The National Evaluation of NHS Walk-in Centres

Final Report

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The National Evaluation of NHS Walk-in Centres

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Executive summary

The Department of Health commissioned a team from the University of Bristol to undertake an independent evaluation of the first wave of NHS walk-in centres. The evaluation was designed to assess the success of walk-in centres against five criteria of improved access to health care, quality, appropriateness, impact on other NHS providers and efficiency. In addition, the evaluation sought to identify the models of organisation and settings which allowed the objectives of walk-in centres to be achieved most effectively. The evaluation began in June 2000 and was completed in November 2001.

The evaluation was based on a number of component studies, which are summarised below:

Analysis of monitoring returns and anonymised patient data

Each walk-in centre sends monthly "monitoring returns" to the Department of Health, describing their activities. In addition, anonymised data were obtained from 12 walk-in centres for more detailed analysis. The number of visitors to centres is gradually increasing, with each centre receiving an average of 2556 per month in August 2001. Nurses conducted 83% of consultations. The median length of a consultation was 14 minutes. Although one feature of walk-in centres is extended opening hours, the majority of visitors attended between 9.00am and 4.00pm, with relatively few attending in the evening. The pattern of attendance by time was distinctly different for different age-groups. A high proportion of visitors were young adults, including a greater proportion of men than attend in general practice settings. Patient throughput was related to the location of the walk-in centre, with centres located on hospital sites without an A & E department, and those co-located with general practices, receiving most visitors.

It proved impossible to examine the clinical content of consultations (reasons for consulting, diagnoses or treatment) from routine data, because few centres recorded this data in a coded form. If clinical conditions are to be coded in future (which will be necessary for the implementation of electronic patient records which can be shared between different health providers) it is essential that walk-in centres use a national standard coding system.

Questionnaire survey of walk-in centre users and follow-up survey

This survey compared the experiences of 4555 visitors to 38 walk-in centres with 3078 patients attending general practices close to each walk-in centre on a "same day" basis. People attending walk-in centres were more likely to be male, more likely to be owner-occupiers, and more likely to have education beyond the age of 18 than those attending general practice, but less likely to come from ethnic minority groups. Four-fifths of walk-in centre users lived locally and almost all were registered with a GP. The main reasons for attending the walk-in centre were speed of access, convenience of location and opening hours. About half of all centre users said they would have attended a general practice if the walk-in centre had not been available, a quarter would have attended an A & E department, and a tenth would have managed the problem themselves. Most walk-in centre users had had their problem for less than a week and only 1 in 6 had previously consulted a doctor or nurse about the same problem. People were very satisfied with the care they received in both walk-in centres and general practice, but more satisfied with walk-in centres. Fewer patients attending walk-in centres expected a prescription or medication and fewer still were given any, compared with general practice. Only 13% of patients were referred from the walk-in centre to a GP and 6% to an A & E department, but 32% intended to make a GP appointment following their visit to a walk-in centre.

A sub-sample of responders to the main survey was followed up four weeks later. This survey was limited by a lower response rate (65%). About half of those consulting in a

walk-in centre consulted a health professional (usually a GP) about the same problem in the subsequent four weeks, but a similar proportion of those attending initially in general practice also re-consulted.

Qualitative case studies

Interviews were held at ten walk-in centres with 54 visitors and 50 of the nurses they consulted. Interviews were taped, transcribed and analysed qualitatively. People chose to attend in the walk-in centre because of convenience, because they felt their GPs were too busy, and sometimes because of the anonymity offered by walk-in centres. The "drop-in" nature of the service was frequently cited as an important factor, in contrast with the difficulties experienced in obtaining an appointment with a GP. Visitors spoke positively about the facilities and the environment at walk-in centres, although parking was a problem at some sites. They were also very positive about the quality of care provided. There was some confusion about the range of services available at walk-in centres, with a general lack of awareness that the service was nurse-led. Some visitors did not know that the nurses could not write prescriptions. Most users were unconcerned about the fact that a walk-in centre did not provide continuity of care and viewed the centre as an alternative route to care for less serious problems.

The staff in walk-in centres generally felt that any consultation was appropriate, however minor the problem, and even when the walk-in centre was not suitably equipped to deal with the clinical problem. The nurses agreed with centre users that lack of continuity of care or medical records was not problematic. The issues cited most frequently by nurses as limiting their ability to provide high quality care were inadequate clinical assessment software and long waiting times at peak periods.

Impact of walk-in centres on the workload of other local health providers

A study was conducted of the workload of eight randomly selected general practices, one A & E department and one out-of-hours provider close to each of ten walk-in centres in the year before and after each walk-in centre opened. This study was also conducted in 10 matched towns without walk-in centres.

Although there was a slight drop in the average number of consultations per month in the A & E departments close to walk-in centres compared with virtually no change at control sites, the difference was not statistically significant. For out-of-hours providers, there were no differences between walk-in centre and control sites. The data for general practices showed great variability in consultation rates at different practices. Workload of practices in control areas increased consistently throughout the 24 month period. In practices near walk-in centres, the consultation rate increased at a similar rate to control sites before the walk-in centre opened but then remained stable in the 12 months after centre opening. However, such was the variability between individual practices that this finding was not statistically significant.

Survey of local health professionals

The views of local health professionals working near to walk-in centres were surveyed because their attitudes are likely to be influential in determining the success of centres, and because they may provide useful feedback about the operation of their local centre.

At the time of the survey (February – March 2001) , a slightly larger proportion of local health professionals were supportive of walk-in centres than were opposed to them, but the largest proportion were undecided. Discounting those who were undecided, more professionals felt positively than negatively that walk-in centres improved access to health care, provided appropriate care and care of reasonable quality. Negative perceptions were that walk-in centres would undermine continuity of care, were inefficient, increased public expectations and the workload of other health services, and provided too limited a service.

There were differences between the attitudes of different groups of professionals. Doctors (both A&E consultants and GPs) were generally more critical, and practice nurses most

supportive. Pharmacists were generally supportive but appeared to be less aware of walk-in centres and have less good communication links with them.

Assessment of quality of care using standardised patients

The quality of care provided in walk-in centres was compared with that provided to temporary residents in general practice and by NHS Direct, in a study using standardised (or simulated) patients. 15 role players were trained to present five scenarios at visits to 20 walk-in centres, 20 general practices and 11 NHS Direct sites. Essential criteria for the assessment and management of these scenarios were devised by a Delphi procedure using a panel of GPs and nurse practitioners. The accuracy of portrayal of scenarios and the reliability of the assessment procedure were determined through preliminary studies. Data were collected on 297 consultations; 99 in each setting.

Overall, walk-in centres achieved a significantly higher mean score for essential items conducted than either general practice or NHS Direct. There were, however, differences between scenarios. Two scenarios (post coital contraception and asthma) were conducted better in walk-in centres than in general practice, two scenarios (sinusitis and headache) had similar scores, and in one scenario (chest pain) general practice scored better, although not significantly so. Generally, walk-in centres achieved higher scores for items relating to history taking, and general practice scored more highly on examination items. Walk-in centres also achieved higher scores overall than NHS Direct, although much of this difference was due to the post-coital contraception scenario. Because NHS Direct always referred callers to another provider they tended to ask fewer questions and achieved lower scores.

The scenarios in this study were designed to assess care in walk-in centres, not to encompass the full range of activities of general practice. Thus, the interpretation of the study findings should not be that care in general practice is inferior to that in walk-in centres, but that walk-in centres perform adequately and safely compared to general practice.

Appropriateness and quality of supply of antibiotics under Patient Group Directions (PGDs)

All walk-in centres were asked to supply copies of all PGDs for antibiotics in use in February 2001. These were assessed against the relevant legal requirements. There was wide variability in the format and content of the PGDs supplied. Several did not comply in important respects with the legal requirements. Advice about extra contraceptive precautions when issuing an antibiotic was examined in more depth. The advice given was inconsistent between PGDs in different centres. At 10 walk-in centres, the notes of 50 patients who had received antibiotics under a PGD were examined. In many cases, there was insufficient evidence from the records to confirm whether the requirements of the PGD had been fulfilled due to inadequate record keeping.

Costs and relative efficiency

This analysis was based on activity and financial data provided by each walk-in centre, supported by data about patients' intentions and referrals obtained from several other components of the evaluation. The mean cost of a walk-in centre consultation over the whole period was £30.58, although costs have gradually fallen as patient throughput has increased, to a mean of £23.54, in centres that have been open for more than a year. Modelling the effect of centre type (based on location) and financial quarter since opening showed that in the least costly scenario (centres co-located with general practice in the fifth quarter after opening), the cost per consultation fell to £18.36.

Further models compared the costs of walk-in centres care with the alternative forms of care that visitors said they would have followed had the walk-in centre not been available. Results varied depending on centre location, the length of time that centres had been open, and the source of data about visitors' prior intentions. Centres co-located with general practice or on hospital sites without A & E departments, which have been established over a year, could be less costly than visitors' stated alternatives, mainly because of substitution of walk-in centre care for attendance at A & E departments. However, since the cost per visit is higher than the cost of a general practitioner consultation (£15), and much higher than the cost of a practice nurse consultation (£7), alternatives to walk-in centres such as increased capacity in general practice would be less costly still. Further, after including the costs of consultations incurred by referrals to other health providers, walk-in centres were more expensive than the alternatives under all modelling scenarios.

Initial and follow up visits to walk-in centres

Managers at each centre completed questionnaires and were interviewed, soon after each centre opened, about issues arising from the establishment of their centre. Towards the end of the evaluation, centre managers were re-interviewed about the successes of their walk-in centre, along with difficulties and how they had sought to overcome them. Successes related to the popularity of centres with users, the opportunities for nurses to develop new roles, and the relationship with other local health providers at some centres. Difficulties included confusion about the role of walk-in centres, insufficient time for staff training, the use of clinical assessment software, staff shortages and problems with facilities in some centres. Other issues that arose at the interviews included the increasingly wide range of services provided or hosted by walk-in centres, the importance of constructive relationships with other local health professionals, the need for clear lines of management, the variability of nurse roles and grading between centres, problems with ratification of PGDs, the need for a clearer identity for walk-in centres, and uncertainties about the future. One important, and perhaps unanticipated, function for walk-in centres has been to act as a base in the community for area-wide initiatives organised above the level of individual practices.

Conclusions

The success of walk-in centres in relation to the criteria for assessment can be summarised as follows:

Access: Walk-in centres clearly improved access for some groups of people. Of particular importance is the use of centres by young and middle aged men as these groups have important health needs but have been relatively low users of general practice. However, walk-in centres appear to be attracting a more affluent population than attend in general practice, thus increasing inequalities in access to health care. Walk-in centres are likely to have only a marginal impact on access to health care for the population as a whole, for reasons discussed in Section 13.1.

Quality: The most important dimension of quality for walk-in centres is the subjective experience of their users. This was highly satisfactory. The quality of care provided by nurses also appears to be high for the limited range of problems amenable to assessment in the study using standardised patients. There is room for improvement in the use of PGDs (which are a new and developing concept), in the ability of walk-in centres to use routinely collected data to monitor their performance, and in the training of nurses.

Appropriateness: Walk-in centres appeared to provide an appropriate route to care in the eyes of both walk-in centre users and the health professionals they consulted. The relatively low rate of referral to other providers also suggests that walk-in centre consultations were generally appropriate. Lack of continuity of care did not appear to be an important issue for either users or health professionals. Some concerns about appropriateness relate to the finding that the users of walk-in centres generally had

relatively low levels of health need, and some centres may not be reaching the groups in the population they were intended to target.

Impact on other providers: Most people who attended walk-in centres stated that they would otherwise have consulted a general practice or an A & E department. It has proved difficult to provide a robust estimate of the impact of this on the workload of other NHS providers, because of the high level of background variability in consultation rates at different provider sites. In addition, the impact of a walk-in centre is likely to represent only a small proportion of the consultations at an individual general practice or an A & E department , making any differences unnoticeable at a local level. However there was little evidence that walk-in centres provided a duplication of care with people attending them as well as other services about the same problem.

Efficiency: Walk-in centres appear to have higher costs per consultation than general practice. For the NHS as a whole, the cost of care in a walk-in centre may be broadly similar to the alternatives people said they would have used, but only under the most optimistic modelling scenarios. Walk-in centres appear to generate some additional demand, but mainly act as a substitute for other existing services.

Implications for policy

Walk-in centres appear to offer some benefits for patients and to offer safe care of high quality, but at additional cost. These benefits and costs must be weighed against other competing claims for NHS resources from groups of patients who may have higher health needs. Although walk-in centres appear successful when viewed in isolation, there currently appears some lack of coherence in the overall system, with many overlapping initiatives to improve access and many provider organisations offering similar services. A more strategic overview of the role and contribution of different health providers within NHS primary care appears to be needed. Finally, if it is decided that a greater investment to improve access to health information and advice for minor illness is a priority, walk-in centres are only one way of achieving these aims. Although they appear generally successful, they should now be compared with alternative models of organisation to identify the best way of achieving these benefits at the least cost.

Table of contents

Index of tables

Index of figures

Index of boxes

Index of appendices

1 Background

1.1 Policy background

In April 1999 the Prime Minster announced that the NHS would set up twenty pilot NHS walk-in centres.[1] Following a bidding process, plans were eventually approved for forty walk-in centres, to be opened by December 2000, representing an investment of approximately £31 million in the first year.

The concept of the walk-in centre has been further described in Health Service Circular 1999/0116, a series of press releases[2 3 4 5 6] and a resource pack for organisations preparing to establish a centre.[7]

Based on these documents, an NHS walk-in centre would characteristically have the following features:

- wide opening hours (normally 7.00 a.m. to 10.00 p.m. every day).
- walk-in access, without the need for an appointment.
- convenient location.
- providing information and treatment for minor conditions.
- offering health promotion, supporting people in caring for themselves.
- centres should build on, not compete with or duplicate existing services.
- they should maximise the role of nurses.
- nurses would be supported by computerised decision support systems.
- good links with local general practices.
- services which meet the needs of their identified population.

NHS walk-in centres are being developed as part of the government's commitment to modernise the NHS. They are intended to complement other initiatives such as NHS Direct and Healthy Living centres. Several themes are apparent in these developments.

The first is improving accessibility, based on the perception that people sometimes find it difficult to access health care quickly from general practice. Although the system of personal registration with a GP near ones' home 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. There is increasing emphasis on tailoring NHS services to users' felt needs. 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. A recent Department of Health survey suggested that there is limited provision of non-emergency routine GP care outside office hours.[8]

The third theme is of increasing skill-mix, and in particular maximising the role of nurses. In this way 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.

Although walk-in centres are a new phenomenon within the NHS, the ideas behind them can be traced to other developments in the UK and overseas. Within the UK, Minor Injuries Units (MIUs) have been established in many towns, often replacing small casualty departments as services are rationalised within larger centralised A & E Departments. These MIUs are normally staffed entirely by nurses. Experience has suggested that nurses in MIUs are able to offer a safe, effective and popular service.[9 10 11]

In addition the telephone helpline NHS Direct has been implemented nationally, based on nurses providing advice to patients with a wide range of problems, supported by computerised decision support software. The positive evaluation of this service, in terms of safety and acceptability, has led to the suggestion that nurses working with decision support may be able to provide similar advice face-to-face. Recent randomised controlled trials of nurse practitioners in primary care[12 13] have supported the suggestion that nurses with extra training can manage most patients presenting with acute minor illness.

Alongside developments in the NHS, pressure for quick and convenient access to medical care has led to the establishment of a number of private 'drop-in' medical centres. These centres are run by a number of commercial organisations and are mainly sited in transport centres or business districts to cater for relatively affluent commuters.[14 15]

Walk-in centres have existed in other countries, notably the USA, Canada, Australia and South Africa for many years. The first centres in North America opened in the USA in the early 1970s, variously termed as 'emergency centres', 'ambulatory care centres' or 'urgent care centres'. By 1986, some 3800 such centres were in operation, dealing with 53,000,000 patient contacts per annum.[16] During the 1980s, walk-in centres were also developed in Canada.[17] A report in 1993 suggested that about a third of Ontario residents visited a walk-in centre each year.[18] There are however important distinctions between the concept of a walk-in centre in these countries compared with the new centres in England.

Firstly, centres in other countries are led by doctors rather than by nurses. Secondly they have developed in an entrepreneurial competitive health care economy, in direct competition with family doctors. Since doctors in these countries are mainly paid on a fee for service basis, walk-in centres compete for business by offering quick and convenient access, especially when more traditional family practices are closed or are not able to offer a quick appointment.

Perhaps unsurprisingly, family physicians in these countries have been critical of walk-in centres, arguing that they offer low quality, fast through-put care with no continuity, leaving other health providers to deal with demanding, complex and ongoing problems.[19 20 21] It also important to note that in North America and Australia many walk-in centres developed, at least initially, primarily to provide care outside office hours.

Unlike in the UK, where doctors are responsible for a defined list of patients 24 hours a day (even though they may provide this care through a co-operative or deputising service), doctors in other countries are generally less accessible outside office hours and patients are free to choose the most convenient health provider.

1.2 Claimed advantages and disadvantages of walk-in centres

An evaluation of the impact of walk-in centres within the NHS must examine whether the intended benefits are achieved and whether these benefits out-weigh any disbenefits. The aims of NHS walk-in centres can be summarised in terms of the following intended benefits:

- improved access for care. This is achieved by providing care at a more convenient time, in a more convenient location, with minimal waiting.
- reducing demand on other NHS services, thus maximising efficiency.
- providing safe, high quality care by nurses with decision support software.
- increased appropriateness of patients seen by other NHS providers. This is achieved by nurses encouraging self-care and helping patients identify when they need to consult a doctor.

Walk-in centres have been one of the most controversial initiatives within the NHS in recent years. The criticisms of the centres can be summarised as follows:

- walk-in centres may increase access primarily for the affluent, thus increasing health inequalities.
- increased accessibility may increase total demand on the NHS with little or no health gain if patients primarily consult with minor self-limiting illnesses. If a high proportion of patients are referred from walk-in centres to GPs or A&E departments this may increase demand on these services.
- achieving a 'no-wait' service may require a high level of staffing with high costs per consultation. Diverting patients to walk-in centres is only efficient if centres provide care more cheaply than other NHS providers and the reverse may be true.
- walk-in centres may undermine continuity of care leading to duplication (people consulting different agencies about the same problem) and inappropriate care (due to lack of medical records about previous history).
- nurses working to protocols may not be able to safely manage the wide range of problems encountered in primary care. Nurses may also be no less expensive than doctors because of longer consultation times.

An evaluation of the impact of NHS walk-in centres must seek to provide evidence about as many of these claims and counter-claims as possible. It is important to determine the extent to which the intended benefits are achieved and the claimed disadvantages are avoided. However, it is important to note that some of the debate is about matters of policy (e.g. the extent to which providing advice about minor illness should be a priority within the NHS compared with other competing priorities for resources) and these questions cannot be resolved by the evaluation.

1.3 Literature review

There are few published documents about walk-in centres in other countries to inform their development in the United Kingdom. Moreover, experience from elsewhere may be of limited relevance to the UK because of the very different health care systems in different countries. The published evidence about the activities and impact of walk-in centres abroad, and also about MIUs in the UK, is described below. A comprehensive review of the literature on walk-in centres has been carried out by Salisbury and Munro[22] and a review of walk-in centres in Canada has recently been published by Jones.[21]

It is important to note that the available research evidence is very limited. No systematic programme of research, examining the impact of walk-in centres from different perspectives, has been published in any country, although a number of relevant studies are currently underway in Ontario.[17] Most published work is of small-scale descriptive studies of a single walk-in centre. Much of this research is out-of-date and some is of poor quality. Almost all studies focus on a single issue (usually activity levels, the process of care or patient satisfaction) with very few comparative studies. There is very little research evidence available about the impact of walk-in centres on health outcomes or other important issues such as the costs of care or the impact on other health services.

1.3.1 Types of patients consulting in walk-in centres

Studies which have included demographic details of patients consulting in walk-in centres have shown that, as is the case in primary care generally, women consult more often than men.[22] A high proportion of consultations concern young adults. Although a fairly high proportion of consultations concerns children, this represents a smaller proportion in walk-in centres than in general practice. The elderly also consult less often in walk-in centres than they do in other primary care settings. There is some evidence that walk-in

centres attract a disproportionate number of people in employment. In a study of a paediatric walk-in centre in Ottawa, parents were more likely to be employed and of high social status than the local population average, and in 54% of cases both parents were in paid employment. The main motivation for attending this walk-in centre was the convenient hours.[23]

1.3.2 Type of problem presented

In studies from North America, consultations mainly concerned minor illness.[24 25 26] The commonest conditions encountered were respiratory tract infections (representing about half of all consultations in several studies),[25 26 27 28] skin disorders, and musculo-skeletal problems.[29 30 31] By contrast (and not surprisingly), studies of MIUs in the UK suggest they see mainly minor injuries and accidents, with relatively few people consulting about minor illness.[10 11]

1.3.3 Times that patients consult

The majority of calls to walk-in centres in North America are made outside office hours.[22] In this respect, they appear to fulfil a similar function to primary care centres operated by GP co-operatives and deputising services in the UK. Therefore, the temporal pattern of use of walk-in centres elsewhere may be misleading in the context of the UK.

1.3.4 Reasons that patients consult

A number of studies have addressed the issue of why people choose to consult in a walk-in centre rather than contact an alternative provider, and the findings are consistent. The main factors appear to be convenience of location, extended opening hours, the non-appointment service, and the minor nature of the problem.[9 20 23 26 27 32] These appear to be positive choices, with relatively few people choosing to consult in a walk-in centre because of dissatisfaction with their family physician or the local emergency department.

There is a suggestion that there may be cultural differences in expectations of care in different countries. Rizos noted that 63% of patients at the walk-in centre studied thought that an acceptable wait to see a doctor with their problem was less than 12 hours, although most patients in this study had respiratory tract infections or other non-urgent (from a clinically determined perspective) minor illness.[26] In another North American study, 34% of those attending with a respiratory tract infection felt they needed to be seen within two hours.[33]

1.3.5 Patient satisfaction

Studies from both the US[27 34] and Canada[23 26] have demonstrated high levels of satisfaction amongst patients attending walk-in centres. Similar findings apply to studies of patients attending MIUs in the UK.[9 11 35]. Patient satisfaction appears to be most strongly related to interpersonal aspects of care, such as the doctors' or nurses' behaviour and their perceived concern.[34]

The findings about high levels of satisfaction, and the importance of interpersonal factors, are common to studies of patient satisfaction with health care and should be interpreted cautiously.[36] It is well recognised that patients may express general satisfaction with health care but still voice many detailed criticisms if questioned specifically. In particular those patients who have chosen to attend a walk-in centre are a self-selected group, who are more likely to prefer this service than those who have chosen to attend elsewhere. For example, a study of patients attending a Canadian emergency department showed that many people had a low opinion of walk-in centres.[37]

1.3.6 Continuity of care

Walk-in centres in North America appear to place relatively little emphasis on supporting continuity of care with family physicians, which may not be surprising in view of the competitive relationship which often exists. Only 47% of walk-in centres in Toronto routinely inform GPs of patients attending the clinic.[38] Similarly, most patients appear unconcerned about the lack of continuity, with only 20% of patients at one clinic saying it mattered whether they saw a different GP at each consultation, and 20% being concerned about the absence, at the walk-in centre, of their medical records.[26]. This supports the findings of a study from Wakefield, which found that potential users of the walk-in centre did not appear to be concerned about the lack of continuity of care, with some people positively preferring the anonymity offered by a walk-in centre.[39]. By contrast, several studies from UK general practice have shown that continuity of care from a doctor who knows them is an important concern for many people.[40 41 42] This may suggest that people have different expectations of a walk-in centre compared with general practice.

1.3.7 Quality of care

Very little information is available from the research literature about the quality of care provided in walk-in centres. Studies of MIUs in the UK have suggested that care by nurses is safe[10 43 44] However assessment of quality of care is difficult and this work has a number of limitations. It is mainly based on audit of requests for investigations or x-rays, or adequacy of case records. Assessments have been subjective and relatively unsophisticated. Research from MIUs may in any case have limited relevance to walk-in centres, as nurses in the latter are likely to encounter a much wider range of undifferentiated problems than nurses working in MIUs.

1.3.8 The impact on other agencies

The potential for walk-in centres to reduce health care costs by diverting people from other agencies is an important consideration. This potential is likely to be realised only if centres divert patients rather than duplicate care, if the cost of the walk-in centre is less than the alternative, and if a high proportion of those people consulting a walk-in centre would otherwise have gone elsewhere rather than managed the problem themselves. There is some limited evidence from North America about these issues, much of it conflicting.

In terms of duplication, Bell found that 67% of patients attending walk-in centres in Canada attended a GP within the following seven days.[32]. However Paxton and Heaney found that only 21% of patients attending an MIU in the UK consulted a GP within 14 days.[9] The same authors found that in the three months following the opening of the MIU, there was a 24% drop in the number of patients attending the local A & E Department.[10] By contrast a large US study found no impact of walk-in centres on nearby A&E departments.[45]

In terms of alternatives to attending a walk-in centre, Rizos found that 24% of patients would otherwise have attended an Emergency Department, 28% would have contacted their regular physician, 28% would have attended another walk-in centre and 16% would not have used any other health facility. Studies of UK MIUs suggest that patients mainly use them as an alternative to A & E departments rather than as an alternative to general practice.[11 9 35]The relevance of these findings from MIUs to walk-in centres within the NHS is uncertain.

1.3.9 Costs

There is a marked lack of available information about the costs of walk-in centres. Only one study was identified, which suggested that the cost of care in walk-in centres in Canada was similar to costs in general practice and lower than the costs of hospital Emergency Departments.[46] This study was recognised by its author to have a number of methodological weaknesses including potential misclassification of walk-in centres, after-hours clinics and Emergency Departments.[17]

1.4 Conclusions

As previously discussed, there is very limited research evidence from other countries about most of the important questions concerning the role of walk-in centres, and the evidence which does exist has limited relevance to the NHS. In a recent *BMJ* editorial, Hutchison argued the need for pre-planned rigorous evaluation of walk-in centres against clearly specified objectives; consideration of the effects that might occur elsewhere in the health care system and beyond; and anticipation of the potential responses of stakeholders, especially patients and general practitioners.[17]

From the outset, the UK government has emphasised its commitment to a full independent evaluation of the impact of walk-in centres in the NHS. This forms part of a programme of work which also includes local evaluation, routine monitoring of activity and costs and support for development. The independent evaluation of walk-in centre impact was commissioned from a team from Bristol University in June 2000, to be completed by the end of November 2001. This document is the final report from this evaluation.

2 Research design

2.1 Overview of research design

The overall aim of the National Evaluation was to determine whether walk-in centres achieve their stated policy objectives of improving access to high quality care in a manner which is efficient and supports other NHS providers. Alongside the assessment of outcomes, a formative evaluation was conducted to identify the models of organisation and settings for walk-in centres which allow the objectives to be achieved most effectively, in order to improve the performance of existing and future centres

The evaluation had three main components:

- ***Description of walk-in centres***
- ***Assessment of the impact of walk-in centres on the following outcomes:***
  a) access to primary health care
  b) quality of care
  c) appropriateness of care
  d) impact on other NHS providers
  e) efficiency
- ***Formative:*** A qualitative assessment of the factors which were associated with the success or failure of different centres to achieve their objectives.

2.2 Choice of dimensions for assessment of outcomes

The framework used in this evaluation, based on five dimensions of outcome, reflects the stated policy objectives for walk-in centres.

2.2.1 Access

Improved access is the main 'raison-d'être' for walk-in centres. This dimension addresses the requirement that services are fast and convenient. There are a number of steps in the pathway to gaining access to primary health care, including finding out about the care available, making contact, locating the service, the convenience of the location and its opening hours, being received, and not waiting excessively. These issues were therefore addressed, principally via a survey of users of walk-in centres.

2.2.2 Quality of care

The problems of assessing the quality of primary health care are well-recognised.[47 48 49 50 51] Assessment of health status outcomes is very difficult because many problems are self-limiting, adverse outcomes are rare and may not be apparent for many years. The purpose of many consultations in primary care is to gain reassurance, information and understanding. These subjective outcomes may be particularly relevant in the case of walk-in centres. The assessment of the quality of care in walk-in centres was based on several sources of data. A survey of users' satisfaction with the consultation assessed the subjective experience of patients. A study using simulated patients provided objective evidence of nurses' performance. An audit of the use of Patient Group Directions assessed the quality of prescribing. In addition various other components of the evaluation provided information about aspects of service quality, such as the analysis of waiting times.

2.2.3 Appropriateness

It is important that centres meet the needs of their target population (for example tourists, or the homeless) rather than duplicate care for users who already have easy access to other services. It was necessary to determine whether the problems presented by users are those which the centre was set up to deal with, and whether the professional skills available were appropriate to the problems.

Appropriateness also refers to the impact of walk-in centres on co-ordination and continuity of care. Most walk-in centres have been established to deal with discrete episodes of minor illness or injury, in which continuity of care is less important. However if users attend with complex on-going problems which are already being investigated or treated by other providers this may lead to increased costs, decreased efficiency and possibly inappropriate care, unless it can be demonstrated that walk-in centres 'add value' for example by providing patients with further information.

Appropriateness was assessed through analysing the characteristics of users seen at each centre in relation to its objectives. The extent to which patients consulted other NHS providers before and after attending a walk-in centre was assessed via a survey of users. Furthermore, a qualitative in-depth examination of a sub-sample of respondents to the user survey examined the appropriateness of the walk-in centre as a setting for dealing with users' problem from the perspectives of the user, the professional who saw them in the centre, and their GP. This study also considered whether the advice given at the walk-in centre appeared to enhance or undermine continuity and co-ordination of care.

2.2.4 Impact on other NHS providers

One potential benefit of walk-in centres is that they may 'sign-post' patients to the most appropriate NHS provider, and also provide people with the information to manage problems themselves. If this benefit is realised, the demand on other local NHS providers should fall, and those people who do need to consult GPs or A&E departments should do so with problems that require their skills. The total demand on all NHS providers (including walk-in centres) will stay the same or will rise, because it will include users of walk-in centres who previously did not attend general practice because it was inaccessible or inconvenient. On the other hand, it is possible that people will attend walk-in centres with on-going problems that they have already seen other NHS providers about, or about which they inevitably will have to see their GP. In this scenario, walk-in centres could duplicate services, increasing total NHS activity with no decrease in workload for other providers.

Assessing the impact of walk-in centres on other NHS providers is complex, as the population attending a centre may come from a wide and ill-defined area, served by many providers. Information about this dimension was therefore obtained in various ways. Users were asked about whether and where they would have sought help if the walk-in centre had not been available. Health care professionals in walk-in centres recorded if they advised patients to contact other NHS providers. The impact of walk-in centres on the workload of a sample of providers (A&E departments and GP practices) was assessed. A sample of people who consulted in a walk-in centre were contacted four weeks later to find out the proportion who contacted other NHS providers in the following four weeks. Finally, providers were asked about their perceptions of the impact of the walk-in centres on their total workload, the problems they deal with and communication with the walk-in centres about patients.

2.2.5 Efficiency

Economic studies seek to determine how the most benefit can be gained for the least cost. One important issue for walk-in centres is balancing the level of staffing and the anticipated demand from users. This is a problem of technical efficiency, which asks the question 'How cost-effective are walk-in centres in providing the services they provide?' Other economic aspects of this evaluation include how walk-in centres impact on other providers, the pattern of demand for services, waiting times and appropriateness of services.

There are therefore two levels of economic interest::

(1) How well walk-in centres are working as walk-in centres (i.e. how well are these performing relative to each other?) This involves making comparisons *between* centres, including describing activity and costs.

(2) How well are walk-in centres performing as part of the overall health care system (i.e. are they helping to improve health care/expand available services?)

This second level, in its broadest sense, includes most aspects of the evaluation (access, appropriateness, impact on other providers). The most important issue is to determine whether walk-in centres are being used to offer additional services, to duplicate services, or to substitute for other settings. If walk-in centres are providing care previously provided elsewhere (with no additional improvement in quality of care), to be considered efficient, the additional cost of providing the centre should be no more than that saved from the original providing organisation. It is therefore important to consider the costs of providing care in walk-in centres in relation to the costs of care in alternative settings.

2.3 Data sources

The evaluation was based on information from a number of sources:

- Initial description of each walk-in centre, based on a short postal questionnaire survey and site visits or telephone interviews
- Analysis of routine monitoring returns about activities
- Detailed analysis of anonymised contacts at 12 walk-in centres
- Postal questionnaire survey of walk-in centre users
- Follow-up survey of a sub-sample of participants in the user survey
- Qualitative case studies
- Analysis of workload of other local providers, before and after walk-in centres opened
- Postal survey of NHS providers (GPs, practice nurses, A&E consultants, and pharmacists) near to each walk-in centre
- Quality of care study using simulated patients
- Study of Patient Group Directions for antibiotic prescribing
- Financial data obtained from the Department of Health
- Semi-structured follow-up interviews with managers at each walk-in centre towards the end of the evaluation

2.4 Relationship between outcomes and data sources

Figure 1 provides a matrix which shows in summary form the relationship between the dimension for evaluation, the specific outcomes to be assessed, the method of assessment, the sources of the data, and the comparator to be used.

2.5 Ethical committee approval

Ethical committee approval for the main evaluation was obtained from South and West Multi-centre Research Ethics Committee and also from Local Research Ethics Committees covering all of the walk-in centres.

2.6 Walk-in centres included in this evaluation

This evaluation was based on the 39 walk-in centres which had opened by May 2001, excluding one site from the first wave of centres (Southampton) which did not open until October 2001. On 12th April 2001, the Health Minister announced a further three centres to open in Luton, Blackpool and Liverpool city centre. These centres are also not included in this evaluation. Appendix 1 shows the centres contributing to different components of the evaluation.

Figure 1: Summary of outcome evaluation

Dimension	Outcome	Method of assessment	Sources of data	Comparator
Access	Convenience of opening hours	Quantitative analysis of responses to questionnaire	Survey of users	Patients attending in general practice
	Convenience of location	Quantitative analysis of responses to questionnaire	Survey of users	Patients attending in general practice
	Length of wait to be seen	Analysis of routine records	Monitoring returns; plus detailed audit in several centres	None
	Reasons for choosing walk-in centre over alternative NHS provider	Quantitative analysis of responses to questionnaire	Survey of users	None
Quality	Patient satisfaction with information and advice	Quantitative analysis of responses to questionnaire	Survey of users	Patients attending in general practice.
	Quality of clinical care	Proportion of essential actions undertaken	Study of simulated patients	General practice
	Adherence to Patient Group Directions	Extent of recorded compliance with PGD	Audit of use of PGDs	Standard in direction
Efficiency	Cost per case	Number of contacts in relation to costs	Monitoring returns	Existing data on costs in other settings
	Cases per nurse per hour	Number of contacts in relation to working hours	Monitoring returns	Existing data on costs in other settings
Impact on other NHS providers	Users consulting another provider with same problem within 4 weeks	Quantitative analysis of responses to questionnaire	Follow-up survey of sub-sample of users	Patients attending in general practice
	Change in users' intentions	Quantitative analysis of responses to questionnaire	Survey of users	NHS Direct evaluation
	Referrals to other providers	Quantitative analysis of routinely recorded data	Monitoring returns	NHS Direct evaluation
	Change in workload of other local NHS providers	Quantitative analysis of workload statistics	Workload data from local providers	Workload before and after opening of walk-in centre
	Views of other local NHS providers	Quantitative analysis of responses to questionnaire	Postal survey of NHS providers	None
Appropriateness	Clinical conditions presented in relation to staff skills	Quantitative analysis of most frequent conditions, analysed by type of centre	Monitoring returns	Conditions presented in general practice and to NHS Direct
	Users' expectations for care in relation to care provided	Quantitative analysis of responses to questionnaire	Survey of users	User's expectations before and after the consultation; patients attending in general practice
	Socio-demographic characteristics of patients seen in relation to target population	Quantitative analysis of responses to questionnaire and routinely recorded data	Survey of users, monitoring returns and interviews with managers	Characteristics of patients compared with the aims stated by each centre, and data about patients consulting in general practice
	Appropriate contribution to co-ordination of care	Qualitative and quantitative analysis from perspectives of patient, health professional consulted and GP	Qualitative case studies	None
	'Added value' or duplication	Qualitative/quantitative analysis from perspectives of patient, health professional consulted, and GP	Qualitative case studies & user survey	None

3 Establishment of NHS walk-in centres pilot sites

3.1 Introduction

The first objective of the national evaluation was to describe the walk-in centre sites. This descriptive work had a number of purposes:

- documenting how this new policy initiative has been enacted in different ways and in different settings formed the basis for a qualitative assessment of the factors associated with the success or failure of these centres to meet their stated objectives.
- describing walk-in centres would assist in the development of a typology or categorisation system for comparing different types of centre.
- understanding the initial plans and objectives of different centres provided a baseline against which their progress could be judged.
- undertaking qualitative description may aid the interpretation of the quantitative results obtained from other aspects of the evaluation, particularly the data from the routine monitoring returns.

NHS walk-in centres are not homogeneous. The forty walk-in centre pilot sites included in the national evaluation are situated in thirty cities and towns across England - see Figure 2. The centres operate within different organisational and built environments and are further differentiated by the facilities they have and the range of services offered.

The business plans prepared for each walk-in centre contained some information about the local circumstances and rationale for the establishment of a walk-in centre at that location, but these documents did not provide detailed information about each centre, nor did they specify how the plans had been implemented or operationalised at each location. To collect more detailed information a series of site visits were conducted, as described below.

3.2 Method

Walk-in centre managers were sent an initial 'pre-visit questionnaire', which was followed by a site visit or telephone interview.

3.2.1 Pre-visit questionnaire

The pre-visit questionnaire requested information about each centre's:

- objectives
- opening times
- target population and anticipated throughput
- setting
- staffing
- written policies and procedures
- services provided
- information technology

3.2.2 Site visits

Visits were arranged with as many centres as possible. A detailed topic guide was developed to explore in more depth the factual information provided in the pre-visit questionnaire. In particular, the topic guide explored potential facilitating or hindering factors which might influence the success of the walk-in centre, issues of local context and the roles of different staff groups.

Before the visit, the business plan and any routine monitoring data about the centre were scrutinised, as this sometimes raised particular issues for discussion or clarification. The site visits included informal interviews with the centre manager or lead nurse at each site, a brief tour of the site and, where possible, some observation of the centre in operation to collect more detailed information and to follow up queries raised from the pre-visit questionnaire. The informal interviews and observations were recorded during the site visit as hand-written notes and were later combined with information from the pre-visit questionnaires to produce typed, descriptive summaries for each centre. These summaries were returned to the centre manager for checking, with any additional information being collected via telephone and e-mail contact with the centres. Where it was not possible to arrange a site, visit the centre managers were telephoned and the resulting notes combined with information from the pre-visit questionnaires as needed.

The timing of the site visits, when many of the walk-in centres had only recently opened, meant that many of the centres were in a period of considerable change. Several were responding to problems or difficulties associated with opening the centre (such as staff recruitment, training and IT) and some were adapting their services to meet the demands and needs of users (e.g. changing opening hours). The information presented here attempts to accurately reflect the initial developmental phase of the centres. It is important to note that the information detailed here may not reflect the current status or activity of the individual centres.

Figure 2: Map of walk-in centre locations

3.3 Findings

Much descriptive information was obtained which is not reported here in detail. This chapter summarises the main findings from the initial visits and interviews.

3.3.1 Location and typology

The NHS walk-in centres are in

> "convenient locations that allow for easy access by the target population whether residents, shoppers, commuters or visitors".[52]

They are predominantly located in city or town centres but the environment and the target populations vary considerably between the different sites. One aim of the initial descriptive work was to characterise walk-in centres into 'types' to enable internal comparisons between different types of centre. The most appropriate typology appeared to be based on location. As far as possible, centres were classified into one of four types:

- 'Shop-front' centres on high streets or in shopping centres
- Centres at hospitals which also had Accident and Emergency facilities
- Centres at hospitals which do not have Accident and Emergency facilities
- Centres located close to other primary care facilities, such as a general practice

The only centre which could not readily be described by this typology was Bury, which is in a town centre location, but is not a 'shop-front' type site, being co-located with a GP out-of-hours co-operative.

3.3.2 Issues arising during the early development of walk-in centres

It is remarkable that the walk-in centres were built, staffed and organised within such a short space of time following the announcement of the initiative. This reflects the dedication and hard work of the project managers and lead nurses, along with many other people, at each centre. Many of the staff interviewed demonstrated great enthusiasm for the concept of walk-in centres and were committed to making their centre a success.

The centres had developed in very different ways in different settings, which may be in response to local need and circumstances but may also have reflected opportunism in the bid for funding. Some of the centres represented a radical new way of delivering health care, whereas others involve the re-badging and modification of pre-existing services (particularly minor treatment centres). This re-badging should not necessarily be interpreted negatively – it may be appropriate that existing innovative services are brought within a national programme and are able to benefit from a new source of funding.

