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Main Article

ENT cases seen at a local 'walk-in centre': a one year review

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Abstract

Aim and method: This retrospective study reviewed the ENT-related cases seen, and the discharge or transfer outcomes, at both a local 'walk-in centre' and the respective emergency department, over one year in Norwich.

Results: Of the 7657 ENT cases seen at the walk-in centre, the commonest conditions included tonsillitis or pharyngitis, otalgia, cough, and deafness. In comparison, 1586 patients were seen at the emergency department, and the commonest conditions were epistaxis and throat foreign bodies. Of the ENT cases seen at the walk-in centre, 85.4 per cent were treated and discharged. Of the 14.6 per cent referred to other healthcare providers, 11.1 per cent were to the general practitioner. In comparison, the emergency department discharged 41.2 per cent and referred 58.8 per cent to other healthcare providers.

Conclusion: This study indicates that ENT cases may constitute a large proportion of patients seen in walk-in centres, and that the case types seen may differ from those presenting to emergency departments. It also indicates that walk-in centres may potentially be assessing, treating and discharging 85.4 per cent of ENT patients seen.

Key words: Emergency Care; Ambulatory Care; Otorhinolaryngology; Great Britain

Introduction

'Walk-in centres' are a relatively recent UK government policy initiative, and promise more flexible access to primary care by offering access to nurses for advice and treatment for minor ailments and injury. A recent national evaluation of walk-in centres revealed that over 11 per cent of cases seen were ENT-related.[1] To date, there has been no detailed study examining the use of this service by patients with ENT-related problems.

This retrospective study reviewed the various ENT cases seen at a walk-in centre over a one-year period, and their outcomes, and compared these with ENT cases seen at the respective emergency department over the same time period.

Background

In April 1999, the UK Department of Health authorised funding for a pilot scheme of National Health Service (NHS) walk-in centres across England, as part of the government's commitment to modernise the NHS.[1] The first of these opened in January 2000. At the time of writing, there were over 80 walk-in centres in the UK, with plans to open further centres in the near future. Walk-in centres have now become an important aspect of primary care, but are certainly distinct from general practice. Essentially, patients may present to a walk-in centre without an appointment, with new symptoms. They may also be awaiting specialist referral or currently receiving specialist treatment.

These nurse-led walk-in centres offer a conveniently situated 'drop-in' service with long opening hours (from 7 a.m. to 10 p.m.), seven days a week. Their aim is to reduce the demand on other NHS providers, particularly general practitioners and emergency departments, by: providing advice and treatment for minor illnesses and injuries; encouraging an element of self-care in patients; and helping patients identify when they really need to consult a doctor.[2]

The nurse-led consultations employ the NHS clinical assessment system software. This software employs a set of over 600 algorithms, which nurses combine with their own clinical assessment in order to determine healthcare priority and need. The algorithms comprise a set of structured clinical triage categories organised around a specific patient complaint or symptom, such as earache or sore

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TABLE I

ENT-RELATED CASES SEEN AT THE WALK-IN CENTRE OVER ONE YEAR

Presenting complaint	*n* (%)
Tonsillitis or pharyngitis	1828 (23.9)
Otalgia	1783 (22.7)
Cough	1670 (21.8)
Deafness	1434 (18.7)
Oral soreness or pain	271 (3.5)
Cold or 'flu'	204 (2.7)
Foreign body in ear or nose	41 (0.5)
Epistaxis	46 (0.6)
Tinnitus	23 (0.3)
Hoarseness	13 (0.2)
Dysphagia	4 (0.1)
Total	7657 (100)

throat, rather than medical diagnoses. The responses to a specific question trigger additional questions or direct the nurse to a decision about a required level of care. The nurse identifies the algorithm most similar to the patient's presenting complaint. The documented history and examination and the various stages of the algorithm lead the nurse to the appropriate patient advice, which is considered to be part of the nurse's clinical judgement. An outcome is also logged, such as 'treated in centre' or 'routine appointment with general practitioner', with accompanying clinical notes.

As previously mentioned, one study demonstrated that 11 per cent of cases seen at walk-in centres were ENT-related. It is also well documented that ENT-related disease contributes a considerable percentage of the cases seen by general practitioners. However, little has been published on the specific types of ENT cases seen by UK walk-in centre nurses.

This retrospective study reviewed common ENT conditions seen in walk-in centres, and the outcomes of these consultations. Common ENT conditions seen at the respective emergency department were also reviewed and compared to the walk-in centre data.

Objectives

The study's objectives were: (1) to identify the ENT-related cases seen at the specified walk-in centre over a one-year period; (2) to analyse and subdivide these cases into presenting complaint or diagnostic group; (3) to review the outcome of these consultations; (4) to repeat the above three steps for data obtained from the respective emergency department over the same time period; (5) to compare the different case types and outcomes for both sites; and (6) to consider the implications for further use of nurses within ENT primary care.

