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Do NHS walk-in centres in England provide a model of integrated care?

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Abstract

Purpose: To undertake a comprehensive evaluation of NHS walk-in centres against criteria of improved access, quality, user satisfaction and efficiency.

Context: Forty NHS walk-in centres have been opened in England, as part of the UK governments agenda to modernise the NHS. They are intended to improve access to primary care, provide high quality treatment at convenient times, and reduce inappropriate demand on other NHS providers. Care is provided by nurses rather than doctors, using computerised algorithms, and nurses use protocols to supply treatments previously only available from doctors.

Data sources: Several linked studies were conducted using different sources of data and methodologies. These included routinely collected data, site visits, patient interviews, a survey of users of walk-in centres, a study using simulated patients to assess quality of care, analysis of consultation rates in NHS services near to walk-in centres, and audit of compliance with protocols.

Conclusion & discussion: The findings illustrate many of the issues described in a recent WHO reflective paper on Integrated Care, including tensions between professional judgement and use of protocols, problems with incompatible IT systems, balancing users' demands and needs, the importance of understanding health professionals' roles and issues of technical versus allocative efficiency.

Keywords

integrated care, health services, health care reform, access to health care, skill-mix

Aims: policy background

Forty NHS walk-in centres have been opened in England, representing an investment of approximately €440 million over 3 years. The reasons for the development of walk-in centres can be understood within the context of the UK governments' commitment to 'modernise' the National Health Service (NHS), which has also led to the telephone help line NHS Direct. Several themes are apparent in these developments, which reflect concepts of integrated care.

The first is improving accessibility, based on the perception that people sometimes find it difficult to access health care quickly from general practice. In the UK, individuals are personally registered with one general practice near their home address, and cannot receive treatment from another practice except in an urgent situation. Although this system has advantages for many people, for certain groups such as commuters, the homeless, tourists and travellers, it can cause difficulty with access.

The second theme is of making the NHS more responsive to modern lifestyles. Just as people increasingly expect to be able to shop in the evenings and at weekends, so it is argued that people should be able to access health care without taking time off work.

The third theme is of increasing skill-mix, and in particular maximising the role of nurses. It is intended that walk-in centres (and also NHS Direct) will reduce the load on doctors, enabling them to concentrate on problems that require their skills.

Processes: description of NHS walk-in centres

Although individual walk-in centres vary considerably, reflecting their different settings, they have characteristic organisational features. These include having

extended opening hours (normally 7.00 a.m. to 10.00 p.m. every day), and offering walk-in access, without an appointment. Centres are sited in central locations such as town centres or existing hospital sites. Walk-in centres provide immediate treatment for minor health conditions but also provide people with information to enable them to manage problems themselves, thus reducing the workload of general practices and emergency departments. Walk-in centres are intended to complement existing medical services, not compete with them or duplicate them, by providing care for people who do not need the skills of doctors or expensive medical facilities.

In marked contrast to walk-in centres in North America, NHS walk-in centres in the UK are led by nurses rather than doctors [1]. These nurses use protocols within computerised assessment systems that help them to determine how to manage the patient, and whether to treat them within the walk-in centre or refer them to a doctor. Following the consultation, the system automatically faxes structured details of the consultation to the patient's general practitioner in order to maintain continuity of the medical record. Nurses can supply certain drug treatments, which were previously only available with a prescription from a doctor, by following Patient Group Directions. These specify treatments for common health conditions, such as emergency contraception or antibiotics for urinary tract infections.

NHS walk-in centres also have a role in health promotion. Some run courses to support people wanting to give up smoking or lose weight, and others have Internet booths with public access to enable people to use the on-line version of the NHS Direct.

The defining features of the role of nurses in NHS walk-in centres which distinguish them from nurses working in primary health care in other countries, are the fact that they work in an office based system almost entirely independently of doctors, and the way in which they seek to provide a comprehensive first contact service for undifferentiated health problems, supported by the use of computerised clinical assessment software. This contrasts with the role of nurses in most health care systems, where nurses provide a limited range of services (usually involving practical nursing procedures) and often as part of a team, which includes doctors.

Outcomes: comprehensive evaluation

As in other countries, the establishment of NHS walk-in centres met with considerable hostility from some sections of the medical profession [2–4]. Partly in response to this controversy, the UK government commissioned a comprehensive independent evaluation of NHS walk-in centres. This was influenced by the model of 'realistic evaluation', which argues that evaluation of outcomes must be based on an in-depth enquiry into local context and a thorough understanding of the mechanism of the intervention under study [5]. Attention needs to be given to where, why and how some centres are more successful than others.