Many centre managers described the success of their walk-in centres in terms of attracting increasing numbers of patients, high levels of patient satisfaction, and an increasing acceptance of the walk-in centre amongst other local health providers. However, the emphasis of the national evaluation is formative – to identify and feed back issues in order to improve the performance of walk-in centres. Given the rapid development of walk-in centres it is inevitable that issues would arise during their early development which required consideration and action:

- Signposting at many sites was poor, and walk-in centres were not always easy to find. This applied both to street signs, and also to internal signage within hospital sites.
- There was considerable variation in the training, background, experience and role of nurses at different centres. Although there is evidence that nurse practitioners can provide care for minor illness,[12] [13] this research involved nurses with formal nurse

practitioner training and was conducted within general practice, where nurses work in a team alongside doctors, and cannot necessarily be generalised to other settings. There is also evidence that nurses using decision support software can safely offer telephone advice about minor illness,[53] although as previously noted there are important differences between telephone advice and face-to-face consultations. However, some nurses at a number of walk-in centres were initially providing assessment and advice without either decision support or formal training in the management of the wide range of minor illnesses presenting in primary care. Training for the nurses appeared to be limited at many sites, with ad hoc arrangements being made to address identified problems once the centre had opened.

- Management structures at many walk-in centres were extremely complex, leading in some cases to delayed decision making, and unclear lines of accountability.
- Although HSC 1999/116 [54] states that a 'key feature' of walk-in centres is that they would be based on 'a patient/population needs assessment which supports the development of an innovative primary care centre and is sensitive to age, culture and lifestyle of patients', some walk-in centres were established without any organised assessment of local need. This is probably a reflection of the rapid bidding process which precluded much opportunity for needs assessment.
- There was considerable frustration around the development of patient group directions (PGDs). Although the centres were generally enthusiastic to produce PGDs (and several excellent examples of PGDs were observed), their development had sometimes been obstructed locally. Central guidance from the NHSE about a 'core range' of PGDs may be helpful, and the content of some PGDs could also be developed centrally, requiring only minor modifications to suit local circumstances. The lack of availability of 'over-the-counter' medication (particularly paracetamol syrup for febrile children) seems an important issue, as patients eligible for free prescriptions may continue to consult in general practice in order to obtain these. This appears unfortunate, as an objective for walk-in centres was to divert exactly this type of patient with a minor illness from general practice.
- The clinical assessment software systems in use initially had serious limitations for use in face-to-face consultations. This has been addressed in the recent procurement exercise. It will be important to examine the appropriateness, safety and convenience of the AXA software after it has been used for a period of time in walk-in centres.
- Many centre managers described the attitudes of other local health providers, particularly GPs, practice nurses and A&E consultants, as an important factor in determining the success of the walk-in centre. The level of acceptance or rejection of the walk-in centres appeared to vary considerably between areas.
- The wide range of different services provided at different walk-in centres may seem an advantage in that centres can respond to local circumstances. However it may also be a disadvantage in seeking to establish the identity and 'branding' of walk-in centres, as the public may be confused about what to expect at different centres which may lead to reduced uptake and consumer dissatisfaction.

It should be noted that the above points are a summary of findings at an early stage in the establishment of each walk-in centre. These issues formed an agenda, which was used in the second round of interviews and site visits towards the end of the evaluation (see Chapter 12). This explored the ways in which the different walk-in centres had sought to overcome their initial difficulties, and to identify factors associated with the successful establishment of a walk-in centre.

4 Analysis of monitoring returns and anonymised data

4.1 Introduction

Each walk-in centre sends monthly monitoring returns to the Department of Health, based on data extracted from their computer system. These play an important role in the descriptive element of the National Evaluation, since they provide a means of understanding the month-on-month changes in demand and service provision.

The monitoring returns provide summary information about the activity of each walk-in centre. This information, although useful for project management purposes, has limitations. In particular, the monitoring returns provide totals (for example the number of patients arriving at different times of day or within different age-groups) but do not make it possible to carry out cross-tabulations (e.g. the time at which different age-groups make use of walk-in centres). For this type of analysis it is necessary to have access to data on a case-by-case basis.

Different walk-in centres initially used different configurations of computer software, with some using different programmes for call management and for decision support. In order to analyse comparable data from several sites it was decided to restrict an analysis of case-by-case data to walk-in centre sites using one type of software. The programme that was used in the largest number of sites (n=12) was the Adastra system. The walk-in centres using Adastra software were representative of different types of centre in terms of size, setting, range of services provided and geographical region.

In this chapter of the report the findings from the monitoring returns and the anonymised data are presented together. Differences in the findings from these two sources of data may be due to the fact that the anonymised data were obtained at an earlier date and are based on only a sub-sample of centres.

4.2 Methods

4.2.1 Monitoring returns

Data were provided by each walk-in centre to the Department of Health, where they were amalgamated and sent to the National Evaluation team as an Excel spreadsheet. The data reported here is based on the most recent return available at the time of analysis, relating to activity in August 2001.

By 31 August, thirty-nine of the forty planned NHS walk-in centre sites were open for business. Thirty-five of these centres submitted a monitoring return to the Department of Health for the month of August 2001, as requested. The remainder (Bath, Harlow, Tooting, Woking) were unable to do so for a variety of technical reasons following the installation of on-site AXA software. For this final report, the previous month's activity levels for these centres were used within the trend analyses.

4.2.2 Anonymised data

The twelve centres using Adastra software were asked to allow extraction of anonymised data, and all agreed. The Adastra company wrote a program to anonymise and extract the necessary data remotely.

Anonymised data was downloaded from the 12 sites for all consultations from the opening of each walk-in centre until 23rd January 2001. Data from the calendar month in which each centre opened were not included in analyses, since this month may be atypical. The sample of patient consultations obtained therefore did not represent a simple random sample of patients attending walk-in centres within a given time period, but was stratified by centre, with a variable number of months of data sampled for analysis. Consequently, data analysis was undertaken using robust survey estimators in Stata that took proper account of the complex survey design, specifically the stratification by centre, the sampling of one-month time periods within each centre, and by applying post-sampling weights to adjust for the variable number of months sampled in each centre. Some centres did not collect complete data for all of the variables of interest. In particular only six centres coded data about diagnoses, and only four of these recorded this sufficiently well for analysis. Where centres had more than 20% of data missing for any variable they were omitted from relevant analyses.

In various fields, different centres used different coding systems. Based on the glossaries, all data were re-coded into a standard format.

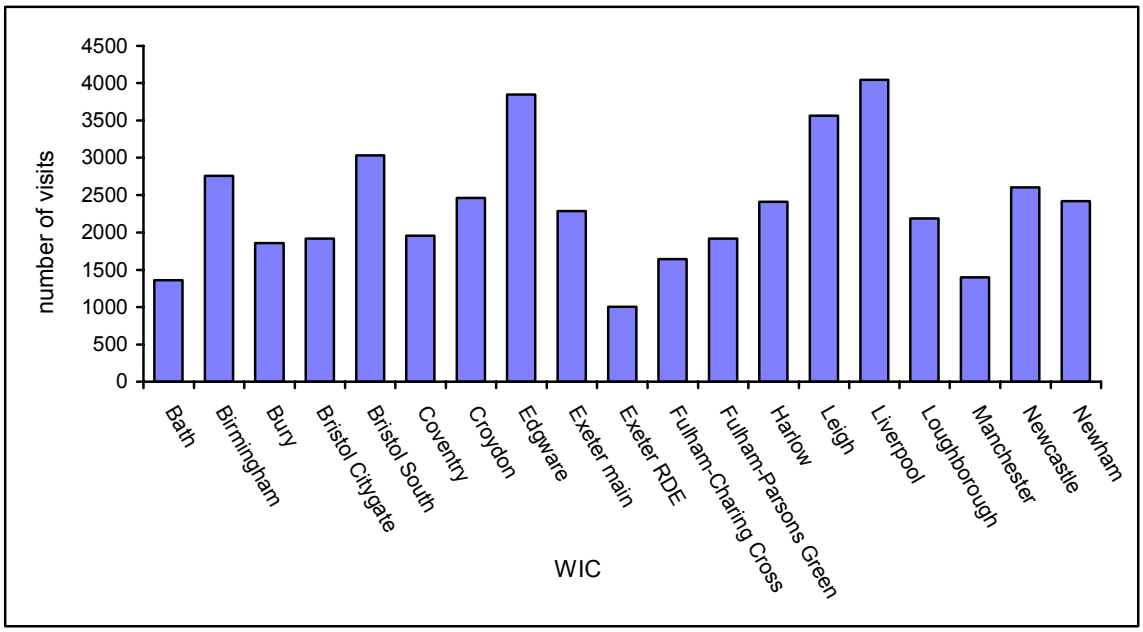
Not only did different walk-in centres use different locally derived codes, but they also used different fields within the software to record the same information. For example referral to a GP was recorded under the 'agency' field in some centres, under the 'follow-up' field in others, or under both fields in others. New variables were created as necessary. In this example separate variables were created for 'referred to GP', 'referred to A&E' and so on. If either the 'agency' or 'follow-up' fields indicated a referral to a GP this information was recorded in the new variable. One call may lead to referral to more than one agency, so these were treated as multiple response variables.

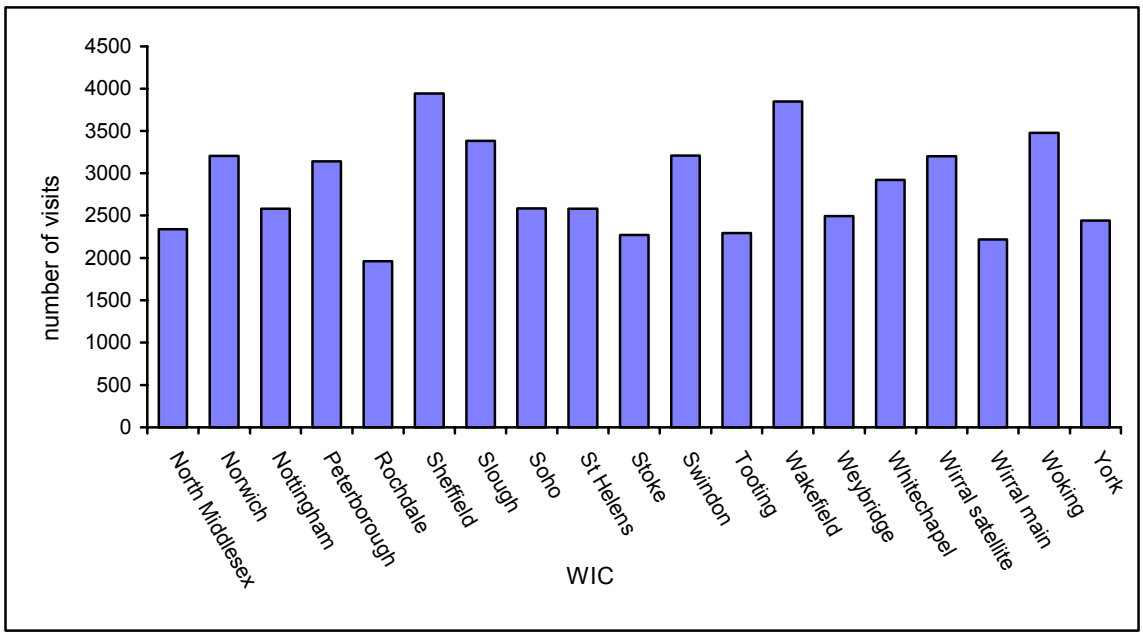
4.3 Results

4.3.1 Total number of visits

All thirty-five reporting sites were able to provide data on the total number of walk-in centre visits during August 2001. Figure 3 illustrates how the attendance varied considerably from site to site. Monthly patient throughput ranged between 1004 and 4041 per centre during the month of August 2001.

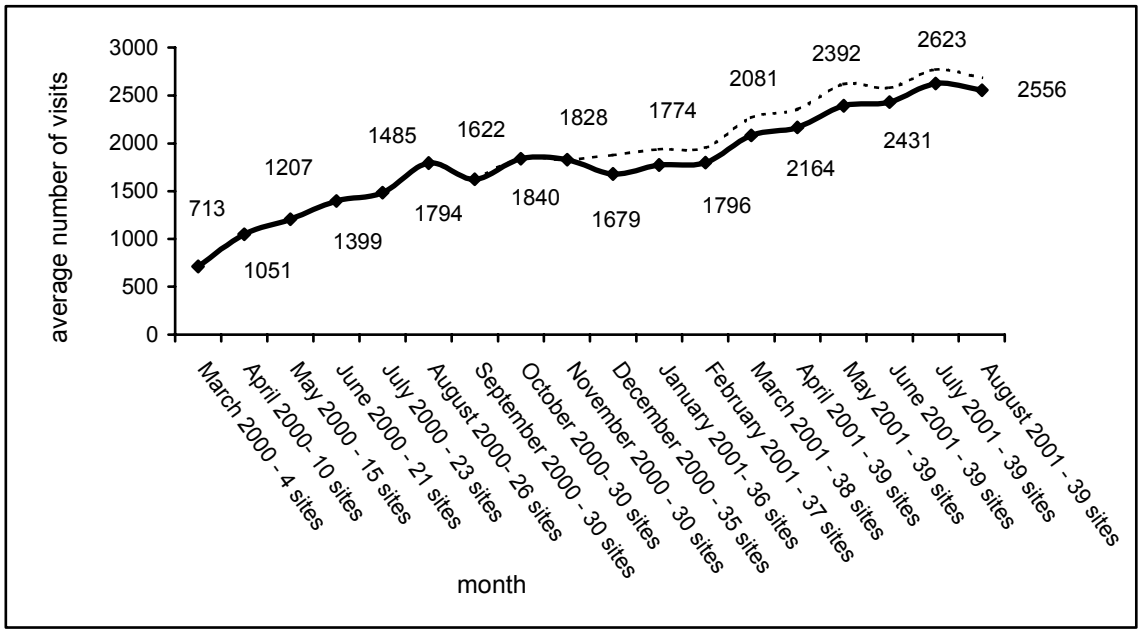
Figure 3: Total number of visits across all walk-in centres in August 2001
(n=99675)





In August 2001, the average number of visitors per walk-in centre was 2556 (82 visitors per day) compared to an average of 1794 in August 2000. Because the average number of visitors per walk-in centre over time could be misleading (if more or less busy sites opened later), an analysis was made of the number of consultations in those sites which had been open for at least 12 months by August 2001. This is shown by the dotted line in Figure 4..

Figure 4: Number of callers per month per walk-in centre



4.3.2 Average number of visits during each hour of the day

Twenty-eight of the thirty-nine operational sites gave feedback on the average number of visits per hour, although in some cases the data was incomplete. The busiest period on weekdays falls between 9 a.m. and 4 p.m. From 7 p.m. onwards, the average number of consultations decreases steadily from around 6 per hour to only 1 per hour by 10 p.m. The distribution of walk-in centre visits over weekends and Bank Holidays is largely similar to that of weekdays although the busiest period begins slightly later in the day, around 10 a.m.

Figure 5 illustrates the times of visits based on the anonymised data. Interestingly, although one feature of walk-in centres is that they have extended opening times, they received relatively few visitors outside office hours.

Figure 5 Times at which people contact walk-in centres

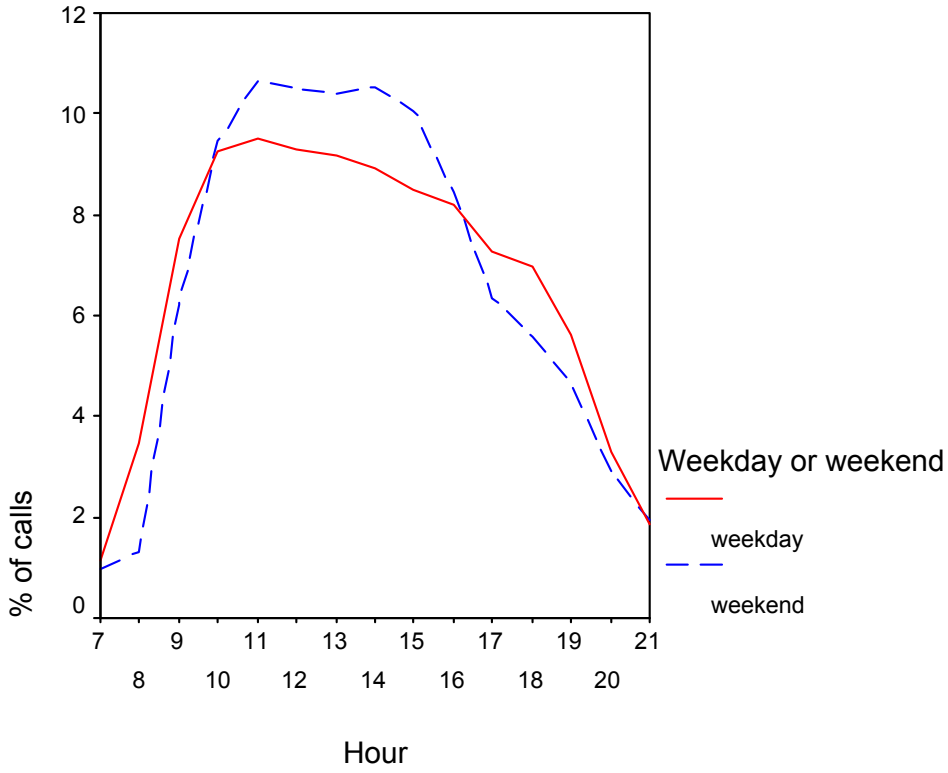


Figure 6 overleaf illustrates that there was a clear relationship with age, with consultations about children occurring most commonly between 15.00 and 17.00 hours, those concerning young adults (16 to 44 years) peaking at lunch-time (between 12.00 and 14.00 hours) and older people consulting between 9.00 and 12.00. The busiest day was Monday (17 (16.0 to 17.8)% of all calls), with similar numbers attending on other days but fewer on Sundays (13 (11.9 to 13.5)% of calls).

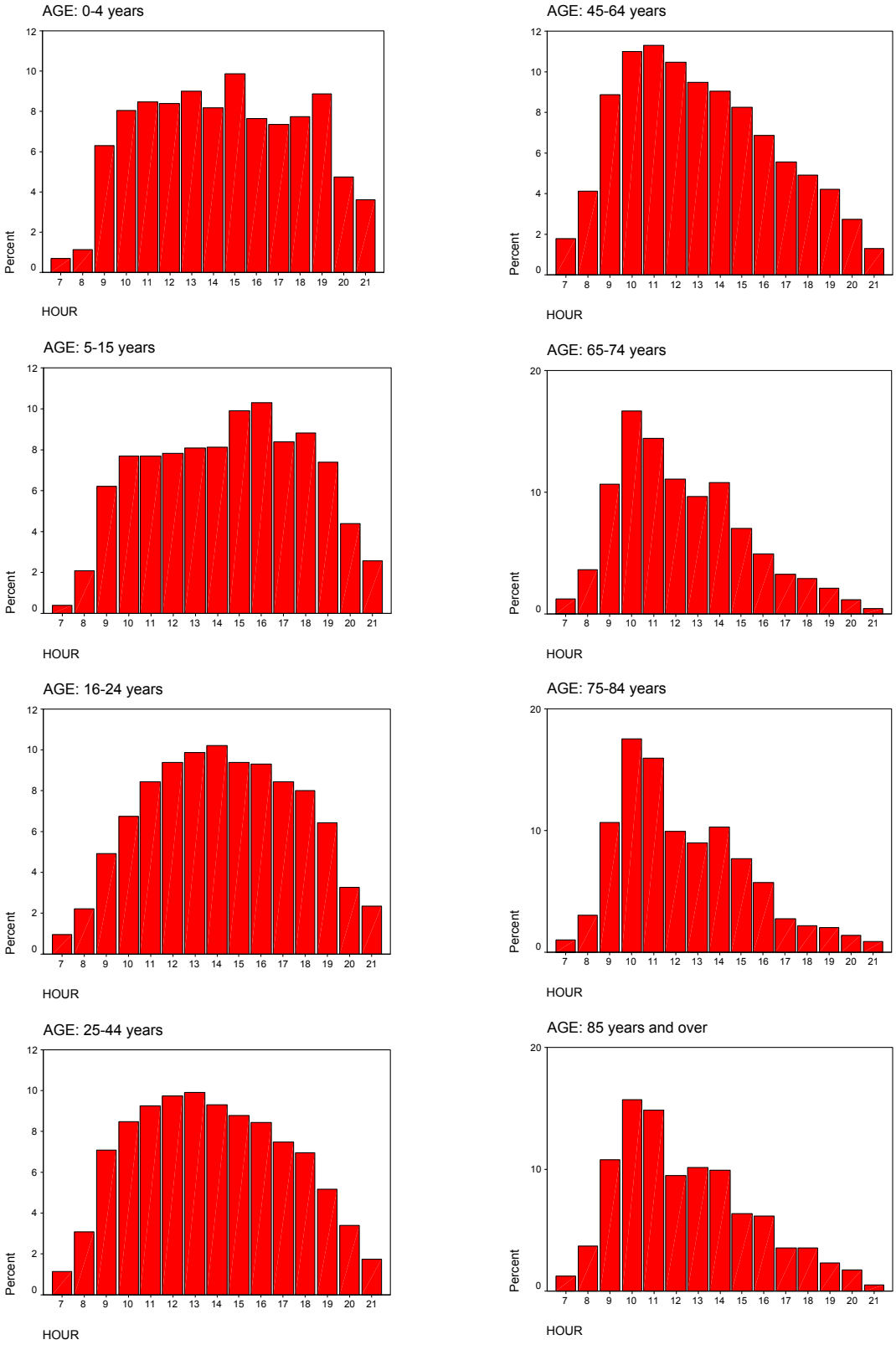


Figure 6 Consultations by different age-groups at different times of day

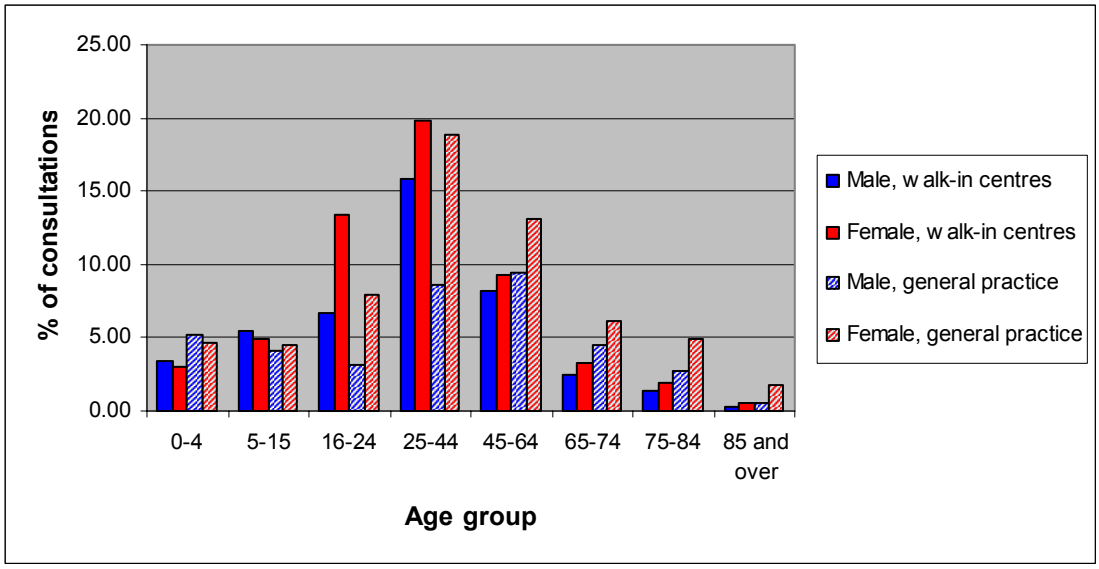
4.3.3 Visitor profile at walk-in centres

Information about the age and sex of visitors is available from the anonymised data, and is compared in Figure 7 with data from the Fourth National Morbidity Study[55] of visitors to general practices. This shows that a higher proportion of visitors to walk-in centres are young adults with a higher proportion of young men and fewer elderly than consult in general practice.

Twenty-four walk-in centre sites provided some data in the monitoring returns about the age and/or sex of their August 2001 visitors. The overall age profile of visitors attending walk-in centres was similar to that shown by the anonymised data, with the majority of visits being made by people between the ages of seventeen and thirty-five years. The proportion of women and men attending is almost exactly equal (27643 : 27446).

Figure 7 Age and sex of visitors to walk-in centres, compared with general practice

Proportions of walk-in centre consultations are based on data from centres using Adastra software, weighted to adjust for the length of time centres had been open. Data for general practice is from the Fourth National Morbidity Study.[55]



4.3.4 Number of visits dealt with by each staff group

Twenty six of the thirty-nine operational sites returned data relating to the categorisation of visits by type of staff group consulted. Data about staff type were available for 93% (62346/67292) of visitors to walk-in centres during August 2001.

The great majority of the August 2001 walk-in centre visits - 83% (51716 / 62346) - were attended by a nurse only.

4.3.5 Consultation duration and waiting times

Table 1 shows the length of consultations provided by individual staff types at walk-in centres. It appears that whilst the amount of time spent with a nurse has remained generally static over time, there has been an increase in the length of time spent with GPs at those walk-in centres where doctors are present.

Table 1: Consultation duration (minutes) across all walk-in centres by month

Month	Nurse	Doctor
June 2000	18	9
August 2000	18	11
February 2001	18	22
August 2001	17	25

According to the anonymised data from the Adastra sites, the median wait for a consultation was 10 minutes (inter-quartile range 3 to 26 minutes), and the median length of consultation was 14 (IQR 8 to 21) minutes. The average length of consultation (for comparison with the monitoring returns data shown in Table 1) was 17 minutes, but the median is a more appropriate statistic because the mean is skewed by a few lengthy consultations.

4.3.6 Presenting complaints

Reliable data about patient complaints was only obtainable from 4 of the 12 centres providing anonymised data. The most common presenting complaints, based on this data, are shown in Table 2 .

Table 2 Twenty most frequent reasons for consultations
(data from 4 centres, n = 20410)
Excludes 'miscellaneous' which accounts for 13% (12.1% to 14.3%) of consultations

Condition	n	% of consultations*	(95% confidence interval)
Flu/viral systemic infection	578	5	3.5 to 6.1
Unprotected sexual intercourse	513	3	2.8 to 3.6
Return dressing	634	3	2.0 to 3.4
ENT other	636	3	2.5 to 2.9
Common cold	391	2	1.8 to 3.0
Blocked ears	681	2	2.1 to 2.6
Other musculoskeletal condition	577	2	2.1 to 2.7
Non-acute wound care	326	2	1.8 to 2.7
Other skin conditions	667	2	2.0 to 2.4
Otitis media	262	2	1.7 to 2.6
BP check	744	2	1.7 to 2.2
Muscle pain	263	2	1.4 to 2.4
Urinary tract infection	372	2	1.6 to 2.1
Other eye conditions	441	2	1.5 to 2.0
Tonsillitis/pharyngitis	336	2	1.4 to 2.1
Minor head injury	240	2	1.3 to 2.1
Soft tissue injury ankle/foot/toe	289	2	1.5 to 1.8
Other wound, soft tissue infection, burn	249	2	1.4 to 1.9
Styes, conjunctivitis, blepharitis	372	2	1.3 to 1.7
Back pain	282	1	1.2 to 1.7

* Proportions are weighted to adjust for the length of time centres had been open

4.3.7 Prior intentions and referrals

In the routinely collected data, walk-in centre visitors were asked what they would have done if the walk-in centre had not existed, and the health professional conducting the consultation recorded whether they referred the patient elsewhere after the consultation. Different estimates are obtained from the monitoring returns and from the anonymised data, which is based on a smaller set of centres. These estimates are shown in Table 3.

Based on the June 2001 monitoring returns, 74% of consultations were managed entirely in the walk-in centres.

Table 3 Visitors intentions if walk-in centre and not been available, and referrals from centres following consultation

	Anonymised data		Monitoring returns	
	Prior Intentions	Referrals	Prior Intentions	Referrals*
General Practice	58%	35%	49%	14%
Accident & Emergency	15%	7%	19%	5%
No health agency	10%	51%	9%	74%
Pharmacy	1%	1%	4%	2%
Call 999	0.2%	0%	0.1%	0.1%
Call NHS Direct	0.7%	0%	1%	0%
Minor Injuries attendance	1%	0%	6%	0%
Other	14%	10%	12%	5%

* Total is greater than 100% because some consultations led to more than one referral

4.3.8 Further analysis by type of walk-in centre

Using the typology described in section 3.3.1, the various walk-in centres reporting in August 2001 were placed in one of four distinct categories according to their situation - shop-front; based in a hospital site with A&E facilities; based on a hospital site without A&E facilities; or co-located near a GP surgery or health centre.

4.3.9 Average visit throughput by type of location

The average number of visits to centres in different types of location varied considerably, as shown below in Table 4. Those centres based at hospital sites without A&E facilities attracted the highest average number of visits per month (3200) whilst those in shop-front locations dealt with almost two-thirds that number of monthly visits (2219) on average. However, the average number of visitors to all four types of walk-in centre had increased significantly since August 2000, by between 24 and 65 per cent.

Table 4: Average visit throughput by type of location

Type	August 2000 (25 sites)	February 2001 (37 sites)	August 2001 (39 sites)	% change between 2000/2001
Shop front	1346	1551	2218	+65
Hospital site with A&E	1553	1565	2271	+46
Hospital site without A&E	2571	2387	3200	+24
GP / health centre	2070	2005	2638	+27

4.4 Discussion

A number of difficulties were identified with using the routinely collected data to describe the activities of the walk-in centres. At the beginning of the evaluation the centres were using a variety of different types of software and were recording information in different ways. Many had difficulties in extracting the information they required in order to complete the monitoring returns. Even where sites used the same software, they sometimes used the same field to record slightly different information.

During the evaluation, all sites changed to using a standard clinical assessment system, but this happened at different times at each centre, and there were initial difficulties in obtaining monitoring data, although the situation was improving towards the end of the evaluation.

These problems are not unusual in analyses based on routinely recorded data. They do, however, mean that conclusions based on the monitoring returns should be made very cautiously, and should not be accepted without careful consideration of the validity and reliability of the particular item of data. For many variables there were a large proportion of missing cases at some centres. In this report, analysis has been restricted to variables and centres providing reasonably complete data.

The coding of clinical data was particularly problematic. Few walk-in centres initially coded the clinical content of their consultations. Many entered presenting complaints in free text which was not amenable to analysis. Those which did code clinical conditions used different locally devised coding systems. These frequently confused presenting complaint, bodily system affected and final diagnosis. They were often not comprehensive. In many cases the codes were very general (e.g. 'other musculoskeletal condition') and such descriptions are of little practical use.

The coding of clinical conditions raises difficult issues. It is not necessarily easy for staff to code patient's problems which may often be complex, multiple and poorly defined. In the longer term, coding consultations within walk-in centres will be necessary to enable electronic linkage between walk-in centre records and records held in primary care and hospitals. It will be important to clearly distinguish between the coding of presenting complaint, or symptoms, and diagnosis, recognising that diagnoses made at walk-in centres will frequently be provisional. It will also be important to use a standard national coding system such as Read codes.

5 Questionnaire survey of walk-in centre users and follow-up survey

5.1 Introduction

In order to evaluate the success of walk-in centres, the experience of their users is clearly fundamental. A large scale questionnaire survey of walk-in centre users was therefore conducted. This complemented the qualitative case-study approach, described in Section 6. The purpose of the questionnaire survey was to gain information about the characteristics of centre users, their reasons for attending a centre, their expectations, their satisfaction with the service they received, and their intentions following the consultation.

The survey would provide important data to inform conclusions about four of our five assessment criteria for walk-in centres. Questions about the convenience of the centre location and opening hours, reasons for using a walk-in centre rather than another health provider, and how long people waited to be seen, provide information about accessibility. With regard to quality, it can be argued that since many consultations in walk-in centres relate to minor illnesses and the need for health information and advice, the patient's subjective experience is the most valid measure of the outcome of a walk-in centre consultation. A comparison of user's intentions before their consultation, whether they were referred to another health provider following the consultation, and what they actually intended to do following the consultation, provide some indication of the likely impact of walk-in centres on the use of other health services. Finally, the user survey provides information about the appropriateness of care. This comes from questions about users expectations of walk-in centres and whether centres provided what users felt they needed. The user survey also provides evidence about whether centres are providing care to the patient groups that they set out to target in their objectives.

It is well-recognised that levels of expressed satisfaction in surveys of health service users are usually high, and the results also depend on how questions are asked. It is therefore necessary to have a comparator group in a survey of this kind. Although there is no direct comparator for walk-in centres, patients consulting in general practice on a 'same-day' basis (i.e. without making a pre-booked appointment) were used as the most appropriate comparison group for this survey. The limitations of this approach are discussed later.

5.2 Methods

5.2.1 Setting

The survey was conducted amongst people attending 38 centres which were open by March 2001. In order to provide a comparison for these data, a sample of users of general practices was also recruited. Rather than obtaining a simple random sample of general practices (and their patients), we restricted the sampling frame of general practices to those that were within three kilometres of a walk-in centre. By stratifying the general practice sampling frame in this way, we ensured that the demographic characteristics of the walk-in centre and general practice patients were reasonably well matched. General practices were recruited by approaching the nearest general practice to each walk-in centre; if this practice declined we approached the next nearest practice and so on, but did not approach

practices more than three kilometres from each walk-in centre, based on a list of practices less than three kilometres from each walk-in centre.

5.2.2 Subjects

Consecutive users of walk-in centres or general practices who attended in randomly selected sessions were invited to participate in the survey. In general practices, the survey was only conducted amongst patients attending on a same day basis. Parents or carers were asked to complete the questionnaire on behalf of children aged under 16 or people unable to complete the questionnaire because of old age or disability. Unaccompanied children aged under 16 were excluded. Where participants could not read English, walk-in centres and practices used their own local arrangements for translation or were able to contact 'Language Line' to arrange administration of the questionnaire over the telephone in a wide range of languages.

5.2.3 Development of questionnaire

The questionnaire was in two sections. The first was designed to be completed in the waiting room before the consultation and included questions about socio-demographic characteristics, convenience of location and opening hours, reasons for consulting a walk-in centre or general practice, alternative avenues of help considered, expectations, recent use of health services and attitudes to continuity of care. The second section, to be completed after the consultation, included questions about the wait to be seen, satisfaction with the service and the consultation, treatment given and referrals to other agencies, 'enablement', and intentions to consult other health professionals following the consultation.

Most questions were identical for users of walk-in centres and general practice, but some questions had alternate wordings (e.g. 'what did you expect the walk-in centre/surgery to do for the patient?) as necessary. These alternative wordings are shown in brackets in the results. Some additional questions were only applicable to the walk-in centre version of the questionnaire. Preliminary interviews were held with a number of patients to walk-in centres to ensure that answer options included all likely responses.

Questions were used or adapted from existing validated questionnaires where possible, including the Census, the General Household Survey,[56] the user survey conducted as part of the evaluation of NHS Direct,[57] and a study of patient satisfaction with GP out-of-hours co-operatives and deputising services.[58]

In a separate study, supported by the Scottish Office and the National Association of GP co-operatives, a brief satisfaction questionnaire has been developed for use by organisations providing out-of-hours primary care. This has been designed to use a single question to substitute for each of the longer multi-item scales used in an earlier validated and well-established questionnaire.[58] Pilot studies have shown that the brief questionnaire produces higher response rates than the long questionnaire, and that each question correlates significantly with the relevant longer scale. Individuals' responses to the different questions on the short questionnaire are also highly correlated, and the questions can be combined to form a single satisfaction scale which has good internal reliability.

As a measure of outcome following the consultation, the patient enablement questionnaire was also included.[59]

The entire draft questionnaire was piloted over a one-week period at a walk-in centre and a general practice, slightly modified and re-piloted at another walk-in centre.

5.2.4 Administration of questionnaire

Each person attending the walk-in centre or general practice during a 'survey session' (see below) was given a unique identifying number and their gender and date of birth were recorded on a survey form. Patients were given the questionnaire on arrival and asked to complete the first section before the consultation, the second section after the consultation but before leaving the walk-in centre or surgery, and to deposit the questionnaire in a box. Questionnaires were marked with the identifying number, but were otherwise anonymous. At the end of each session, receptionists sent one postal reminder to each person attending in the survey session who had not returned a questionnaire.

5.2.5 Sampling

Based on information from each walk-in centre or general practice site about the number of patients they anticipated in a typical week, sessions were randomly sampled over a one week period in order to invite about 100 people to participate at each site. Sessions were weekday mornings, weekday afternoons and Saturday mornings at general practices, and every morning, afternoon and evening at walk-in centres. If a site did not anticipate seeing 100 patients in one week, sessions were sampled sessions over a two week period.

Wherever possible, the study was run in the walk-in centre and in the neighbouring practice in the same week, in order to minimise any seasonal effects. In a few cases this was not possible, but in all cases the survey ran in the neighbouring walk-in centre and practice within a four week period.

5.2.6 Power of study

Prior power calculations were based on 72 sites (36 centres and 36 practices) each providing 100 potential respondents, and a response rate of 70%, leading to 5,040 completed questionnaires. In the absence of significant clustering effects, this would provide 80% power in a comparison of proportions to detect differences between all walk-in centres compared with all practices of at least 4% (based on 50% vs. 54%) using a two-tailed z-test. The study was not adequately powered to detect likely differences between individual walk-in centres and their neighbouring practice, since it would only have 80% power to detect a 23% difference.

5.2.7 Analysis

For each key outcome, descriptive statistics were calculated for all walk-in centres and all practices combined. Comparisons between walk-in centres and practices were made using linear models that adjusted for the effects of age, sex and ethnicity amongst patient groups, as these factors have been shown to be potent determinants of patient satisfaction in similar studies in other contexts.[58]

As appropriate for each specific variable, multivariable linear models were estimated using ordinary, logistic or ordinal logistic regression. The estimation of these models, and of 95% confidence intervals, was undertaken using design-weighted survey estimators implemented in Stata version 7. These analyses took full account of the complex survey design, including the stratification of the sampling frame and the clustering of patients within walk-in centres and general practices, and were weighted to take account of the differential sampling fractions used in each site.

5.3 Follow-up survey methods

5.3.1 Introduction

A sub-sample of respondents to the main user survey was approached four weeks after their consultation in a walk-in centre or general practice. The purpose of this follow-up survey was to determine whether patients had re-consulted about the same problem or another problem, either by returning to the same site or by attending a different health agency. This is relevant to the issue of whether walk-in centres represent an additional route to care or a duplication of services, with people seeking 'second-opinions' from different providers. This in turn will impact on the efficiency of walk-in centres.

One function of walk-in centres is to provide care for those not registered with a GP, and to facilitate their registration for future care. Therefore the follow-up study also examined whether those who were not registered with a GP at the time of their initial consultation (in the main survey) were registered four weeks later.

5.3.2 Design of follow-up questionnaire

The follow-up questionnaire consisted of three questions. Questions 1 and 2 addressed whether, in the four weeks following the consultation at which they completed the main survey questionnaire, they had consulted an NHS health professional about the same problem or a different problem, and if so which health agency. Question 3 asked whether the patients was registered with a GP in their home area.

5.3.3 Administration of questionnaire

As a result of concerns expressed by the Multi-Centre Research Ethics Committee, respondents in the main user survey were given the opportunity to opt out of being sent a further questionnaire four weeks later. Follow-up questionnaires could therefore only be sent to those people who had both returned a questionnaire in the main survey and who had not opted out of further contact. Follow-up questionnaires were sent by post, followed by one reminder to non-respondents.

5.3.4 Power of study

Based on a sample of one fifth of the respondents to the user survey participating in the follow-up study, and a response rate of 70% in the follow-up study, 706 respondents to the follow-up survey were anticipated. This sample size would provide estimates of proportions within 5.3% (95% CI) and 80% power to detect differences of at least 10.5%. between all walk-in centres combined and all general practices.

5.3.5 Sampling

Initially one day in the survey week was randomly selected at each site, and all those attending a survey session on that day were invited to participate in the follow-up survey. However, because a higher proportion of people opted out of follow-up than anticipated, this was later changed to a randomly selected 1 in 3 sample of the sessions used in the main survey. The analyses were weighted to take account of the different sampling probabilities at each site.

5.4 Results

The survey ran in the first site in the week beginning 30th October 2000 and in the last site in the week beginning 9th April 2001. It was conducted in 38 walk-in centres and 34 general practices. In two sites it was not possible to identify a local general practice willing to run the survey, and a further two practices were unable to conduct it at short notice. In 15/34 areas the general practice closest to the walk-in centre agreed to run the survey. The median number of practices approached to run the survey was two.

5.4.1 Response rates

Completed questionnaires were returned by 3856/4555 (85%) of patients attending walk-in centres and 2373/3078 (77%) of patients attending general practices, an overall response rate of 6229/7633 (82%).

Respondents were very similar to non-respondents in terms of age (mean age respondents 33.3 (95% confidence interval 32.8 to 33.9) years; non-respondents 31.8 (30.6 to 33.0) years) and sex (56.0% of respondents were female vs. 57.1% of non-respondents).