TABLE II

ENT-RELATED CASES SEEN AT THE EMERGENCY DEPARTMENT OVER ONE YEAR

Diagnosis	*n* (%)
Epistaxis	582 (36.7)
Miscellaneous	219 (13.8)
Foreign body in throat	198 (12.5)
Acute otitis media	139 (8.8)
Tonsillitis	134 (8.4)
Foreign body in nose	94 (5.9)
Foreign body in ear	79 (5.0)
Acute otitis externa	63 (4.0)
Labyrinthitis	52 (3.3)
Tympanic membrane perforation	26 (1.6)
Total	1586 (100)

TABLE III

OUTCOME OF ATTENDANCES AT THE WALK-IN CENTRE OVER ONE YEAR

Outcome	*n* (%)
Discharged home	6537 (83.4)
GP (within 12 hrs)	296 (3.9)
GP (within 12–36 hrs)	318 (4.1)
GP (routine appointment)	231 (3.0)
Dentist	112 (1.5)
Pharmacist	110 (1.4)
Emergency dept	53 (0.7)
Total	7657 (100)

GP = general practitioner; hrs = hours; dept = department

Methods

The study was conducted at a walk-in centre in Norwich, East Anglia, UK, opened in April 2000 next to a busy supermarket. Data for the walk-in centre were collected over one year from April 2005 to March 2006, during which time the walk-in centre treated a total of 54 512 patients. Of these, 7657 (14 per cent) were identified (from the clinical assessment computer records) as being ENT-related by nature of their presenting complaint, and were extracted for further analysis.

We also assessed the emergency department of the Norfolk and Norwich University Hospital, opened in 2004. The department's computer database was searched and 1586 ENT-related diagnoses treated in the same time period were collected for further analysis.

From the data sets obtained from both sites, patients were classified according to their presenting complaint or diagnosis and the outcomes of their treatment. Data were analysed to determine the commonest conditions seen and the outcomes of

TABLE IV

OUTCOME OF ATTENDANCES AT THE EMERGENCY DEPARTMENT OVER ONE YEAR

Outcome	*n* (%)
Discharged with no follow up	654 (41.2)
GP	280 (17.7)
Admitted	254 (16.0)
Ward review	233 (14.7)
Out-patient appointment	123 (7.8)
Emergency dept clinic	39 (2.5)
Other	3 (0.2)
Total	1586 (100)

GP = general practitioner; dept = department

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treatment, and also to highlight differences between the walk-in centre and the emergency department.

Results

Clinical presentation

Of the 54 512 patients seen at the walk-in centre between April 2005 and March 2006, 7657 were deemed ENT-related, according to the computer algorithms reviewed. The four commonest presenting ENT-related complaints were tonsillitis or pharyngitis ($n = 1828$, 23.9 per cent), otalgia ($n = 1783$, 22.7 per cent), cough ($n = 1670$, 21.8 per cent) and deafness ($n = 1434$, 18.7 per cent).

In comparison, the emergency department treated 1586 ENT-related cases over the same time period, with distinctly different types of clinical presentation compared with the walk-in centre. The commonest diagnoses were epistaxis ($n = 582$, 36.7 per cent), foreign body in the throat ($n = 198$, 12.5 per cent), acute otitis media ($n = 139$, 8.8 per cent) and tonsillitis ($n = 134$, 8.4 per cent).

Of note, a significant proportion of patients seen in the emergency department were given a diagnosis of 'miscellaneous' ($n = 219$, 13.8 per cent). Further data for this group of patients was unobtainable for further analysis.

Outcome of consultation

The outcomes of consultations were also reviewed. Of the 7657 ENT-related cases seen in the walk-in centre, the majority were discharged with no further follow up ($n = 6537$, 85.4 per cent). The other 1120 (14.6 per cent) patients were referred on to other healthcare professionals for further treatment or advice, most frequently to general practitioners ($n = 845$, 11.0 per cent), followed by dentists ($n = 112$, 1.5 per cent) and pharmacists ($n = 110$, 1.4 per cent). Notably, only 53 (0.7 per cent) of the ENT patients seen at the walk-in centre were referred on to the emergency department for further consultation.

In comparison, of the 1586 patients seen in the emergency department, 654 (41.2 per cent) were discharged home with no further follow up. Of the patient referrals, once again, most were to general practitioners ($n = 280$, 17.7 per cent). In addition, 254 patients (16.0 per cent) were admitted, 233 (14.7 per cent) were brought back for ward review, 123 (7.8 per cent) were sent to the out-patient department and 39 (2.5 per cent) were brought back to an emergency department clinic for follow up.

