinics were women compared with 71% attending office based practices.[12] In a cross sectional survey of after hour clinics, women aged 21-50 accounted for 30% of users.[8]

Children and younger adults (<35) were more likely to attend walk-in centres than those aged over 35.[12] This pattern is similar in after hours clinics.[8] It has been stated that "Family physicians have tended to abandon the needs of their patients, especially working families."[16] Conversely, walk-in services may not be meeting the needs of the older population.

Effect on demand for care

An important concern about walk-in centres is that they increase (potentially unnecessary) medical demand. There are no published studies exploring

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J CLEVERLEY

Walk-in centre in Vancouver, British Columbia

whether walk-in clinics have increased primary care activity.

Perhaps an indicator of demand, rather than need, is the patient's perception of urgency. The paediatric survey showed that 39% of patients had had symptoms for less than 24 hours.[4] Rizos et al explored acceptable waiting period for medical attention among walk-in patients; 15% responded "minutes," but a cumulative total of 63% wanted to be seen with in 12 hours.[6] However, only 1% were referred on to emergency departments, suggesting this urgency may not be justified. Rachlis found that only 4% of patients attending after hours services were referred to secondary care.[8]

Concern exists in Canada about the concept of "double doctoring" (unnecessary duplication of consultations). Bell and Szafran observed that 46% of patients attending walk-in clinics later attended their doctor for the same condition, 67% with seven days.[7] Weinkauf and Kralj showed a small increase in follow up rates at 72 hours for people attending walk-in clinics (27%) compared with general practice consultations (22.7%).[11]

Patient satisfaction

In Bell's study of walk-in clinics, satisfaction was high, with 73.8% of users saying they were satisfied and would visit again.[7] Rizos et al found that 83% of users were satisfied.[6] Among patients attending emergency departments, knowledge of walk-in clinics was high (70-73%), but only 34% had a positive opinion of the clinics.[9] Those who were dissatisfied felt that the doctors were of "poor quality."

Doctors' attitudes

There are no surveys of doctors' attitudes, but a measure of their views can be obtained from the medical journals. General practitioners are concerned about quality of care and "cherry picking" by walk-in centres, leaving the traditional general practice service with the complex patients. Burak's accusation of walk-in clinics servicing a "high volume, low intensity" workload[17] has some support from Weinkauf and Kralj's study.[11] There is also concern about walk-in centres increasing demand by removing barriers to care. A doctor at a meeting of the College of Family Physicians of Canada warned that "any way we train patients to use services inappropriately … may inadvertently be teaching people to demand care at ever lower levels of distress."[16] Makin condemns this style of care as "McDonald's medicine."[18] However, a walk-in centre director responds, "Convenience, cleanliness and consistency are all selling points … a McDonald's kind of concept."[19]

Some argue that criticism of walk-in centres is unsubstantiated and anecdotal.[20] Rowlands and others suggest that as "Medicine is a … marketable product," doctors need to "do it or lose it," by providing after hours clinics.[19 21 22]

Costs

An economic study using routine billing data (Ontario Health Insurance Plan) shows that walk-in centres accounted for 3% of total (including emergency department) first patient contact costs.[11] The authors note some limitations of the methods. An unpublished Manitoba health report states that "If [walk-in clinics] increase costs, it is probably marginally."[14] Cost is central to many arguments. Toews for example, states that walk-in clinics "drive up the cost … due to unnecessary visits and duplication."[23]

Future of walk-in centres

The future of walk-in clinics seems assured, despite a possible change to Canadian primary health care with the introduction of "rostering" (a modified capitation payment system with a 24 hour commitment). The Canadian College of Family Physicians and provincial colleges of physicians and surgeons (which have a role similar to the General Medical Council) acknowledge that these centres are "here to stay."[14]

One centre owner says that walk-in clinics "will have to incorporate a strong family medicine component. It will be an exception … that survives strictly as an episodic care centre."[21] However, in Toronto, several walk-in centres have gone out of business "through overly aggressive expansion."[19] Nevertheless, it seems certain that the growing strength of these clinics "will inevitably challenge all doctors to meet the demand for a more convenient service."[19]

Conclusions

The studies included in this article have been criticised for their small local samples and self reporting.[11] Population based surveys, more health economic studies, and comparative studies are needed. Nevertheless, the results give important information about Canadian walk-in centres. It is unclear, however, how applicable this will be to the nurse led services in the United Kingdom.

The finding of most concern is the lack of continuity of clinics with established primary care, which may have important long term cost and quality implications. The total costs (at only 3% of total primary care) are surprisingly low. The studies do not tell us anything about the effect of walk-in clinics on demand for health care, although one study found that the rate of use remains stable at eight years.

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Effect of needle length on incidence of local reactions to routine immunisation in infants aged 4 months: randomised controlled trial

Linda Diggle, Jonathan Deeks

Abstract

Objective To compare rates of local reactions associated with two needle sizes used to administer routine immunisations to infants.

Design Randomised controlled trial.

Setting Routine immunisation clinics in eight general practices in Buckinghamshire.

Participants Healthy infants attending for third primary immunisation due at 16 weeks of age: 119 infants were recruited, and 110 diary cards were analysed.

Interventions Immunisation with 25 gauge, 16 mm, orange hub needle or 23 gauge, 25 mm, blue hub needle.

Main outcome measures Parental recordings of redness, swelling, and tenderness for three days after immunisation.

Results Rate of redness with the longer needle was initially two thirds the rate with the smaller needle (relative risk 0.66 (95% confidence interval 0.45 to 0.99), P = 0.04), and by the third day this had decreased to a seventh (relative risk 0.13 (0.03 to 0.56), P = 0.0006). Rate of swelling with the longer needle was initially about a third that with the smaller needle (relative risk 0.39 (0.23 to 0.67), P = 0.0002), and this difference remained for all three days. Rates of tenderness were also lower with the longer needle throughout follow up, but not significantly (relative risk 0.60 (0.29 to 1.25), P = 0.17).

Conclusions Use of 25 mm needles significantly reduced rates of local reaction to routine infant immunisation. On average, for every five infants vaccinated, use of the longer needle instead of the shorter needle would prevent one infant from experiencing any local reaction. Vaccine manufacturers should review their policy of supplying the shorter needle in vaccine packs.

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Introduction

As part of the UK childhood immunisation schedule, infants routinely receive diphtheria, pertussis, and tetanus (DPT) vaccine and *Haemophilus influenzae* type b (Hib) vaccine at 2, 3, and 4 months.[1] Nationally available guidelines advise practitioners to administer primary vaccines to infants by deep subcutaneous or intramuscular injection using either a 25 or 23 gauge needle but give no recommendation regarding needle length.[1] The question of optimum needle length for infant immunisation has not previously been addressed in Britain, despite calls from nurses for evidence on which to base immunisation practice. We conducted a randomised controlled trial of the two needle sizes currently used by UK practitioners to determine whether needle size affects the incidence of redness, swelling, and tenderness.

Participants and methods

Participants

Eight of 11 general practices approached in Buckinghamshire agreed to participate in the study. Practice nurses recruited healthy infants attending routine immunisation clinics. Parents received written information about the study when attending for the second primary vaccination and were asked if they wished to participate when they returned for the third vaccination. The only exclusion criteria were those normally applicable to a child receiving primary immunisations.[1]