5.4.2 Interpretation of tables

In each of the following tables, the raw numbers of respondents in each category are misleading because of the weighting used in the analyses. Therefore the denominator is shown for each analysis, with weighted proportions of respondents. The denominator varies because of missing data. Comparisons between walk-in centre and general practice are adjusted for age, sex and ethnicity where specified.

5.4.3 Characteristics of patients attending walk-in centres or general practices

The following tables show the socio-demographic characteristics of users of walk-in centres and general practices.

Consultations with general practice appear slightly more likely to involve children than those in walk-in centres (22.8% vs. 19.1%), but this difference is of only borderline significance (p=0.06). Users of walk-in centres are slightly younger, and include a higher proportion of males than those in general practice (Table 5).

Table 5 Age and sex

	Walk-in centre	Practice	Significance of difference
Age: Mean	32.7	34.0	p=0.095
Median	29	32	
Gender: % male	46.6%	41.9%	p=0.002

The pattern of use by age-sex groups shows distinct differences. Females aged 17-25 and males aged 26 to 35 make up a higher proportion of the population using walk-in centres than in general practice (Table 6).

Differences in the age and sex characteristics of users of different types of walk-in centres were explored. Shop-front sites tended to see a lower proportion of young children and a higher proportion of adults, particularly men aged 46 to 80. A slightly lower proportion of patients attending walk-in centres came from ethnic groups other than white, compared with general practice (p=0.04) (Table 7 overleaf).

Table 6 Age-sex groups

			WIC or Practice	
Gender			Walk-in centre	Practice
Male	Age group	<5	9.5%	14.6%
		5-16	15.4%	17.8%
		17-25	15.5%	9.9%
		26-35	19.9%	14.7%
		36-45	14.5%	11.5%
		46-55	9.9%	11.7%
		56-65	7.6%	8.8%
		66-80	6.1%	9.1%
		>80	1.7%	2.0%
		n =	1754	964
Female	Age group	<5	6.7%	8.2%
		5-16	12.0%	12.0%
		17-25	24.6%	17.2%
		26-35	19.6%	17.5%
		36-45	11.8%	15.8%
		46-55	9.2%	9.0%
		56-65	6.5%	9.2%
		66-80	7.2%	9.0%
		>80	2.3%	2.2%
		n =	2085	1386

(significance of difference in age-distributions: p<0.001 for both males and females)

Table 7 Ethnicity

		WIC or Practice	
		Walk-in centre	Practice
Ethnic Origin	White	87.7%	84.4%
	Black Caribbean	2.0%	2.2%
	Black African	1.3%	1.7%
	Black other	1.2%	2.2%
	Indian	1.9%	2.2%
	Pakistani	1.7%	2.0%
	Bangladeshi	1.1%	1.9%
	Chinese	.4%	.7%
	Any other ethnic group	2.6%	2.8%
	n =	3816	2348

Questions were asked about the age at which people completed full-time education, and about housing status, as proxy measures for socio-economic status.

Users of walk-in centres were more likely than users of general practice to have further education beyond the age of 18 ($p<0.006$ adjusted for age-group, sex and ethnicity) and were more likely to be owner occupiers (Odds ratio general practice/walk-in centre = 0.69 (0.60 to 0.79), adjusted for age-group and sex). Only a small proportion of walk-in centre users were homeless.

Table 8 Education and housing

	Walk-in centre	Practice
Age on finishing full-time education		
Median age	16	16
% with education beyond age 18	24.7%	18.9%
n =	3314	1993
Household occupation:		
Owner-occupier	54.9%	49.2%
Renting	36.0%	44.5%
Live there rent-free	6.3%	3.5%
Squatting	0%	0.1%
Homeless	0.2%	0.4%
Other	2.6%	2.2%
n =	3806	2335

5.4.4 Reasons for being in the area and registration with a GP

Table 9 shows that four-fifths of walk-in centre users lived locally, but 13% were in the area for work or shopping. The vast majority (95.6%) were registered with a GP, with 79.3% being registered locally and a further 16.3% being registered but not in the area of the walk-in centre they were visiting.

Table 9 Why are you in this area?

	%
Living in this town	80.3
Work/Commuting	10.0
Shopping/Leisure	3.2
Tourist	.7
Staying temporarily	1.4
Homeless	.1
Refugee/Asylum seeker	.5
Other	3.8
n =	3803

5.4.5 Convenience of location and opening hours

Almost all users of general practice lived within 5 miles of their surgery. In contrast about a half of walk-in centre users lived very locally (within 2 miles) but 16.1% lived more than five miles away (Table 10).. A third (34.0%) of walk-in centre users had visited a centre before the consultation in which they completed a survey form. Users found the location of walk-in centres more convenient than the location of general practices (Table 11), and they found the opening hours far more convenient (Table 12).

Table 10 How far from the surgery do you live?

		WIC or Practice	
		Walk-in centre	Practice
Distance from WIC/surgery	< 2 miles	47.1%	75.4%
	3 - 5 miles	36.8%	22.2%
	6 - 10 miles	9.7%	1.6%
	> 10 miles	6.1%	.5%
	In another country	.3%	.2%
	n =	3788	2352

p <0.001adjusted for age, sex and ethnicity

Table 11 Convenience of location

		WIC or Practice	
		Walk-in centre	Practice
Convenience of WIC/surgery location	Very poor	.8%	1.1%
	Poor	.7%	1.8%
	Fair	11.3%	15.8%
	Good	44.5%	46.4%
	Excellent	42.7%	34.9%
	n =	3780	2308

p <0.001adjusted for age, sex and ethnicity

The relationship was examined between convenience of location and type of walk-in centre. Users found walk-in centres on hospital sites with A&E departments to be less conveniently located (Appendix 2)

Table 12 Convenience of opening hours

		WIC or Practice	
		Walk-in centre	Practice
Convenience of WIC/surgery hours	Very poor	.5%	.7%
	Poor	.4%	3.4%
	Fair	7.8%	24.9%
	Good	44.9%	51.8%
	Excellent	46.4%	19.1%
	n =	3651	2296

p <0.001adjusted for age, sex and ethnicity

5.4.6 Reasons for choosing a walk-in centre or general practice

The next question asked respondents to state the main reasons that they decided to attend a walk-in centre (or general practice as appropriate), rather than go elsewhere, such as a GP surgery (or walk-in centre), casualty department* or telephoning NHS Direct. Table 13 shows the main reasons that people consulted in each setting, ranked in order of reason for consulting in a walk-in centre. Not all options were applicable in both settings. Note that people could choose more than one option, so totals do not equal 100%.

The most important reasons that walk-in centre users chose this option were that it was possible to be seen more quickly than waiting for an appointment with the GP or waiting in casualty, and the convenience of the location and opening hours. Many people (17.5%) did not want to bother a doctor with their problem. The main reasons that people consulted in general practice rather than in the nearby walk-in centre were a preference for seeing a doctor or nurse that they knew, a wish to see a doctor rather than a nurse. A high proportion (39%) of general practice users did not consider the alternative of attending the walk-in centre, and a substantial minority (21.4%) had more confidence in the advice or treatment that they would receive in general practice.

Table 13 Main reasons for consulting a walk-in centre or general practice

Main reasons	WIC or Practice		
	Walk-in centre	Practice	Significance*
Quicker appointment than GP	59.7	-	
Convenient opening hours	32.6	11.9	<0.001
Convenient location	29.8	29.1	0.83
Shorter wait than casualty	29.1	16.4	<0.001
Didn't want to bother doctor	17.5	-	
Wanted to see nurse rather than doctor	9.5	-	
Sent by casualty, minor injuries unit, or GP (walk-in centre)	9.2	1.8	<0.001
More confidence in advice/treatment	8.1	21.4	<0.001
Not registered with GP	5.0	-	
Better range of services	4.9	6.5	0.04
Didn't think about going anywhere else	5.9	39.0	<0.001
Wanted to see a doctor or nurse that I knew	-	44.9	
Wanted to see a doctor not a nurse	-	33.7	
Walk-in centre not suitable for my problem	-	19.6	
Wanted definite appointment time		16.8	
Other reason	11.0	8.6	<0.001
n =	2263	3785	

*adjusted for age, sex and ethnicity

There were some differences in the reasons that different age-groups gave for consulting in a walk-in centre rather than general practice, and vice versa (see Appendices 3 & 4).

Young adults (aged 17 to 45) and parents of young children were likely to cite reasons of convenience and speed for consulting in a walk-in centre, those aged 17 to 25 years were

* NB. The term 'casualty' was used in questions rather than 'Accident and Emergency' department, as it appeared to be more familiar to walk-in centre users

more likely to consult because they were not registered with a GP, and the elderly were more likely to say that they did not want to bother a doctor, and wanted to see a nurse.

For those consulting in general practice, the proportion of those wishing to see a health professional that they knew, and to see a doctor rather than a nurse, increased with age. People aged 17 to 25 were much less likely to express a wish to see a doctor rather than a nurse than other age-groups.

The reasons that people chose a walk-in centre also varied with the setting of the centre, although being seen more quickly than in general practice was the most important reason in all types of centre. Appendix 5 shows that for 'shop-front' centres convenience of location and opening hours were important factors, along with a desire not to 'bother the doctor'. Many people attending walk-in centres on hospital sites chose this option because it was quicker than waiting in a casualty department. For sites adjacent to general practices, the longer opening hours of the walk-in centre were an important factor.

5.4.7 Alternatives chosen if walk-in centre had not been available

Users of both walk-in centres and general practice were asked what action they would have taken if the service had not been available. It is recognised that the responses should be interpreted with caution, because peoples' reactions to this type of hypothetical question may not reflect their actual behaviour.

The responses to this question indicate that about a half of walk-in centre users indicated that they would have attended a GP or practice nurse if the walk-in centre had not been available, and a quarter would have attended a Casualty department (Table 14). Only one in 10 walk-in centres would apparently have managed the problem themselves without involving any other health professional. These options were not surprisingly related to the type of walk-in centre, with those attending centres on hospital sites being more likely to cite a casualty department as an alternative, and those attending shop-front or general practice linked sites citing general practice as the alternative they would have chosen (Appendix 6).

By contrast, people who could not be seen in general practice would have considered a wider range of options, with the walk-in centre being only one of a number of alternatives considered alongside pharmacists, asking for a home visit, or managing the problem themselves.

It is notable that few people in either group considered the alternative of contacting NHS Direct.

Table 14 Alternatives if walk-in centre / (practice) had not been available

		WIC or Practice	
		Walk-in centre	Practice
Option if walk-in centre/GP not available	Looked after problem myself	9.7%	16.7%
	WIC/GP/PN	46.3%	18.9%
	Pharmacist	5.1%	15.6%
	Dentist	.2%	.2%
	Minor Injuries Unit	2.9%	1.0%
	Casualty Department	26.0%	13.8%
	NHS Direct	2.0%	5.8%
	Call GP out	3.7%	13.5%
	Other	4.2%	14.5%
	n=	3785	2263

p <0.001

5.4.8 Expectations

The next question asked respondents about the treatment or advice they expected from the walk-in centre or practice. It appears that walk-in centre users were more likely to expect information, advice, and treatment other than medication, whereas patients in general practice were more likely to expect medication or a prescription. Totals may exceed 100% because respondents could answer more than one option.

Table 14 Expectations for treatment and advice

		WIC or Practice		
		Walk-in centre	Practice	Significance*
What did you expect?	Advice	65.2	59.1	0.001
	Information	37.0	32.4	0.001
	Prescription	24.9	52.8	<0.001
	Medication	21.9	30.8	<0.001
	Treatment other than medication	34.2	12.8	<0.001
	Refer to GP/(WIC)	6.5	.7	<0.001
	Refer to hospital	6.3	5.5	0.260
	Other	5.5	5.3	0.572
	n =	3746	2286	

*adjusted for age, sex and ethnicity

5.4.9 How long had problems before consulting?

The next question asked respondents how long they had had the problem that led to their consultation. Most users of walk-in centres had had their problem for no more than a few days, and over a quarter were consulting on the same day as their problem began (Table 15).

Users of general practice appeared to have had their problems for longer. Although this survey was conducted amongst patients who consulted on a 'same-day' basis, most of whom would have been seen urgently because they felt they could not wait for a routine appointment, over half had had their problem for at least a week (Table 15).

Table 15 How long has the patient had the problem?

		WIC or Practice	
		Walk-in centre	Practice
How long has the patient had the problem?	Just today	28.1%	9.9%
	A few days	33.1%	34.8%
	About a week	12.9%	15.6%
	A few weeks	12.3%	15.3%
	A few months	5.2%	8.8%
	> a year	4.1%	11.2%
	Other	4.3%	4.4%
	n =	3745	2299

p <0.001adjusted for age, sex and ethnicity

5.4.10 Recent previous consultations with doctors or nurses

Respondents were asked if they consulted a doctor or nurse about the same or another health problem in the previous four weeks. The responses to these two questions were also combined to determine if respondents had consulted with any problem. The purpose of these questions was to detect evidence of duplication of care provision.

Table 16 Recent consultations with doctors or nurses

	WIC or Practice		Significance*
% who had consulted in the previous 4 weeks	Walk-in centre	Practice	
Same problem	17.7%	26.5%	P<0.001
Another problem	20.4%	24.8%	P<0.003
Any problem	32.7%	42.9%	P<0.001

* adjusted for age, sex and ethnicity

Although a minority of users of walk-in centres had already consulted a doctor or nurse recently about the same problem, this was true of a higher proportion of those attending in general practice.

5.4.11 Importance of continuity of care

Respondents were asked to state how important it was to see a doctor or nurse that they knew. This question was asked to test the hypothesis that those who chose to attend walk-in centres may place less priority on continuity of care than those who chose to attend general practice.

Table 17 Preference for seeing a known doctor or nurse

		WIC or Practice	
		Walk-in centre	Practice
Importance of same doctor/nurse	Always try to see same doctor/nurse	26.6%	35.0%
	Prefer to see same doctor/nurse	24.7%	30.7%
	Don't really mind which doctor/nurse I see	47.3%	33.5%
	Prefer to see a doctor/nurse I don't know.	.5%	.3%
	Other	.9%	.7%
	n =	3717	2288

p <0.001adjusted for age, sex and ethnicity

The results tend to confirm that seeing a familiar doctor or nurse is less important to walk-in centre users.

There was a trend for older people to place more importance on seeing a doctor or nurse that they knew (Table 18). Men were less likely than women to wish to see a familiar doctor (ordered logistic regression, adjusted for age-group and ethnicity, p<0.001), and patients of white ethnicity were less likely to want to see a familiar doctor than non-white patients (ordered logistic regression, adjusted for age-group and ethnicity, p<0.001).

Table 18 Preference for seeing a known doctor or nurse, by age-group and sex

		Age group								
Gender		<5	5-16	17-25	26-35	36-45	46-55	56-65	66-80	>80
Male	Always try to see same doctor/nurse	27.9%	26.1%	17.0%	25.7%	21.9%	36.1%	36.9%	44.4%	41.0%
	Prefer to see same doctor/nurse	30.8%	25.2%	22.5%	24.6%	24.4%	20.3%	18.1%	23.6%	15.2%
	Don't really mind which doctor/nurse I see	41.3%	48.7%	60.4%	49.7%	53.6%	43.6%	45.0%	31.9%	43.8%
Female	Always try to see same doctor/nurse	28.6%	25.8%	18.5%	26.3%	34.8%	40.3%	35.6%	54.5%	42.2%
	Prefer to see same doctor/nurse	29.4%	21.9%	31.8%	31.8%	29.7%	25.7%	32.9%	22.3%	24.3%
	Don't really mind which doctor/nurse I see	42.0%	52.3%	49.6%	41.9%	35.5%	33.9%	31.6%	23.1%	33.5%

5.4.12 Section 2 - completed after consultation

Respondents were asked to complete the remaining questions after seeing the nurse or doctor.

The majority of users of walk-in centres consulted a nurse, whereas most of those consulting in general practice saw a doctor (Table 19).

Table 19 Did you see a doctor or nurse?

		WIC or Practice	
		Walk-in centre	Practice
Health professionals seen	Doctor	4.5%	93.4%
	Nurse	87.4%	3.7%
	Doctor and nurse	8.1%	2.9%
	n =	3242	2037

5.4.13 Waiting times

People were asked how long they had to wait before their consultation. Waiting times were significantly shorter in walk-in centres ($p<0.001$).

Table 20 Length of wait before consultation

		WIC or Practice	
		Walk-in centre	Practice
Length of wait	Not at all	12.2%	7.1%
	<10 minutes	31.3%	28.5%
	11 - 20 minutes	24.8%	24.5%
	21 - 30 minutes	13.8%	14.0%
	31 - 40 minutes	7.0%	9.1%
	>40 minutes	10.8%	16.8%
	n =	3479	2107

5.4.14 Satisfaction

The issue of patient satisfaction was addressed in a number of ways. Respondents were asked five questions about their satisfaction with different aspects of the care they received, and a question about their overall satisfaction. Preliminary analysis of the full dataset confirmed the results from pilot studies that the responses to the six attitudinal questions had a high level of internal consistency (Cronbach's alpha =0.82), and it would be appropriate to derive an overall scale score from these question items. The score was expressed as the percentage of the maximum possible score. A response of 'very satisfied' on all six items would score 100%, with neutral on all responses scored as 0, and 'not at all satisfied' on all responses scored as –100%.

In addition, respondents were asked if they left the consultation with unanswered questions, whether they would recommend this walk-in centre or practice to their family

and friends, and whether they would use a walk-in centre or this surgery again. These questions were also intended to be measures of patient satisfaction.

It is well recognised that patients tend to express high levels of satisfaction in surveys conducted in the health service and are reluctant to criticise health care, even though detailed questioning reveals many causes for complaint. Because of this, it has been suggested that responses of 'fairly satisfied' (or worse) on this type of survey indicate room for improvement in the service.[60] As expected, responses to the satisfaction items in this survey were strongly skewed towards satisfaction, therefore Table 21 presents the proportion of respondents who were 'very satisfied' with each item.

Table 21 Patient satisfaction with aspects of the service

	WIC or Practice		
% of respondents 'very satisfied' with each item	Walk-in centre	Practice	Significance*
The attitude of the receptionist	85.0 (n=3615)	70.6 (n=2200)	p<0.001
The time you had to wait before you saw a doctor or nurse	60.5 (n=3490)	43.6 (n=2088)	p<0.001
The attitude of the doctor or nurse	88.3 (n=3485)	79.0 (n=2099)	p<0.001
The explanation the doctor or nurse gave you about your problem	79.9 (n=3384)	69.3 (n=2044)	p<0.001
The treatment or advice you were given	76.9 (n=3420)	68.9 (n=2056)	p<0.001
Overall, how satisfied were you with the service you received?	79.9 (n=3491)	66.2 (n=2099)	p<0.001

*adjusted for age group sex and ethnicity

The mean overall satisfaction score was higher amongst walk-in centre patients than amongst general practice patients (85% vs. 75%, mean difference 10.0% (8.0% to 11.9%), p<0.001 adjusted for age, sex and ethnicity), although it is important to note that scores were high in both settings, and most patients expressed high levels of satisfaction.

As has been shown in other similar studies, age, and ethnicity were potent confounding factors with regard to satisfaction, with people from non-white ethnic groups being more likely to express dissatisfaction, and satisfaction being lowest in 17-25 year olds and increasing with age. Satisfaction was also lower amongst those with further education, and was inversely related to waiting times.

Several further questions were asked which were likely to reflect patient satisfaction. The results for the questions about unanswered questionnaires and willingness to recommend the service again indicated that users were satisfied with both walk-in centres and general practice, but were more satisfied with walk-in centres. The question about whether users would use the service again favoured general practice, but this question is of limited relevance to general practice patients.

As anticipated there was a strong relationship between the overall satisfaction score and not having any unanswered questions (57% vs. 85%, mean difference 28.7% (23.2% to 34.1%), p<0.001 adjusted for age, sex and ethnicity), willingness to recommend the service(64% vs. 90%, mean difference 26.4% (24.3% to 28.5%, p<0.001 adjusted for age, sex and ethnicity) and intention to use the service again(63% vs. 88%, mean difference 25.5% (23.1% to 27.8%), p<0.001).

Table 22 Further questions relating to patient satisfaction

		WIC or Practice		
		Walk-in centre	Practice	Significance of difference*
Did you leave the doctor/nurse with unanswered questions?	Yes	6.0%	8.7%	p<0.001
Would you recommend this walk-in centre/(surgery) to your family and friends?	No/Not sure	3.2%	7.6%	
	Probably yes	19.5%	32.9%	
	Definitely yes	77.2%	54.5%	p<0.001
Would you use this walk-in centre/(surgery) again	No/Not sure	3.4%	1.4%	
	Probably yes	19.4%	14.7%	
	Definitely yes	77.3%	83.8%	p<0.001

*adjusted for age, sex and ethnicity

5.4.15 Enablement

The enablement questionnaire was used as a measure of outcome from the consultation. The results should be interpreted with caution as there was a higher proportion of missing responses on this section of the questionnaire than on any other. The proportion of missing responses for the six items ranged from 20.4% to 35.1% of respondents, and between 18.5% and 31.6% of these responses were 'not applicable'. Although 'not applicable' scores can be included in the calculation of the overall 'enablement' score, this does tend to reduce the usefulness of the results.

Because of the high levels of non-response, scores were only calculated for respondents who completed all items. A score was therefore only calculated for 56.3% (3506/6229) of respondents. The mean score for respondents in general practice was slightly higher than for walk-in centre users (28.7vs 25.5, mean difference 3.3 (0.9 to 5.6), p=0.007 adjusted for age, sex and ethnicity).

5.4.16 Treatment or advice given

Respondents were asked to indicate the treatment or advice they were given by the nurse or doctor, and could answer multiple options. Referrals to general practice or to hospital were included in this question. A much higher proportion of people were given a prescription in general practice. Almost a fifth (18.8%) of respondents were referred from the walk-in centre to a GP or to casualty.

Table 23 Treatment, advice, referrals

	WIC or Practice		
When you saw Dr/nurse were you:	Walk-in centre	Practice	Significance*
Given advice only	49.4	36.5	<0.001
Given information only	24.8	18.6	<0.001
Given a prescription	8.1	63.7	<0.001
Issued with medication	14.9	14.3	0.606
Treatment other than medication	27.1	7.0	<0.001
Referred to GP/ (walk-in centre)	12.8	.9	<0.001
Referred to Casualty	6.0	5.4	0.351
Other	7.6	7.1	0.611

*adjusted for age, sex and ethnicity

The relationship was examined between what people claimed they would have done if the walk-in centre or appointment in general practice had not been available, and the advice they were given by the doctor or nurse. No clear pattern emerged. People who said they would otherwise have attended general practice were no more likely to be referred there than those who said they would have handled the problem themselves. Of those who said they would have attended a GP if the walk-in centre had not been available, only 14.1% were referred there, with a further 3.7% referred to an A&E department.

5.4.17 Patients intentions after the consultation

This question asked respondents what they intended to do now that they had seen the doctor or nurse. This showed that about a third of patients intended to make an appointment at their GP's surgery following their consultation at the walk-in centre. Although this may suggest at first sight that many people attending walk-in centres had to attend general practice as well, it is important to note that a similar proportion of general practice patients also intended to make another appointment.

Table 24 Intentions following the consultation

		WIC or Practice	
		Walk-in centre	Practice
Next step	Make an appointment at GP surgery	32.0%	36.9%
	Visit Casualty Dept.	7.1%	2.5%
	Deal with it myself	41.2%	40.6%
	Other	19.7%	20.1%
	n =	3160	1915
			p <0.001

The following table examines the relationship between what people claimed they would have done if the walk-in centre or appointment in general practice had not been available, and their planned intentions following the consultation. This shows that of those who said before the consultation that they would have contacted a GP if the walk-in centre had not been available, only 34.6% intended to attend a GP following the consultation.

Table 25 Relationship between prior and planned intentions

		Next step				
Figures are weighted % of row.	**Option if Walk-in centre/GP not available**	Make an appointment at GP surgery	Visit Casualty Dept.	Deal with it myself	Other	n
Walk-in centre patients	Looked after problem myself	29.2%	2.8%	53.3%	14.7%	347
	GP/PN	34.6%	4.0%	40.8%	20.5%	1452
	Pharmacist	32.3%	.4%	50.7%	16.6%	165
	Dentist	41.2%	17.6%	5.9%	35.3%	7
	Minor Injuries Unit	29.1%	14.2%	38.3%	18.4%	81
	Casualty Department	25.8%	15.8%	37.4%	20.9%	756
	NHS Direct	44.1%	5.4%	40.7%	9.8%	71
	Call GP out	39.8%	4.1%	39.8%	16.3%	117
	Other	34.1%	3.1%	33.9%	28.9%	137
	Total	31.9%	7.0%	41.3%	19.8%	3133
Practice patients	Looked after problem myself	37.3%	1.5%	47.5%	13.7%	307
	WIC	34.4%	3.1%	43.5%	18.9%	387
	Pharmacist	31.3%	1.5%	49.8%	17.4%	274
	Dentist	16.7%		66.7%	16.7%	4
	Minor Injuries Unit	34.5%	20.7%	31.0%	13.8%	19
	Casualty Department	36.3%	4.1%	39.5%	20.1%	272
	NHS Direct	21.1%	4.3%	45.4%	29.2%	95
	Call GP out	44.0%	2.4%	35.0%	18.5%	246
	Other	41.9%	1.1%	26.3%	30.7%	252
	Total	36.3%	2.6%	41.0%	20.2%	1856

Finally, the relationship was examined between the advice the person said they were given in the consultation, and their intentions following the consultation (Table 26). This shows that 86.2% of those referred to a GP intended to follow that advice, but a third of those given advice or information also intended to go to the GP following the consultation.

Table 26 Relationship between advice given and planned intentions
(Walk-in centre visitors only)

When you saw Dr/nurse were you: Figures are weighted % of row	Next step: Make an appointment at GP surgery	Visit Casualty Dept.	Deal with it myself	Other	N
Given advice only	33.0%	3.2%	48.3%	15.1%	1671
Given information only	30.0%	4.1%	49.5%	16.4%	839
Given a prescription	37.1%	2.7%	39.1%	21.1%	240
Issued with medication	23.2%	3.4%	51.4%	22.0%	430
Treatment other than medication	22.2%	5.7%	41.3%	30.8%	753
Referred to GP	86.2%	1.7%	3.6%	8.5%	431
Referred to Casualty	9.6%	75.0%	6.1%	9.3%	180
Other	25.1%	6.7%	25.8%	42.4%	229

No of respondents =3116

5.5 Follow-up survey results

5.5.1 Response rates

A total of 2227 people attended walk-in centres or general practices during sessions sampled for the follow-up survey. Of this number, 1809 (81.2%) returned the questionnaires from the main survey, and 1423 (78.6%) did not opt out of further follow-up and were therefore included in the follow-up survey. Replies were received from 892 people, with 45 questionnaires returned as 'not known at this address', representing a response rate of 64.7% (892/1378 excluding non-recipients). However the response rate as a proportion of all those in the follow-up sessions (including those who did not return the main survey questionnaire or opted out of follow-up) is 40.0%

5.5.2 Consultations about the same health problem within four weeks

Almost half of those consulting in a walk-in centre then consulted again about the same problem within the subsequent four weeks (Table 27). In most cases the subsequent consultation was with a GP or nurse in a GP surgery, but 10.7% of follow-up consultations were with a walk-in centre (Table 28). Although this could be interpreted to suggest that walk-in centres are providing a duplication of care for many people, it should be noted that a very similar pattern of repeat consultations occurred amongst people initially consulting in general practice.

Table 27 Consultations about the same health problem within four weeks

		WIC or practice	
		Walk-in centre	Practice
Consulted about same health problem	No	56.3%	57.1%
	Yes	43.7%	42.9%
	n =	534	353

p=0.14 adjusted for age-group, sex and ethnicity

Table 28 Professional consulted for same problem

		WIC or Practice	
		Walk-in centre	Practice
Who consulted about same problem	GP	63.7%	69.2%
	Nurse at GP surgery	9.2%	15.5%
	Walk-in centre	10.7%	8.2%
	A&E	10.0%	8.3%
	Pharmacy	1.4%	6.7%
	NHS Direct	1.0%	1.4%
	OOH	1.5%	3.2%
	Other	11.3%	14.0%
	n =	229	145

5.5.3 Consultations about a different health problem within four weeks

The proportion of people consulting again within four weeks with a different problem was higher for those who originally consulted in general practice. Many of these follow-up consultations were with the practice nurse. This may suggest that those attending general practice are more regular users of health care.

Table 29 Consultations about other health problems within four weeks

		WIC or Practice	
		Walk-in centre	Practice
Consulted about other health problem	No	85.1%	68.9%
	Yes	14.9%	31.1%
	N =	534	353

p<0.001 adjusted for age-group, sex and ethnicity

Table 30 Professional consulted for different problems

		WIC or Practice	
		Walk-in centre	Practice
Who consulted about different problem	GP	69.8	55.9
	Nurse at surgery	8.6	20.3
	Walk-in centre	14.9	8.8
	A&E	7.8	9.2
	Pharmacy	1.1	4.4
	NHS Direct		3.5
	Out of Hours service		4.4
	Other	8.6	10.9
	n =	81	109

Overall a half (49.6%) of all walk-in centre attenders, and a slightly higher proportion of general practice attenders (54.2%) had a further consultation with a health professional about either the same or a different problem within four weeks of their initial consultation (p=0.88 adjusted for age-group, sex and ethnicity).

5.5.4 Did unregistered patients get registered with a GP following the walk-in centre consultation?

People attending the walk-in centres were asked in the follow-up survey whether they were registered with a GP. The purpose of this question was to determine whether those people who were not registered initially had now managed to register. Of those who responded to the follow-up survey, only 15 people (2.9% of walk-in centre users who responded to the question in the main survey) were not already registered with a GP at the time of the index consultation, but 8 of these (53%) were registered four weeks later.

5.6 Discussion

5.6.1 Main patient survey

This large multi-site survey provides information about the experience of patients in all walk-in centres which were open by the Spring of 2001. The high response rate provides confidence that the results are representative of patients views at that time. The results from general practice are provided primarily as a control group for the walk-in centres. Because practices taking part in this survey were selected on the basis of their proximity to walk-in centres, the findings are not necessarily generalisable to all general practices.

The results support the findings from the analysis of routine data that walk-in centres provide a service to a higher proportion of men, particularly men between the age of 17 and 45 years, than attend in general practice. This was particularly true of walk-in centres in shop-front settings. The population attending walk-in centres was more affluent than that attending general practice. Although one function of walk-in centres is to provide a service for tourists, commuters and other visitors who are away from their home area, four-fifths of users lived in the same town as the walk-in centre they visited, and were registered with a GP locally. This suggests that some people chose to use walk-in centres when attending the GP would have been a reasonable alternative. The survey provides clear evidence that the main reasons people chose walk-in centres were related to the speed with which they can be seen and the convenience of their opening hours, with convenience of location also being important.

Further evidence that people valued speed of access to health care comes from the finding that a quarter of those attending a walk-in centre did so on the day their problem arose, and more than half had had their problem for 'a few days' (less than a week). Since these were very recent problems, it is not surprising that few people had previously attended another health professional about the same problem. The fear that walk-in centres would duplicate services, with people attending multiple providers about the same problem does not appear to be a major concern.

It is perhaps not surprising that people attending walk-in centres placed less priority on seeing someone they knew, compared with those attending in general practice. It is important to remember that the general practice sample in this study comprised people attending on a 'same-day' basis, who would in most cases not be seeing a specific doctor of their choice. A sample of people who had made appointments with a specific doctor would probably have indicated greater priority for continuity of care. It has been suggested that some people attend walk-in centres because of the anonymity that they provide. This survey provides no evidence of this (in that few people preferred to see a doctor or nurse that they did not know), although it could be argued that people may not wish to express this opinion explicitly.

Although most people claimed that they would have contacted their general practice if the walk-in centre had not been available, it appears that some people attended when they were unsure whether to attend a GP. For many people the decision to attend a walk-in centre was driven by a wish 'not to bother the doctor', and most people expected advice or information in most cases, rather than a prescription. Although one should be cautious in interpreting hypothetical questions of this type, it is notable that despite the publicity given to NHS Direct and the attempts of pharmacies to promote their role in providing health information and advice, few people considered these agencies to be the most relevant alternative providers.

One potential limitation of this study was the need to devise a new patient satisfaction instrument. Previously developed questionnaires were not fully applicable to walk-in centres, or did not capture information about important issues such as waiting times and the attitude or receptionists, or were too long to incorporate alongside the other issues to

be addressed within this survey. The brief section of questions used in this questionnaire appeared to have good internal consistency. The strong correlation between the overall satisfaction score and the other questions which were intended to reflect satisfaction is also reassuring. The fact that anticipated differences in satisfaction were observed for different age and ethnic groups also supports the validity and sensitivity of the questionnaire. One problem with the satisfaction questions, common to brief satisfaction questionnaires, is that 'ceiling effects' were observed, with the majority of respondents indicating that they were 'very satisfied' with all aspects of the service in both walk-in centres and general practice.

Despite the limited sensitivity of this measure, marked differences were found between walk-in centre users and general practice patients in overall satisfaction scores. The biggest differences related to the satisfaction with the receptionist, and the waiting time for the consultation, with smaller but still significant differences in the attitude, explanation and treatment provided by the doctor or nurse. Walk-in centre patients have shorter waits for their consultation and much longer consultation times, both factors which are strongly associated with satisfaction in other settings.[58] There is also evidence from other studies that even after adjusting for length of consultation, patients in general practice express greater satisfaction with consultations with nurses compared with doctors. [13]

5.6.2 Follow-up survey

The results from the follow-up survey must be interpreted with more caution because of the lower response rate. The purpose of the follow-up survey was to determine if walk-in centres were providing duplication of care, with many people attending a walk-in centre and then another health provider about the same problem. The results are interesting and can be interpreted in a variety of ways. Almost half of walk-in centre users did consult another health care provider (most commonly their GP) about the same problem within the subsequent four weeks. However, the same applies to people who consult in general practice. The most likely interpretation, which is consistent with other responses in the main survey, is that people attended in both settings with acute illnesses and that a proportion of these people need further care. The finding that the proportion of people re-attending following a walk-in centre consultation was no higher than in general practice, along with the relatively low proportion of people referred from walk-in centres to general practice, suggests that centres are not providing a duplicated service for most people. Against this one must set the finding from the main survey that although only 13% of walk-in centre users were referred to a GP, 32% of users intended to make a GP appointment directly after the consultation.

6 Qualitative case-studies

6.1 Introduction

The primary aim of this part of the evaluation was to provide detailed qualitative information on issues related to health care and service provision at walk-in centres. In this way, it complements the questionnaire survey (Chapter 5). The objectives of the case studies were to:

- provide more detailed illustration of the range of health problems presenting to walk-in centres than is possible by quantitative classifications of 'presenting complaint'.
- assess whether a walk-in centre was the most appropriate way for the NHS to deal with each individual and their problem
- assess ways in which provision of service in walk-in centres could have been improved for each individual.
- assess the impact of the walk-in centre consultation on continuity and co-ordination of care, in particular to determine whether the lack of medical records and previous history was relevant; whether the consultation enabled better use of the skills of other NHS providers and whether communication with the user's GP was adequate.

6.2 Methods

The case studies aimed to incorporate the perspective of three stakeholders in walk-in centre care, namely centre users, health care professionals consulted at walk-in centres and users' general practitioners. The main method used for the case studies was semi-structured interviews. These were supplemented by observational methods and a short postal questionnaire to users' general practitioners. Draft interview questions for centre users and health care professionals were piloted at one site – Coventry - and minor changes made prior to use at other centres. Site visits included observation of waiting room and reception areas and initial triage procedures, where these were used. A telephone interview schedule was initially developed for use with users' GPs, although this was later replaced with a short postal questionnaire due to practical difficulties accessing GPs by telephone.

6.2.1 Sampling the walk-in centres

In order to build on the previous work of the evaluation, the case studies sought to reflect the functional and geographical diversity of walk-in centres. This was achieved by reference to the typology of walk-in centres developed earlier in the evaluation. Ten sites were purposively selected to ensure broad coverage of the different types of walk-in centre – shop front, hospital (with and without A&E facilities) and co-located with a general practice.

6.2.2 Sampling of users and health care professionals at walk-in centres

Between 4-6 users were interviewed at each walk-in centre, selected to represent maximum diversity in terms of age, sex, ethnicity and presenting complaint. Users were approached in the walk-in centre waiting room, invited to participate in the study and to give written consent. Consenting users were interviewed in a private room, away from the main reception and consulting areas to ensure confidentiality and maximise comfort.

The interview was taped for ease of transcription, and focused on the reasons for attending the walk-in centre, the perceived need for advice or treatment, expectations and concerns, and the reasons that they chose to consult a walk-in centre on this occasion rather than to self-manage the problem or consult another source of advice. The interviewer probed, where relevant, for a number of other issues such as 'triggers' to the consultation, appropriate avenues of care and continuity of care.

The health professional responsible for carrying out the consultation was interviewed as soon as possible after the consultation. These interviews explored the health professional's formulation of the user's problem and factors they felt influenced the user's decision to consult; their perception of the impact of the walk-in centre service on other health care provision and whether they were hindered by lack of medical records or previous knowledge of the user; whether they felt they were able to offer appropriate care and whether the walk-in centre was the most appropriate venue to deal with this problem.

6.2.3 Postal questionnaire to users' general practitioners

Attempts to follow-up the consultation by telephone interviews with general practitioners in the month after the walk-in centre consultation produced a poor response. Many general practitioners were unable or unwilling to commit time to talk to the researcher by telephone. Instead a short, structured postal questionnaire was developed to ascertain whether the general practitioner had been informed that their patient had consulted a walk-in centre, whether the communication was adequate, whether they felt the walk-in centre was the most appropriate venue to deal with the problem, whether they felt that actions taken at the walk-in centre were appropriate, and whether they felt the attendance at the walk-in centre had a beneficial or harmful influence on their ability to co-ordinate care.

6.2.4 Analysis

The data were analysed in terms of five key issues for the evaluation - access, quality, effectiveness, impact on other health care providers and appropriateness. The interview transcripts were read by two researchers and key themes and areas of interest identified. Interview transcripts and observational notes were used to prepare index cards for each case, detailing user and health professional's views and information about the case and the care provided. These cards were combined with re-reading of the original interview transcripts to allow systematic searching for the key areas of interest. An adapted charting procedure was adopted, loosely based on the framework approach[61] to document and summarise the cases by centre according to key themes. These charts also provided space for new or associated issues to be noted. Additionally, responses from the GP postal questionnaire were incorporated into the main analysis where appropriate and a summary table of key points produced.

6.3 Results

6.3.1 Cases and response rate

Walk-in centre users and healthcare professionals

A total of fifty-four users were included and interviewed. An additional two users were approached but declined to take part in the interviews. Interviews were conducted with the healthcare professionals who carried out fifty of the fifty-four consultations but in four cases this was not possible due to time constraints, shift changes or work pressure.

A selection of the case studies are described in the boxes in this section of the report to provide an illustration of the range of users attending walk-in centres.

General practitioners

Of the fifty-four users interviewed, thirty-eight consented to their GP being contacted regarding their walk-in centre consultation. A total of twenty postal questionnaires were returned by general practitioners whose patients had visited a walk-in centre . This equates to a response rate of 59%.

6.3.2 Range of presenting conditions

Some information about presenting conditions was available from the observation of the waiting room and reception areas and from manual/paper based recording systems used at some sites. Where possible, a retrospective list of presenting cases during the site visits to conduct interviews was obtained, although at some sites changes to the computer systems meant it was not possible to obtain such a listing. This provided a means of checking that cases covering a range of different presenting conditions were selected for interview.

Case 1: Adult minor injury case study – North Middlesex walk-in centre

Male, late teens who lived locally and arrived on foot. He was a first-time user of the walk-in centre. He had crushed his hand in machinery at work, and a designated first-aider there recommended attending the walk-in centre. He was keen to return to work as soon as possible as he was paid on an hourly basis. He checked in at reception on arrival, was assessed by a triage nurse within 5 minutes, and waited to see the minor injuries nurse. He was then sent to adjacent A&E for X-ray to return for a review with the minor injury nurse.

While all walk-in centres aim to provide treatment and advice for a wide range of minor illnesses and injury, this case study work indicates that some centres have a distinct profile in terms of users and the types of presenting conditions they predominantly deal with. The case study visits only provide a snapshot of the type of presenting cases, but nonetheless it appeared that some centres appear to see a greater proportion of users with minor injuries, such as cuts, head injuries and ankle sprains while others appeared to see, mainly, a range of minor illnesses such as sore throat, ear ache, skin complaints.

Case 2: Child minor injury case study – Leigh walk-in centre

Female aged 12 years. She lived locally and arrived by car, accompanied by parents and two siblings. She cut her knee in the playground at school, and a teacher recommended attending the walk-in centre. The family had previously used Minor Injury Unit on this site but were unaware that the walk-in centre had replaced this service. Checked in immediately at reception but in interview Mother mentioned that they were unsure how long they would have to wait, and appeared concerned about possible long wait. Family unsure of the opening times at the walk-in centre. Felt that the centre was better than local A&E department in Wigan.. Nurse cleaned and dressed the wound and advised re-attendance in 3 days.