Discussion

The objective of this study was to determine the types of ENT-related cases seen at a walk-in centre over a one-year period. Ear, nose and throat related cases seen at the local emergency department were also reviewed, and the two data sets compared. The common ENT-related case types seen at both sites differed distinctly. The walk-in centre commonly assessed cases of tonsillitis or pharyngitis, otalgia, cough, and deafness, whereas the emergency department commonly saw cases of epistaxis and throat foreign bodies. It must be emphasised that the ENT patients attending the walk-in centre were largely defined according to generic signs or symptoms rather than medical diagnostic categories. The extent to which it is necessary to obtain a medical diagnosis in order to be able to effectively manage minor ENT problems in the first access care setting is an issue requiring further examination. However, from an epidemiological point of view, the data obtained allowed the necessary comparisons of ENT-related cases to be made.

In addition, the outcome of consultations at both sites were analysed and compared. Of the ENT-related cases seen, the walk-in centre treated and discharged 85.4 per cent ($n = 6537$), while the emergency department treated and discharged 41.2 per cent ($n = 654$). Where patients were referred, the general practitioner was the commonest healthcare provider selected at both the walk-in centre and the emergency department. Notably, the walk-in centre only referred 0.7 per cent ($n = 53$) of patients to the emergency department for further treatment or advice. From the data, it is apparent that the walk-in centre was able to treat and discharge a larger proportion of the patients seen, compared with the emergency department. This is probably explained by the fact that more serious cases were likely to present to the emergency department, potentially requiring acute intervention or further follow up. One important limitation of this study is the fact that outcomes were unknown for patients discharged from the walk-in centre. It is possible that a proportion of these patients subsequently presented to their general practitioner or the emergency department. Obtaining this information would require further study, including assessment of patients' satisfaction following their walk-in centre consultation.

Since their introduction, walk-in centres have received both support and criticism regarding their role in reducing other healthcare providers' workloads. One study performed a time-series analysis to assess the impact of walk-in centres on the workload of other local healthcare providers.[2] A reduction in consultations at emergency departments and general practices close to walk-in centres was observed, although these reductions were not statistically significant. A different study demonstrated that walk-in centres co-located with an emergency department failed to have any effect on attendance rates, process, costs or outcome of care in the emergency department.[3] A further study showed that a new walk-in centre did not greatly affect the workload of local general practitioners; however, the workload of the local minor injuries unit increased significantly.[4] These studies demonstrate that walk-in centres do not appear to significantly affect the workload of other healthcare providers.

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In a report from the House of Commons Committee of Public Accounts, it was again suggested that walk-in centres developed with the aim of reducing demand on English emergency services were not succeeding.[5] The committee went on to comment that this demand had not changed since the creation of a range of open access services for minor injury and illness, and that, although these alternative services had been largely welcomed, they had mainly addressed a previously unmet need, rather than reducing demand on existing services.

- **Over 80 'walk-in centres' are currently open in the UK. Recent evaluation revealed that over 11 per cent of cases seen are ENT-related**
- **This study found that one walk-in centre saw 7657 ENT-related cases in one year, compared with 1586 such cases seen in the respective emergency department**
- **The commonest ENT-related cases seen at the walk-in centre were tonsillitis or pharyngitis, otalgia, cough, and deafness**
- **The commonest ENT-related cases seen at the emergency department were epistaxis and throat foreign body**
- **If the results of this study were applicable to other UK walk-in centres, nationwide, a considerable number of patients with ENT-related conditions may be being treated in such centres, possibly diverting them away from other healthcare providers**

This study was unable to assess whether or not the walk-in centre examined had had an effect on the workload of the respective emergency department, as no computer records were available from the emergency department prior to the opening of the walk-in centre. Whether walk-in centres reduce the workload of other healthcare providers or address a previously unmet need for ENT care can only be answered by additional investigation. However, the key aims of a walk-in centre are to triage patients, to identify the potential to enhance patient self-management and health education (of minor ailments), and/or to guide patients to other healthcare services. Such care is a priority for patients with ENT conditions, as they constitute a large proportion of the primary healthcare case load.

However, this study does indicate that walk-in centres may assess and treat a large number of patients with ENT-related conditions, irrespective of the effect that this has on other healthcare providers. This in itself raises the question of whether nurses' roles within ENT primary care could be extended. Although requiring further investigation, it is plausible that some hospital-based ENT services could possibly be conducted in the community, perhaps in walk-in centres, improving convenience for the patient.

Conclusion

This study found that ENT conditions constituted a large proportion of cases seen in a walk-in centre ($n = 7657$, 14 per cent). The ENT case types seen differed distinctly from those presenting to the respective emergency department. The walk-in centre was potentially assessing, treating and discharging 85.4 per cent ($n = 6537$) of the total number of ENT-related cases seen within the local area, within the time period studied. If the results of this study were applicable to the other UK walk-in centres, this may indicate that, nationwide, a considerable number of patients being treated and possibly being diverted away from other healthcare providers.

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