The evaluation of NHS walk-in centres therefore had three components [6]. The first component was a descriptive evaluation of the structure, context and activities of each centre, with the intention of categorising walk-in centres into a number of types to enable internal comparisons between different models. The second component assessed the impact of walk-in centres against five outcome criteria—improved access to health care, quality of care, appropriateness of care, impact on other NHS providers and efficiency. The third component of the evaluation was a qualitative assessment of the factors associated with the success or failure of different centres to achieve their objectives.

Research methods

Several empirical studies were conducted in order to collect data for the evaluation, which are summarised below.

Managers of each walk-in centre were sent a short postal questionnaire survey at the beginning of the evaluation to collect information about setting, staffing and services provided. This was followed by a site visit or a telephone interview.

Each walk-in centre provided monthly data about activities and costs to the Department of Health. This was amalgamated to provide information about characteristics of patients visiting walk-in centres and activity data for the economic evaluation. In addition, detailed case-by-case records of anonymised consultations were obtained from 12 walk-in centres, which were used to explore in detail, the patterns of activity.

A questionnaire survey was conducted of a sample of patients consulting in each walk-in centre, along with a sample of patients consulting in a general practice nearby. In order to compare similar types of patients, only those people consulting in general practice on a 'same-day' basis were included, excluding those with pre-booked appointments. Following this survey a 1 in 5 sub-sample of patients was contacted again four weeks later, to explore patterns of use of health services following the initial consultation.

A series of 54 interviews were conducted with patients consulting in walk-in centres in order to explore the patients' experiences qualitatively. Interviews were also held with 50 of the nurses these patients had consulted.

To determine the impact of walk-in centres on the workload of other local providers, an analysis was conducted of the number of consultations in nearby general practices, Emergency Departments and general practice out-of-hours organisations in the year before and after walk-in centres opened. In addition, a postal survey was carried out to explore the perceptions of other NHS health professionals working near to each walk-in centre.

Quality of care was examined in three ways. Firstly, the survey of service users (described above) provided data about patients' subjective experience, which is arguably the best measure of quality in this type of service. Secondly, simulated patients playing 5 different scenarios carried out 100 consultations in NHS walk-in centres. These actors also carried out the same number of consultations in general practice and made telephone calls to the telephone help-line, NHS Direct. Visits and telephone calls were made covertly, and the actors scored the performance of each centre using predetermined criteria, which had been tested for reliability. Thirdly, an audit was carried out of the extent to which walk-in centre nurses complied with guidelines when using Patient Group Directions to supply antibiotics.

As the final component of the evaluation, semi-structured follow-up interviews were conducted with managers at each centre towards the end of the evaluation to identify barriers and facilitators to the establishment of walk-in centres.

Results

The key findings from these studies are summarised below.

Access to health care

NHS walk-in centres attracted a different population from that attending nearby general practices, including more men of working age, and fewer children and elderly. Those attending walk-in centres had higher levels of education and affluence. The main reasons that people chose to attend a walk-in centre rather than a general practice were speed of access, convenience of location or opening hours [7].

Waiting times for consultations were shorter (median 10 minutes) and consultation times were longer (median 14 minutes) than is typical of UK general practice [8].

Quality of care

People were very satisfied with the care they received in both walk-in centres and general practice, but more satisfied with walk-in centres [7]. In the study using standardised patients, walk-in centres provided a quality of care, which was at least as high as in general practices [9].

Appropriateness of care

Both patients attending walk-in centres and the nurses they consulted felt that attendance at a walk-in centre was entirely appropriate for their problem. It was notable that staff tended to justify all consultations as appropriate [6].

Impact on other NHS providers

About half of all centre users said they would have attended a general practice if the walk-in centre had not existed, a quarter would have attended an A & E department, and a tenth would have managed the problem themselves [7]. Following the consultation 13% of patients were referred from the walk-in centre to a GP and 6% to an Emergency department, but 32% intended to make a GP appointment [7]. There was a trend towards reduced consultation rates at general practices and emergency departments close to walk-in centres, but this was not statistically significant [10].

Efficiency

The cost of providing care in walk-in centres was higher than the cost of the alternative that patients specified they would have used if the walk-in centre did not exist, and considerably higher than the cost of a typical consultation within general practice [6].