6.3.3 The user's perspective

Choosing to attend a walk-in centre

Previous research has identified a number of 'triggers' and reasons why individuals seek help from health professionals.[62] [63] The case studies provided an opportunity to explore why individuals chose to attend a walk-in centre. Some centre users appeared to have made the decision to attend a walk-in centre based on convenience and some knowledge about the type of health problems that centres dealt with:

> *"It's for minor things, not many things, not serious. It's very good for basic things. It saves a lot of time." BIRM2*
>
> *"If I had a lot more pain I think [I would go to] the hospital, to be honest. I think I would probably have rung through to my own doctors and see what they say, but with this centre being here I thought, well, it was the easiest option" LEI3*
>
> *"It's just the convenience of the place, it's so handy" SOHO3*
>
> *"I wouldn't come to a Walk-in centre for anything I feel only a doctor would have to see" WEY3*

Some users deliberately chose to attend the walk-in centre because they did not wish to see their general practitioner, particularly for sexual health matters:

> *"I know my local GP and I haven't got to go there because they know the family… I see him around, so I don't want to involve him." COV4*
>
> *"I prefer this to the doctors because at the doctors I can sit, well, it's got everything there and you might knock into somebody that you know. It's just a small surgery and you have to say you want contraception at reception and it seems that, people are standing behind you and you don't feel comfortable." COV5*

Case 3: Emergency contraception case study - Coventry walk-in centre

Female, late teens arrived by bus from the other side of the city, accompanied by male partner. Had unprotected sexual intercourse within past 24 hours and wanted to obtain EC. (She has attended this walk-in centre for EC on previous occasions) Felt that pharmacy-supplied EC is expensive and compromises privacy, and that walk-in centre nurses have more time to spend on giving contraceptive advice than doctors. She had first learned about the walk-in centre at school and has recommended the service to friends. Nurse provided EC according to protocol.

Other users suggested that using the walk-in centre was a way of relieving pressure on general practice:

> *"What I'm here with now, what I've got at the moment, [my GP] is not going to be too worried if the nurse sorted it out to be honest with you. You asked how my doctor would feel me coming here... I've had to think that my own doctor would think that it's just one less sat in the waiting room. I see this place as an emergency room, instant fix and to get information as well…if I had a medical [problem] then I'd see my doctor" MAN2*
>
> *"I think that doctors cannot cope with the amount of patients, and that [my doctor], she's a busy woman, it's a busy surgery, so, so, busy that it seems that this [centre] might relieve the pressure. Unless it's something really serious that I'd feel I'd go to my doctor" MAN3*
>
> *"I think it is an excellent idea because it does mean that your GP may be busy and may not be able to see you at short notice if you have an injury like I have here. It could be…you know, it can lighten the doctor's surgery… " WEY4*

An important motivation for attending the walk-in centre was advice or recommendation from a family member, friend or colleague. This appeared, in many cases, to be more important than personal knowledge of the service gained from national and local advertising.

Knowledge of the services provided at the walk-in centre was often patchy, particularly at sites that had previously functioned as A&E or Minor Injury Units, where many users did not seem to know that the service had changed:

> *"I still thought it was accident and emergency until I got to the doors" LEI2*
>
> *"I've heard of the accident and emergency but I've never heard of the walk-in centre" NMIDD4*
>
> *I don't know too much else about what it is used for apart from [emergency contraception]…I think most other things I wouldn't come for. I'd go and see the doctor or something." COV1*
>
> *"I never knew the facility existed" WEY3*

Access

The choice to attend a walk-in centre was, as shown above, informed by knowledge of services offered and ease of access. The immediacy of a 'drop in' service was frequently cited as important:

> *"Sometimes – it depends on how busy they are – sometimes it's ten minutes, sometimes it's twenty. It's usually within the half hour when we've been here" WEY5*
>
> *"It doesn't feel [like] there's a lot of people about waiting; it's just pop in and pop out." LEI1*

This was particularly important for those in paid employment who could attend during breaks or between shifts:

> *"It's ideal, because being at work and being busy it's just great to be able to pop in." BIRM5*
>
> *"I don't like to take time off work so if you get the opportunity to come here I'll take advantage." MAN1*
>
> *"I took the day off yesterday from work and today I was trying to fit into lunchtime because my boss is quite strict" SOHO1*

Case 4: Local worker case study – Manchester Airport walk-in centre

Male airport worker in his late thirties, presented with stomach upset and re-occurrence of haemorrhoids following holiday illness. He wanted advice and possible treatment options. He did not wish to see a pharmacist due to lack of privacy, and felt that the waiting time for a routine GP appointment would be too long. His co-workers recommended the walk-in centre and he expressed positive views of facilities and speed of attention. The nurse recommended over-the counter treatment and a review if symptoms did not improve.

One user who attended with her child in Leigh walk-in centre was concerned about the lack of information and uncertainty about waiting times and observation of the waiting room showed that there were busy periods when some long waits of more than an hour occurred. Similarly, during a visit to Soho walk-in centre, the facility had to be closed to new users during the evening period because waiting times had risen steeply and further patients could not be accommodated or seen within the opening hours. Some users were visibly concerned about waiting times, and would ask reception staff to estimate how long they would have to wait. Occasionally users waited for a period of time and then left the centre without being seen, whilst others were directed by reception staff to alternative facilities or given indications of times when the walk-in centre would be less busy.

"I was here once before and I had to wait over an hour and I walked out. WEY4

"I feel I'm going to have a long lunch hour here too though!" SOHO2

Generally however, when directly questioned about the waiting times, few users complained about the time they had waited:

"I've been waiting for about an hour and a half now… I'd prefer to be seen straight away but I understand that there's a lot of pressure and a lot of people that need seeing to." SOHO3

Another important factor in the decision to use the walk-in centre was perceived or actual lack of access to general practice, pharmacy or accident and emergency care:

"The surgery would have been closed this afternoon, they close in the afternoon. She's not open until 4 o'clock so I couldn't have seen her, so the only option I had was casualty or the walk-in centre" LEI5

"My GP only has open surgery in the evening…I think it's excellent because most of the time the chemist in my area are closed on the weekend. If there is something wrong with me I can't see my GP because of the weekends as well." SOHO1

Case 5: Sore throat case study – Soho walk-in centre

Italian male, aged 20 who worked locally and lived in South London. Presented with persistent sore throat and cold type symptoms for three weeks for which he had used over-the-counter remedies. Not registered with local NHS GP but had previously used private doctor. Colleague at work recommended attending walk-in centre, he had also contacted NHS Direct for advice. Had tried earlier in the week to see walk-in centre nurse but waiting time too long. At time of interview he had waited 45 minutes and was unsure how long he would have to wait. Very positive view of walk-in centre compared to private doctor. Nurse advised self-care as no visible signs of bacterial infection.

Many users said that their general practitioners operated appointment-only systems and were often fully booked. Some said that they had attempted to make a same day appointment with their general practitioner before attending the walk-in centre, but others suggested that perceived delays or inconvenience encouraged them to seek alternative sources of help:

"Previously when I've tried to get an appointment from the doctors, it's quite hard. You have to wait, or it's just, I'm at work, I've got two little children, it's sometimes inconvenient, when I want to go first thing in the morning, if I want an appointment at 9 o'clock then I can't have it, I have to have it at 10 o'clock and that's no good to me." MAN3

"It's very frustrating if you phone up your surgery… and they say, well, that they can't see you until next Thursday morning or whenever. I find that very frustrating and it's also a problem if you want to be dealt with, if you're in a lot of pain." SOHO3

Quality of walk-in centre environment and facilities

Many of the users interviewed for the case studies commented on the quality of the walk-in centre environment and facilities. They mentioned the appearance of the walk in centres, and spoke favourably of the cleanliness and comfort of the waiting room and treatment areas. Several contrasted the walk-in centre environment with their experience of using other services, such as A& E or general practice:

"It's a lot better actually a lot friendlier…I was very comfortable" MAN4

"My doctor's surgery is a little bit old fashioned, and this is all nice and clean and clinical." COV2

"It's nice. Nicer than casualty used to be, it used to be leather chairs and things, and it's nice and bright." LEI1

"It seems that what you term A&E… is usually crowded and they see things, especially if you've got kids, that you don't want to see, so it's much nicer and calmer to go to a drop-in service like these" WEY4

"It's quiet. It's comfortable. It's easy just sitting there. It's not like going to hospital, in places that are a bit run down…so if this is typical or the walk-in centres then, you know, I think it's great." BIRM4

"….good actually, better than I expected.. It all seemed very spacious and comfortable and well-organised and not – I expected to see crowds of people here but it's not really." SOHO2

A number of users also mentioned that the walk-in centre was easy to access by public transport or that better parking facilities encouraged them to attend:

"I was in [town], there wasn't anywhere else that I could get my blood pressure checked. Otherwise I'd have to go to X, I live in Y and X is just horrendous to park… you can normally get somewhere here, I know if I can't park here then I'll park in [adjacent shoppers car park]." COV2

A related issue that was discussed in the interviews was parking facilities. Many users drove to the walk-in centre and comments about this aspect of the facilities were more mixed. Whilst many users felt that car parking facilities at walk-in centres were adequate or compared favourably to the facilities at other healthcare facilities, one user at Leigh walk-in centre felt that the parking provision was not satisfactory, particularly for disabled users:

"Parking isn't good here. That is a fault, because even in the disabled parking spaces you pay as well…and when you're dealing with somebody in a wheelchair and then you've got to start considering well I need to get tickets for parking it is two issues you're thinking about, dealing with someone who is injured, who's disabled, and scrimmaging around looking to make sure you've got the right money on you." LEI5

Quality of care

Users were interviewed prior to consultation so their comments about quality of care are principally based on expectations of care and 'first impressions' gathered while waiting to be seen. A small number of users had previously attended the walk-in centre and were able to comment more directly on the quality of care received on previous visits:

"We've got young children and I've brought them up about 3-4 times. And also, my wife's sister… she came up here a few times. It's actually brilliant." WEY5

"I've come several times with the children and I never found a problem. The staff have always been good, they've been thorough. I've come when one of the children had a rash and I wasn't sure and you know they really examined him well, and looked after them well." LEI5

"I think they've [nurses] got more time to spend on it, they seem to anyway. They don't seem to mind dealing with it as much as a doctor. [At the chemist] she sort of talked me into a corner, really, of Boots, went through everything quite quickly and didn't really ask as many questions as the nurse here…and it feels a bit more confidential I guess ." COV1

Efficiency

Some users felt that the walk-in centre service was quicker than other health services such as A&E or general practice:

"It's certainly a lot quicker than [GP] because you can be seen straight away." COV6

"I can basically walk in and have a health check. It's quick. Very simple. You don't have to make and appointment, wait till you get an appointment with the GP ands then sometimes you have to see the [practice] nurse which can be on a different day. So it's convenience." BIRM4

"I don't really want to go [as an emergency] to the hospital and to wait 7 hours" SOHO1

A minority of patients appeared to be using the walk-in centre to obtain a second opinion or bypass general practice. Observation of initial triage or consultations (where this was possible) suggested that most walk-in centre staff asked questions about previous or concurrent treatment for the presenting problem and made it clear that they could not undermine or counter the advice of other health professionals. Such patients tended to be directed back to the health professional already dealing with their current problem.

Case 6: Current user of several services case study – Leigh walk-in centre

Female, in her late fifties arrived accompanied by husband, who drove her to the walk-in centre. She presented with septic toe, and medical history of rheumatoid arthritis. She was registered with NHS GP and private chiropodist. She has a routine appointment with chiropodist in 1 week, and an appointment to see an appliance officer at the local hospital the next day. She was seeking advice and possible referral to specialist for toenail removal. She had read about the walk-in centre in the local press. She liked the immediate access and friendly atmosphere of walk-in centre. Nurse advised GP attendance and was able to immediately refer to chiropodist on site for a second opinion.

Impact on other health care providers

The interviews provided an opportunity to explore the relationship between walk-in centre use and use of other health services in several ways. Attendees were asked about their use of other forms of health care prior to their walk-in centre visit. Some had attempted self-care or had used over the counter remedies. Some had attempted to access other health services e.g. their general practitioner or local A&E department prior to attending the walk-in centre. Others were referred to the walk-in centre by other services such as NHS Direct, general practice receptionists, GP out-of hours services or workplace first -aiders and nurses:

"I telephoned my local GPs emergency line and spoke to someone there… There was a bit of a silence on the phone whilst she went and asked somebody else… and then she came back and said that the nearest Walk-in centre would be Soho Square, Frith Street" SOHO2

"We went straight to [A&E] but when we arrived there we were told that there was a 5 hour wait and at a quarter past there was quite a serious emergency being brought in so they were

dealing with that first and it was affecting the minor injury nursing. So the triage nurse there dressed it for him …She said it was okay to come here to the walk-in centre." LEI5

"The first aiders said I were better off coming here…." LEI6

"I called my doctor's office and they suggested I come to the Walk-in centre" WEY3

Perceived or actual delays in getting an appointment with a general practitioner were commonly cited as reasons for attending the walk-in centre, particularly the lack of same day appointments:

"When I have something like that wrong I usually wait for it to go away but this one isn't going away. It's getting worse and rather than make an appointment to see my doctor which might be next week sometime I thought I would come to the walk-in centre and get it lanced and cleaned up and wrapped up" SOHO3

"I actually tried to phone to make an appointment at the doctor's surgery this morning and nobody answered the phone so I was feeling a bit miffed and thought I'd come along [here] anyway" WEY2

The interviews were used to explore users views about continuity of care. Most users were happy for their general practitioner to be informed about their attendance at the walk-in centre, and understood the need for their general practice to have a complete record of the health care they had received, but at the same time valued the additional choice offered by walk-in centres:

"I presume that the drop in centres, whatever you prescribe me goes to my GP, I presume that's the norm anyway. At the end of the day I'm my own person and if I want to go to a drop in centre or the doctor it's entirely up to me. It's my decision." MAN3

Appropriateness

Judgements about the appropriateness of walk-in centre use were closely linked to the reasons for choosing to attend. As described above, most users appeared to view walk-in centres as an additional tier of NHS health care for less serious health problems. Some said that they were concerned about 'bothering' their general practitioner with such conditions, or felt that the walk-in centre relieved pressure on other over-stretched services:

"With your GP you've got to make an appointment. Casualty, well I feel that when it is just a minor injury like that, you feel there's more important people in there with serious injuries, you take up their time. This [centre] is really good." NMIDD3

"They didn't say whether it was appropriate or inappropriate. They just said they would be able to get someone to see me…" WEY2

"I think it could be…not a stress of the doctor but, you know, it can lighten the doctor's load and so on" WEY4

Case 7: Health check and advise case study – Birmingham walk-in centre

Male, mid thirties, lived in London, but visiting friends locally. Attended walk-in centre having seen a poster, which advertised the service, for a general health check and advice (specifically blood pressure and cholesterol screening). In the interview he mentioned several current health concerns including glaucoma, cataracts', tuberculosis, and said that he was interested in complementary therapies. He was registered with an NHS GP but was keen to obtain alternative health care opinions. In the consultation he also mentioned sore throat symptoms. He reported that he liked the quiet, calm atmosphere of the walk-in centre (only one other person waiting at this time). Health care advisor provided coronary heart disease risk assessment, cholesterol and blood pressure check, advised on diet and a nurse was called in to the consultation to advise regarding sore throat symptoms.

Very few users, mostly those seeking care or advice about sexual health problems, appeared to prefer that their general practitioner was not informed, as in this case:

> *"If I go to my doctor, I do trust him but I don't know if I'd go there… I don't like everyone knowing my business" BIRM1*

It became clear that there was some confusion about the range of services provided at walk-in centres. Some users did not understand that nurses could not write prescriptions, or were unsure what would happen during the consultation. There was also a general lack of awareness by first time walk-in centre users that the service was nurse-led.

> *"I think if it is more serious they'll send you to a doctor or they give you something for the time being for the pain, till I see my actual doctor. I don't know. There are proper doctors here anyway aren't there? MAN3*
>
> *"I was expecting to see a doctor… but the nurse is quite trained so I'm happy to…" SOHO1*
>
> *"Antibiotics….I don't know if nurses can supply those if it's necessary" WEY4*

Sometimes use of the walk-in centre was suggested by another health professional and this appeared to legitimate or sanction attendance. A considerable number of those attending with children for minor injuries sustained during school hours reported being advised to attend by school staff or first-aiders at work.

Case 8: Tourist case study – Soho walk-in centre

American female, early forties, visiting London on holiday with family. She sustained a cut to her lower leg from a collision with a motorbike. She was initially directed to a local A&E department, triaged there and then advised to attend a private medi-centre because of long waiting times in A&E. Staff at the medi-centre were unable to suture the wound and referred her to the walk-in centre. She arrived by taxi accompanied by husband and daughter. She expected to have the wound cleaned and stitched. She was impressed by free NHS service, although would be prepared to pay if needed and gave positive feedback on facilities and speed of attention. Walk-in centre nurse cleaned and assessed the wound and decided that it was too deep to be managed at the walk-in centre. The nurse telephoned the original A&E to advise that she was returning this case to them for treatment..

One user at Manchester Airport attended the walk-in centre seeking advice and information related to his work. He suggested that this was probably an inappropriate use

of the walk-in centre, but nonetheless appreciated having access to someone with proper 'medical expertise'.

6.3.4 The health care provider's perspective

Presenting conditions and reasons for consulting

The design of the case studies meant that users were interviewed about their symptoms and/or reasons for attending before seeing the health professional (nurse, or health advisor) at the walk in centre. These interviews were confidential and took place in a private room. Nonetheless in two cases, users presented additional symptoms/health concerns to the health practitioner that had not been mentioned during the interview. The first of these was a user attending for a health check and advice who subsequently told the walk-in centre nurse that he had a sore throat. The second was another male user who was attending about a bruise sustained whilst playing football, who mentioned chest pain symptoms to the nurse. The presentation of additional symptoms or concerns during the consultation may reflect the user's perceived need to legitimate attendance, or a response to the holistic models of care used by many walk-in centre staff and their ability to ask about other symptoms as part of the consultation. Routine information on presenting symptoms is often compiled from data collection at reception, prior to consultation. Discussion with these staff suggested that on some occasions users were reluctant to state their reasons for attending. It is worth noting that in some cases users may not wish to disclose symptoms or present with multiple symptoms and may introduce 'new' concerns during the consultation. Reliance on reception-level data may not therefore reflect the full range of presenting conditions.

Asked about their understanding of why users chose to attend the walk-in centre, health professionals cited delays in obtaining GP appointments as a key factor. They also noted that convenience and the location of the centre, near workplace or shopping centres, made this service attractive to users.

Appropriateness

The health care professionals were asked to consider the appropriateness of the case they had dealt with. There was broad consensus that cases were appropriate to be seen at the walk–in centre, with most consultations being regarded as 'very' or 'entirely' appropriate.

Some users presented with very minor symptoms, such as a sore throat or small cuts, that health professionals suggested could be treated by self-care or over-the-counter remedies. Nonetheless when asked, they described these attendances as appropriate because they enabled health education advice to be given, as in this case:

> *"There are always difficult people … a bit draining and you sort of feel like, ' You haven't tried anything yourself. You haven't given it a chance.' But I think it is a big gap in patient education. They don't have realisation of what they should or shouldn't do. She was quite worried. I was more than happy to see her." SOHO1*

Cases were often felt to be appropriate even where the walk-in centre staff were unable to treat or advise, and/or where users were referred to other health services. One case was seen and assessed at the walk–in centre, then sent to adjacent A&E for x-ray, to return to the walk-in centre for care. The nurse involved in this case felt that the attendance was appropriate because this type of minor injury fell within her remit.

Some of these cases could not be managed at the walk-in centre because of lack of supplies or equipment. One case was triaged at A&E and had seen a private Medi-centre before being advised to attend the walk-in centre where it was discovered that her wound was too deep to be dealt with by the nurses there. This case had to be referred back to the

original A&E facility. In discussion, the nurse suggested that it was difficult to assess the appropriateness of this attendance as, until examination the wound had appeared superficial and therefore appropriate for walk-in centre care. This particular nurse had previously worked in A&E and felt that additional facilities and clinical support might have allowed her to deal with this case at the walk-in centre:

> *"I would have liked to have been able to sort out her leg. .. to have the support here, facilities here that we could. … You would need better equipment than we have here, better lighting, better instruments. And probably more support as in somebody a lot more senior that could go through it with me." SOHO6*

Another case could not be treated because of a temporary lack of drug supplies:

> *It was appropriate yes, but I couldn't treat here because…we will eventually have the penicillin she needed. She fitted the criteria beautifully but we didn't have any supplies from the pharmacy. It's one thing they have delayed us having, so I was a bit frustrated because I knew what was coming and I knew I couldn't send her away with the pills which would have been brilliant really. …She has now go to go away and see a doctor." COV4*

Impact on other health providers

Health professionals at the walk-in centre were asked about their views on the impact the centre had on other local health care provision and whether they experienced any difficulties with providing 'one-stop' i.e. non-continuous care. Staff were aware that that the boundaries between walk-in centre service and other forms of care were not always clear cut; some cases could have been appropriately dealt with by other services:

> *"It was one of those fifty fifty sort of things, really, she could have gone to her GP as it is a chronic problem that she has got and she needs referring… The GP is obviously able to do this but we are as well. The fact that she couldn't get an appointment [with the GP] means that she was appropriate." LEI3*

In other cases the walk-in centre was seen as providing a unique service: one user attended for health checks and advice which could not have been obtained simultaneously at his general practice:

> *"For him to go and see the GP would have been several trips for the same thing, more than one appointment. That's if he could have got in. So it was convenient [to attend the walk-in centre]" BIRM4*

The lack of continuity of care at the walk-in centre and the lack of access to users' medical notes was not seen generally as a problem, partly because the consultation time allowed health professionals to review medical histories with the user. However, some health professionals were aware that a number of users chose to attend because they did not want to see their general practitioner. Whilst this was considered an appropriate use of the walk-in centre service, a few staff were concerned that it might impact on continuity of care:

> *"We do encourage people to let their doctors be informed because we are treating them and it is important from a health point of view that we do pass on that information. But if they don't want us to, we don't want to frighten them off and not get their treatment or come here. Perhaps they think it is a bit more anonymous, maybe, for certain things, for whatever reasons that they don't want to discuss, maybe they've known their doctor since they were little children." COV1*

A few of the case studies were repeat users of the walk-in centre service. Some had used the service for previous episodes of ill health, others returned for follow-up care, typically within 24-72 hours to check symptoms and treatment or to have wounds re-dressed.

The case studies indicate that walk-in centre staff made use of links with other health care providers, by cross-referring and seeking advice from other health professionals. Examples here included telephoning the local mental health team to ask advise about a distressed patient, referral to a chiropodist, district nursing and sexual health services. Walk-in centre staff also obtained advice from other members of walk-in centre staff, calling them in to consultations where necessary. One case studied was used as an opportunity for training (BIRM6), as the consulting nurse who had considerable experience of fracture management asked another nurse who had recently undergone training in this topic to assess the case and give a 'second' opinion.

Possible ways of improving care

An important problem observed and discussed in the interviews concerned computer software and associated facilities. At some centres the case study data collection was carried out soon after new computer software had been introduced and staff training had only recently been completed. The use of computer software varied considerably between and within sites. Some health professionals found that the support software indicated courses of action which they did not see as appropriate or which conflicted with their clinical judgement.

> *"I used the assessment tool which came up with self- care at the end but I knew that he needed a little bit more than that and that what he needed was strapping by putting the two fingers together with some gauze in between… the system doesn't cover it fully." BIRM2*
>
> *"I used my clinical expertise. I didn't go through the algorithm" SOHO3*
>
> *"We were told at the training be it right or wrong that if there was an algorithm on there to go with a specific complaint you must open it. … [but] sometimes it's ambiguous because if somebody has a pain, if you put pain in you get 50 different areas of pain, if you put ear in you get all sorts of things different, with the ear. I will get to know which ones are relevant to what I am seeing. But there are things on there that don't even come into it." NMIDD1*

Other problems encountered in consultations related to waiting times and facilities. Staff were concerned that some patients experienced lengthy delays at busy periods, such as lunchtimes and evening peak times.

> *"We're all very conscious that we don't want to keep the patient waiting and we've had opinions from other sources that say, well they wait in doctors surgeries anyway, but the idea is surely that we're there for busy people with busy lives, to get them in and get them out, but treat them professionally and appropriately. I think that [waiting] could be improved." LOU3*

Several of those using new software systems were concerned about the length of time data entry and interrogation took. Others felt that using the clinical assessment software during the consultation hindered their interaction with the user and so used the software after the consultation to confirm the treatment or advice.

There were also occasional concerns about temporary lack of supplies or equipment, notably restricted medication supply. Interestingly, one interviewee noted that all the consulting rooms had defibrillation machines which were not used, and suggested that more appropriate equipment might have been purchased. At one centre where users had to walk through one treatment area to get to another (Loughborough), staff reported concerns about the layout of treatment areas and user confidentiality/privacy. However, it was suggested that, in the long-term, changes to the accommodation were planned to overcome this.

6.3.5 Views of general practitioners

Twenty GPs responded to the postal questionnaire about patients who had attended a walk-in centre. Of these, only 12 (60%) claimed to have received any form of notification of their patient's visit. Three quarters (75%) of known walk-in centre attendances were felt to be "appropriate" in the circumstances. However, one GP felt that his patient should have been encouraged to take up an already booked GP appointment rather than attend the walk-in centre on that occasion, whilst the medical complaints of the other two attendees were not felt to merit attendance at an "immediate access" facility. The data suggested that only one of the known attendances at walk-in centres were afforded care that might be termed "inappropriate".

6.4 Discussion

- The case studies provide some useful additional detail about the range of health problems presenting to walk-in centres. Some walk-in centres appear to have built up a distinct profile of the types of cases predominantly seen, others have very mixed case profiles.
- Users highlight that the convenience of a drop-in, non-appointment service and proximity, notably to the workplace, are important factors in decisions to attend walk-in centres. Even for those experiencing long waits at the walk-in centre, this convenience and accessibility was appreciated. Many also commented favourably on the quality of the walk-in centre environment and facilities.
- While there continues to be some uncertainty about the range of services provided by walk-in centres, several users saw them as a distinct, additional tier of service for minor illnesses and injuries for which general practice or A&E attendance would not be appropriate. Some users had sought other health care prior to attendance at the walk-in centre and some were referred on or advised to see their general practitioner or attend A&E after consultation at the centre. In the absence of clinical criteria, which were not part of this aspect of the evaluation, it is difficult to assess whether the walk-in centre was the most appropriate way for the NHS to deal with each individual and their problem. In the vast majority of cases both health professionals and users considered individual attendances to be appropriate. In many instances it was suggested that lack of access to general practice and/or the inconvenience of GP appointment systems prompted use of the walk-in centre.
- Few areas for possible improvement in the service were identified from the case studies. The walk-in centres and the services provided were viewed very positively by both users and staff. For health professionals, problems with computer software were frequently cited.
- There is little evidence from the case studies that walk-in centre service has an adverse affect on continuity and co-ordination of care. The lack of access to medical records does not appear to be relevant in most cases. The case studies indicate that walk-in centre staff were making use of local knowledge and networks to refer patients on where necessary.

7 Impact of walk-in centres on the workload of other local NHS providers

7.1 Introduction

This particular element of the evaluation aimed to assess the impact of NHS walk-in centres on the workload of other NHS health practitioners and services in the surrounding area. One of the principal aims of walk-in centres is to relieve pressure on other NHS provider organisations such as general practice and A & E departments.

7.2 Methods

A purposive sample of ten walk-in centre sites was identified, taking into account both the geographic spread of walk-in centre locations and the type of service offered at each site, according to the walk-in centre typology. For each walk-in centre site, a control site was also selected as a town of similar size, in the same region, but as distant as possible from any existing walk-in centre. The final sample is described in Appendix 7.

The Health Authorities for each of these twenty locations were approached, with a view to securing a complete listing of:

- all GP surgeries within 3 kilometres of the walk-in centre / city centre
- the A&E department closest to the walk-in centre /city centre
- the GP out-of-hours service closest to the walk-in centre / city centre

Eight practices were randomly selected from each town, stratified by size (three or fewer/four or more partners). These eight practices and the most central A&E department and out-of-hours provider in each town formed the initial sampling frame.

These eight practices, together with the relevant Accident and Emergency department and out-of-hours provider in each of the twenty chosen sites, formed the sampling frame of healthcare providers for the study. Each provider was asked to supply a series of anonymised data relating to their workload in the twelve-month periods before and after an index date. This index date varied from location to location since it reflected the opening date of the local walk-in centre or, in the case of control sites, the opening date of the walk-in centre in the 'matched' site. All face-to-face consultations involving GPs were included, along with any practice nurse consultations where practices recorded these throughout the whole period.

The first and second data requests took place in January and April 2001, and the third and final data collections occurred in July and September 2001 respectively. The entire dataset was compiled and analysed in October 2001.

7.2.1 Analyses

For GP surgeries and out-of-hours services, the number of consultations each month was divided by the respective surgery or service list size to create a variable representing the monthly consultation rate, which was the primary workload variable used in the analyses. For A&E departments, where no suitable denominator was available, the raw number of consultations each month for each department was used as the primary indicator of workload.

For each of the three service types, mean workload was calculated each month separately for walk-in centre sites and control sites, and was plotted against time on a graph which

also included best-fit trend lines obtained from generalised linear models applied separately to:

(i) data over 24 months from control sites

(ii) data from the first 12 months for walk-in centre sites

(iii) data from the 12 months after opening for walk-in centre sites.

In these models, the independent variables were index month (coded as -11, -10,…0..11, 12 with 0 being the month of opening) and site status (coded 0 for control sites, 1 for walk-in centre sites).

A second set of models estimated change in workload for control and walk-in centre sites respectively, with a pre-post variable (coded 0 for the first 12 months, 1 for the second 12 months) included as the only independent variable in models estimated separately for the two types of site.

Finally, a model was estimated with index month, site status, pre-post and the interaction between pre-post and site status included as independent variables, with the interaction term giving an estimate of the difference in change in workload between the control and walk-in centre sites. These final models were also estimated with month of year, consultation type and matched set included as covariates, to adjust for seasonal effects or any variation in the type of consultations included in the data.

All models took full account of the correlated nature of the repeated measures data by adjusting for the relatedness of sequential observations over time using generalized estimating equation models that identify the best autoregressive structure to fit the data. The models, estimated using Stata 7, also took account of the small number of services sampled by using robust variance estimators. All model residuals were examined, and certain models were re-estimated to check that the findings were substantively unaffected by the omission or inclusion of highly influential observations. The final models presented in the next section included all data points other than one observation consisting of the workload in December for one particular out-of-hours service, where data appeared to be erroneous.

7.3 Results

7.3.1 Response profile

In total, there were 74 positive responses to the requests for data. For both walk-in centre and control sites, responses were received from:

- 20 GP surgeries (25% response rate)
- 10 A&E departments (100% response rate) and
- 7 out-of-hours providers (70% response rate)

In Newcastle, total consultations reported by the A&E department increased dramatically during the 10th month of the first year of data collection, from which time they merged with another A&E department elsewhere in the city, taking on additional workload. All models of A&E workload therefore included a variable to adjust for this change in circumstance in Newcastle. Appendix 8 provides further detail of the responses obtained.

7.3.2 Number of consultations and consultation rates

Table 31 indicates the mean number of consultations per healthcare provider (general practice, out-of-hours service or A&E department) per month, calculated separately for the year prior to walk-in centre opening, and the year after opening. These figures are presented separately for walk-in centre sites and control sites. Consultation rates per 1000 patients per month (n/1000/month) are presented for out-of-hours services and general practices, and the change in workload is presented, with 95% confidence intervals, derived from models estimated separately for walk-in centre and control sites.

Table 31: Mean number of consultations per health care provider

		Mean number of consultations / month		rate/month[b] (95% CI)	rate/month[b] (95% CI)	Change (95% CI)
		Pre[a]	Post[a]	Pre[a]	Post[a]	
WIC	A&E	5267[c]	5316[c]	-	-	-173.3[c] (-334, -12)
	OOH	2690	2650	11.4 (7.2, 15.7)	11.3 (6.6, 16.1)	-0.09 (-0.63, 0.44)
	GP	1661	1686	258 (229, 286)	261 (229, 293)	3.9 (-13.9, 21.7)
Control	A&E	5769	5766	-	-	-3.0 (-145, 139)
	OOH	2296	2200	12.3 (8.8, 15.8)	11.8 (8.4, 15.1)	-0.52 (-0.95, -0.00)
	GP	1867	2040	256 (217, 295)	279 (247, 312)	23.7 (-8.0, 55.3)

a based on 12 months of data
b rate per 1000 registered patients
c data reflects major change in volume of consultations from month 10 onwards at Newcastle A&E

Impact on A&E departments:

Reference to Table 31 indicates that among the 10 A&E departments in walk-in centre cities, consultations increased slightly from a mean of 5267 per month in the year before walk-in centre opening, to 5316 per month in the year after opening. However, this increase was largely driven by the artefactual increase in Newcastle, and when this was adjusted for, there was actually a statistically significant reduction of 173.3 (95% confidence interval –334, -12) in mean consultations per month.

It was anticipated that the impact of walk-in centres on A&E department workload would be greatest where the walk-in centre was located on the same site as the A&E department, which was the case in Newcastle, Tooting and Harlow. In an analysis of change in consultations within these three sites only, there was a reduction of 349 per month (95% CI: -696, -2). Among the 10 A&E departments in control cities, there was only a negligible change in workload over the 24 months for which data were collected.

Figure 8 displays the data for all the A&E sites over the 24 month monitoring period, and the 10 observations for Newcastle can clearly be seen (to the bottom left of the graph) as indicating approximately 2500 consultations per month for those 10 months but then increasing dramatically from that time.

Figure 8: Consultations per department per month across all A&E sites

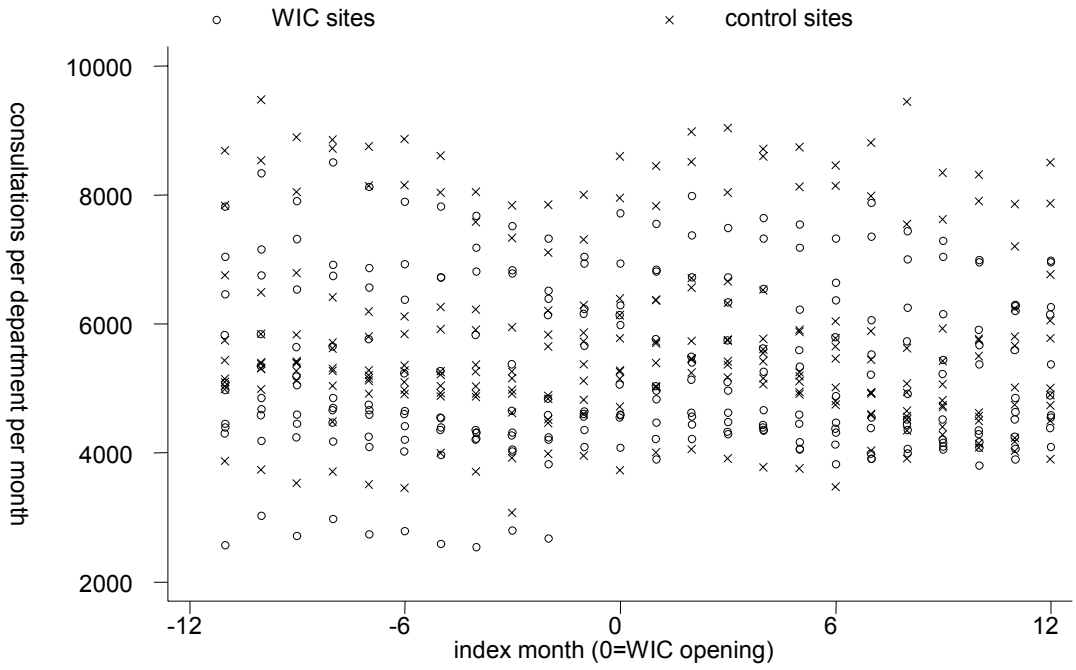
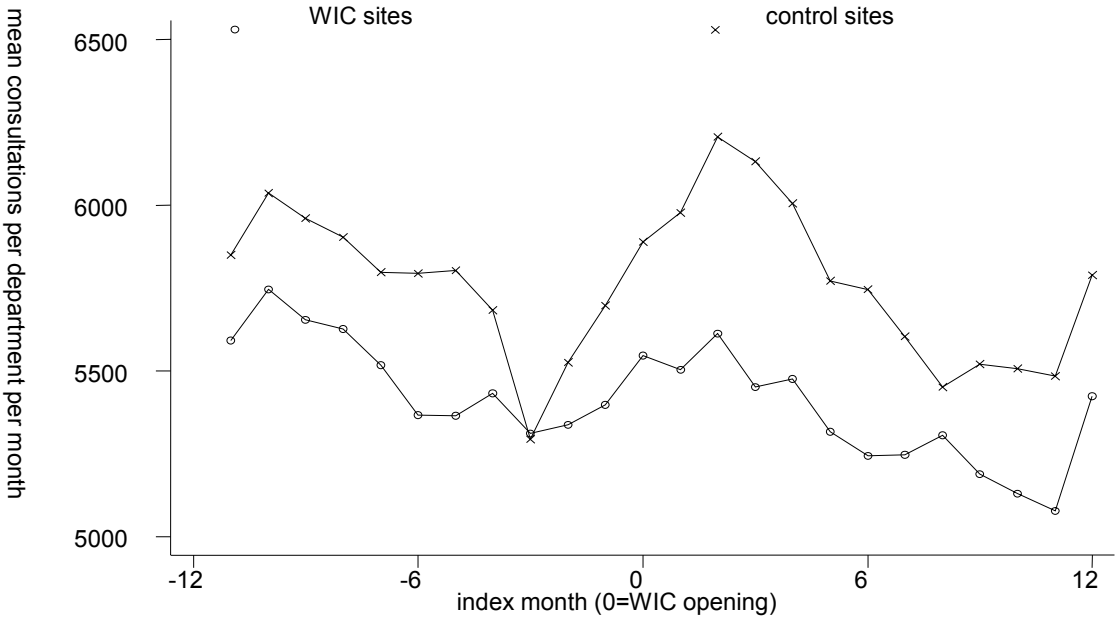


Figure 9 shows the mean consultations per month, for both the walk-in centre and control sites separately, with Newcastle data excluded. The lines, although irregular (representing month-to-month fluctuations in workload) are roughly in parallel. There is, however, a suggestion of a slight divergence in the year after walk-in centre opening, with consultation numbers a little lower in the walk-in centre sites.

This is supported by the final model of A&E workload, which estimates that having adjusted for the change in reporting in Newcastle, as well as consultation type, calendar month, baseline difference and matched set, there were 175 fewer consultations per month in A&E departments in walk-in centre cities than in control cities in the year after opening. However, this observation is not statistically significant (p=0.11, 95% CI: -387, 36). This final model was also re-estimated just for the three matched pairs of sites where the walk-in centre was located near an A&E department. This model found 264 fewer consultations per month in walk-in centre sites, but although this was a larger effect, it was not statistically significant due to the small sample size (p=0.18, 96% CI: -651, 122).

Figure 9: Mean number of consultations per month across A&E departments (excluding Newcastle)



Impact on General Practice:

Among general practices in walk-in centre sites, there was a small increase in workload in the year after walk-in centre opening, estimated as an increase of 3.9 consultations per 1000 patients per month (95% CI: -13.9, 21.7). However, there was a somewhat greater increase among GPs in control sites, of 23.7/1000/month (95% CI: (-8.0, 55.3). Figure 10 displays the monthly mean consultation rates for practices in control and walk-in centre sites respectively, and also indicates the best-fit trend lines.

This graph suggests that in the year prior to walk-in centre opening, there was a steady increase in consultation rates in practices in both control and walk-in centre locations. However, in the year after walk-in centre opening, the increasing trend continues in control sites, but there is a levelling off in the walk-in centre sites, resulting in a divergence of consultation rates over the year after opening. Figure 11 displays these best-fit lines, superimposed on the raw data, with each point representing a consultation rate for a specific practice at a specific time. This graph highlights the huge variability in consultation rates between practices.

The final model of general practice workload estimates that in the year following walk-in centre opening, practices near walk-in centres have 19.8 fewer consultations per month per 1000 patients, but this is not statistically significant (p=0.25, 95% CI: -53.3, 13.8).

Figure 10: Mean consultation rate per month in GP practices

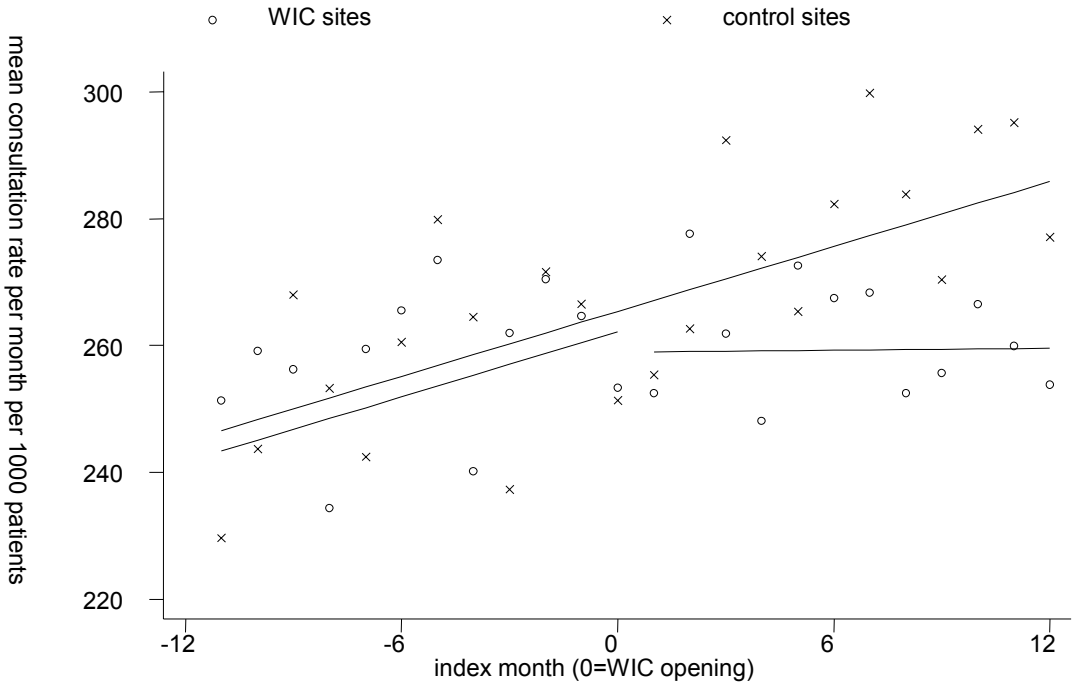
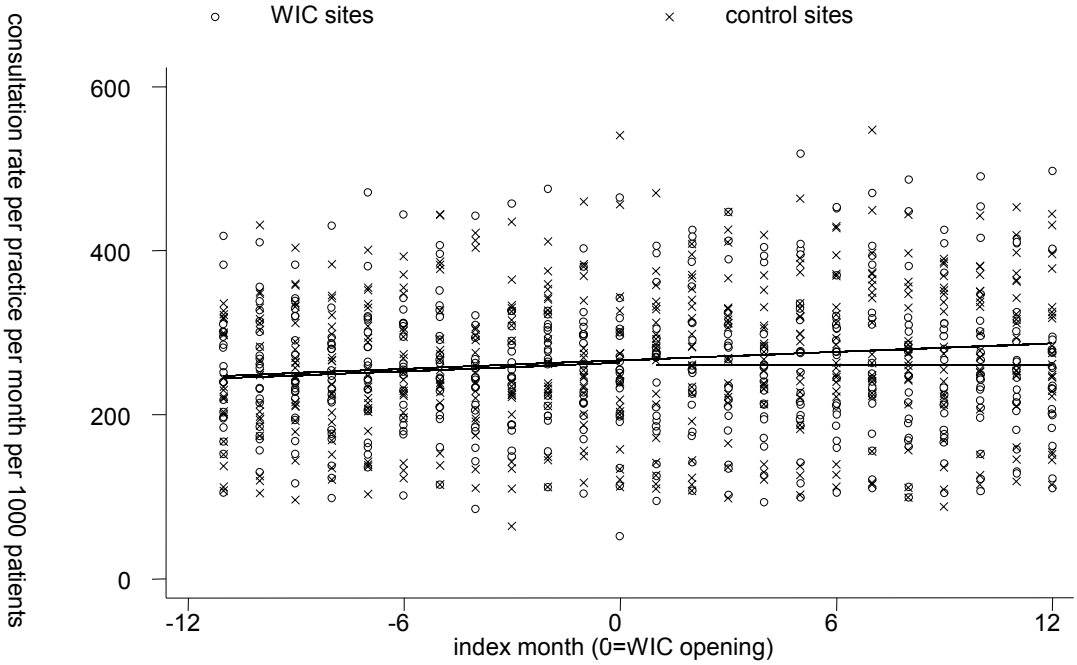


Figure 11: Consultations per practice per month across all GP sites



Impact on out-of-hours services

Figure 12 displays the data for all the out-of-hours sites over the 24 month monitoring period. Figure 13 indicates that in control sites, there was a statistically significant fall in consultation rates, from 12.3/1000/month to 11.8/1000/month - a reduction of 0.52/000/month (p=0.01, 95% CI: 0.13, 0.91). There was also a slight decline observed in walk-in centre sites.

In the final adjusted model, the net difference in change in consultation rates between the control and walk-in centre sites is estimated as an 0.38/1000/month greater reduction in control sites than in walk-in centre sites, (p=0.242, 95% CI: -0.26, 1.02). For an average-sized out-of-hours service (211,000), this equates to 80 fewer consultations per month. However, this net effect is not statistically significant, nor do the graphs indicate any observable impact of walk-in centre opening on out-of-hours service consultation rates.

Figure 12: Consultations per service per month across all out-of-hours sites

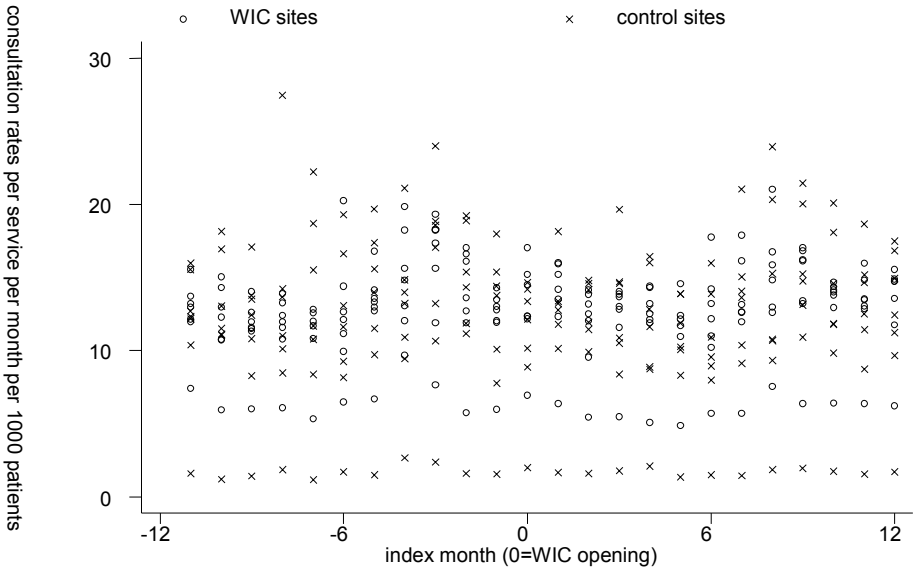
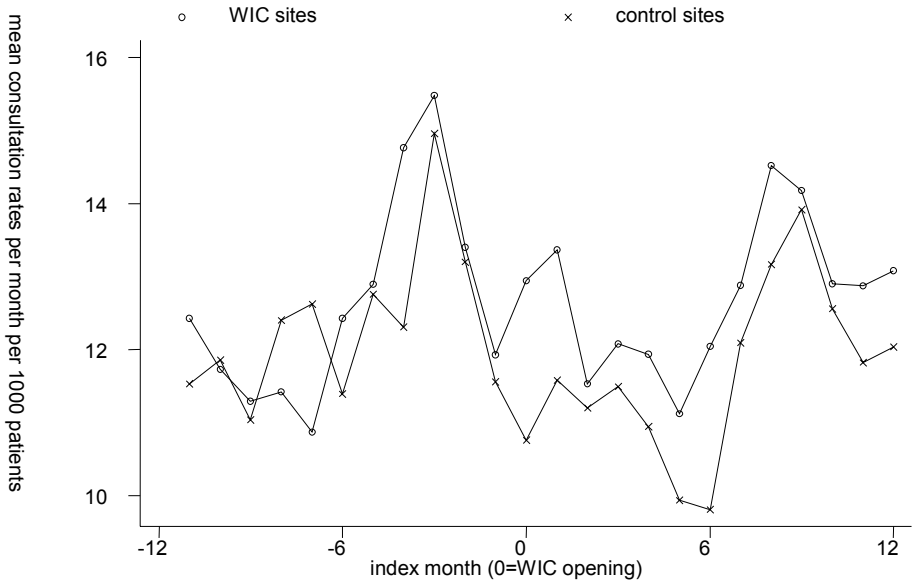


Figure 13: Mean number of consultations per month across out-of-hours services



7.4 Discussion

The results from this study of the impact of walk-in centres suggest that consultation rates at Accident and Emergency departments in towns with walk-in centres may be slightly reduced, especially in towns where the walk-in centre is co-located with the Accident and Emergency department. In general practices, workload increased in both walk-in centre and control sites in the twelve months before walk-in centres opened, but this rise continued for the following twelve months only at control sites. For out-of-hours services there was very little evidence of any change in consultation rates at either walk-in centre or control sites. However, none of these apparent changes were statistically significant, and the research has a number of important limitations.

First, the relatively short period of follow-up (providing relatively few data points for analysis), combined with the small number of sites and the very wide variation between them in workload, leads to statistically non-significant findings. Second, walk-in centre sites were matched to control sites to account for seasonal and regional effects on workload, but other local confounding factors may have influenced activity at one or more sites. Third, only a minority (25%) of general practices were able or willing to supply data about the number of consultations at their practices so the results for general practice may not be representative. Practices may not be able to supply this data unless they have computerised appointment systems. However, it is difficult to conceive that any impact of walk-in centres on workload would have a differential effect on those practices able to supply data, so this low response rate may be less of a problem than it would be in a questionnaire survey of opinion. Fourth, this study was based on routinely collected data extracted by the sites themselves, which is of uncertain reliability.

Walk-in centres vary considerably in terms of their setting and the services they provide. Some are located next to Accident and Emergency departments, some in hospitals without this facility, some in shopping centres and others are co-located with primary care facilities such as GP co-operatives or health centres. In this study, centres of different types were selected purposively and analysed together. However, it is likely that certain types of centre will have differential impacts on the workload of other types of health service provider. A further sustained period of evaluation will be needed, starting with a clear description of the theoretical basis by which different models of service may have predictable effects in different contexts, to disentangle the relationship between setting, model of walk-in centre organisation and impact on other local services.

Twelve months is a relatively short time in which to assess the impact of a walk-in centre. Patient throughput at walk-in centres increased steadily over the first few months after opening but it is still to early to predict how patients will use walk-in centres in the longer term, and will remain so until they have become used to what different health care services are on offer. Judging the true impact of a walk-in centre on the workload of other NHS providers will require the participation of a larger number of sites and a longer period of follow-up.

8 Survey of local health professionals

8.1 Introduction

The views of local health professionals working near to walk-in centres are important for several reasons. Many lead organisations claimed the support of the local health community in justifying their business case when bidding for funds to establish a walk-in centre. However, in the first round of interviews to walk-in centres, managers cited the attitudes of other local health professionals as the most important potential barrier to the success of their centre. Local professionals are likely to influence the ways that their patients use the centre, and the ways in which co-operation between the walk-in centre and other local services can be enhanced. The experiences of local health providers may provide useful feedback about how well the walk-in centre is working and how it is contributing to the local 'health economy'. Most importantly, these professionals may have constructive suggestions to make about how the walk-in centre can be developed and improved.

A postal survey was therefore used to gather information about the views and experience of GPs, practice nurses, pharmacists, and A&E consultants working near to walk-in centres. This work focused on the following areas of interest::

- perceived impact of the local walk-in centre on workload of other providers
- perceived impact of the local walk-in centre on types of problems presented to other providers
- perceived impact of the local walk-in centre on patient expectations
- satisfaction with communication about patients between themselves and the walk-in centre
- views on the issues of quality, appropriateness and efficiency of service / care at walk-in centres
- views about how the walk-in centre could be improved

8.2 Methods

Between February and March 2001, an anonymous postal survey was made of NHS healthcare providers (general practitioners, practice nurses, pharmacists, Accident and Emergency consultants) working in close proximity to a sample of twenty walk-in centres. These twenty centres were representative of four types of location identified by the evaluation (high street, hospital site with or without Accident and Emergency facilities, or co-located with primary care). Every general practice located within a 3 km radius of each chosen walk-in centre was selected from health authority lists and questionnaires sent to all general practitioners and one named practice nurse at each. The survey also targeted all pharmacy managers working within 2 miles of the various walk-in centres and all consultants in Accident and Emergency departments within a 5 miles radius.

The short, self-completion questionnaire was piloted with local GPs, pharmacy, nursing and A&E contacts. The final questionnaire consisted of 16 closed questions (with multiple tick box response options) and space for free-text comments. Most of the questions were intended to be answered by all respondents, but some were directed to GPs and/or A&E consultants only.

8.2.1 Analysis

The analysis used four different approaches to explore the data. An overall view was obtained by looking across all twenty sites. It was then possible to examine each site individually and to look at differences and similarities between types of respondent - GPs, practice nurses, pharmacists and A&E consultants. The analysis then focused on sites within each of the four categories of the walk-in centre typology identified earlier in the Evaluation.

In addition to the quantitative survey results, this report also takes account of the free-text comments offered in response to the open-ended question "Do you have any views about how walk-in centres can be improved?" Whilst it would be impossible to list all the individual items of feedback, an attempt has been made to realistically reflect the diversity of views offered by the various types of healthcare professionals who offered additional feedback, whether positive or negative.

The main findings are described below, along with examples of free-text comments.

8.3 Results

8.3.1 Response rate

Of the 2105 questionnaires mailed, a total of 1584 completed questionnaires and 7 incomplete questionnaires were returned following two reminders. Eighty-six of the original sample were excluded as 'addressee not at the listed address'. Thus, the final response rate was 79% (1591 / 2019).

8.3.2 Section one: whether health professionals had visited a walk-in centre

This section addressed a single issue - whether or not the healthcare professionals had personally visited a walk-in centre, as this may influence their attitudes towards the concept.

Question 1: Visit to local walk-in centre

Thirty-two percent (504 / 1577) of healthcare professionals surveyed had visited their local walk-in centre. However, this varied between sites (from more than 60% of those surveyed in Loughborough, Bristol and York to less than 20% in Manchester, Nottingham and Sheffield) and between types of professional. Almost half of A&E consultants questioned (48%) said they had visited their local walk-in centre compared to 37% of GPs, 26% of practice nurses and only 1 in 5 pharmacists.

At the time of this survey some health-care professionals still did not know about this new service, notably pharmacists, a point reiterated by some of the free-text data presented below.

Perceptions of visits to local walk-in centre

" I do not know of any walk-in centre near our premises"
pharmacist

"We have not got a local walk-in centre"
pharmacist

8.3.3 Section 2: Perceived impact of walk-in centres and communication

This section of the questionnaire examined the perceived impact of walk-in centres on other local health services by considering the issues of changes in presenting complaints, in workload and in patient expectations.

Question 2: Perceived changes in type of problems presenting to local providers

91% of healthcare professionals surveyed (1427 / 1570) indicated that they felt that the opening of a walk-in centre in their locality had not changed the types of problems that patients presented to their own service. Some of the free-text comments pointed out that it was difficult to assess change over a short time period and to accurately identify walk-in centres as the reason for changes in the types of problems presented.

Perceived changes in type of problems presenting to local providers

"…seems to be working well in general. It is too early to be sure that changes were permanent or that they are occurring as a result of the walk-in centre rather than NHS Direct or GP co-op"
A&E consultant

"I've not noticed a huge change in my work."
practice nurse

Question 3: Perceived impact on workload

When asked to assess any change in workload since the opening of their local walk-in centre, more than three-quarters of respondents (1189 / 1562) observed no significant change. A further 9% reported a reduction in workload, whilst the remaining 15% claimed that their workload had increased.

The free-text comments below illustrate some of the complex issues underlying these assessments of changes in workload. Again, there is the issue of measuring change over a relatively short time period, and attributing the reason for changes. Nonetheless, some respondents had strong feelings about the impact of walk-in centres on the workload of other healthcare professionals and services.

Perceived impact on workload

"Being situated a fair distance away from the NHS walk-in centre, it has had very little, if any, effect on me. I have had no experience of it or any feedback from patients who have gone there "
pharmacist

"The local walk-in centre has had no impact on A&E directly. It has generated extra work as GPs refer their patients to it rather than keep to existing emergency slots"
A&E consultant

"…walk-in centre is used a buffer by A&E when they get busy"
practice nurse

"Patients still feel they need to see their own GP to confirm diagnosis and treatment and therefore walk-in centres are duplicating work for providers"
practice nurse

"In our area…all treatments needing prescriptions are referred to the GP thus increasing workload!"
GP

Question 4: Perceived effects on patient expectations

Twenty-nine percent (443 / 1552) of respondents said they had observed an increase in patient expectations following the opening of their local walk-in centre, whilst 70% reported no change and 1% observed a reduction. As expected, the extent and nature of the change in patient expectations, fluctuated from place to place. One of the issues identified from the free-text comments on the questionnaires concerned continuing confusion amongst the general public about the services provided by walk-in centre. There was also some concern about appropriateness of help seeking behaviours - see comments below.

Perceived effects on patient expectations

"I have noticed that the time spent with each patient is much longer than they require!"
practice nurse

"Patients will expect mini-A&E departments on their doorstep with 24 hour access…Whilst they offer an alternative, it is not always appropriate and patient expectations are increased on all levels. Patients must see the need for the medical profession to prioritise in accordance with need"
practice nurse

"It misguides the patient into thinking that easy access to any healthcare is automatically preferable"
GP

"In my experience it encourages the most selfish and dishonest patients to demand more. It does not address the issues of health education or fair access for the most needy and most ill"
GP

Question 5: Communications between walk-in centre and other local NHS services

Generally, the feedback regarding general communication between the walk-in centre and other local heath care services was positive - 29% of respondents deemed communication to be adequate and a further 33% felt it was good or excellent. However, 21% of healthcare professionals consulted felt that communication between themselves and their local walk-in centre was poor.

Individuals working in those areas where walk-in centres are located on a hospital without A&E facilities were most likely to report an unsatisfactory level of communication whilst those working close to a walk-in centre co-located with a GP surgery were most likely to offer positive feedback. A&E consultants were more likely to think that communications with the walk-in centre and their own service were positive than any other type of healthcare professional consulted in the survey - indeed 64% reported communications to be either excellent or good. By contrast, a considerable proportion (37%) of pharmacists thought that communications between the local walk-in centre and their own service were poor, and this was reflected in their free-text comments.

Perceptions of communication between walk-in centre and other NHS services

"I am supportive of the idea of NHS walk-in centres but have received no feedback from our local centre yet"
pharmacist

"Had difficulty in obtaining information about where it was located. Had to contact NHS Direct"
pharmacist

Question 6: Information on patient consultations provided to GPs and A&E consultants

The information received by GPs and A&E consultants about patient consultations conducted at their local walk-in centre was considered to be of excellent quality in 5% (44 / 857) of cases and good in 33% (285 / 857) of cases. A further 39% of respondents felt the information received was adequate whilst 23% deemed it to be of poor quality. There was variation by type of location: those walk-in centres co-located with a GP surgery were generally reported to be the best at providing information on patient consultations, and those walk-in centres on hospital sites without A&E facilities were deemed to be particularly poor at forwarding information about patients.

When asked to rate the information about patient consultations provided by their local walk-in centre, A&E consultants were far more likely than their GP counterparts to think that information was of good or excellent quality (56% compared to 38%).

The free-text section of the questionnaire provided an opportunity for the healthcare professionals to comment about communication links between services and make suggestions about how these links might be improved – see comments below.

Perceptions of patient information provided to GPs and A&E consultants

"Recently a patient visited the local WIC, was seen very promptly… but also advised to see a doctor at A&E. It would have been helpful if the WIC could have contacted A&E to warn them that the patient was due and to give a possible waiting time."
pharmacist

"make transfer of information seamless(i.e. electronic) between providers"
A&E consultant

"Tremendous advances could be made if effective computer links could be made with each individual's medical history."
practice nurse

Question 7: Notification of patients' attendance to GPs

GPs appear generally satisfied with the rate at which they were notified of patient visits to walk-in centres - 55% (427 / 782) of the GPs surveyed felt that they were always notified, with an additional 27% believing they were notified on some occasions. However, 9% of GP respondents claimed they were rarely notified and the same proportion believed that they were never informed of such visits. There were some concerns about the quality of notification, illustrated in the free-text comments below.

Perceptions of notification regarding patients' attendance to GPs

"The letters are very confusing, computer-generated and make it difficult to unravel exactly what was the problem when the patient was seen"
GP

8.3.4 Section 3: Attitudes towards walk-in centres

Questions 8-15 of the survey questionnaire consisted of a series of statements about walk-in centres. The respondents were asked to read each statement and respond on a 5-point scale indicating their agreement or disagreement with the statement. The statements were balanced so that some were worded positively and others negatively. The results for this section of the questionnaire are presented below.

Table 32 Overall responses to attitudinal questions

	Strongly agree %	Agree %	Undecided %	Disagree %	Strongly disagree %
"Walk-in centres provide appropriate care for many patients" *N = 1563*	3	35	38	18	6
"Provision of walk-in centres enables the NHS to operate more efficiently" *N = 1570*	3	21	34	29	13
"Walk-in centres provide lower standards of care than other local health services" *N = 1568*	4	15	39	38	4
"The service provided by walk-in centres is too limited" *N = 1561*	7	30	44	17	2
"Walk-in centres undermine continuity of health care" *N = 1565*	14	30	23	31	2
"Walk-in centres improve access to health care for people" *N = 1567*	7	53	21	15	4
"I encourage people to contact the walk-in centre as an alternative to consulting me/us" *N= 1561*	3	20	15	39	23
"I feel confident that the walk-in centre provides people with high quality care" *N = 1563*	3	27	44	18	8

Question 8: Appropriateness of care

When asked to respond to the statement "*walk-in centres provide appropriate care for many patients…*", just over one third (38%, 589 /1563) of those surveyed agreed. Opinions about this statement varied greatly depending on location. Healthcare professionals in Liverpool, Swindon, North Middlesex and Weybridge expressed a strong belief that walk-in centres provide appropriate care whilst their colleagues in Bath, Exeter and Manchester - all of whom occupy shop-front locations - appeared to be far less convinced about their appropriateness – see free-text comments below.

Perceived appropriateness of care at walk-in centres

"…No GP at present at the … centre which limits our referral requirements but it is useful when we need to refer patients for dressings etc."
pharmacist

"Flies in the face of trying to educate the public to access medical services when it is appropriate and timely to do so"
GP

"Consultations are too time-consuming especially when the patient then needs referring on to another medical service. I'm unconvinced as yet that this is an appropriate use of NHS funds"
practice nurse

Appears to be an excellent service and is very appropriate for patients who need an instant referral for minor problems"
practice nurse

"No evidence base for existence"
A&E consultant

Question 9: Efficiency of walk-in centre provision

Forty-two percent of all healthcare professionals surveyed disagreed with the statement "*provision of walk-in centres enables the NHS to operate more efficiently…*". A further 24% of respondents agreed that walk-in centres were able to contribute to the efficient running of the NHS and the remainder were undecided. Respondents working in areas where the local walk-in centre was adjacent to an A&E department were more likely to feel walk-in centres improved NHS efficiency than those working around walk-in centres in other settings.

The free-text comments highlight some of the views about the efficiency of the walk-in centre model of provision.

Perceived efficiency of walk-in centre provision

"Walk-in centres have received a disproportionate amount of money for the services they provide - where is the money for A&E to reduce their waiting time…where's the money for community pharmacy to develop their walk-in service?
pharmacist

"poor value for money given the significant costs of establishing them"
GP

"I think it would have been more efficient and useful to extend and invest in present services"
practice nurse

Question 10: Standards of care at walk-in centres

Less than a fifth of those surveyed believed that "*walk-in centres provide lower standards of care than other local healthcare services…*". Indeed, 42% of healthcare professionals disagreed with the statement whilst the remainder were undecided.

The free-text comments indicate that there are some concerns with standards within walk-in centres but also with ensuring similar standards throughout the different types of healthcare provision available.

Perceptions of standards of care at walk-in centres

"should standardise the level of personnel at each centre and ensure that personnel at the centres are trained to the same standard as community pharmacists in the treatment of minor ailments"
pharmacist

"all providers to use the same triage / initial assessment system to decide who goes where"
A&E consultant

"there appears to be a gap between the competencies of the work-force and the expertise required to do the job"
practice nurse

"Walk-in centres cannot deliver the expertise needed for diagnosis and treatment. Neither do they prescribe"
GP

Question 11: Range of services at walk-in centres

When asked whether they felt that "*the service provided by walk-in centres is too limited…*" 37% of all respondents agreed.

The free-text comments illustrate some of these concerns - see below.

Perceptions of range of services at walk-in centres

" Without prescribing facilities, the walk-in centre does not bridge the gap between community pharmacy and GP practice. In most cases we would still be referring customers that we cannot help on to a GP unless they require minor first aid"
pharmacist

Despite experienced nurses running the service, those centres placed in secondary care settings provide a very limited service e.g. giving M.A.P but no condoms"
practice nurse

"the main problem is their inability of nurses to prescribe and therefore the service is an expensive advice-giving centre"
practice nurse

Question 12: Continuity of care at walk-in centres

Forty-three percent of respondents agreed with the statement that "*walk-in centres undermine continuity of healthcare…*". 55% of GPs agreed with this statement compared to 41% of A&E consultants, 28% of pharmacists and 25% of practice nurses. The free- text comments suggest that those working in GP settings, perhaps unsurprisingly, may have particular concerns about continuity of care.

Perceptions of continuity of care at walk-in centres

" Follow-on care from the walk-in centre is very reliant on patient recall and could be problematic"
practice nurse

"They are making a difference already, building bridges from GPs to hospitals - filling a void"
practice nurse

"It disrupts continuity of care … and undermines and dilutes the long-term relationship and efficient service provided by GPs"
GP

Question 13: Access to care at walk-in centres

Sixty percent (939 / 1567) of respondents agreed that "*walk-in centres improve access to healthcare for people…*". Healthcare professionals working in areas where the local walk-in centres is adjacent to an A&E department were more likely to think that the centres improve access to healthcare than respondents elsewhere. Practice nurses and pharmacists were most likely to believe that walk-in centres improve access to healthcare - some 75% of practice nurses surveyed agreed with this statement, as did 73% of pharmacists. By comparison, 59% of A&E consultants and 51% of GPs believed that walk-in centres improved access to healthcare.

Perceptions of improved access to care at walk-in centres

Why not locate them within existing facilities such as pharmacies?"
pharmacist

"It is very useful to have somewhere locally which is open early morning or late at night where we can ask our customers to go for further advice"
pharmacist

"It should provide easier access for difficult-to-reach groups like the homeless, refugees, mentally-ill etc."
A&E consultant

"Our local walk-in centre is a great avenue of health care for our patients who find the confines of appointment times a hindrance"
practice nurse

Question 14: Walk-in centres as an alternative to other services

In response to the statement "*I encourage people to contact the walk-in centres as an alternative to consulting me / us…*" 62% of healthcare professionals disagreed.

GPs were less likely to encourage people to contact walk-in centres as an alternative to their own service than any of the other types of healthcare professionals taking part in the survey. Only 14% of GPs agreed with the statement compared to 31% of pharmacists, 40% of practice nurses or 43% of A&E consultants.

The free-text comments suggest that there may be a variety of reasons underlying this pattern of recommendations, including previous experience of referral.

Perceptions of walk-in centres as an alternative to consulting

"I always refer people whom I cannot help personally and who cannot get a GP appointment in an appropriate time-span to the centre, particularly when they have minor injuries such as bad scalds and cuts"
pharmacist

"I have recommended many of my customers who needed care but they came back saying that they weren't given anything. So now I am fairly reluctant to recommend"
pharmacist

"The answer will depend on the condition the patient has. Those who have been are well satisfied with their treatment and speak highly of the system."
practice nurse

"My concern is that patients play one service off against the other"
practice nurse

Question 15: Quality of care at walk-in centres

When asked to respond to the statement "*I feel confident that the walk-in centre provides people with high quality care…*", 30% (472 / 1563) of those surveyed agreed, 26% disagreed and the remaining 44% were undecided.

Practice nurses showed the most confidence in the quality of care given to patients at walk-in centres. 49% of practice nurses agreed with the statement compared to 33% of pharmacists or 23% of both GPs and A&E consultants. Some possible reasons underlying these findings may be gleaned from the free-text comments presented below.

Perceptions of quality of care at walk-in centres

"I am concerned about the quality of some of the advice given but am generally supportive of the idea. I would be very worried if the centres developed into supplying medical items and medicines without pharmacist involvement"
pharmacist

"Inappropriate advice given by nurses about usage and dosage increases our workload"
pharmacist

"The standards and guidelines developed ensure that patients receive high quality care. However, there is still a lot of misconception by general practice as to what purpose walk-in centres provide - it's still seen as a threat"
practice nurse

8.3.5 Section 4 : Support for the concept of walk-in centres

The final question asked respondents to respond to the statement "*Overall, how supportive of the concept of walk-in centres within the NHS are you?*"

Question 16: Overall concept of walk-in centres

Whilst local health care professionals appear divided about the concept of walk-in centres, there was nevertheless an overall majority in favour of them. Indeed, 53% claimed they were "*supportive*" of the concept and a further 9% said they were "*very supportive*" of this new primary health care service. Only 27% were reported to be "*opposed*" the idea and a further 11% were "*very opposed*" - see Appendices for details.

There were a number of locations where support for the concept was greater (North Middlesex, Tooting and Nottingham) and others where the concept of walk-in centres had been embraced to a much lesser extent (Manchester, Sheffield and York). Of the four professional types surveyed, practice nurses and pharmacists were generally more supportive of walk-in centre concept than either their GP or A&E consultant colleagues. There was also clearly more support for walk-in centres as a concept in those areas where a walk-in centre was located close to a hospital with A&E facilities – see Table 33 below.

Table 33 Support for walk-in centre concept by type of professional

	Very supportive %	Supportive %	Opposed %	Very opposed %
A&E consultants n= 44	9	60	19	12
GPs n=914	5	42	37	16
Pharmacists n=285	13	67	15	5
Practice nurses n=341	17	67	13	3
Shop front n=461	6	51	30	13
With A&E n=413	15	56	21	8
Without A&E n=230	7	50	29	14
With GP n=480	9	52	30	9

The free-text comments indicate a range of views about walk-in centre provision. Although there are contrasting views about the appropriate role and scope of walk-in centres, there is definite support for the role of walk-in centres in reaching minority groups and encouraging registration into standard health services such as general practice.

Perceptions of walk-in centres as a concept

"I feel that the main feature of a walk-in centre is exactly that - that you can walk in. You have to be able to get it from your local neighbourhood. Funding should be made available to support them from the local community and site them in the right places, alongside the local pharmacy and GP surgery, with everyone working in conjunction with one-another"
pharmacist

"Abolish them! They take up too many nurses who would be better put to use in hospitals"
GP

"Provide them with some definite vision - one objective and one role - not just an alternative to A&E or GP service"
A&E consultant

"I feel that future improvements will come from local initiatives and innovation and not according to central dictates"
A&E consultant

"The concept is flawed as it relies on taking nurses away from hospitals and GP practices, undermining both"
GP

8.4 Discussion

This survey is the first systematic attempt to gain the views of a range of health professionals with regard to walk-in centres. The large sample and high response rate means that the findings can be regarded as representative. The results demonstrate some interesting findings.

It is possible to gain the impression from press reports that other health providers, particularly GPs, are universally opposed to the concept of walk-in centres in the NHS. However, this survey shows that health professionals are divided, with more in favour of

walk-in centres than are opposed to them. This is shown by the results of the quantitative results, although the free-text comments tend to be more negative. This is probably because people are more likely to express critical comments than positive comments in an optional free-text box on a questionnaire. This was particularly the case in the questionnaire used for this survey, as the free text box invited respondents to write in suggestions about how walk-in centres could be improved.

It is important to understand the aspects of walk-in centres which were supported by other health professionals, and the aspects that caused them concern. Professionals felt that walk-in centres:

- improved access to health care for many people
- provided appropriate care
- provided care of reasonable quality

The concerns of health professionals were that walk-in centres:

- undermined continuity of care
- were an inefficient use of NHS resources
- increased public expectations and the workload of other health services
- presently provided too limited a service

The above statements reflect the balance between those who agreed or disagreed with a number of statements. However, the most frequent response for almost all statements was 'undecided', suggesting that local health professionals are still forming a view about the role of walk-in centres within the NHS.

Although this summarises the findings for respondents as a whole, there are interesting differences between different types of professional, different types of walk-in centre, and between individual walk-in centre sites.

There were clear differences between the attitudes of doctors (both A&E consultants and GPs) and nurses and pharmacists. Doctors were generally more critical, and were particularly concerned about the efficiency of walk-in centres and the potential for centres to undermine continuity of care. Practice nurses were most supportive of walk-in centres, expressing more confidence in the quality of care they provide, and their potential to improve access to health care. Pharmacists, although generally supportive of walk-in centres, appeared to be less aware of centres and have less good communication links with them. Only a fifth of pharmacists had visited a walk-in centre. Several of the free-text comments from pharmacists illustrate a concern that walk-in centres offer an easily accessible health advice service which may compete with their own role.

The results from the survey were analysed by type of walk-in centre, using the typology described in Section 3.3.1. It is notable that A&E consultants and GPs were more likely to have visited a site near to their own service, and more likely to be supportive of this type of walk-in centre. Centres which were linked to nearby GP surgeries and those in a hospital with an A&E department attracted most support. Walk-in centres which fell into the category in the typology of 'sites at hospitals without an A&E department' attracted least support. They were perceived to have less good general communication with other local health providers, to provide less frequent and poorer quality reports about patients' consultations, to provide care of less good quality and to provide services which were too limited.

There were also differences between individual walk-in centres. Certain centres, such as North Middlesex, Tooting, Nottingham and Liverpool, seemed to attract strong support from their local health community. Other sites (e.g. Harlow, Manchester, Sheffield and York) attracted less support across a number of issues. The variation between sites was considerable, with 84% of local health professionals in North Middlesex being supportive of walk-in centres, while only 44% of professionals in York were supportive. It may be

worthwhile to explore further the reasons for this local variation, in order to identify contextual factors associated with the success of walk-in centres in different settings.

It is important to note that this component of the evaluation needs to be 'triangulated' with information obtained from other aspects of the evaluation. It describes the perceptions of local health professionals about issues such as the impact on workload of other providers, and the quality of care offered in walk-in centres. Further information about these issues also comes from other aspects of the overall evaluation.

9 Assessment of the quality of care study using standardised patients

9.1 Introduction

This part of the evaluation aimed to determine whether or not walk-in centres provide adequate and safe clinical care to a wide range of patients, and how the quality of care in walk-in centres compares to that of other primary care services. Despite the existence of walk-in centres in other countries for many years, little research has been conducted on the quality of care provided. The only previously published attempt to evaluate clinical care in UK walk-in centres was damning.[64] It found the overall quality of care disappointing, some care positively dangerous and considerable variation between sites. However, this Consumers Association study considered just eight walk-in centres with no comparative group, and had a number of methodological flaws. [65]

Assessment of quality of clinical care, although important in the overall evaluation of walk-in centres, is challenging. Good quality clinical care involves accurate assessment of the clinical problem based on history and examination, awareness of the range of possible diagnoses and how to decide between them and provision of appropriate advice and treatment. Its assessment needs to consider the quality of clinical decisions and management.

A number of methods exist for evaluating the quality of what occurs in the clinical consultation, most of which are limited by difficulties obtaining reliable and valid data on consultation content. Indirect methods, involving evaluation of clinician behaviour by medical record review or self-reporting have systematic biases.[66] Direct methods of observation, such as video recording, require large numbers of consultations to be reliable, because of the variable case mix seen in clinical practice. In addition, clinicians may change their behaviour when observed. One method of quality assessment is gaining favour because it avoids these methodological problems: the use of covert standardised (or simulated) patients.

Standardised patients are people trained to portray the presentation of a clinical scenario to a health professional for teaching or research purposes. They have been used in the US for over 30 years and have been the subject of a significant body of educational research.[67] [68] Increasing numbers of studies have employed standardised patients to explore what occurs in clinical practice,[69] [70] [71] [72] [73] [74] [75] including studies concerned with quality assurance in which day to day clinical performance is assessed. Whilst the use of standardised patients in this sort of research is novel in the UK, experience from elsewhere suggests that this approach to quality of care assessment is reliable and valid. [76]

This study used standardised patients to compare the quality of clinical care provided by walk-in centres, with that available in two other primary care settings: consultations in general practice and telephone contact with NHS Direct. Its objective was to discover whether patients who attend walk-in centres receive an adequate and safe level of clinical care. Consequently, it concentrated on assessing what is necessary, rather than what is ideal, with respect to patient care. This study, in contrast to that carried out by the Consumers Association,[64] involved a large sample of consultations with clinicians that had consented to participate. In addition, it employs prospectively determined assessment schedules, consisting of lists of essential criteria for the safe management of standardised patients. Finally, outcomes, primarily the proportion of essential criteria fulfilled by each provider type, are presented in an anonymised form.

It is important to note that there are important differences between the three models of organisation compared in this report, and some differences in the care provided may be anticipated. General practice provides first point of contact for almost any health problem. NHS Direct provides a first point of assessment to advise people about managing their problem themselves or to direct them to the most appropriate health provider. Walk-in centres fulfil aspects of both functions, providing advice and treatment for minor illnesses and injuries, providing advice about self-care, but also directing people to other appropriate health providers. However people consulting with common problems should expect a consistent and minimum standard of care, whatever their first point of entry to the health service.

9.2 Methods

9.2.1 Sample size

This study was powered as an equivalence study. In order to test the null hypothesis that the quality of clinical care in walk-in centres differs from that provided in general practice and by NHS Direct, a target sample size of 276 clinical contacts by standardised patients was required. That is 92 standardised patient contacts with each of the three types of primary care provider. This sample size was calculated to provide 80% power, with $p<0.05$, to exclude the possibility of a difference of 18% or more between provider types in the proportion of essential criteria achieved.

9.2.2 Participant recruitment-clinical sites

The study compares quality of care in 20 walk-in centres, 20 general practices and 11 NHS Direct sites. For logistic and financial reasons, clinical sites were approached in three geographical areas. These were the localities in and around Bristol, Birmingham and London. General practices involved with research or teaching networks in these localities were invited to participate, whereas walk-in centres and NHS Direct sites were approached to participate on the basis of their geographical position in the three localities. Twenty out of 25 (80%) walk-in centres, 11 out of 12 (92%) NHS Direct sites and 24 out of 62 (39%) general practices agreed to participate, with the first 20 to respond being included. Twelve practices (19%) declined to take part and the remainder did not respond.

Ethical approval was obtained from the local research ethics committee. Participating sites all gave informed consent for contact with standardised patients, but were not informed as to when the role-players were likely to present themselves. General practitioners were paid for their care of standardised patients, (the equivalent of a temporary resident fee for each standardised patient consultation). Sites taking part in the study were assured complete anonymity: outcome data was presented such that individual sites and clinicians could not be identified. The research team was also kept blind as to the identity of individual sites and clinicians, which were known only to an independent intermediary, who held the code linking clinicians with standardised patients.

9.2.3 Participant recruitment-standardised patients

Standardised patients were played by 15 professional role-players, selected from those involved in educational activities at the three universities of Bristol, Birmingham and London. They were chosen on the basis that they matched the roles assigned to them in terms of age-group and gender. Role-players were paid for their participation in the study, and made a written understanding to keep all information about individual clinicians strictly confidential. They were made aware of the possible consequences of actual disease being uncovered.

9.2.4 Selection of standardised clinical scenarios

Role-players each portrayed one of five standardised clinical scenarios. Clinical problems were chosen largely on the basis that they represented those likely to present to walk-in centres. However, their selection was limited in a number of obvious ways. First, scenarios could not require the presence of abnormal physical findings. Second, their management should not involve other parties, for example by referral to hospital. The research team devised the clinical scenarios. Believable, standardised scripts for standardised patients were then developed in consultation with role-players. The scenarios were as follows:

- A 30 year old man with worsening asthma caused by taking ibuprofen purchased over the counter
- A 35 year old woman with symptoms of sinusitis suggesting bacterial aetiology
- A 27 year old man with tension headaches and underlying symptoms of depression
- A 23 year old woman requesting postcoital contraception
- A 30 year old man with musculoskeletal chest pain

Each scenario focused on a different type of clinical problem that might present to a walk-in centre and was intended to assess a different aspect of clinical care in that setting. The asthma scenario was constructed to assess drug history taking and awareness of drug side effects. The sinusitis scenario was designed to assess issues around antibiotic prescribing. The headache scenario was devised to assess ability to explore psychosocial as well as somatic issues. The postcoital contraception scenario was intended to assess management of a commonly seen, straightforward clinical problem. Finally, the chest pain scenario was designed to assess ability to exclude a potential serious diagnosis and reassure the patient accordingly.