Discussion

Many of the aims of walk-in centres are based on concepts of integrated care. By providing an easily accessible first point of contact, they help people to manage problems themselves, provide simple treatments for minor illnesses, and direct people to the most appropriate health service provider for their needs. In theory this should reduce demand and inappropriate attendance at expensive health service

facilities such as emergency departments, improve the accessibility of care and provide increased user satisfaction with the health service, and maximise the efficiency of the system as a whole. The use of computerised clinical assessment software should enable nurses to provide consistent high quality care.

The experience of NHS walk-in centres illustrates several of the points recently described in a conceptual paper about integrated care from the World Health Organisation [11], demonstrating that several issues need to be considered in order to achieve the benefits described above.

Balancing demands and needs

To maximise health gain for the population as a whole it would be ideal to preferentially improve access to those groups with the greatest health needs. However, the walk-in centre model, with its emphasis on quick accessibility, wide opening hours and convenient town centre locations, is likely to be most attractive to those who are working or shopping. These groups tend to be those who are at least risk of health problems, in contrast to the elderly, the housebound or the mentally ill. Evidence from other countries suggests that walk-in centres may increase access primarily for the affluent [1], and this finding is supported by evidence from the UK evaluation [6]. Walk-in centres represent another example of the inverse care law, whereby health care resources tend to be disproportionately spent on those groups at least risk, thereby increasing health inequalities.

Increasing total demand

It is important to consider whether walk-in centres improve access for conditions that people would have otherwise presented to another health provider, or whether they meet new demand that would not have presented to the health system at all. If new demand is being generated this may be appropriate if the service is meeting important needs, which were previously being neglected because of problems of access. However, increased accessibility of care may increase total demand on the NHS with little or no health gain if patients primarily consult with minor self-limiting illnesses. In addition, this type of new service may further medicalise minor problems, undermining peoples' confidence in their ability to solve their own problems without medical advice. If a high proportion of patients are then referred from walk-in centres to GPs or emergency departments this may increase demand on these services.

Although these are important issues for health service planning, it is difficult to provide clear answers from the evaluation of NHS walk-in centres. According to the patient survey, most people claimed they would have attended a GP or an emergency department if the walk-in centre had not existed. However, the objective assessment of workload in these services close to walk-in centres did not reveal any statistically significant reduction in workload.

The impact on continuity of care

One purpose of an integrated system is to provide continuity and consistency of care. Given a well-functioning system of integrated records it should be possible for an individual to consult different providers within the health care network (whichever is most accessible and appropriate for their problem) but for all providers to have access to the same patient record. However, this idealised situation is far from achievable in the NHS currently, for reasons discussed below. In addition, although continuity of records may theoretically be possible in an integrated system, placing emphasis on accessibility and sending people to the most appropriate health professional may be at the expense of personal or longitudinal continuity. The lack of continuity provided by walk-in centres may lead to duplication (people consulting different agencies about the same problem) and inappropriate care (due to inadequate medical records about previous history).

Problems with information technology

Information technology (IT) offers exciting potential for the re-design of more integrated systems for the organisation and delivery of health care. However, it is vital not to underestimate the problems, human as well as technical, which may need to be overcome. It is also important to resist the temptation to use an overly complex computerised solution when this is not necessary or appropriate. The implementation of NHS walk-in centres provides examples of these issues.

The concept of the NHS walk-in centre was influenced by the earlier experience of NHS Direct. In this telephone advice service, nurses in centralised call centres follow computerised algorithms to assess and advise patients. Evaluation has suggested that this system was popular with patients, although call times were relatively long raising doubts about efficiency [12]. The use of similar software in NHS walk-in centres has highlighted the fact that programs developed for telephone consultations have major limitations when used for face-to-face consultations.

Clinical assessment software is based on an underlying assumption that people have clearly defined

problems, which, if accurately assessed, lead to specific management solutions. The evidence from medical sociology suggests that patients' reasons for consulting are multiple and complex and that a linear and mechanistic approach to their presenting complaints is unlikely to be appropriate. A recent literature review has highlighted the lack of evidence to support the view that clinical assessment software has a useful role in primary health care [13].

Although consultations in walk-in centres are conducted following computerised protocols, the information collected is not coded in any standard format. This will be essential so that walk-in centre records can integrate with other parts of the NHS. In order for different health providers to share a common record major obstacles need to be overcome because different general practices and hospital services in the UK use a wide variety of incompatible software and are currently at very different levels of computerisation.