Appendix 9 shows an example of a scenario, based on a man consulting with a headache.

9.2.5 Derivation of essential criteria for assessment

In order to discover whether walk-in centres, and by comparison general practice and NHS Direct, are safe, it was necessary to assess the care provided against standards, which took the form of lists of essential criteria for the adequate management of each scenario.

A stepwise procedure, based on the Delphi process,[77] involving use of evidence-based literature and a consensus panel of GPs and nurse practitioners, was used to construct the lists. First, the research team reviewed the literature to identify evidence-based criteria for essential actions relevant to each of the five clinical scenarios. In the absence of research evidence, consensus based guidelines were used where available. The lists of potential criteria were then circulated, in the form of a postal questionnaire, to consensus panel members. The panel consisted of 9 GPs and 5 nurse practitioners. It was intended to be both expert, in that all were experienced primary care practitioners, as well as representative of the clinicians participating in this study.

In the first round panel members rated whether or not they felt each item was essential, and could suggest additional items. The second round provided feedback on how the other panel members had responded, providing an opportunity to change responses in view of the panel's response. Items that 93% (13 out of 14) or more of the panel agreed were essential on the second round were included in the final checklists. The final checklists (see Appendix 10) consisted of between 8 and 17 items (mean 14 items), depending on the scenario and the site. These items were grouped into those relating to history taking, examination and diagnosis, advice and treatment. For a particular scenario, the walk-in centres and general practice checklists consisted of identical items, but the NHS Direct one differed, in that it did not contain examination items.

Role-players completed the checklists as soon as possible after consultations. In addition at the end of the checklists the role-players recorded whether any medication was prescribed* or referrals made. Finally, role-players were asked to comment on any positive or negative aspects of the consultation in open questions.

9.2.6 Background data for standardised patients

Role-players were provided with detailed site information, as well as personal information relating to their standardised patient roles. Site information included contact details and, where appropriate, a map and directions, as well as relevant information about the locality and types of patients that might present there. For general practices, information about surgery hours and likely waiting times for appointments was also included. Personal information for each standardised patient included name, date of birth, occupation, home address, visiting address and, where appropriate, name and address of own GP. NHS Direct sites receiving more than one call from the same standardised patient, and walk-in centres with shared databases (where there were two centres in one area), required several different aliases per standardised patient.

9.2.7 Details of standardised patient contacts

There were five role-players, each portraying one clinical scenario, working in each of the three geographical areas. Each role-player visited a particular walk-in centre or general practice once, but, due to the smaller number of sites, contacted a particular NHS Direct up to three times. In order to achieve at least the target sample size of 276 consultations, 305 clinical contacts were planned, 100 in walk-in centres, 100 in general practice and 105 with NHS Direct, as illustrated in Table 34.

Table 34 Planned consultations per role-player, per setting

Location	Number of role-players	Consultations planned for each setting per role-player			Consultations per role-player
		Walk-in centre	NHS Direct	Practice	
Birmingham	5	7	7	6	20
London	5	7	7	7	21
South West	5	6	7	7	20
Total consultations		100	105	100	305

* Technically, nurses at walk-in centres do not 'prescibe', but administer medication under Patient Group Directions (PGDs). However the word 'prescribing' is used throughout this report to encompass both prescribing and administration of medication under PGD.

Standardised patient contacts in the three settings took place over a 13-week period from July to September 2001. Standardised patients visited general practices as temporary residents, in order to avoid the logistic problems of new patient registration. They were responsible for arranging their own consultations, but the week of each visit to general practices was timetabled, so as to avoid arousing suspicion. If asked, role-players instructed walk-in centres and NHS Direct not to inform their "own GP" of the consultation, to avoid third parties receiving correspondence regarding standardised patients.

After each consultation, role-players informed the site, using a standardised letter posted first class that day to the practice manager or walk-in centre /NHS Direct lead. This contained details of the standardised patient consultation, enabling sites to amend their records accordingly. In the event of role-players being uncovered, they were provided with an ID card, as well as a letter explaining their part in the study, and requesting reception staff to allow access to a clinician, without alerting them to their true identity.

9.2.8 Training of role players

Each role-player was trained to play one of the five clinical scenarios, and to report reliable and valid facts about clinicians' management of that scenario. For each role-player, the training process was completed in one day, lasting about six hours. Role-players were provided with details of their clinical scenario in advance of the training day.

9.2.9 Training in portrayal

The three role-players responsible for playing the same role in Bristol, Birmingham and London, repeatedly practised their scenario in contact with a clinician. Using observers and videotape, they were given feedback on their performance. Accuracy of portrayal, defined as the proportion of predefined clinical features presented correctly in each consultation, [78] was assessed by two observers independently completing a checklist of performance items during the final round of role-playing. If observers differed in their assessment of whether a standardised patient had performed an individual item, verification was carried out from a videotape of the performance. The overall accuracy of portrayal was 89% across all scenarios, with 1038/1164 of essential actions correctly portrayed. In order to maintain consistency of portrayal, role-players were given a videotape of their performance on the training day, to watch before each consultation during the study period.

9.2.10 Training in assessment

Role-players performed their scenario in contact with a clinician, and immediately afterwards completed the checklist of essential items. Using observers and videotape, they were given feedback on the accuracy of their clinician assessment. At a later date, two GPs watched the videotaped consultations and completed the checklists independently and blind to the role-players' assessments, to give a gold standard for each particular scenario. In order to assess the reliability of assessment, a role-player's responses (yes/no) to each checklist item were compared to the gold standard responses. Pooling this data across all scenarios and role-players gave a kappa of 0.8 (91%), suggesting excellent agreement.

Reliability of assessment also involved the consistency of one role-player over time (intra-role-player reliability), as well as the correspondence between different role-players playing the same standardised patient (inter-role-player reliability). In order to explore the intra-role-player consistency in assessment over time, each role-player was asked to score the videotaped consultation from the training day again, half way through the 13-week study period. A role-player's responses to each checklist item on the training day

were compared to those at the half way stage. Data was pooled across all scenarios and role-players to give a group kappa for test-retest reliability of 0.7 (87%). In order to explore inter-role-player consistency of assessment, role-players performing the same scenario were asked to independently assess the videotaped consultation of the third role-player for the same scenario. The two observers scores were compared. Data was pooled across all scenarios and role-players to give a kappa for inter-rater reliability of 0.9 (96%), again suggesting excellent agreement.

9.2.11 Validity of standardised patients

The face validity of the standardised patient method of assessing clinicians' performance is high, especially if clinicians do not know or suspect that they have been confronted by standardised patients. In this study information was collected about standardised patient detection by encouraging participating clinicians to contact the study team anonymously, via an answer machine, if they suspected a standardised patient had consulted them. Twenty-three such calls were made, 5 of which were about true standardised patients, and the remaining eighteen being about falsely suspected standardised patients. Thus, the detection rate was 1.7% (5/297), the suspected rate was 6.1% (18/297) and the positive predictive value 21.7% (5/23).

9.2.12 Analysis

For each consultation, a score representing the proportion of essential criteria fulfilled was calculated for all items, and also separately for the three sub-groups of items (history taking; examination; diagnosis, advice and treatment). Means of these four scores were calculated for each type of primary care setting, with 95% confidence intervals calculated using design-weighted survey estimators. The estimation of differences between mean scores for the three types of primary care setting were then undertaken using multivariable regression models, with primary care setting and scenario included as fixed effects. Non-independence of repeat observations within individual centres was accounted for in two alternative ways: models were estimated (i) using design-weighted survey estimators, and (ii) with individual centre included as a random effect. For each model, the interaction between primary care setting type and scenario was then added and tested for statistical significance. Where this interaction was significant, separate models were estimated excluding, first NHS Direct consultations (to allow comparison of walk-in centres and general practice), and second general practice consultations (allowing comparison of walk-in centres and NHS Direct). Within each scenario, mean scores, mean score differences between settings, and 95% confidence intervals for these statistics were estimated using design weighted survey estimators.

As well as comparing mean scores for essential criteria completed, the variation in scores (standard deviation) within each primary care setting was calculated and compared between setting type. Since the checklists for NHS Direct excluded some items that were included in the other two settings, the above analyses were repeated using only items that were identical across all three settings.

For each scenario, numbers and details of prescriptions and referrals made were compared.

Finally, the open comments made by role-players about consultations at the end of the questionnaire were analysed.

9.3 Results

9.3.1 Consultations

Data were collected on a total of 297 out of the planned 305 consultations, 99 in each primary care setting. The remaining eight consultations had missing data for a number of reasons. Data on one walk-in centre consultation were lost in the post and one general practice consultation and six NHS Direct consultations were not completed for logistic reasons.

Table 35 shows that the large majority of walk-in centre consultations were with a nurse, although a small number involved a doctor or a paramedic. Conversely, most consultations in general practice were with a GP, although a few standardised patients saw a nurse in that setting. In a small minority of NHS Direct consultations, standardised patients spoke to a non-health professional rather than a nurse.

Table 35 Staff carrying out consultations in three primary care settings

Staff	Walk-in centre	Practice	NHS Direct
Nurse	91% (90/99)	2% (2/99) (postcoital contraception)	97% (96/99)
Doctor	1% (1/99) (asthma)	96% (95/99)	0%
Nurse and doctor	7% (7/99)	2% (2/99)	0%
Nurse and paramedic	1% (1/99) (chest)	0%	0%
Non health professional	0%	0%	3% (4/99) (post coital contraception)

9.3.2 Quality of care

Results of design weighted models and random effects models were very similar in all cases, and thus only the design-weighted analyses are presented as these tended to be slightly more conservative than the random effects models. For the models based on all items and those restricted to history taking and diagnosis, advice and treatment, the interactions between primary care setting and scenario were statistically significant. Thus, results of these analyses and analysis of examination items are presented separately for comparisons between walk-in centres and general practice, and then between walk-in centres and NHS Direct.

9.3.3 Walk-in centres versus general practice

Table 36 shows that, considering the five scenarios together, walk-in centres achieved a significantly greater mean score for all essential items than general practice. There were, however, between scenario differences. The quality of care for scenarios 1 (postcoital contraception) and 5 (asthma) was significantly better in walk-in centres, that for scenarios 3 (sinusitis) and 4 (headache) was similar in the two settings and that for scenario 2 (chest pain) was better in general practice, although not significantly so.

Possible explanations for the above findings are provided by considering separately essential items relating to "history taking", "examination" and "diagnosis, advice and treatment". Table 37 illustrates that overall, and for each scenario individually, walk-in centres scored better on history taking, with the differences for all scenarios and two individual scenarios being significant. Overall and individually for the two scenarios involving examination, scenario 2 (chest pain) and scenario 5 (asthma), general practice scored better on these items, although for scenario 5 this difference was not significant. There was no significant difference between the quality of diagnosis, advice and treatment provided by walk-in centres and general practice. However, for scenarios 1 (postcoital contraception) and 5 (asthma) the quality of these aspects of clinical care was significantly better in walk-in centres, and for scenario 3 (sinusitis) it was significantly better in general practice.

Thus, in summary, walk-in centres provided equivalent if not better quality of care on the items assessed than general practice, with the exceptions of their advice and treatment of scenario 3 (sinusitis) and their examination of scenario 2 (chest pain).

9.3.4 Walk-in centres versus NHS Direct

Table 36 shows that, considering the five scenarios together, walk-in centres also achieved a significantly greater mean score for all essential items than NHS Direct. Again, there were between scenario differences. The quality of care for scenarios 1 (postcoital contraception) and 5 (asthma) was significantly better in walk-in centres, whereas no significant differences existed for the other three scenarios.

Again, it is informative to consider separately essential items relating to history taking and diagnosis, advice and treatment. Table 37 illustrates that overall, and for scenarios 1 and 5 individually, walk-in centres scored significantly better on history taking and also for diagnosis, advice and treatment.

Although walk-in centres achieved a higher overall score than NHS Direct, most of this difference was due to the lower NHS Direct score on the post-coital contraception scenario. In this scenario, patients were appropriately asked fewer questions by NHS Direct and advised to contact another health provider.

Table 36 Mean scores on all essential items with comparisons between walk-in centres and general practice and walk-in centres and NHS Direct

Scenario	Walk-in centre	General practice	NHS Direct	Difference between WIC and general practice (95% CIs and p values)	Difference between WIC and NHS Direct (95% CIs and p values)
All scenarios	67.3	59.2	56.5	8.2	10.8
	(63.7-71.0)	(53.9-64.5)	(52.6-60.4)	(1.7-14.6)	(5.5-16.1)
				p=0.01	p<0.01
1 Postcoital contraception	76.9	58.1	37.5	18.8	39.4
	(70.0-83.8)	(49.2-66.9)	(27.7-47.3)	(7.6-30.1)	(27.4-51.4)
				p<0.01	p<0.01
2 Chest pain	66.4	69.4	60.2	-2.9	6.2
	(57.8-75.1)	(61.9-76.9)	(51.0-69.4)	(-14.4-8.5)	(-6.39-18.9)
				p=0.61	p=0.33
3 Sinusitis	64.2	55.8	73.6	8.5	-9.4
	(55.3-73.1)	(46.6-64.9)	(65.1-82.2)	(-4.3-21.2)	(-21.7-3.0)
				p=0.19	p=0.13
4 Headache	60.4	55.8	62.6	4.5	-2.24
	(52.4-68.3)	(48.4-63.1)	(55.4-69.8)	(-6.3-15.4)	(-13.0-8.5)
				p=0.40	p=0.68
5 Asthma	68.3	56.7	51.2	11.7	17.1
	(59.7-77.0)	(49.3-64.0)	(46.7-55.7)	(0.3-23.0)	(7.4-26.8)
				p=0.04	p<0.01

Table 37 Mean scores on "history taking", "examination" and "diagnosis, advice and treatment" items

Scenario	Walk-in centre	General practice	NHS Direct	Difference between WIC and general practice (95% CIs and p values)	Difference between WIC and NHS Direct (95% CIs and p values)
History items:					
All scenarios	72.2 (68.4-76.0)	59.8 (53.7-65.9)	60.9 (56.3-55.5)	12.4 (5.2-19.6) p<0.01	11.3 (5.3-17.3) p<0.01
1 Postcoital contraception	88.0 (82.7-93.3)	65.0 (52.9-77.1)	36.0 (21.2-50.8)	23.0 (9.8-36.2) p<0.01	52.0 (36.3-67.7) p<0.01
2 Chest pain	66.6 (57.6-75.6)	62.2 (53.0-71.4)	62.8 (54.1-71.5)	4.4 (-8.5-17.2) p=0.50	3.8 (-8.7-16.4) p=0.54
3 Sinusitis	66.0 (56.1-75.9)	48.5 (39.2-57.8)	73.3 (65.8-80.9)	17.5 (3.9-31.1) p=0.01	-7.3 (-19.8-5.1) p=0.24
4 Headache	68.9 (61.6-76.2)	62.7 (53.8-71.6)	74.8 (65.0-84.5)	6.2 (-5.3-17.7) p=0.28	-5.8 (-18.0-6.3) p=0.34
5 Asthma	71.25 (61.9-80.6)	60.6 (52.4-68.9)	60.2 (56.6-63.9)	10.6 (-1.8-23.1) p=0.09	11.0 (1.0-21.0) p=0.03
Examination items:					
All scenarios	67.9 (60.7-75.1)	85.8 (76.7-95.0)	N/A	-17.9 (-29.5-6.3) p<0.01	N/A
2 Chest pain	58.3 (43.9-72.7)	86.7 (77.8-95.6)	N/A	-28.3 (-45.5-11.4) p<0.01	N/A
5 Asthma	77.5 (64.0-91.0)	85.0 (72.2-97.8)	N/A	-7.5 (-26.1-11.1) p=0.42	N/A
Diagnosis, advice and treatment items:					
All scenarios	59.9 (53.9-65.8)	57.8 (51.8-63.8)	43.9 (36.8-50.9)	2.1 (-6.4-10.5) p=0.63	16.0 (6.8-25.2) p<0.01
1 Postcoital contraception	70.0 (60.8-79.2)	53.8 (44.9-62.6)	40.0 (28.2-51.8)	16.3 (3.4-29.0) p=0.01	30.0 (15.1-44.9) p<0.01
2 Chest pain	73.7 (57.3-90.1)	78.3 (69.7-87.0)	50.8 (28.0-73.6)	-4.6 (-23.2-13.9) p=0.62	22.9 (-5.2-51.0) p=0.11
3 Sinusitis	58.3 (45.8-70.9)	80.0 (70.0-90.0)	75.0 (55.1-94.9)	-21.7 (-37.7-5.6) p=0.01	-16.7 (-40.2-6.9) p=0.16
4 Headache	36.8 (20.6-53.1)	36.8 (25.9-47.8)	29.2 (18.1-40.2)	0 (-19.6-19.6) p=0.99	7.7 (-11.9-27.3) p=0.44
5 Asthma	60.0 (48.5-71.5)	39.0 (29.3-48.7)	27.3 (17.0-37.5)	21.0 (6.0-36.0) p<0.01	32.7 (17.3-48.1) p<0.01

9.3.5 Individual scenarios

Scenario 1 Postcoital contraception

All prescribing by walk-in centres and general practice was of the most effective hormonal postcoital contraceptive, Levonelle 2. All NHS Direct consultations resulted in referral, probably contributing to the lower scores obtained by NHS Direct on this scenario, as referral may have substituted for detailed history taking and advice.

Scenario 2 Chest pain

A minority of clinicians in walk-in centres and general practice prescribed a range of drugs. A fifth of walk-in centre consultations, and over three-quarters of NHS Direct consultations, resulted in referral, sometimes to Accident and Emergency (A&E) departments. This scenario was designed to assess ability to exclude serious illness and reassure appropriately. In about two thirds (65%) of walk-in centre consultations standardised patients were reassured that their pain was unlikely to be cardiac in nature. In this respect walk-in centres performed worse than general practice, where almost all (95%) standardised patients received this reassurance (P=0.07), but significantly better than NHS Direct, where less than a third (30%) of standardised patients were reassured (P=0.04). This greater level of caution in NHS Direct consultations may however be appropriate.

Scenario 3 Sinusitis

Almost all general practice consultations resulted in a prescription, for one of a range of antibiotics. Fewer walk-in centre consultations resulted in a prescription, (always for the same antibiotic, amoxycillin), with just over half (60%) resulting in either a prescription for antibiotics or the suggestion that a standardised patient see their own GP to discuss antibiotics. About a third of walk-in centres, and more than three quarters of NHS Direct, consultations resulted in referral, again sometimes to A&E departments, which may not necessarily be seen as appropriate.

Scenario 4 Headache

Almost half of general practice consultations resulted in a prescription, for a range of drugs. About a quarter of walk-in centre, and nearly two thirds of NHS Direct, consultations resulted in referral, including in the case of the latter to A&E departments. The purpose of this scenario was to assess ability to explore psychosocial issues. The proportion of consultations that involved discussion of a possible diagnosis of depression was low in all settings, but slightly lower for general practice (21%;p=0.71) and NHS Direct (11%;p=0.25) than for walk-in centres (26%).

Scenario 5 Asthma

Prescriptions were largely for asthma inhalers, although in one walk-in centre's consultation a standardised patient was nebulised, and in general practice both antibiotics and oral steroids were issued. Almost half of walk-in centre consultations, and almost all NHS Direct consultations, resulted in referral, sometimes to A&E departments. This scenario was designed to assess awareness of drug side effects. The proportion of consultations that involved explanation of ibuprofen as a possible trigger for the standardised patient's exacerbation of asthma was low in all three settings, but significantly lower in both general practice (5%;P=0.01) and NHS Direct (9%; P=0.01) than walk-in centres (50%).

Table 38 Numbers of referrals overall and to accident and emergency by scenario and setting

Scenario	Walk-in centre	Practice	NHS Direct
All scenarios			
All referrals	26% (26/99)	0%	82% (81/99)
Referrals to A&E	5% (5/99)	0%	13% (13/99)
1 .Postcoital contraception			
All referrals	5% (1/20)	0%	100% (20/20)
Referrals to A&E	0%	0%	5% (1/20)
2. Chest pain			
All referrals	20% (4/20)	0%	76% (16/21)
Referrals to A&E	15% (3/20)	0%	38% (8/21)
3. Sinusitis			
All referrals	35% (7/20)	0%	78% (14/18)
Referrals to A&E	5% (1/20)	0%	6% (1/18)
4. Headache			
All referrals	26% (5/19)	0%	61% (11/18)
Referrals to A&E	0%	0%	11% (2/18)
5. Asthma			
All referrals	45% (9/20)	0%	91% (20/22)
Referrals to A&E	5% (1/20)	0%	5% (1/22)

9.3.6 Intrasite variability

Considering all scenarios together, the variability of quality of clinical care, expressed as the standard deviation, was highest for NHS Direct, and lowest for general practice. On the other hand, the variability of quality of history taking for all scenarios together was higher in general practice than in walk-in centres. However, it can be seen from Table 39 that the variability of quality of care across different settings varies for individual scenarios. For example, the high variability for NHS Direct was due largely to scenario 1 (postcoital contraception), where referral may have substituted for consistent performance on history taking and diagnosis, advice and treatment items. In addition, although the overall variability of quality of history taking was greater in general practice than walk-in centres, for scenarios 3 (sinusitis) and 5 (asthma) it was actually greater in walk-in centres.

Table 39 Standard deviations in care for all sites

Scenario	Walk-in centre	NHS Direct	Practice
All items	19.0	21.9	18.6
History taking items	20.2	24.4	22.1
1. Emergency Contraception			
All items	15.6	21.1	20.0
History Taking Items	12.0	29.5	27.4
2. Chest pain			
All items	19.6	17.1	17.0
History taking items	20.4	16.2	20.8
3. Sinusitis			
All items	20.2	16.5	20.7
History taking items	22.3	14.6	21.1
4. Headache			
All items	17.6	16.5	16.2
History taking items	16.1	17.0	19.6
5. Asthma			
All items	19.6	21.1	16.7
History taking items	21.1	21.4	18.7

9.3.7 Access

Although the study did not set out to collect data about access, this emerged as an important issue, especially with respect to NHS Direct. For a number of reasons, role-players reported that contacting NHS Direct could be time consuming and unsatisfactory. Approximately one quarter (25/99) of completed calls to NHS Direct resulted in a call back, the mean wait being 33 minutes (range 0-90 minutes). In addition, three NHS Direct consultations were not completed because role-players reported an impractically long call back time. In a small minority (3%) of cases role-players spoke only to a non-health professional, and almost one in 12 (7%) calls were diverted to a non-local "buddy" NHS Direct site. Problems were also reported accessing general practice and walk-in centres, but these were fewer in number and less generalised.

9.4 Discussion

9.4.1 Study findings

This study demonstrates that, overall, walk-in centres provided equivalent if not better quality clinical care than both general practice and NHS Direct for the limited range of clinical conditions assessed. There is substantial between scenario variation in quality of care, with walk-in centres performing particularly well on the postcoital contraception and asthma scenarios. There are only two areas of clinical care where they do significantly less well than general practice: examination of the chest pain scenario and diagnosis, advice and treatment of the sinusitis scenario. These inadequacies alone do not provide evidence of poor quality care. It could be argued that examination is of secondary importance to history taking, diagnosis, advice and treatment in the overall management of musculoskeletal chest pain. Also, the significantly lower use of antibiotics for sinusitis by walk-in centres may reflect the recognised difficulties identifying accurately those patients who will benefit from antibiotics for this condition.

There is also considerable variability in the quality of care provided by different walk-in centres, general practices and NHS Direct. It is slightly greater for walk-in centres than for general practice, which may partly be explained by the considerable variation in training, experience and competencies of nursing staff in walk-in centres.[79] However, the variability in quality of history taking is greater in general practice than walk-in centres, which may partly be due to the use of decision support software in walk-in centres. The better scores for walk-in centres are particularly marked for history taking. This may relate to the longer consultations that nurses undertake in this setting, compared to general practice.

Although the quality of clinical care provided by walk-in centres in this study was better than in general practice, walk-in centres, as well as NHS Direct, referred patients to a variety of other providers, including Accident and Emergency departments, whereas all general practice consultations were managed exclusively in that setting. This poses questions about the impact of both walk-in centres and NHS Direct on the workload of other providers, which is addressed in chapter 7.

9.4.2 Comparison with other studies

The proportion of essential items achieved by clinicians in each of the primary care settings is low, given that these were standards for adequate, safe care, on which clinicians might be expected to meet close to 100%. This finding is consistent with another study which involved assessment of GPs against standards determined by a consensus procedure, and found that they performed at a level considerably below that set by their peers.[80] It is possible that performance may not reflect true competence, because clinicians exhibit efficiency, by only carrying out what is necessary at a particular moment.[80]

The overall accuracy of portrayal of standardised patients (89%) was comparable to that in other studies,[78] as were scores for the reliability of clinician assessment by standardised patients (kappa 0.7 to 0.9).[81] The detection (1.7%) and suspected rates (6.1%) for standardised patients compared very well with those reported previously. In other studies suspected rates of 13 to 24% have been reported, [69] [82] and detection rates of 0 to 18%.[81] [82] [83] [84]

9.4.3 Methodological issues

The main limitations of this study are the non-random sample of participating sites, the use of a limited number of clinical scenarios, some of which were probably more discriminating than others, and the use of a novel checklist for assessment of clinicians.

Participating sites, particularly general practices, were likely to be more interested in the research question and may have provided a higher quality of care, which could have attenuated the study findings. The scenarios were chosen as typical of those presenting to walk-in centres, and because they were appropriate for portrayal by standardised patients. It was not possible to include, for example, scenarios that necessitated the presence of abnormal physical findings, or involved the possibility of certain types of physical examination or referral to third parties. Thus, the finding that walk-in centres offer safe care cannot necessarily be extrapolated to all clinical conditions, although the scenarios were designed to assess important, generalisable components of clinical care.

The ability of scenarios to discriminate between quality of care in the three settings was variable. One of the five scenarios, (scenario 1, postcoital contraception), suggested that variability of clinical performance overall, and for NHS Direct in particular, was comparatively high. This was probably due to the fact that NHS Direct's management of this scenario always involved referral elsewhere, such that performance on essential history taking, advice and treatment items was not as thorough as in other settings. The lower overall scores for NHS Direct compared with walk-in centres was largely due to the lower score on the post-coital contraception scenario. Similarly, the performance on scenario 3 (sinusitis) of walk-in centres and NHS Direct may have been attenuated, due to the fact that good quality care of this scenario involved the suggestion, or actual prescribing, of antibiotics. Although the checklists allowed for the possibility that adequate care may involve advising patients to go elsewhere to obtain a prescription, in settings where prescribing could not occur, performance on advice and treatment items may have subsequently suffered.

The scenarios were primarily designed to assess walk-in centres rather than general practice. They did not assess what are acknowledged to be some of the strengths of general practice, for example the evolution of the doctor-patient relationship. Neither did the methodology, which required all standardised patients to be temporary residents in general practice, lend itself to the assessment of some of the claimed advantages of care in that setting, such as continuity and availability of past medical records. Thus, the study's interpretation should not be that care in general practice is inferior to that in walk-in centres, but that walk-in centres perform adequately and safely compared to general practice.

The checklists of essential items used by standardised patients appear to have face and content validity, but due to time and financial constraints no data were collected on their other properties. The development of checklists in such studies has received little attention generally [85], although their construction is crucial to the reliability and validity of the assessment process.

9.4.4 Conclusion

This study provides evidence that walk-in centres provide adequate, safe clinical care for a range of common clinical conditions. A proportion of patients seen by walk-in centres were referred elsewhere, raising questions about the impact of walk-in centres on the workload of other providers. This issue is addressed in Chapter 7. In addition, properties such as the reproducibility and consistency of the checklists used to assess quality of clinical care merit further research, but this study suggests that walk-in centres are capable of safely providing primary care for a range of clinical conditions.

10 The appropriateness and quality of antibiotic supply from walk-in centres

10.1 Introduction

There is considerable controversy about when to use antibiotics in primary care. Increased cost[86] and rising community bacterial immunity[87] are cited as reasons against prescribing antibiotics. However, proponents cite an earlier resolution of fever, other symptoms, and the need to maintain the doctor-patient relationship.[88]

Recent developments, such as the Crown Report and proposals from the Medicines Control Agency, have extended the range of health care professionals that are now able to supply medicines previously only available on prescription such as antibiotics. This includes nurses working in walk-in centres who are now able to supply and administer prescription-only medicines in accordance with a patient group direction (PGD).[89] A PGD is described as a specific written instruction for the supply and administration of a named medicine in an identified clinical situation. A feature of PGDs is that they are locally derived and signed by a local multi-disciplinary group. For this reason, it is anticipated that there may be differences between some walk-in centres' PGDs in terms of the information required or provided upon supply.

This study was designed to investigate whether PGDs used by walk-in centres complied with national guidelines, and specifically to assess the level of compliance with PGD requirements in the supply of antibiotics.

10.2 Methods

All walk-in centres in operation as of February 2001 were asked to send copies of PGDs covering the use of all antibiotics to the research team. These PGDs could either be condition-specific (e.g. for tonsillitis or sinusitis) or antibiotic-specific (e.g. for penicillin or amoxycillin). These PGDs were then assessed for the extent to which they met the legal requirements as identified in the NHS Executive's Health Service Circular on Patient Group Directions.[90]

From the PGDs collated, ten walk-in centres were selected for their diversity with respect to their antibiotic PGD. Although preference was given to antibiotic PGDs for the symptoms of acute respiratory tract infections, antibiotic use in other infections were also utilised. At each of these centres the medical notes of 50 patients who received an antibiotic under a PGD were examined to determine compliance with the specifications in the PGD for the safe and appropriate use of an antibiotic. Specific criteria against which the medical notes from each consultation were compared included the clinical criteria under which the patient was eligible for treatment, exclusions from treatment, circumstances under which further advice should be sought and from whom, details of applicable or maximum dosage, quantity, form, strength, route of administration, frequency and duration of administration, relevant warnings and arrangements for any necessary follow-up action or referral. It is recognised that medical notes may not always provide an accurate reflection of the consultation, potentially resulting in some issues that were discussed not being recorded. Equally, it may be that professionals may record issues that have not been discussed in actual practice.

The data were analysed descriptively to explore the proportion of consultations that met the criteria specified in the PGD.

10.3 Results

10.3.1 The Use of Patient Group Directions at Walk-in Centres

Integrity of individual walk-in centre's PGDs

Twenty PGDs were received from walk-in centres of which 5 were condition-based and the remaining 15 were drug-based. There was a huge variety in the format and content of the PGDs and little consistency in approach. The specific differences in PGDs have been listed below:

- prose with headings whilst others are in tabular format
- different headings/titles for similar PGD requirements
- brevity compared to very detailed and 'wordy'
- introduction that includes the general aspects of supplying antibiotics
- referral to other documents, e.g. a pharmacy protocol
- explicit, compared to implicit terminology e.g. 'dosage' which should include amount (mg), frequency, duration

PGDs were examined for the extent to which they provided information in the 21 required areas as identified in the Health Services Circular (Table 40).[90] The drug-based PGDs had a higher compliance rate than the condition-based PGDs. The average completion rate per centre for drug-based PGDs was 19, and 14 for condition-based PGDs. Three (out of 5) condition-based and 3 (out of 15) drug-based PGDs complied with 15 or fewer PGD requirements. Centres complied fully with the following requirements: drug description, clinical condition, clinical situation, details of dosage, details of strength, frequency of administration and pharmaceutical form.

Table 40 Walk-in centres' compliance with PGD requirements (n=20)

PGD requirement	Total completions (max. 20)
Drug description	20 (100%)
Clinical condition	20 (100%)
Clinical situation	20 (100%)
Details of dosage	20 (100%)
Frequency of administration	20 (100%)
Details of strength	20 (100%)
Pharmaceutical form	20 (100%)
Duration of administration	19 (95%)
Details of quantity	19 (95%)
Maximum period	18 (90%)
Relevant warnings	18 (90%)
Exclusions	17 (85%)
Circumstances for further advice	17 (85%)
Follow-up actions	15 (75%)
Arrangements for medical advice	15 (75%)
Date for coming into force	12 (60%)
Staff qualified to administer drug	12 (60%)
Signed on individual PGD	12 (60%)
Route of administration	12 (60%)
Record keeping arrangements	11 (55%)
Expiry date	10 (50%)

10.3.2 Walk-in centres' compliance with PGD requirements when supplying antibiotics

Following the examination of the walk-in centres' PGDs, a more detailed analysis was undertaken of 50 medical notes of patients who had received an antibiotic under the PGD at each of 10 walk-in centres. The necessary data could not be obtained from one walk-in centre due to the software, therefore data were collected from 453 records (an additional three records were inadvertently included due to counting errors). Some walk-in centres recorded "as per PGD" instead of specific details regarding the information given to the patient. There were 3 requirements that were recorded in almost 100% of records: description of the drug, clinical criteria and clinical situation. The rate of recording for individual PGD requirements varied, the lowest recorded requirements were as follows: route of administration (48%), exclusions such as allergies, current medication and past medical history (approximately 20%), and any relevant warnings (16%). Follow-up advice and medical referral recommendations were variable with 14% of patients having neither recorded in the medical notes, 18% had no follow-up actions recorded and 14% had no medical referral recommendations (Table 41).

Table 41 Completion rates for individual PGD requirements (n=453)

PGD requirement	Recorded (%)	"As per PGD" (%) *	Not recorded (%)
Drug description	98	2	-
Clinical situation	98	2	-
Clinical condition	98	2	-
Exclusion – allergy	79.5	0.5	20
Exclusion – past medical history	85.5	0.5	14
Exclusion – medication	79	0.5	20.5
Extra contraceptive precautions	14	0.5	85.5
Strength of antibiotic	72	22	6
Maximum strength	48	22	30
Maximum dosage	48	22	30
Route of administration	23	25	52
Frequency of administration	69	20	11
Duration of administration	51	22	27
Pharmaceutical form	84	16	-
Advice given	73	6	21
Relevant warnings	16	-	84
Follow-up actions	82	-	18
Medical referral	86	-	14

* "as per PGD" : specific details regarding information given to patients were unrecorded

There were many differences in the advice that patients were given when they were supplied with an antibiotic. The main areas of advice related to instructions concerning the taking of antibiotics and completing the course, recommendations to take extra fluids and analgesia, and specific care relating to the patients' presenting symptoms (Table 42) .

Table 42 The five most frequently proffered aspects of advice from walk-in centre nurses by number of centres that supplied the individual antibiotics

Advice recommended	Antibiotic taking	Fluids	Analgesia	Specific symptom care	Extra contraception
Amoxycillin	2/6	2/6	5/6	2/6	0/6
Erythromycin	0/1	0/1	1/1	0/1	0/1
Flucloxacillin	4/7	0/7	5/7	4/7	0/7
Penicillin V	2/6	4/6	5/6	2/6	0/6
Trimethroprim	1/6	6/6	3/6	3/6	None routinely

The specific area of warnings was examined in more depth with regard to advice that should be offered about extra contraceptive precautions when using a broad-spectrum antibiotic. The recommendations specified in individual centres' PGD requirements about extra contraceptive precautions were inconsistent (Table 43).

During early data collection, the age of patients was not collected from the records for 34 female patients, and both age and sex were not collected from 64 records. However, later in the study the collection of both age and sex data was undertaken when it was determined that this information was necessary. The eligibility of all the patients for whom recommendations concerning taking extra contraceptive precautions was appropriate, therefore cannot be determined. However, for those women for whom age and sex could be determined and it was appropriate (taken as over 9 years and under 56 years of age), nurses recorded the advising of, or the discussion about, extra contraception in 15% (17/113) of patients. Advice from the Family Planning Association is that additional contraceptive precautions should be taken whilst taking a short course of a broad-spectrum antibiotic and for 7 days after stopping.[91] If these 7 days run beyond the end of a packet then the next packet should be started immediately without a break.

Table 43 Walk-in centre antibiotic PGDs that specified extra contraceptive precautions.

Centre	Amoxycillin	Erythromycin	Flucloxacillin	Penicillin V	Trimethroprim
Bristol	-	-	-	-	Y
Coventry	Y	-	Y	Y	Y
Edgware	Y	N	N	Y	N
Exeter	Y	-	Y	Y	N
Harlow	Y	N	-	Y	N
Leigh	-	N	N	N	-
L'borough	Y	-	-	-	N
Newcastle	Y	N	N	N	Y
Newham	N	N	-	-	N
N Middx.	Y	N	Y	Y	N
Nott'ham	-	Y	-	-	-
Norwich	-	-	Y	Y	N
Sheffield	N	Y	N	Y	Y
Slough	Y	N	Y	N	-
Soho	Y	N	Y	Y	-
Stoke	Y	N	Y	Y	N
Swindon	Y	-	-	Y	N
Tooting	N	N	N	N	-
Woking	N	N	N	N	-
York	-	-	-	-	Y

10.4 Discussion

While it was anticipated that, owing to local development, the PGDs would vary from centre to centre, it was notable that not all centres had fully adhered to the format required for PGDs. There has always been a tension between the need to standardise care and ensure quality of care regardless of point of access, and the freedom to develop guidelines or protocols which best meet local needs. Much of the disparity observed is probably due to the rapid pace at which these documents were produced initially. While it may be likely that the care provided is of high quality, without sufficient and consistent documentation such claims are difficult to prove. In addition, comparisons between walk-in centres and with other health service providers become increasingly difficult.

The provision of additional contraceptive advice is a case in point. Few centres recorded that they would recommend additional contraceptive cover over the period of antibiotic use in all their antibiotic PGDs. While such advice is recommended only for broad spectrum antibiotics, such advice would be likely to include amoxycillin, erythromycin, and flucloxacillin. The unequal provision of advice, both between walk-in centres and within a walk-in centre, for different antibiotics may lead to inconsistent and potentially inappropriate advice as well as confusion for patients, should they attend and see a different walk-in centre nurse or visit more than one walk-in centre.

Similar concerns arose when medical notes were investigated for their compliance with the PGD requirements. In this regard, the medical notes were examined to see if they met the legal PGD requirements, not whether they met the local PGD's requirements (some of which had gaps in what was included). While medical notes are well known for their inaccuracies with respect to documenting what occurred in an individual patient consultation, it is important to adequately record that the specific conditions of the PGD have been met. This is not only useful in demonstrating that the quality of patient care has been achieved, but also provides safeguards for the walk-in centre nurses, protecting them against the charge of failing to provide a high level of care in accordance with recognised guidelines. The notes, as currently documented, may not in some cases give adequate protection to the nurse should a patient complain that they did not receive adequate information.

11 Walk-in centres: costs and relative efficiency

11.1 Introduction

NHS walk-in centres are a new organisational form of care in the UK and, as such, it is important that they are subjected to analysis of their costs, relative to the alternatives, as well as the quality of care provided. An economic evaluation of walk-in centres would, ideally, relate the costs of care to the outcomes of that care. Here, that is not possible due to the difficulties of identifying specific health outcomes from walk-in centre care. It is, however, possible to assess the costs associated with care provided by walk-in centres, and to relate that to the costs of the alternative forms of care provided routinely.

11.2 Methods

The assessment of costs and relative efficiency of walk-in centres described here comprised three elements. First, there was a comparison of the cost per visit across the different walk-in centres, based on the simple typology of walk-in centres developed earlier in the project. The aim of this comparison is to give an idea of the relative costs of different formats of walk-in-centre and thus aid decisions about the development of future centres. Second, a cross sectional time series linear regression analysis identifying the impact of different factors upon the walk-in centre costs per visit was conducted. Third, there was a comparison of the cost per visit with that of the chosen alternative specified by the individual, taking into account referral onwards from the walk-in centre. Essentially this comparison considers the relative cost of the walk-in centre with that of the care provided in the absence of a walk-in centre. Estimates of both referrals onwards and prior intentions were taken from a number of sources.

11.2.1 Data collection – all analyses

Activity data were available from monthly monitoring returns provided by each walk-in centre on a routine basis to the Department of Health. From these, information about the number of patients visiting each month in each walk-in centre was obtained.

Financial data were available from quarterly monitoring returns provided by each walk-in centre on a routine basis to the Department of Health. These provided information about the costs incurred in each walk-in centre in each quarter. The costs included in the analyses were all annual running costs, but no set up costs. Annual running costs included were: staff (including project management, medical support and advice nursing, reception), costs associated with the premises (including rent, utilities, capital charges, rates) and other running costs (including IT support, telephone, publicity, stationery, supplies, drugs/prescriptions).

11.2.2 Data analysis – all analyses

Costs for walk-in centres were estimated on a per visit basis using the data contained in the financial returns. Costs are for 2000-2001 and are reported in sterling. The analyses were conducted from the viewpoint of the NHS only, thus costs incurred by patients or other agencies are not included. In all cases mean cost figures are given as these are of greatest relevance to those planning the provision of care (as they relate to total costs in a way which median cost estimates do not). Quarters were assumed to be strictly related to the date of opening (such that, even if a centre opened only shortly before the end of one quarter, the next quarter was assumed to be its second, rather than its first, quarter of opening).

11.2.3 Comparison of cost per case across walk-in centres

For the assessment of costs by quarter of opening, only centres for which a first financial return was received for one of the quarters during 2000-2001 are included. It should be noted that, for those centres that opened prior to the first financial quarter of 2000-2001, no financial data were available for the first quarter of opening (that is, for the final quarter of the financial year 1999-2000). Finally, for some centres there are missing or combined returns for particular quarter(s) and, where this is the case, these quarters are not included in this assessment of costs by quarter of opening.

The typology of care developed earlier in the evaluation was used to classify walk-in centres according to their location. Four types of walk-in centre were described: shop-front; hospital site with associated emergency department; hospital site without emergency department; and centre adjacent to GP/health centre.

11.2.4 Impact of different factors upon mean cost per patient in walk-in centres

An attempt was made to assess the importance of type of centre, season, and length of time since opening upon the mean walk-in centre cost per visit, using a repeated measures regression model, using generalised estimating equations to allow for the within centre correlations.

For the purpose of this analysis data were adjusted to allow for modifications (both positive and negative) made by individual walk-in centres to the non-staff costs they reported for the fourth quarter of the year. On an individual centre basis, allocating these costs on a quarterly basis caused some distortions between the cost per patient in that quarter and the costs per patient in earlier quarters. For this analysis, therefore, where the mean quarterly cost per patient visit on a centre basis was used as the dependent variable, the costs for each quarter were adjusted such that all non-staff costs were allocated across the total number of patients seen during the year whilst the quarterly staff costs continued to be allocated across patients seen in that quarter. The only quarter for which this adjustment was not made was that of the first quarter of 2001, for which annual data were not available by the end of the research project.

In this analysis in order to improve the normality of the dependent variable, a log transformation was applied to the mean cost per visit variable. Season and centre type were modelled as fixed effects with dummy variables relating to the season in which the centre opened and the centre type. Season equal to April-June and centre type equal to Shop-front were, respectively, used as reference categories. For the purposes of this regression analysis only, an "other" categorisation was added to the typology of care to include one centre that could not be typified in this way (Bury) and two centres of different types (Wirral main, and Wirral satellite) for which data for 2000-2001 were available only in combined form.

This analysis included only centres for which the first financial return was received during 2000-2001. Data from four additional quarters were also excluded from the final model. Two of these because they followed a missing quarter of data for that particular centre, and therefore needed to be excluded to enable the quarter since opening variable to be modelled as a continuous variable. The other two because they were outliers, that is, they had mean costs per patient visit of greater than £200. This latter exclusion was particularly important because these two outliers were found to be having a significant effect on the modelling procedure. The two quarters involved costs of £559.82 and £1075.89 per patient visit. For the first of these the cost was for a centre that had been open for 20 days in its first quarter over the Christmas period; for the second of these, the centre had been open for only four days in its first quarter.

11.2.5 Comparison of walk-in centre costs with those of alternative forms of care

Comparisons were made between the costs associated with the stated prior intentions of walk-in centre patients and the costs of their attendance at the walk-in centre, plus the cost of any referral onwards. The purpose of this comparison was to estimate the degree to which the walk-in centre is a substitute for other forms of care or in some way complementary to those forms of care, i.e. providing an additional, rather than a replacement service. Costs were compared per 1,000 patients attending a walk-in centre.

Estimates of visitors' intentions were taken from a number of sources:

- a detailed analysis using raw data from a small number of centres using the computerised system Adastra, both unweighted and weighted to adjust for the different lengths of time centres have been open
- information from the monitoring returns for all centres completing data during June 2001
- findings from the user survey regarding patient intentions

The valuations used for estimating the costs of alternative forms of care were largely obtained from the *Unit costs of health and social care 2000*.[92] The cost for an NHS Direct consultation was taken from the final report of the NHS Direct evaluation.[93] Both prior intentions and referrals falling under the "other" category were assumed to incur no cost to the NHS.

11.3 Results

11.3.1 Comparison of cost per case across walk-in centres

Up to the end of June 2001, the total spend on walk-in centres in the UK had been £25.6 million. During this time, all walk-in centres had seen a total of 838,000 patients, giving a mean cost per visit across the whole period since the first centre opened of £30.58. This cost represents the mean across all different types of walk-in centre, different seasons and, importantly, different periods since opening. The length of time that a centre has been open, unsurprisingly, appears to have an influence upon the mean cost per visit as shown in Table 44, with, to date, the mean cost per visit falling each quarter, so that the mean cost per visit by those centres in their fifth and/or sixth period of operation was around 20% lower than the overall mean, at £23.54.

Table 44 Mean cost per visit, by quarter since opening

Quarter since opening	Mean cost/visit
1 (n=22)	£57.85
2 (n=27)	£32.40
3 (n=31)	£30.27
4 (n=29)	£26.26
5 or 6 (n=21, 27 data points)	£23.54

(n refers to number of centres upon which data are based)

Table 45 presents the figures for mean cost per visit, by type of walk-in centre across the different seasons in which centres were open. It can be seen that, in general, the cost per visit associated with walk-in centres based in either hospitals without accident and emergency departments, or GP practices/health centres, was lower than the same cost for patients seen in walk-in centres based in hospitals with accident and emergency departments or with a shop-front setting.

One explanation for this finding could be that centres based in shop-front or hospital A&E settings have higher non-staff costs associated with their location. Table 46 shows the split between staff and non-staff costs for these different types of centre for the entire period for which data were available (April 2000 to June 2001). Whilst it is clear that the absolute values of non-staff costs per patient are higher, particularly for shop-front settings but also for hospitals with accident and emergency departments, as a proportion of the total costs the differences between all four settings are not large. This suggests that the difference in mean cost per visit across settings is likely to be due to factors relating to the numbers of visits in these different settings: either an intrinsic difference between the numbers of patients attending different settings or, alternatively, related to the time since opening across the different types of centres. This latter issue is considered in the regression analysis.

Table 45 Mean cost per visit, by type of walk-in centre and season

	Shop-front	Hospital – with A&E	Hospital – without A&E	GP practice/ health centre
April-June 2000	£39.35	£39.44	£87.80	£28.98
	(n=3)	(n=4)	(n=2)	(n=7)
July-September 2000	£69.17	£34.27	£32.48	£25.84
	(n=7)	(n=6)	(n=6)	(n=9)
October-December 2000	£39.73	£38.19	£18.18	£28.14
	(n=7)	(n=7)	(n=6)	(n=9)
January-March 2000	£47.72	£31.11	£25.31	£22.45
	(n=8)	(n=8)	(n=6)	(n=8)
April-June 2001	£33.25	£29.53	£18.23	£21.34
	(n=10)	(n=11)	(n=6)	(n=9)
TOTAL	£43.65	£32.76	£23.71	£24.58

Includes all centres open during each quarter (n refers to number of centres upon which data are based) that were classified using the typology

Table 46 Split between staff and non-staff costs by type of walk-in centre

	Shop-front	Hospital – with A&E	Hospital – without A&E	GP practice/ health centre
Mean cost/visit	£43.65	£32.76	£23.71	£24.58
Mean staff cost/ visit	£25.28 (58%)	£22.42 (68%)	£16.60 (70%)	£17.01 (69%)
Mean non-staff cost/ visit	£18.37 (42%)	£10.34 (32%)	£7.11 (30%)	£7.57 (31%)

(All walk-in centres classified using typology, April 2000 to June 2001)

11.3.2 Impact of different factors upon mean cost per patient in walk-in centres

After controlling for quarter since opening and each other, neither centre type nor season were significantly associated with the log mean cost per patient visit. Quarter since opening was, however, significantly associated with log mean cost per visit. A squared term for this variable was added to the model but was not found to be significant.

Centre type and season were then considered in separate models adjusting only for quarter since opening. In the first of these, centre type was significant (p=0.037); in the second, season was not significant (p=0.17). The first of these models is presented in Table 47. This model would suggest that the mean cost per visit for a walk-in centre with a shop-front setting in the first quarter of opening is £60.95, falling to £37.71 by the fifth quarter of opening; for a walk-in centre based in a GP practice/health centre (which this model suggests is the least costly option) the mean cost per visit in the first quarter of opening would be £29.67, falling to £18.36 by the fifth quarter of opening.

A further model containing season, centre type and quarter since opening included an interaction term between season and quarter since opening (no plausible basis for interactions between centre type and the other variables was felt to exist so such interactions were not tested). This interaction was significant (p=0.013), showing a quantitative interaction with a negative gradient across quarters, approximately doubled for starting months between July and December, compared with the starting months January to June.

Table 47 Results of the regression analysis on log mean cost per patient visit

	Coefficient	95% confidence intervals		P-value
Constant	4.29	3.90	4.69	<0.001
Quarter since opening	-0.18	-0.22	-0.14	<0.001
Centre type				0.037
Hospital with A&E	-0.22	-0.61	0.18	
Hospital without A&E	-0.37	-0.80	0.06	
GP practice /health centre	-0.48	-0.86	0.10	
Other	-0.28	-0.63	0.08	

11.3.3 Comparison of walk-in centre costs with those of alternative forms of care

Table 48 shows the estimates of prior intentions and referrals onwards used in the various analyses. It should be noted that each of these different estimates are based on relatively small samples from within the total data set. The Adastra prior intentions data are based on 6 centres only (42,165 visits), and those on referrals on 5 centres only (40,021 visits). Furthermore, these data cover the period from the centre opening until January 2001 only. Monitoring returns data are based on the June 2001 monitoring return. They may therefore reflect a more established set of policies than data collected earlier in the study, particularly in relation to referral, but it should be noted that data on prior intentions and referrals were reported for only 29,447 (31.1%) of the 94,814 visits made during that month. The user survey, although taking place across all centres included only 3856 respondents. For the estimate of "referrals" based on the user survey, the figures are taken from patients' intentions after the consultation, rather than any referral from the walk-in centre.

Table 48 Estimates (%) of prior intentions of patients and referrals from various sources, and valuations, used in the analyses comparing the costs of walk-in centre care with those of the alternatives

	Adastra (unweighted)		Adastra (weighted)		Monitoring returns		User Survey		Value
	Prior Int.	Refer.	Prior Int.	Refer.	Prior Int.	Refer.	Prior Int.	Refer.	
General Practice	63.3%	37.9%	57.6%	35%	48.9%	14.1%	50.0%	32.0%	£15
Accident & Emergency	12.0%	6.2%	14.6%	7%	18.8%	4.9%	26.0%	7.1%	£65
No health agency	9.8%	45.5%	10.2%	51%	8.9%	73.9%	9.7%	41.2%	£0
Pharmacy	1.0%	0.4%	1.0%	1%	3.9%	2.0%	5.1%	0%	£0
Call 999	0.2%	0.1%	0.2%	0%	0.1%	0.1%	0%	0%	£179[b]
Call NHS Direct	0.7%	0%	0.7%	0%	1.2%	0%	2.0%	0%	£15
Minor Injuries attendance	0.8%	0%	1.3%	0%	6.3%	0%	2.9%	0%	£65[c]
Other[a]	12.2%	9.9%	14.4%	10%	11.9%	4.9%	4.4%	19.7%	£0

a "Other" includes unknown intentions by visitor, other, referrals to non-NHS agencies (which do not incur a cost for the NHS)

b Cost of emergency ambulance transport assumed

c Cost of accident and emergency visit assumed

Table 49 shows the comparison of the costs of walk-in centre care with those of the alternative forms of care identified by the various sources described in Table 48, in all cases for a cohort of 1000 patient visits. For all comparisons the direct comparison of the walk-in centre cost with that of the alternative form of care is given, as well as the cost of the walk-in centre visit plus any referral onward. It is clear that the cost of the walk-in centre visit plus onward referral in all cases is higher than that of the cost of the patients initial intention, and that, for the majority of estimates this is also true for the cost of the walk-in centre excluding the cost of onward referral.

Table 49 Comparison of costs of alternatives, using various sources of data and different estimates of walk-in centre costs, for a cohort of 1,000 patients attending the walk-in centre.

Figures in parentheses show the difference between the walk-in centre cost and the cost of the alternative.

	Walk-in centre cost	Cost of alternative	Walk-in centre cost plus cost of referral onwards
Adastra unweighted data			
Mean overall walk-in centre cost (£30.58)	£30,580	£18,493 (-£12,087)	£40,474
More established walk-in centre cost (£23.54)	£23,540	£18,493 (-£5,047)	£33,434
Shop-front walk-in centre cost (£43.65)	£43,650	£18,493 (-£25,157)	£53,544
Hospital without A&E walk-in centre cost (£23.71)	£23,710	£18,493 (-£5,217)	£33,604
GP practice/health centre cost in fifth quarter of opening (£18.36)	£18,360	£18,493 (+£133)	£28,254
Adastra weighted data			
Mean overall walk-in centre cost (£30.58)	£30,580	£19,438 (-£11,142)	£40,380
More established walk-in centre cost (£23.54)	£23,540	£19,438 (-£4,102)	£33,340
Shop-front walk-in centre cost (£43.65)	£43,650	£19,438 (-£24,212)	£53,450
Hospital without A&E walk-in centre cost (£23.71)	£23,710	£19,438 (-£4,272)	£33,510
GP practice/health centre cost in fifth quarter of opening (£18.36)	£18,360	£19,438 (+£1,078)	£28,160
Monitoring returns data			
Mean overall walk-in centre cost (£30.58)	£30,580	£24,009 (-£6,571)	£36,059
More established walk-in centre cost (£23.54)	£23,540	£24,009 (+£469)	£29,019
Shop-front walk-in centre cost (£43.65)	£43,650	£24,009 (-£19,641)	£49,129
Hospital without A&E walk-in centre cost (£23.71)	£23,710	£24,009 (+£299)	£29,189
GP practice/health centre cost in fifth quarter of opening (£18.36)	£18,360	£24,009 (+£5,649)	£23,839
User survey data			
Mean overall walk-in centre cost (£30.58)	£30,580	£26,570 (-£4,010)	£39,995
More established walk-in centre cost (£23.54)	£23,540	£26,570 (+£3,030)	£32,955
Shop-front walk-in centre cost (£43.65)	£43,650	£26,570 (-£17,080)	£53,065
Hospital without A&E walk-in centre cost (£23.71)	£23,710	£26,570 (+£2,860)	£33,125
GP practice/health centre cost in fifth quarter of opening (£18.36)	£18,360	£26,570 (+£8,210)	£27,775

11.4 Discussion

In summary, it appears that the costs per visit associated with walk-in centres are relatively variable, and that the main cause of this variation is the length of time for which a walk-in centre has been open, although centre type also appears to be an important influence on costs. Although the mean cost per walk-in centre averages £30.58 across the research period, comparing with a cost per visit to a general practitioner of only £15, this mean cost falls to around £22 to £23 for centres open for over one year and the regression analysis suggests that costs for particular centre types will be below this level by one year. Thus, visiting a walk-in centre appears to be more costly at present, on average, than the costs of the alternatives that individual patients would have pursued had the walk-in centre not existed. This is a relatively robust finding based on all but the most optimistic of the current scenarios, but the falling costs associated with walk-in centres which have been open for over a year suggest that this finding may change over time. It should also be noted that the walk-in centre cost includes costs of prescriptions as these costs are directly linked to walk-in centres. Analysis of these costs, however, shows that they account for only 3% of the cost (approximately 66p per patient) for those centres that had been established longest (in their fifth or sixth quarter) by the first quarter of 2002, and thus suggests that they do not strongly influence the size of the total cost.

In general, there are a number of limitations associated with the assessment of efficiency. A major limitation with the conduct of the economic evaluation at this stage is that, for many of the centres, it is based on data obtained at a relatively early stage in the life of the scheme.[94] In general, it is important that schemes are not evaluated at a point where key stakeholders – particularly, in this case, the public - are not yet convinced of the value of the scheme or even know about it. If schemes are evaluated too early in their existence they may not have reached anything like full capacity and will appear not to be cost-effective. Further, schemes may well adapt in their early days as staff become more familiar with the types of patients for whom care is more or less successful, and the scale of schemes may change as they have the opportunity to grow and accumulate economies of scale.[94] These issues are particularly important in light of the findings here that mean costs per visit appear to fall as walk-in centres become more established. As centres become further established and better known among the population their costs may well fall further (both because of increasing numbers of patients seen and increasing efficiency in running the centres as staff become more experienced).

A second issue concerns the similarities between walk-in centres. In some areas there will be excess capacity in the existing system, suggesting that alternative forms of care located within this existing capacity would be more cost-effective than systems such as walk-in centres which in general have involved increasing the service capacity available. In other areas, however, where there is a shortage of current services, particularly of general practitioners, the walk-in centre may well provide a cost-effective service. This issue of the current capacity available in a particular locality, and its influence upon the efficiency associated with particular services is not one that it has been possible to consider in a relatively broad study such as this one. In terms of decisions about future development of walk-in centres it is, however, crucial.

A third potential difficulty identified prior to the conduct of the analysis was that, for many centres, data were not available for an entire year, and thus, as well as evaluating the scheme at a relatively early stage, there could have been seasonal effects influencing the findings: there are certain periods of the year when demand is generally accepted to be higher than at other periods. For some centres, in particular, the choice of site might have been expected to respond to particular seasonal issues (for example, walk-in-centres designed to respond to the pressure of tourism might be expected to have a different seasonal pattern from those located alongside an A&E department). An estimate of cost per case should, therefore, as far as possible be based on data from an entire year of

operation, or, at the very least, should incorporate both those periods known to be busy and those which are generally accepted as being less busy. This is the case for some centres, but not for others. The findings of the regression analysis do, however, suggest that, after adjusting for quarter since opening, neither season nor centre type were significantly related to the cost per visit, and thus these concerns may be ameliorated.

A severe limitation of this study of the efficiency of walk-in centres compared to alternative sources of care is that it is not based on experimental data but on hypothetical data about the alternative forms of care that patients would have accessed. In the absence of a controlled research design there is, of course, no way of knowing the veracity of this information. Further, each of the sources used to estimate the proportions of patients who would have chosen to access particular alternatives provides different indications of the alternatives that would have been used, and thus there is some concern over the reliability of the data used. Nevertheless, the results obtained are relatively robust to these different estimates, with the vast majority of estimates suggesting that, at current cost levels, walk-in centres are relatively more costly than the use of routinely available alternatives.

A further limitation of the study concerns the quality of the data used in the analysis more generally, both in terms of the monitoring data relating to number of patients seen, and the financial data used for costing. Different systems (both computer and manual) were used by different centres to report aspects of the monitoring data in particular, whilst the financial returns required a number of adjustments to make the data appropriate for the economic analysis. Further, from an economic perspective, the data reported relate to financial, rather than opportunity, costs. For some centres, particularly those aligned to existing health service premises, some financial costs may be accounted for through those other premises and may not appear on the financial reports for the walk-in centres. These costs will have an opportunity cost which should be included in the economic evaluation, but which may not appear on the financial returns and are thus excluded from this analysis. One area where this may be particularly true is in terms of the capital costs associated with the initial set up of each walk-in centre. For this reason, these costs have not been included here.

To conclude, although there are a number of limitations associated with the findings here, there appear to be three relatively robust findings. The first is that walk-in centres are currently more costly than the alternatives that patients stated they would have used in their absence. The second, however, is that the cost per visit associated with attending walk-in centres is falling over time and the third is that some types of walk-in centre are less costly than others. The findings suggest that this analysis should, ideally, be repeated in one or two years time to determine whether the impact of falling costs per visit results in costs associated with walk-in centres falling below those of the routine alternatives. Ideally, such analysis would also use controlled, rather than hypothetical, data and would link the costs of care with the outcomes produced by that care.

12 Follow-up visits to walk-in centres

12.1 Introduction

At the outset of the evaluation, the managers of walk-in centres were interviewed in order to obtain information about the structure, aims and activities of each walk-in centre and its local context. These interviews were conducted soon after each centre had opened and the findings were described in Chapter 3.

The purpose of the second round of interviews was to assess the progress that centres had made since the initial visit. In particular, the visits had a formative function – to identify examples of successful activities and how they these were achieved, and to identify difficulties and how walk-in centres had sought to overcome them. In this way this round of visits was intended to provide lessons to inform the future development of walk-in centres.

12.2 Methods

Interviews were undertaken with either the project manager, lead nurse/manager or lead nurse in 37 walk-in centres, the majority of which (23) were carried out face-to-face, the remainder by telephone (14). The interviews were conducted by four different researchers using the same interview schedule.

The interview schedule began by asking interviewees to describe successes and facilitating factors, difficulties and how they were dealt with, and barriers to development. A section of more focussed questions then followed, based on the findings of the first round of interviews, covering the following issues:

- Sign-posting
- Premises
- Patient Group Directions
- Changes in demand
- Attitudes of local health professionals
- Centre management
- Staffing and skill-mix
- Information technology
- Developing new services
- Specific issues relating to the walk-in centre
- Any other issues the manager wished to discuss

During the interviews notes were made and transcribed after completion. Reports based on the interviews were returned to the interviewee for validation. For the purpose of the analysis, the notes were separated into three categories according to the type of staff interviewed and data extracted into themes based on the headings used in the interview schedule.

12.3 Results

12.3.1 Successes identified by walk-in centres

Patient satisfaction was consistently identified by walk-in centres as a success. This was mainly judged by verbal feedback from patients as well as some letters of appreciation, but few centres had had the resources to carry out more formal surveys of patients' views.

Development of nursing skills was highlighted as a very positive success. Some of the staff interviewed cited examples of extending the nurses' skills in examination and assessment, as these were seen to be appropriate for walk-in centre nurses.

Staff commitment was also seen as having been vital to the present and on-going success of the walk-in centre.

Relationships with primary healthcare staff had generally greatly improved, with some staff (mainly project managers) remarking on how well their walk-in centre was working with local healthcare providers. Examples most commonly related to GPs and A&E departments. This was mainly put down to good communication, hard work, and much time and energy on the part of the staff managing the walk-in centre.

12.3.2 Problems encountered by walk-in centres

There has been confusion and misunderstanding about *the role of walk-in centres* from the patients' viewpoint, and also from GPs and other primary healthcare professionals. This led to inappropriate attendances and difficult relationships with other healthcare providers. There was also a view expressed that the Department of Health was not clear about the role of walk-in centres, with too much emphasis on data collection rather than clinical care.

There had been *insufficient time to train* the walk-in centre staff. Some centres reported that training had been unavailable and therefore recruitment of staff able to meet the demands of the job had been difficult. This has been partly overcome by walk-in centres organising in-house training, or asking GPs and hospital doctors and nurses to train their staff.

Some managers described *two different cultures of nursing:* those coming from an A&E background and those from a primary care background and these were sometimes difficult to combine. The diversity of nursing backgrounds could be seen as a strength within walk-in centres, but may need to be addressed in orientation programmes.

A question raised several times was around the *role of the walk-in centre nurse*. It would seem that there are different views. Some promoted the view that the "model" is an autonomous nurse practitioner who can make treatment and referral decisions based on extended training. Other managers dispute that this level of skill and expertise is either necessary or appropriate for nurses working in walk-in centres.

The majority of centres had experienced problems with *clinical assessment software.* Managers claimed that it was difficult to use, unsuitable for face-to-face consultations, the decision-support pathways were insufficient and there were many mistakes within them. All reported the impact on staff and the extra time required to use the software. Three Project Managers commented that compiling the monthly reports was difficult since the data required were not captured by CAS.

Although some centres had described *relationships with other health professionals* as a success, others continued to experience problems, although all centres reported that relationships had generally improved.

Staffing was one area where most walk-in centres reported experiencing difficulties, particularly with staff shortages. Generally this was not due to lack of retention (which was often excellent) but when staff did leave recruitment of suitable replacements was a

problem. When there was a high throughput of patients, stress levels were raised due to increased waiting times.

The environment was a major problem for several walk-in centres. Three project managers reported that buildings had not been sorted out before the centre opened. There was a common theme that, even when a centre was purpose-built, there had been a lack of forward planning since the accommodation was insufficient for the demand. Lack of space and facilities appeared to be a feature of several walk-in centres, which affected staff morale and job satisfaction.

12.3.3 Directions and public awareness

In respect of publicity and signposting, the staff generally felt that patients got to know about the walk-in centre by word of mouth rather than signposting or advertising, so although poor signposting was an issue for many walk-in centres, it was not seen as a major hindrance to the overall throughput of patients. However, there might have been a problem for patients in finding the walk-in centre once they had decided to attend.

Several project managers described signposting as a frustration because it was not seen as a priority for other organisations such as City Councils and Hospital Trusts. On the other hand project managers at some centres had been proactive in getting advertisements in tourist maps or through a regular column in the health section of the local newspaper.

Most walk-in centre managers claimed to be seeing more than their anticipated throughput of patients, hence they did not feel that they needed or could cope with more publicity. Many were cautious about increasing their profile due to lack of capacity. However, there was a feeling that walk-in centres may not be reaching their target population.

12.3.4 Centre opening and changes to service provision

There have been few changes in the opening hours of walk-in centres, although some have wanted to reduce their hours in response to quiet times, safety issues or staff shortages.

The development of service provision has been varied, and has been dependent on the skills and expertise of the nurses, other healthcare providers involved in the walk-in centre and the relationships with them, the demand from patients, and the resources and space available. Some of the work that walk-in centres have taken on used to be carried out by practice nurses and there is an overlap with services offered by walk-in centres, practice nurses and GPs. There are also examples of walk-in centres either taking on the work of District nurses, or allowing them to use the walk-in centre at weekends as a base from which to work. Service development varied according to how the walk-in centres were seen to 'fit' into the local health economy and the availability of local healthcare professionals.

Many walk-in centres had developed new services, some of which had been pre- planned but some of which had not been anticipated when the centre opened. Specific examples of changes to service provision included suturing, coronary heart disease screening, leg ulcer clinics, smoking cessation sessions, and venepuncture. Some centres had conducted joint initiatives with other agencies including GP out-of-hours services, ambulance services, community mental health, health promotion and the homeless team. In some cases new services had arisen as a natural extension of the walk-in centre concept of providing accessible advice about minor illness, minor injuries and health information. On the other hand, because some centres were perceived to have spare capacity, they had been under pressure to house services relocated from elsewhere which did not have a clear link to the walk-in centre.

One notable and positive development in some walk-in centres was the use of the centre facilities by a wide range of health agencies, including self-help and voluntary

organisations. Centres had identified a useful role as a community facility, open in evenings and at weekends, for organisations which provided care to a population across a local area. Table 50 lists examples of the extra services which are provided in some walk-in centres.

Table 50 Examples of additional services provided in walk-in centres

Additional services provided by walk-in centre	Walk-in centre as a base for other services
Phlebotomy	Community Mental Health Team
Ear syringing	Health promotion initiatives
Smoking cessation clinics	Homeless team
BP screening initiative	Dermatologist providing mole-screening service
Distribution of welfare milk	
Health screening of refugees	Podiatry
Suturing	ARC project for elderly mentally ill
Providing IVF injections	Patient advocacy worker
Antenatal care	Victim support
Cervical screening	Base for learning disability team to meet parents
Road safety initiative	
Breast screening	Positive action group for sex workers
Travel vaccinations	Providing a meeting centre for voluntary agencies
Occupational health	
Helping practice nurses & district nurses with ambulatory patients at weekends	Skin camouflage clinic
	Citizens Advice Bureau

12.3.5 Health professional attitudes and working relationships

The walk-in centres have generally worked hard to publicise their role, meet health colleagues and to establish links with them. This was crucial to getting their support, and where networks have appeared locally good working relationships appear to have been created. Much depended on staff's previous roles, for example, if the walk-in centre nurses had previously worked in an Accident & Emergency department this facilitated relationships. Some managers felt that the walk-in centre's location had been influential in developing and maintaining these networks.

There was a general feeling that relationships with other healthcare staff, specifically GPs, had improved since the time that the walk-in centre had opened as long as they were seen to be competent and not competitive. Three walk-in centres had developed protocols for direct referral to specialties within local acute trusts, thus effectively bypassing A&E. Some centres have rotated staff with other organisations including the local A&E department and NHS Direct. Birmingham and Swindon have student nurses on placement, which may encourage nurses to consider walk-in centres when looking for community placement on qualification.

An important function of walk-in centres in some areas seemed to be that they were filling gaps in local healthcare service provision and meeting some of the needs caused by deficiencies in other aspects of the health service locally. For example, in Slough there was

a shortage of general practitioners able to accept new patients, therefore the walk-in centre was providing care for patients who could not obtain primary care anywhere else.

12.3.6 Management

The role of the walk-in centre manager was variable. Some managers held joint posts with responsibilities elsewhere, including the out-of-hours services, A&E departments or community nursing services. Many of the original project managers have left, some of whom have not been replaced. Centres had different approaches to the management of the walk-in centre now that the initial establishment of the centre had been achieved, and there were different approaches to the management role of the lead nurse. Although some centres have both project managers and lead nurses, in other centres lead nurses fulfilled both roles. These responsibilities were often imposed on them without extra support being provided. One way of addressing this was by delegating some of their duties to other senior nursing staff, but this was not always possible, especially when the walk-in centre was short-staffed.

In many centres the management structure had been greatly simplified with all staff now employed by a single employer, the primary care trust. This was generally seen as a very positive development.

12.3.7 Staffing (including training)

There remains wide variation in the grades of staff employed across the different walk-in centres (Appendix 11). Whilst a mix of nurse grades allows for potential career progression it is likely that patients will have to see more than one nurse. Many of the walk-in centres have opted for this model, and six centres have one or more D grade posts. However, eight centres were staffed predominantly by G grade staff, some of whom were formally trained as nurse practitioners. Soho, for example, employed mainly G grade nurses or H grade nurses. Walsall had some nurse practitioners with the aim of ensuring that patients needed to see only one nurse, and had also chosen to train receptionists up to NVQ level 2 and 3 so that they could give some advice and take on a support role.

Staff development was seen as vital by all those interviewed but there was wide variation in training provided. This appears to depend on local educational provision, money available for training and staffing levels. Some training was provided in-house using GPs and specialist hospital doctors and nurses, whilst some nurses accessed accredited courses in Higher Education institutions. Although only some of the centres have nurses who were graduate nurse practitioners, others appeared to be developing their nurses towards similar levels of skills and competency. Some centre managers expressed concern about issues of accountability and safe practice (since the nurses practice independently), and the need for effective clinical supervision.

12.3.8 Computing

All the walk-in centres reported that the new system, CAS, was not designed for face-to-face consultations and consequently some of the algorithms were inappropriate. Even though most of those interviewed commented that they had been prepared to be patient for CAS to be adapted for their specific use, most had experienced difficulty during implementation and expressed concern about the amount of extra time required to use the system. Descriptions such as "inefficient" and "unreliable" were used for the technical platform. There were felt to be many mistakes within the decision support software, and nurses felt insufficiently supported. Many managers gave examples of staff overriding the algorithms, which led to concerns about accountability and legal implications. However a small number of centre managers were more positive about the decision support software. For example at St. Helens, where there were four I grade nurses, the excellence of the

software was commented on and it was found to support their decision making as well as being useful for training purposes.

12.3.9 Patient Group Directions (PGDs)

There was wide variation in the number and type of PGD in use by the walk-in centres. The common theme running through the discussions regarding PGDs was that the process to get them ratified for use was extremely lengthy. There was a general feeling that a template should have been produced centrally, which would have been time-saving and provided a standard style that could have been adapted for local use. The training of nurses to enable them to use PGDs was also frequently cited as a problem. Once in place, however, the PGDs appeared to cause no difficulties.

12.3.10 Identity of walk-in centres

There was a general feeling that walk-in centres needed a clearer identity, with less variability between different centres. In particular, managers believed that there should be standard formats for job descriptions, PGDs and many policies.

12.3.11 Inconsistency in staffing

The managers highlighted the variability in the number and role of nurses at different centres, the different approaches to skill mix, and the different gradings given to nurses doing similar jobs at different centres. The use of the term 'nurse practitioner' was also noted to be variable at different centres.

12.3.12 Unease about the future

Staff in many of the walk-in centres expressed unease about the future of walk-in centres, particularly in relation to the short-term nature of their funding and the uncertainty about whether local Trusts would maintain the same service when they take over the funding. The managers commented on the difficulty they had in planning future service provision and staffing.

12.4 Discussion

12.4.1 The role of nurses in walk-in centres

The development of nursing skills in walk-in centres has been varied, and consideration of the skills required for a walk-in centre nurse raises a number of issues. These include the initial training (induction programme) and continuing professional development required in order for nurses to be sufficiently prepared for the demands of walk-in centre work; the level of autonomy at which walk-in centre nurses are carrying out their work; the position of the decision-support software; professional accountability; the variation across walk-in centres in the grade of staff employed; and the undertaking of work traditionally done by practice nurses and the effect on that professional group.

There has been a real problem for walk-in centres in recruiting staff with a sufficiently high level of experience and skills. Induction programmes for new staff have gradually evolved in response to the needs of the nurses but this has been rather 'ad hoc'. In many walk-in centres there have been insufficient levels of staffing to allow training to be undertaken by those nurses already employed, and therefore the opportunity for professional development may have been limited. There is no uniformity in the training offered across walk-in centres.

Many walk-in centre nurses appeared to be practising at a higher level than was initially anticipated. Some walk-in centres had chosen to recruit a mix of staff, whereas others have employed predominantly one or two grades of staff. This is related to the variability in the activities of walk-in centres highlighted in chapter 3, and raises the question of whether there is a 'model' walk-in centre nurse or whether the role is dependent on the function of the individual walk-in centre.

In the first round of visits we identified the diversity of skills, expertise and grades of the nursing teams across the sites. This remains the case, as described in the analysis of the follow up interviews. In some centres, nurses are undertaking physical assessments and working at high levels of clinical decision making, whilst in other centres none of the nurses undertake physical assessment and function more like their counterparts in the telephone accessed NHS Direct. The grade of the nurses operating more autonomously ranges from F to I, and some are graduates while others are not. All have undertaken further training but it is not clear how these differing levels of practice can be related to costs, quality of care and patient outcomes.

The decision-support software provided for the walk-in centres has so far not proved sufficient for the requirements of staff in face-to-face consultations. Therefore the extent to which staff have followed the algorithms has been variable. This raises legality and accountability issues for both nurses and patients, as well as the contradiction expressed by walk-in centre staff between autonomous working and the use of decision-support software.

The transfer of some work to walk-in centres that has traditionally been carried out by practice nurses or district nurses may suit the ambulant patient and appears to be meeting a need. However, the relationship between the role of nurses in walk-in centres and other community nurses needs further consideration.

12.4.2 Conclusion

Generally the walk-in centres have proved popular with patients, and this has been reflected by positive verbal feedback and increased throughput. Relationships with other health care staff appear to have generally improved. Many walk-in centre nurses have been working at a level of autonomy not originally anticipated, and access to training has been variable. Recruitment of staff has proved difficult and there are wide variations in types of staff employed across walk-in centres. There is considerable variability between different centres in service provision and this has caused confusion for other healthcare staff and patients regarding the role of walk-in centres. One important, and perhaps unanticipated, function for walk-in centres has been to act as a base in the community for area-wide initiatives organised above the level of individual practices. The clinical assessment software, as currently used, has proved time consuming and inadequate for the purposes of face-to-face consultations. In spite of problems encountered, all staff interviewed felt that walk-in centres were providing an important service and a high standard of care for patients.

13 Overall conclusions from the evaluation

This evaluation was designed to assess NHS walk-in centres using five criteria: access, quality, appropriateness the impact on other NHS health providers and efficiency. This final chapter draws on the findings from the various component studies to make conclusions under each of these headings, followed by an overall conclusion about the implications for the future of walk-in centres within the NHS.

13.1 Access

Improving access to health care was the principal aim of walk-in centres. The results of this research show that access has clearly been improved for some groups of people. The analysis of monitoring returns shows an increasing number of people attending walk-in centres, suggesting that they are providing a service that people value. Both the user survey and the case studies demonstrate that the main reason that people contact walk-in centres is not because of dissatisfaction with the care provided by other health care agencies, but because of the convenience of a non-appointment service which is available with minimal waiting at a wide range of times.

The case studies convey a strong sense of how much visitors to walk-in centres valued this quick and convenient access. It appears from the questionnaire survey that walk-in centre users placed more priority on accessibility than on continuity of care. This supports other research that shows that people distinguish between some problems for which they want to see a familiar health professional, and other less serious problems when this is less important.[95] It is also clear that many walk-in centre users appreciated the possibility of consulting a nurse, without 'bothering' the doctor. The implication of the views expressed by both centre users and nurses in the case studies was that people had to feel (and convince receptionists) that their problem really 'deserved' a consultation with a GP, whereas they did not have to overcome any barriers (real or perceived) in order to visit a walk-in centre.

The finding that a high proportion of walk-in centre users are men of working age is important, since this group is generally under-represented amongst users of health services.[96] Life expectancy is worse in men than in women, and improving access to health care for this age–group of males is a priority in order to improve the health of the population. Some of the major public health problems that cause mortality in later life are remediable if identified and treated in young adult men (e.g. hypertension) and improved access to care provides greater opportunity for health promotion in relation to issues such as smoking, alcohol and diet.

Some walk-in centres also offer an advantage in accessibility because of the convenience of their location, particularly in providing minor injuries advice. It is possible to establish a walk-in centre in an area which could not support an A&E department, and this explains the success of some walk-in centres in providing this type of care in some settings.

There are, however, some provisos about the improvement in access achieved by walk-in centres. First, there is some evidence from the user survey that the population attending walk-in centres is of higher socio-economic status than the population attending in nearby general practices. This supports the suggestion that walk-in centres are likely to improve access for those who are mobile, those who are working or shopping, rather than for those who are elderly, housebound or who have chronic illnesses. It is also consistent with research from walk-in centres in other countries.[97] Walk-in centres could therefore represent an investment in improving access to care for a group who are generally healthy, and do not necessarily improve access for those with the greatest health needs, thus re-inforcing the 'inverse care law' and inequalities in health care resourcing. On the other

hand, several walk-in centres have been established in deprived areas with high health need, thus targeting extra availability of easily accessible care in areas where people often find it difficult to make appointments.

Second, walk-in centres improve access compared with general practice and A&E departments because of the long waits for care in those settings. There are few inherent reasons why there should be fewer delays in walk-in centres than in other settings. Although walk-in centres offer extended opening hours, the majority of visits are made during office hours. Many general practices now provide open surgeries, and other organisational changes can be implemented to make it possible for people to be seen quickly. Waiting times are currently shorter in walk-in centres mainly because the number of visitors is relatively low in relation to the number of staff. If the number of people attending walk-in centres continues to rise, waiting times will increase (as has already been experienced in some centres) until the service is no more accessible than other providers. The alternative is to further expand the staffing of walk-in centres to match the demand, but this will mean prioritising a service for people with minor illness over competing demands from more seriously ill people requesting help in general practice or A&E departments.

Third, it is important to note that although walk-in centres undoubtedly improve access, this is currently for a small number of people in relation to the number of people who use other services. By way of illustration, an average walk-in centre receives around 2556 visitors per month. Based on the survey of NHS local providers (chapter 8), there are an average of 58 GPs within a 3 km radius of each walk-in centre. From the workload survey (chapter 7), GPs close to walk-in centres conducted 3090 consultations per 1000 patients per year (257.5 per month). Based on the national average list size (1856 patients per GP), 27719 consultations are therefore carried out per month by all GPs within a 3 km radius of an average walk-in centre. In addition there are consultations conducted in local A&E departments (a mean of 5267 per month) and by out-of hours providers (2690 per month). The total number of consultations conducted by these providers is therefore 14 times as many as conducted by an average walk-in centre, indicating that walk-in centres are likely to make only a small contribution towards improving access to health care for the population as a whole, unless many more centres are established in each area.

Subject to these limitations, however, the conclusion is that walk-in centres improve access for some people in some situations and provide a new avenue to health care which is highly valued by those who use the service.

13.2 Quality

Quality is a complex and multi-dimensional concept, and different characteristics of any health service may be valued in different ways by different stakeholders. The quality of service provided by walk-in centres was assessed using several sources of information during this evaluation. These included the organisation of the service, based on the site visits and interviews with centre managers; the quality of care experienced by patients, based on the user survey and the case studies; the technical quality of care, based on the study using simulated patients; and the quality of prescribing using patient group directions.

The general quality of service and organisation of walk-in centres appeared good. The facilities were excellent at most sites. The reception and waiting areas were welcoming and comfortable, and the consulting rooms were very well equipped. The quality of management at different centres was variable, but in most cases appeared to be very good. This was reflected in the commitment evident amongst the staff in the centres that were visited. Most centres have comprehensive documents describing clinical governance procedures. One area that initially caused concern was the need for systematic and

continuing education for the nursing staff, but this appears to be improving in most centres.

One aspect of the quality of an organisation is its ability to examine its own performance, learn from experience and improve the service. Although detailed procedures were set up from the outset by the Department of Health for walk-in centres to record activity and report on monthly monitoring returns, this process has been highly problematic for centres. This issue is now being addressed by the Department as a matter of urgency and the completeness and reliability of the data extracted from systems should improve when all sites have the same software. However it is equally important to ensure that walk-in centre staff enter comparable data in the first place.