Tension between professional judgement and the use of protocols

Different walk-in centres have taken different approaches to the level of staffing, use of skill-mix and experience required when employing nurses. Some centres have argued that because the nurses would be advising people supported by computerised clinical assessment software, they did not need high levels of training in primary care. Others have argued that the nurses provide first contact care to a wide variety of undifferentiated problems, requiring considerable expertise and experience, and have only employed nurses with formal degree level training as nurse practitioners. These more highly trained nurses experience tensions between the extent to which they should use professional autonomy in making decisions and the extent to which they should rely on the clinical assessment software.

Professional roles

The decision to staff walk-in centres with nurses rather than doctors (which is the norm in other countries) probably reflects certain underlying assumptions, but these have not been made explicit. It was probably assumed that because the health problems presented to walk-in centres were likely to be relatively minor, they did not require the expertise offered by a doctor, but could be managed by a nurse who had a less extensive training and who is less expensive to employ.

Several of these assumptions deserve further discussion. Firstly, although most of the problems presented in walk-in centres are minor, this is not always clear at the outset, and an important function of primary care is to detect rare but serious conditions. Secondly, it should not be assumed that employing nurses is necessarily less expensive than employing doctors.

Many factors need to be considered, but the longer consultations provided by nurses both in the walk-in centre evaluation and in other research with nurse practitioners in UK general practice [14], *and* the fact that a proportion of patients consulting a nurse have to be referred to a doctor, may mean that changes that seem efficient may not necessarily be so.

Thirdly, although there are more nurses than doctors in the workforce, the number who have a suitable background to work in a walk-in centre is limited. Many walk-in centres recruited their nurses from experienced staff working in nearby general practices, community nursing, or emergency departments. Improving service provision in one way may have serious adverse consequences on other local services competing for the same staff.

Finally, it should not be assumed that nurses are necessarily more appropriately trained to deal with minor illness than doctors. Within the UK, both professional groups currently receive relatively little training in this type of work. Along with the introduction of a new type of service, careful consideration should be given to the type of training that is necessary for staff.

Tension between a clear national identity and local control

When NHS walk-in centres were first developed there was an emphasis on planning services to meet local needs. Therefore the first 40 walk-in centres developed very differently in terms of their structure and the range of services provided. This had some advantages because it allowed various models of organisation to be tested quickly in different sites. However, for users it was the cause of some confusion about the services that a walk-in centre could provide and made it difficult to give walk-in centres a clearly understood identity.

The whole system perspective

If the walk-in centre concept is to add value to existing services it is important to define the particular contribution that walk-in centres can make that other services cannot. There is currently some ambiguity about the role of walk-in centres in an increasing crowded health care economy in the UK, with many overlapping

initiatives to improve access to care. For example, pharmacists are promoting their role in providing health advice, general practices are employing nurse practitioners to provide same day access for minor illness and are utilising new approaches to enable rapid access to a doctor, some emergency departments are employing nurse practitioners, NHS Direct offers telephone advice and GP out-of-hours co-operatives are providing primary care centres in the evenings and at weekends. Multiple agencies offering similar services can offer greater choice for different groups of patients. However, they may also lead to confusion, inconsistent messages to patients, inefficiency and duplication of effort.

Different services may function well when examined in isolation, but it is important to consider the organisation of the system as a whole. At a 'macro' level it is necessary to have a coherent vision of what each service (walk-in centres, general practice, pharmacy, A & E, GP co-operatives) offers and how they fit together. This may lead to a re-configuration or merger of some services, for example of walk-in centres with primary care centres, or walk-in centres with minor injuries units.

Efficiency

One aim for NHS walk-in centres was to improve the efficiency of the NHS by diverting people from expensive medical services and promoting self-care. However, achieving an accessible 'no-wait' service requires a high level of staffing which leads to high costs per consultation and nurses may have long consultation times which also increases costs. A triage service is only efficient if it provides care more cheaply than other providers and diverts patients away from those providers. The evidence from the evaluation of NHS walk-in centres is that the reverse is true. To some extent they provide an additional service, and to some extent they substitute for existing services by providing a more expensive option, thus reducing the efficiency of the system as a whole.

This is a problem of technical efficiency, which is the least costly way to achieve a desired outcome. NHS walk-in centres also raise questions of allocative efficiency, which is whether investment in walk-in centres is the best way of using limited resources to achieve maximum health benefits. One must balance the importance of investing in improving the accessibility of care for minor self limiting illness against competing priorities within the NHS, such as the long waiting lists for hospital care for people with life threatening illness.

Lessons for the future

In summary, walk-in centres have been generally successful in meeting their aims and appear to provide accessible, high quality care, which is popular with patients. However, this is achieved at greater cost and the investment is not targeted at those with the greatest health needs. How can these findings be useful to health policy-makers in the UK and in other countries, as they seek to maintain the features that make walk-in centres popular with patients while increasing efficiency?