It can be argued that the most relevant measure of the quality of care provided in a walk-in centre is the quality experienced by its users. Given that many people attend walk-in centres with minor self-limiting illnesses or requesting health information, the most valid indicator of success is whether those people consulting felt that their needs had been met, whether for treatment, advice or reassurance. The user survey provides evidence about these issues from a large and representative sample of patients, and the case studies provide further qualitative evidence.

Users of walk-in centres expressed very high levels of satisfaction with the care they received, and greater satisfaction than a sample of patients consulting in neighbouring general practices. Walk-in centre users were very satisfied with all aspects of the service, including the care at reception, the time they had to wait, the manner of the nurse and the information and advice they were given. Few people left with unanswered questions and most would recommend the walk-in centre to their friends. The testimony of the case studies confirms that most people were extremely positive about their experiences in the walk-in centre.

A different approach to the measurement of quality is the technical or clinical quality of care, that is whether the assessment and management of patients' problems by a health professional are consistent with standards of care set by their peers. This was addressed in a study using simulated patients, comparing care in walk-in centres, general practice and NHS Direct. Although the study has a number of limitations, discussed in section 9.4.3, the evidence from this research is that the quality of care provided for the conditions studied is at least as good as that provided in the control settings. In some ways the care provided in walk-in centres was more thorough than that provided in the other settings.

This provides some reassurance about the safety of the model of care operated by walk-in centres, based on nurses supported by clinical assessment software. However it is important to be cautious about the interpretation of this study. Although this was probably the largest study of this type ever conducted in the UK, it had limited power to detect small differences, and it was only possible to study a limited range of presenting complaints. Nevertheless, the results presented in this report are encouraging.

Finally a study was conducted to examine the quality and safety of prescribing using patient group directions (PGDs). This study raised some areas of concern. The format of the PGDs was highly variable, and many did not fulfil all of the statutory requirements. This problem is likely to be due to the speed with which PGDs were introduced, with no national model provided. In many cases when the PGDs were used by nurses with individual patients, it was not apparent that all of the questions and procedures covered by the PGD were dealt with. This may be as a result of inadequate record keeping about consultations. In addition the use of PGDs was not easily linked to individual consultations or presenting complaints, making it difficult to audit the quality of prescribing, with different walk-in centres using different systems. Ideally the computer record of each consultation at the walk-in centre should contain a record of the presenting complaint, whether or not a drug was issued under a PGD, the details of the drug (name, dose, formulation, frequency of administration quantity) and a checklist or protocol so that

nurses could confirm that they have fulfilled all the requirements of the appropriate PGD. All of these problems are largely technical and should be resolvable as PGDs become more established.

In summary, the evaluation suggests that the quality of organisation, interpersonal care, advice and treatment provided in walk-in centres is generally excellent. Areas for continued improvement include the use of PGDs, systems for recording data and monitoring performance, and accredited education programmes for nurses working in this new role. Further research needs to be undertaken to ensure that the high quality of care observed for a limited range of conditions also applies to other conditions, particularly potentially serious health problems and less common diseases.

13.3 Appropriateness

Most walk-in centres provide a range of services covering minor injury and minor illness in line with the specification in their original business plans and the tender documentation. The site visits suggested that a few centres have developed particular case profiles in response to local demand and/or the professional skills available. Thus, the range of problems seen in the walk-in centre may directly reflect gaps in local service.

However, the range of problems presenting to walk-in centres may also be reflective of patients' preferences since many walk-in centre users appeared to view walk-in centres as an additional tier of NHS health care appropriate for dealing with 'less serious' health problems. Generally, users highlighted the convenience of a drop-in, non-appointment service and proximity, notably to the workplace, as important factors in their decisions to attend walk-in centres. A small number of users deliberately chose to attend the walk-in centre because they did not wish to see their general practitioner, particularly for sexual health matters.

There was a general consensus among walk-in centre healthcare professionals that the overwhelming majority of presenting cases were appropriate to be seen at the walk–in centre. Indeed, most consultations were regarded as 'very' or 'entirely' appropriate. In instances where users presented with minor problems that might be treated by self-care or over-the-counter remedies, walk-in centre healthcare professionals nonetheless tended to believe that opportunities to provide health education or advice made such attendance appropriate. Even those cases where the walk-in centre staff were unable to treat or advise, or where users were immediately directed onwards to other health services, were also considered to be appropriate presentations. This probably contributes to the perception of walk-in centre users that they are always welcomed, in contrast to the sense that they have to have significant illness to justify consulting a doctor, but it does raise important issues. Most other NHS services have a long history of trying to manage excess demand, leading to delays in A & E departments, waiting lists for hospital care, and difficulties in getting an appointment with a general practitioner. As a result, they have developed systems to prioritise their work in various ways, which may be perceived as barriers to care by patients. If all consultations at walk-in centres are viewed as equally appropriate, this does not encourage nurses to consider whether their time is better spent in some ways than in others. Although this is attractive to patients, it may also prove to be inefficient in terms or achieving meaningful health gains within finite resources.

One principle of the walk-in centre concept is that they should complement rather than duplicate other NHS services. The case studies suggested that a considerable number of users had attempted to access other health services (e.g. their general practitioner or local A&E department) prior to attending the walk-in centre. Additionally, in a number of cases, walk-in centre staff were unable to deal with the users' problems and were obliged to refer them onwards to another service for help. Occasionally, this was due to an absence of drug

supplies or specialist equipment but, more significantly, it appeared that specialist and senior, experienced support - such as would be found in A&E – was often lacking. The fact that some cases needed to be referred on from the walk-in centre because they fell outside care protocols sometimes proved frustrating for staff and users.

The ability of walk-in centre staff to deal with some cases is, as suggested elsewhere in the evaluation, linked to the training and experience of those staff, as well as the restrictions imposed by care protocols. Site visits and case study data suggested that walk-in centre staff were more confident to deal with episodes of care presented at the walk-in centre – and less likely to refer on - where 'back-up' advice was available, whether from a visiting GP, by telephone, or from more experienced colleagues.

Several data sources suggested that there were a number of repeat users of the walk-in centres. Such users generally returned for follow-up care, within 24-72 hours of their initial visit, to check symptoms and/or treatment or to have their wounds re-dressed. Although walk-in centres were originally designed as a 'one-stop' service, this extended kind of use was not seen to be inappropriate by users or staff. In many cases, staff appeared to encourage this 'review' procedure and users were appreciative of the convenient access and follow-up care. This raises issues about the role of walk-in centres in relation to practice nurses in treatment rooms.

The majority of users interviewed for the case study did not feel that attendance at the walk-in centre compromised continuity or co-ordination of care from other services. Most were happy for their GP to be informed of their visit and of any treatment advised. There was, however, a suggestion from the case studies that communication links with GPs were not adequate in some instances and that this might affect their ability to co-ordinate and plan patient care over time.

13.4 Impact on other providers

One of the rationales for the development of walk-in centres was to provide care for minor conditions, enabling health professionals in other settings, such as general practice, to use their time more effectively. However, there are concerns that walk-in centres could duplicate rather than complement existing services.

It is necessary to distinguish between three effects. Walk-in centres may *substitute* for other providers. If one of the realised benefits of walk-in centres is that they signpost patients to the most appropriate NHS care and also provide people with information to manage problems themselves, the demand on other NHS providers might fall. Walk-in centres may also provide an *additional* service, if people consult with problems they would have otherwise managed themselves. Under this scenario, the workload of other providers would not change, but the total demand on the NHS would rise. It is also possible that walk-in centres may *duplicate* services if people attend with problems they had already seen other NHS providers about, which would again involve no reduction (and possibly an increase) in workload for other providers.

Information about the impact of walk-in centres on other NHS providers' workload has come from several parts of the evaluation. The user survey and the follow-up survey asked patients whether and where they would have sought help if walk-in centres had not been available. The survey of other local NHS providers asked participants for their perceptions of the impact of walk-in centres on their workload. Finally, information has been obtained directly from a postal questionnaire survey on consultation rates from a sample of other NHS providers in cities serviced by walk-in centres and a comparable sample of providers acting as controls in cities where there are no walk-in centres.

The user survey asked patients before their consultation about alternative sources of healthcare they would have consulted, and following the consultation whether they had

been referred to another health provider and what they actually intended to do. Results from the user survey suggest that about half of the people using a walk-in centre would have attended their GP or practice nurse if the walk-in centre had not been available, whereas a quarter would have attended a casualty department. This implies that walk-in centres are substituting for other services.

Some additional consultations were generated, in the proportion (approximately 10%) of people who would otherwise have managed the problem themselves. This may be interpreted as representing an appropriate additional service for people with needs not met by pre-existing health services. Alternatively this could be interpreted as the medicalisation of every-day conditions, undermining people's confidence in their ability to cope with problems without professional advice.

In an attempt to look at potential duplication of care, patients attending walk-in centres were asked if they had consulted for healthcare in the previous four weeks with either the same or a different problem. About a third had had a consultation in the previous four weeks. In general, patients consulting at a walk-in centre were less likely to have consulted in the previous four weeks than the patients attending in general practice.

The survey of users of walk-in centres found about one-fifth were advised to seek further help from a GP or casualty department. Subsequent to the consultation, about one-third of patients intended to make an appointment at their GP surgery. This was a not dissimilar proportion to those who had received same-day care at their practice (32% versus 37%). It seems that walk-in centres do satisfy a need for healthcare as only one-third of those people who said before the consultation that they would have contacted a GP if the walk-in centre had not been available intended to attend a GP following the walk-in centre consultation. In addition, about half of those who consulted in the walk-in centre had consulted again about the same problem in the ensuing four weeks. In most cases the consultation was with the GP or nurse, but 10% of these consultations were at the walk-in centre. This could be interpreted as duplication of care, but there was a similar pattern of repeat consultation amongst general practice attenders.

A postal survey of GPs, practice nurses, pharmacists and A&E consultants working at close proximity to a sample of 20 walk-in centres provided data from 1,591 professionals, all of whom were asked to assess any change in workload since the opening of their local walk-in centre. More than three-quarters had observed no significant change, 9% reported a reduction in workload and 15% an increase.

The most detailed information on the impact of walk-in centres on the workload of other local providers came from the survey of consultation rates in general practice, out-of-hours services and A&E departments. Although the response rate was poor from GPs (25%), there was a 100% response from the A&E departments and 70% from the out-of-hours services. In cities with walk-in centres there was a non-significant trend for a reduction in workload in A&E departments in the year after the walk-in centre opened. This effect was largest for the three sites where the walk-in centre was co-located with the A&E department. Similarly, in general practices, there were fewer consultations per month in those practices situated near walk-in centres compared with practices at control sites. However, the difference was not statistically significant. Finally, the workload changes for out-of-hours services were much smaller, with a slightly greater reduction in control sites compared with walk-in centre sites. This survey suffers, however, from substantial methodological limitations, especially the small sample size. Furthermore, the inter-practice variation in the general practice data overwhelms the between site variation and thus the results are not robust.

Overall, although there is a suggestion from the findings of the workload study and the user surveys that walk-in centres may have moderated the growth in workload experienced at control sites, the variation between different centres and between practices means that the opening of an individual walk-in centre does not have a predictable and/or

consistent impact on the workload of other local NHS providers. It is possible that total NHS workload has increased as a result of the walk-in centre initiative.

13.5 Efficiency

Economic studies seek to determine how the most benefit can be obtained at the least cost. Economic aspects of this evaluation include the direct cost of providing care in walk-in centres, the efficiency of different models of walk-in centres relative to each other, and an attempt to understand the contribution of walk-in centres to the overall efficiency of the NHS.

The primary evidence about these issues comes from the study of the cost of walk-in centres described in chapter 11. This study had a number of limitations as described in Section 11.4. However there appear to be three relatively robust conclusions about the direct cost of a walk-in centre consultation. First, they are currently more expensive than consultations with the main alternative providers such as general practitioners, practice nurses, pharmacists and NHS Direct, but less costly than consultations in A&E departments (by way of comparison, a consultation with a practice nurse costs £7,[92] compared with £23 - £30 in a walk-in centre). Second, the cost per visit is falling over time so that centres which have been established for over a year now have costs per consultation approximately 50% higher than in general practice (£23 vs. £15). Third, some types of walk-in centre appear to be less costly than others. In particular centres allied to general practice sites appear least expensive and walk-in centres in shop-front sites most expensive.

The contribution of walk-in centres to the overall efficiency of the NHS cannot be based only on the direct cost of consultations. It needs to be understood in conjunction with the findings of other aspects of the evaluation about whether centres are providing additional care, substituting for care in other settings, or duplicating care.

Although the detailed findings from these sources vary, the overall pattern of evidence (as discussed in section 13.4) suggests that walk-in centres are primarily substituting for consultations with alternative providers. This pattern of substitution is consistent with the findings from the workload study which, although not statistically significant, suggest that walk-in centres may have moderated the increased consultation rate observed at control sites.

When the effect of substituting care in walk-in centres for other health care providers is taken into account in an economic model, it appears that centres of certain types which have been established for over a year may be able to provide care at similar costs to that of the alternatives that people would have used if the walk-in centre did not exist. This is mainly because of the savings incurred where consultations in walk-in centres substitute for more expensive care in A&E Departments. However, when the fact that a proportion of the people who consult walk-in centres are directed to another health provider is taken into account, walk-in centres become a more expensive option under all modelling scenarios.

As discussed in section 11.4, all of these conclusions from modelling exercises are based on peoples' stated intentions. This may underestimate the proportion of walk-in centre visitors who would not have consulted any other NHS providers if the centre had not existed. The only robust way of determining the contribution of walk-in centres to the overall efficiency of the NHS would be to conduct a population based survey on consultation patterns in matched towns with and without walk-in centres. However the variability in consultation rates identified in the workload study (Chapter 7), the need for a large sample and a high response rate, and the difficulty in determining well-matched control sites, mean that a difficult and expensive study would be needed in order to provide reliable and statistically significant results.

13.6 Implications for Policy

Important issues arising from the evaluation which may need further consideration are summarised in Box 1 (page 132). In respect of the five criteria established for the evaluation, walk-in centres appear to have improved access to health care, to provide a good quality of care, to provide care which is viewed as appropriate by both patients and walk-in centre staff, and possibly to have had some impact on the demand for care from other services. However, the cost of achieving these benefits is higher in comparison with other NHS services. This raises several questions, including whether the benefits are worth the cost, whether the current model of a walk-in centre is the right one, and whether there is a more efficient way of achieving the same aims.

13.6.1 Do the benefits justify the costs?

The most obvious justification for investing in walk-in centres is that they are providing a service which is popular with many people, including some groups who have found other health providers inaccessible. However, one must balance this against competing priorities within the NHS. It may be difficult to justify a major investment in advice for minor self limiting illness, while there are long waiting lists for hospital care for people with life threatening illness. There are also pressures on resources within primary care. In future Primary Care Trusts will have to balance an investment in walk-in centres against the demand for increased resources to meet other priorities such as implementing National Service Frameworks in areas such as heart disease, cancer and mental health.

13.6.2 The concept of nurse led care supported by clinical assessment software

Apart from benefits to patients, the walk-in centre concept has been successful in other ways. In particular it has provided a new role for nurses as a first point of contact for health care. Although earlier studies have demonstrated the role of nurse practitioners in managing minor illness within general practice,[12 13 98] walk-in centres have demonstrated on a large scale the feasibility of a service which is both led by as well as staffed by nurses. Many nurses appeared to greatly appreciate this opportunity to develop the range of their expertise and responsibility.

However, one could raise the more radical question of whether nurse training is a necessary or sufficient training to work in a walk-in centre. At one level, if the role is to act as a face-to-face version of NHS Direct, offering standardised advice supported by clinical assessment software, then it may be possible to train other people to undertake this. But it is very likely that consultations in walk-in centres require greater skills in assessment and management of minor illness than can be achieved using computer-driven protocols. The appropriate training for this work would probably contain some elements from both nurse and medical training, but also some elements not well covered currently in the professional training of either doctors or nurses. This suggests the scope either for some generic training for doctors and nurses working in the community, or for a new type of primary health care professional.

Although the concept of a primary care service not run by doctors appears successful, the role of clinical assessment software is more open to debate. A recent literature review, carried out as part of the Department of Health report on reforming emergency care, has highlighted the lack of evidence to support the view that clinical assessment software has a useful role in primary health care.[99] 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. The interviews conducted for this evaluation highlighted the difficulties that many nurses experienced with clinical assessment software and the quality of care study (Chapter 9) demonstrated the variability in the way that nurses managed cases (although they generally did well). The implementation of clinical assessment software within face-to-face consultations should therefore be seen as highly experimental and subject to careful planning and on-going evaluation. It is important to avoid the temptation to implement technological solutions which may or may not be an advance.

13.6.3 Ambiguity of the role of walk-in centres

This evaluation was designed to enable comparisons between different models of walk-in centre, and with this in mind a typology was devised based on location. The typology proved less useful than was envisaged, mainly because of the variability between individual centres. It is not possible from our data to draw clear conclusions about which 'type' of walk-in centre is most successful because of the unique features of each centre and the importance of their local context. However, certain factors did seem to be associated with the successful establishment of a walk-in centre and these are shown in Box 2. Priorities for further research are summarised in Box 3.

Many local factors have influenced the implementation of the walk-in centre concept in different areas. Sometimes this has been due to an attempt to meet local needs and these vary considerably. An element of local flexibility is desirable, but 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, 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 A & E 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.

Although this evaluation has generally indicated the success of walk-in centres in meeting the criteria for assessment, there are issues of policy that cannot be addressed in this type of study. 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. Within this evaluation several examples were identified where walk-in centres had been established next door to other facilities offering very similar services and a whole system approach to planning local services seemed lacking. Although some walk-in centres appeared to provide a useful role which was complementary to existing services, in other cases they seemed to be running in isolation, disconnected from the rest of the local health care economy.

13.6.4 Are walk-in centres as currently configured the best way of achieving the aims?

This leads to the final question of whether walk-in centres are the best way of achieving the main aim of improving access to primary health care. The most obvious alternative model would be to employ more nurses in existing general practices, or possibly in pharmacies, 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, as more nurses could be employed for an equivalent cost, and this would also have the advantage of integrating them more closely with other members of the primary health care team. A further development of this idea would be for one practice and/or pharmacy to be designated as a walk-in centre in each town, receiving extra funding to employ nurses in return for offering wide opening hours (including weekends) and access to nurse-led advice for minor illnesses for commuters, shoppers and other patients not registered locally. In this way a consistent walk-in centre "brand" could be quickly established and advertised to patients so that they could obtain help of a consistent quality, easily and conveniently, wherever they are in the country.

In conclusion, walk-in centres have been generally successful in meeting their aims and appear to provide accessible, high quality care but at greater cost than other providers of health care. The next priority should be to compare walk-in centres against alternative models of organisations to achieve similar aims.

Box 1 Summary of issues arising from the evaluation which need to be addressed

- There remain difficulties with the current system for reporting activity. It is important to ensure the completeness of data recording and to train staff to interpret the various data requirements consistently.
- Implementing a standard coding structure for both presenting complaints and provisional diagnoses should be a priority. This should interface with GP computer systems, to ensure the seamless electronic transfer of data.
- The opening hours of walk-in centres may need to be re-considered in the light of the low number of patients early on Sunday mornings and late in the evenings.
- Some centres have had to close on occasion because they cannot cope with demand, or because of staff shortages or training. This is not consistent with a 'drop-in service' that people can rely on. Centres need to find other ways of coping with fluctuations in demand. Otherwise, there is a danger that walk-in centres might increase public expectations, which they are then unable to meet, leading to greater demand on other existing providers.
- The role of clinical assessment software for face-to-face consultations should be viewed as experimental until there has been a longer period of assessment.
- The on-going training needs of nurses should be reviewed and standardised, along with an accredited training programme and career pathway for nurses working in new primary care organisations such as walk-in centres and NHS Direct.
- More radically, there might be scope for a new type of primary health care professional to assess and manage minor illness. Appropriate training for such individuals might draw upon elements of both nursing and medical training in addition to new elements not currently covered in either training route.
- Whilst there is tension between the need for a clear national identity for walk-in centres and allowing centres to respond flexibly to local circumstances, a greater degree of central direction regarding the format and content of patient group directions, nurse gradings, and job descriptions is required.
- The role of walk-in centres in relation to similar initiatives such as out-of-hours primary care centres and minor injuries units should be reviewed and clarified. There may be scope for merger or re-alignment of some of these services. Otherwise, it is possible that walk-in centres may become a 'clearing house' for miscellaneous services which do not support the core concept.
- Some centres have developed a valuable role in acting as a base for community based activities (see Table 50, page 118). These ideas should be shared so that a wider range of centres take on this role.
- Further efforts may need to be made to target effort and publicity at vulnerable groups who can not or do not make use of existing services, to ensure that services are provided in relation to morbidity rather than expressed demand.

Box 2 Factors associated with the successful establishment of a walk-in centre

- Clear lines of management, with all staff accountable to one employer, preferably a Primary Care Trust.
- Stable project management with the role of the manager and the lead nurse clearly defined and adequately supported.
- Adequate training for walk-in centre nurses in advance of dealing with patients and a clear programme of continuing education and professional development.
- Improved clinical assessment software, designed for face-to-face consultations.
- A wide range of well-developed Patient Group Directions.
- Genuine support from local health professionals, especially GPs.
- A careful and well considered preliminary assessment of local needs to ensure that the services offered by the walk-in centre are locally relevant.
- Adequate premises with flexibility and room for expansion.
- Centres next to GP surgeries or at hospitals without an A&E department have the highest throughput and the lowest costs per patient.
- General purpose rooms for group meetings to host a range of initiatives.

Box 3 Research priorities

- A prospective, controlled study of costs of care in walk-in centres over an extended period of time, based on actual consultation patterns rather than patients' stated alternatives. It may be most practicable to address this through a national survey such as the General Household Survey.
- An extended study of workload of local providers close to walk-in centres. In view of the variability identified in this study this would need to involve a larger, more representative sample of practices over a longer period of time.
- Additional research to establish how the variability in levels of skill, knowledge and competence of nurses impacts on quality of care and patient outcomes.
- Further efforts to develop and validate the checklists for assessment used in the research using standardised patients.
- Additional research on quality of care using different methods where the standardised patient approach is not suitable e.g. in relation to cases with abnormal physical findings and the management of serious medical conditions.
- Further evaluation of clinical assessment software in face-to-face consultations is needed, in relation to its future use by doctors as well as by nurses.
- The cost-effectiveness of walk-in centres should be compared directly with other models of organisation seeking to achieve the same aims, such as additional nurses working in general practice or pharmacies.

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15 Appendices:

Appendix 1 Centres contributing to each study and typology

ID	LOCATION	Description	Monitoring Returns	Financial Returns	Activity Monitoring	User Survey	Follow-ups	Workload Study	Local Provider Survey	Case Studies	Semi-structured interviews	Antibiotic medical records	Antibiotic expectations	Quality of Care	Typology
1	Bath	✔	✔	✔		✔	✔	✔	✔		✔				1
2	Birmingham	✔	✔	✔	✔	✔	✔		✔	✔	✔			✔	1
3	Bristol City	✔	✔	✔		✔	✔				✔	✔		✔	1
4	Bristol South	✔	✔	✔		✔	✔	✔	✔		✔			✔	4
5	Bury	✔	✔	✔	✔	✔	✔				✔				-
6	Coventry	✔	✔	✔		✔	✔		✔	✔	✔			✔	2
7	Croydon	✔	✔	✔		✔	✔				✔				1
8	Edgeware	✔	✔	✔		✔	✔				✔	✔		✔	3
9	Exeter main	✔	✔	✔		✔	✔	✔	✔		✔			✔	1
10	Fulham _ CX	✔	✔	✔		✔	✔				✔			✔	2
11	Fulham - PG	✔	✔	✔		✔	✔				✔			✔	4
12	Harlow	✔	✔	✔		✔	✔	✔	✔		✔			✔	2
13	Leigh	✔	✔	✔		✔	✔		✔	✔	✔	✔	✔		3
14	Liverpool	✔	✔	✔		✔	✔	✔	✔		✔				4
15	Loughborough	✔	✔	✔		✔	✔		✔	✔	✔			✔	3
16	Manchester	✔	✔	✔		✔	✔		✔	✔	✔				1
17	Newcastle	✔	✔	✔	✔	✔	✔	✔	✔		✔	✔	✔		2
18	Newham	✔	✔	✔	✔	✔	✔				✔			✔	2
19	Norwich	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔			4
20	Nottingham	✔	✔	✔		✔	✔		✔	✔	✔	✔		✔	1
21	Peterborough	✔	✔	✔		✔	✔				✔			✔	1
22	Rochdale	✔	✔	✔	✔	✔	✔				✔				2
23	Sheffield	✔	✔	✔	✔	✔	✔	✔	✔		✔				3
24	Slough	✔	✔	✔	✔	✔	✔				✔		✔	✔	3
25	Soho	✔	✔	✔	✔	✔	✔		✔	✔	✔	✔	✔		4
26	Southampton														-
27	St Helens	✔	✔	✔		✔	✔				✔				1
28	Stoke	✔	✔	✔		✔	✔				✔		✔		3
29	Swindon	✔	✔	✔		✔	✔	✔	✔		✔			✔	4
30	Tooting	✔	✔	✔		✔	✔	✔	✔		✔			✔	2
31	Nth. Middlesex	✔	✔	✔		✔	✔		✔	✔	✔	✔	✔	✔	2
32	Wakefield	✔	✔	✔	✔	✔	✔				✔				2
33	Walsall	✔	✔	✔		✔	✔				✔			✔	1
34	Weybridge	✔	✔	✔		✔	✔		✔	✔	✔				4
35	Whitechapel	✔	✔	✔		✔	✔				✔			✔	2
36	Wirral - Main	✔	✔	✔	✔	✔	✔				✔				2
37	Wirral - satellite	✔	✔	✔	✔	✔	✔				✔				3
38	Woking	✔	✔	✔		✔	✔				✔				2
39	York	✔	✔	✔		✔	✔	✔	✔		✔	✔			4
40	Exeter RDE		✔	✔											2

Typology Key: 1 = Shop Front; 2 = Hospital site with A & E; 3 = Hospital site without A & E; 4 = GP/Health Centre

Appendix 2 Convenience of location

Convenience of WIC/surgery location:	Typology of walk-in centres				
	Shop-front	Hospital site with A&E	Hospital site without A&E	General practice site	Total
Very poor	.4%	1.1%	.4%	1.1%	.8%
Poor	.5%	1.3%	.4%	.5%	.7%
Fair	9.6%	14.6%	9.9%	10.6%	11.3%
Good	46.1%	46.4%	39.8%	44.9%	44.5%
Excellent	43.5%	36.6%	49.4%	42.9%	42.6%
n	1094	1030	670	1005	3799
p value vs. 'shop-front', adjusted for age, sex and ethnicity		0.005	0.131	0.495	

Appendix 3 Reasons for attending walk-in centre rather than general practice, by age-group

Figures are weighted column %, and may exceed 100% because of multiple responses	Age group								
	<5	5-16	17-25	26-35	36-45	46-55	56-65	66-80	>80
Convenient location	25.2	25.6	32.7	33.6	32.8	29.3	26.5	22.6	27.7
Convenient opening hours	37.2	26.1	33.7	38.1	35.1	34.3	25.3	22.3	27.3
Quicker appointment than GP	64.5	52.7	62.3	64.9	63.8	59.7	51.1	48.7	47.0
More confidence in advice/treatment	8.6	8.9	10.1	8.1	5.9	6.6	4.9	10.7	5.8
Not registered with GP	2.1	1.4	10.5	7.1	6.1	.8	2.0	.7	
See nurse rather than doctor	4.3	9.2	8.5	8.0	8.8	14.3	8.3	13.4	29.1
Better range of services	4.2	3.7	5.2	6.6	3.7	5.6	5.8	3.2	4.6
Didn't want to bother doctor	16.7	13.5	11.1	16.0	20.8	24.5	22.2	27.8	23.1
Shorter wait than casualty	26.7	36.5	24.7	29.0	30.6	31.0	28.5	25.2	30.5
Sent by casualty/minor injuries/GP	8.7	8.6	8.4	8.7	9.0	9.8	9.1	12.6	15.3
Didn't think about going anywhere else	5.9	7.2	4.5	5.5	4.2	6.0	5.6	9.2	15.3
Other reason	10.3	11.5	9.4	9.6	10.7	12.3	13.2	14.7	15.3

Appendix 4 Reasons for attending general practice rather than walk-in centre, by age-group

Figures are weighted column %, and may exceed 100% because of multiple responses	Age group								
	0-5	5-16	17-25	26-35	36-45	46-55	56-65	66-80	>80
Convenient location	27.6	30.3	31.6	31.6	30.6	25.7	28.1	19.9	38.8
Convenient opening hours	10.4	10.8	9.2	13.7	13.6	10.9	11.9	12.7	24.6
More confidence in advice/treatment	22.4	18.1	17.5	17.1	24.7	24.0	24.0	25.4	34.6
Better range of services	6.5	5.1	4.4	5.4	6.3	6.6	8.1	8.6	24.3
Shorter wait than casualty	15.8	16.0	12.9	11.4	18.4	19.4	20.6	19.1	28.2
Sent by casualty/minor injuries/GP	1.1	1.3	.4	2.3	2.5	2.7	3.4	1.0	
Didn't think about going anywhere else	39.5	41.2	43.8	41.1	39.4	32.6	32.0	33.6	54.3
Wanted familiar doctor/nurse	41.7	41.3	27.8	40.9	51.6	49.7	50.4	62.4	75.8
Definite appointment time	12.8	20.1	15.1	13.0	17.7	16.4	17.7	19.1	41.5
See doctor not nurse	35.2	35.1	19.3	22.8	36.0	40.4	48.0	43.0	51.1
Walk-in Centre not suitable	19.2	20.7	17.1	17.6	19.4	22.2	23.1	20.9	16.9
Other reason	10.8	9.0	13.0	6.9	7.4	6.8	6.6	8.4	4.9

Appendix 5 Reasons for choosing a walk-in centre, by walk-in centre type

Figures are weighted column %, and may exceed 100% because of multiple responses	Typology of walk-in centres			
	Shop-front	Hospital site with A&E	Hospital site without A&E	General practice site
Convenient location	36.2	24.1	33.2	28.0
Convenient opening hours	34.0	31.3	28.5	35.3
Quicker appointment than GP	64.2	57.9	57.3	59.5
More confidence in advice/treatment	8.1	9.5	9.9	5.8
Not registered with GP	3.2	8.4	2.3	5.0
See nurse rather than doctor	11.1	7.3	8.0	11.2
Better range of services	3.7	6.8	6.0	3.5
Didn't want to bother doctor	24.8	11.5	14.5	19.5
Shorter wait than casualty	23.9	31.2	35.2	27.1
Sent by casualty/minor injuries/GP	4.2	15.9	8.3	7.6
Didn't think about going anywhere else	5.1	5.0	8.7	5.4
Other reason	12.2	9.8	11.4	10.8

Appendix 6 Option if walk-in centre not available, by type of centre

Option if walk-in centre not available	**Typology of walk-in centres**			
	Shop-front	Hospital site with A&E	Hospital site without A&E	General practice site
Looked after problem myself	13.8%	8.2%	9.5%	8.2%
WIC/GP/PN	52.4%	37.2%	38.4%	54.9%
Pharmacist	5.8%	3.4%	4.3%	6.5%
Dentist	.3%	.1%	.1%	.1%
Minor Injuries Unit	1.9%	3.4%	6.4%	.8%
Casualty Department	14.2%	38.9%	32.2%	19.3%
NHS Direct	3.1%	1.9%	1.9%	1.4%
Call GP out	1.8%	3.9%	4.9%	4.2%
Other	6.6%	3.1%	2.3%	4.6%
n =	1096	1040	666	1002

$p<0.001$

Appendix 7 Selected walk-in centre and control sites in workload study

Walk-in centre location	Control location
Bath[1]	Reading
Bristol South[4]	Gloucester
Exeter Bedford Street[1]	Plymouth
Harlow[2]	Northampton
Liverpool[4]	Preston
Newcastle[2]	Hull
Sheffield[3]	Leicester
Swindon[4]	Oxford
Tooting[2]	Brighton
York[4]	Derby

1 shop-front sites
2 hospital sites with A&E departments
3 hospital sites without A&E departments
4 co-located with GP surgery

Appendix 8 Response profile for workload study

Walk-in centre location	GP practice	Out of hours provider	A&E
Bath[1]	5	1	1
Bristol South[4]	5	0	1
Exeter Bedford Street[1]	3	1	1
Harlow[2]	1	1	1
Liverpool[4]	0	0	1
Newcastle[2]	0	0	1
Sheffield[3]	1	1	1
Swindon[4]	2	1	1
Tooting[2]	2	1	1
York[4]	1	1	1
Total	20	7	10

Control location	GP practice	Out of hours provider	A&E
Reading	5	1	1
Gloucester	4	1	1
Plymouth	1	1	1
Northampton	3	0	1
Preston	2	1	1
Hull	1	1	1
Leicester	1	0	1
Oxford	1	1	1
Brighton	1	1	1
Derby	1	0	1
Total	20	7	10

1 shop-front sites
2 hospital sites with A&E departments
3 hospital sites without A&E departments
4 co-located with GP surgery

Appendix 9 Example of scenario for quality study

HEADACHE

Explanation of clinical scenario:
This scenario involves a man who is suffering from tension headaches, but who is also feeling depressed due to unfortunate life events and stresses. The challenge for the clinician is to uncover the fact that he is feeling low, as well as suffering from headaches.

Personal briefing:
You are Patrick Cronin, a 27 (25-35) year old washing machine engineer. You have taken a few days of sick from work and have come to stay with your mother. Things have not been going well for you over the last few months: you hate your job and have split up with your long term girlfriend a month ago. You are normally in good health, and never have to go and see the doctor.

To say to clinician:
I have had a bad headache for the last 2 weeks, and I am getting worried about it.

Behaviour on interview:
Your behaviour and appearance are normal, but you are slightly more restrained and less forthcoming than your usual outgoing self, reflecting the fact that you feel moderately, rather than very, depressed. However, you are quite willing to tell the clinician all about your headache, and the fact that you feel miserable, because you are worried about yourself. Clinicians, GPs in particular, might ask you "open questions" to try and get you to talk about how you are feeling, for example "tell me how you're feeling". If this happens, do not provide them with specific details unless prompted (for example early waking, loss of confidence) just reiterate that you are feeling low/miserable.

Only provide this information if asked specifically:
Where do you get the headaches? They seem to affect the whole of my head, but concentrate behind both eyes Patient points to eyes
How would you describe the headaches? Like a pressure in my head
How often are you getting the headaches? They are there almost all the time
Do they keep you awake at night? No
Are they worse at any particular time of day, for example the mornings? No
Have you felt sick or been sick with the headaches? No
Have you had any visual disturbances with headaches? No
Have you had any photophobia (not been able to tolerate light)? No
Have you recently had a cold, flu like illness or problems with your sinuses? No
Have you had any pain or tenderness on combing your hair? No
Have you had a recent head injury? No
Are you taking anything for the headaches? Yes, Panadeine, which helps a bit.
Have you suffered from headaches in the past? Occasionally, nothing like this
Are you under much stress at the moment? Yes I am, I've had a really awful 3 months
What sort of stress? I can't stand my job, its very stressful, people always want everything done yesterday. I'd really like to get out but I haven't the confidence to apply for other jobs at the moment. My girlfriend has just left me for someone else
Have you felt like crying? Yes, but I haven't
Has your sleep been affected? Yes, I'm not sleeping well
Are you waking up early? Yes about 5am, and then I can't go back to sleep
Has your appetite been affected? I don't think so
Have you stopped looking forward to things? Yes, I'm hardly going out at all, which isn't like me: I just don't want to
Have you lost your sex drive? Yes at the moment
Have you felt its not worth going on/felt suicidal? No, I would never do that
What are you worried might be wrong with you? I just thought these headaches might be something serious, like a brain tumour, and I'm not sure I can go on like this for much longer, feeling this miserable
Would you be interested in going on antidepressants? I don't know really, I'd like to think about it
Have you anyone to talk to? No not really
Would you be interested in counselling? I'm not sure, I'd have to think about it
Is there any family history of depression? No, I don't think so
Are you taking any other medication? No
Do you suffer from any other medical problems or have you had any operations in the past? No

Will I be examined:
The clinician may check your blood pressure and may look into your eyes with a light. Both of these will be normal.

Appendix 10 Example of quality checklist

ESSENTIAL CHECKLIST: HEADACHE SCENARIO (WIC/GP/NHS Direct)

Site Code:……. Date of visit: …….Role-player:……

Did you see a nurse or a doctor?……

INSTRUCTIONS: THINK ABOUT THE CONSULTATION THAT YOU HAVE JUST COMPLETED, THEN CIRCLE EITHER YES OR NO TO RECORD WHAT HAPPENED. OVERLEAF THERE IS A SECTION FOR YOU TO WRITE YOUR THOUGHTS ABOUT THE CONSULTATION.

Medical history

Were you asked about the position of your headache	**YES**	**NO**
2. Were you asked about nature of headache (e.g. throbbing, sharp or dull)	**YES**	**NO**
3. Did the clinician ask you about the frequency of your headaches	**YES**	**NO**
4. Did the clinician ask you questions relating to what time of day your headache is worst	**YES**	**NO**
5. Were you asked whether there is any associated nausea or vomiting with your headaches	**YES**	**NO**
6. Were you asked about any associated visual disturbances	**YES**	**NO**
7. Were you asked about any symptoms of upper respiratory tract infection (cold symptoms, or cough or temperature etc)	**YES**	**NO**
8. Did the clinician ask you if you have had headaches of this nature in the past	**YES**	**NO**
9. Did the clinician ask you questions related to whether you were currently experiencing any stress	**YES**	**NO**
10. Were you asked questions about any of the following; changes in your sleep, appetite, motivation, libido or about feeling low	**YES**	**NO**
11. Were you asked what you were worried might be wrong with you.	**YES**	**NO**

Advice and treatment

12. Did the clinician discuss that s/he thought you are probably suffering tension headaches	**YES**	. **NO**
13. Did the clinician discuss /prescribe analgesia	**YES**	**NO**
14. Did the clinician discuss with you a possible diagnosis of depression	**YES**	**NO**
15. Did the clinician suggest that you make an appointment with your own GP to discuss the possible diagnosis of depression and its treatment	**YES**	**NO**

What other treatment did you receive?

Please list below any treatment you received that we have not already mentioned.

Advice:

Any over the counter medication recommended:

Prescription:

Did the clinician organise any investigations (e.g. blood test, ECG):

Where you referred anywhere?
E.g. casualty, physiotherapy

What did you think was positive about the consultation

What did you think was negative about the consultation

Appendix 11 Grades of nursing/medical staff employed by walk-in centres (whole time equivalents)

	Staff grades/wte's							
	Project Manager and/or I grade	H	G	F	E	D	B/A	GP
Bath		1	1	2	-	-	-	-
Birmingham								
Bristol (CG & S)	-	1	3	10.77	-	-	1	-
Croydon	0.5	1.8	4	-	5	-	-	-
Exeter	-	1	1.6	11.5	2	-	-	-
Norwich	1	3	1	-	6.2	-	-	-
Nottingham	0.2	1	4.39	7.57	-	7.39	-	-
Peterborough	-	0.5	1.6	5.5	0.5	3	3	-
St Helens	4	-	3	-	2	-	2	-
Tooting	0.8	3.4	1	4	2.4	-	-	-
Walsall	1	1	6.2	2.4	-	-	-	-
Coventry	-	1	5	-	4.5	-	1.75	
Ch. X/Prns Grn	0.8	1	8.2	1	-	-	-	-
Harlow	-	1	7	-	2	-	-	-
Newcastle	.5	1	6.67	2	1.8	2	-	-
Newham	2	.6	-	9	-	-	0.1	0.5
N. Middx.	-	1	5.5	-	3.5	-	2	-
Whitechapel	1	1	-	2.5	-	4	-	3
Wirral - Main	1	1	8.8	-	-	-	-	-
Woking	1	-	7.5	-	-	-	1	-
Edgware	2	-	4	3	-	-	-	-
Leigh	-	1.47	8.47	5.54	-	-	2	
Loughborough	1	-	1	9.5	-	-	-	0.4
Sheffield	-	1	5	9.9	-	-	-	-
Slough	1	0.7	4.3	4.5	-	-	-	-
Stoke	1	-	1	8	-	1	2	0.09
Wirral - Satellite	1	-	8		-	1	1.5	
Liverpool	-	-	7.2	4.6	1.6	-	1	-
Soho	2	-	7.7		-	-		-
Swindon	1	-	6.5	-	1	-	-	-
Wakefield	-	.8	5.9	2.8	-	-	-	0.2
Weybridge	-	1	6	0.5	0.6	-	-	-
York	-	1	2.8	5.3	0.1	-	2	-

Staff numbers for 34 walk-in centres are reported in the above table (in some cases e.g. Bristol, staff for 2 linked centres are reported together). A total of 380 whole time equivalent clinical staff were identified, an average of 11.2 per walk-in centre.