It is clear that walk-in centres can make a potentially useful contribution by providing a quick and convenient route to obtaining health care for those who find other services inaccessible. Problems arise because NHS walk-in centres are largely disconnected from other components of the local health care economy. There is scope for a single route of entry to primary care, which encompasses and integrates (probably in one building) the services currently provided by walk-in centres, GP out-of-hours co-operatives, accident and emergency departments, and out-of-hours pharmacies. This organisation would need very close links with the telephone help line NHS Direct and with ambulance services. An individual requesting help, whether in person or by telephone, would receive consistent advice and quickly be directed to the most appropriate source of care. For this to be efficient, these triage decisions have to be made rapidly, and the clinical assessment software in current use will need considerable further development.

Future research

Some would argue that the type of integrated urgent care centre described above could operate during the day as well as during the evenings and weekends, in order to make full use of the available facilities. An important issue for research will be to compare investment in this type of large centralised system against the alternative model of increasing access by employing more nurses in existing general practices to provide similar services but without the need to build entirely new facilities. Such a model is likely to be more economical and easier to implement, and would also have the advantage of integrating the nurses more closely with other members of the primary health care team.

Another important priority for research is further evaluation of computerised clinical assessment software in face-to-face consultations, particularly the balance between the use of information technology and professional autonomy. Finally, a longer prospective con-

trolled study is needed to establish whether improving access to health care using walk-in centres increases demand by meeting previously unmet need, whether it substitutes for existing demand presenting to other health agencies, or whether it increases total demand and health care expenditure but without health gain.

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Vitae

Chris Salisbury Dr. is a General Practitioner with an academic interest in the organisation and delivery of primary health care, and the implications of new models of organisation on the core values of general practice. This includes studies of out-of-hours care and GP co-operatives, NHS Walk-in Centres, and nurse practitioners.

References

1. Salisbury C, Munro J. Walk-in centres in primary care: a review of the international literature. British Journal of General Practice 2003;53:53–9.
2. May P. Walk-in health centres are a politician's folly. Nursing Times 2002;98:38–9.
3. O'Connell S. The introduction of walk in health centres – the end of general practice? British Medical Journal 1999;318:1146.
4. RCGP. Discussion paper on the implications for general practice of NHS Direct and walk-in centres. London: RCGP/ NHS Alliance; 1999.
5. Pawson R, Tilley N. Realistic evaluation. London: Sage; 1997.
6. Salisbury C, Chalder M, Manku-Scott T, Nicholas R, Deave T, Noble S, et al. The National Evaluation of NHS Walk-in Centres: Final report [Online]. Bristol: University of Bristol; 2002 July. [cited 2003 Mar 12]. Available from: URL:http://www.epi.bris.ac.uk/wic/pdf/WIC%20Evaluation%20Report%20-%20Final.pdf.
7. Salisbury C, Manku-Scott T, Moore L, Chalder M, Sharp D. Questionnaire survey of users of NHS walk-in centres: observational study. British Journal of General Practice 2002;52:554–60.
8. Salisbury C, Chalder M, Scott TM, Pope C, Moore L. What is the role of walk-in centres in the NHS? British Medical Journal 2002;324:399–402.
9. Grant C, Nicholas R, Moore L, Salisbury C. An observational study comparing quality of care in walk-in centres with general practice and NHS Direct using standardised patients. British Medical Journal 2002;324:1556–9.
10. Chalder M, Sharp D, Moore L, Salisbury C. Impact of NHS walk-in centres on the workload of other local healthcare providers: time series analysis. British Medical Journal 2003;326:532.
11. Gröne O, Garcia-Barbero M. Trends in Integrated Care – Reflections on Conceptual Issues [Online]. Copenhagen: World Health Organisation; 2002. [cited 2003 Jan 8]. Available from: URL:http://www.euro.who.int/document/ihb/trendicreflconissue.pdf.
12. Munro J, Nicholl J, O'Cathain A, Knowles E, Morgan A. Evaluation of NHS Direct first wave sites: final report of the phase 1 research. Sheffield: MCRU University of Sheffield; 2001.
13. Department of Health. Reforming Emergency Care. First steps to a new approach. London: Department of Health; 2001.
14. Horrocks S, Anderson E, Salisbury C. Systematic review of whether nurse practitioners working primary care can provide equivalent care to doctors. British Medical Journal 2002;324:819–23.