Provision of telephone advice from accident and emergency departments: a national survey

R Crouch, J Dale, B Visavadia, C Highton

Abstract
This study sought to gain a national picture of the provision of telephone advice using a postal survey of senior nurses from accident and emergency (A&E) and minor injury units (MIUs). In all, 268/313 (85%) of hospitals/units responded. The average number of calls reported as received per day was 15.5 (median: 12; quartiles 6, 20) for weekdays and 21.0 (median: 17; quartiles 10, 29) for weekends. Most (89%) viewed the provision of telephone advice as an important component of their work, but few units offered staff training for this role or had implemented protocols or guidelines. Only 5.4% units included the number of calls received in their department in their workload figures, but 91.9% felt that they should be. Extrapolation of the data from this study to all 313 A&E and MIUs in the UK suggests that just under two million calls for telephone advice are currently made to units each year. Recognition and formalisation of this aspect of work is likely to be of increasing importance given the constraints on services and the need to manage demand effectively. Future integration of A&E telephone advice calls with NHS Direct should be considered as a means of managing demand and avoiding duplication of service provision.


Keywords: telephone advice; national survey; workload management; NHS Direct

European Institute of Health and Medical Sciences, Postgraduate Research School, University Campus, Stag Hill, Guildford, Surrey GU2 5XH
R Crouch

Postgraduate Medical School, University of Warwick
J Dale

King’s College School of Medicine and Dentistry, King’s College, London
B Visavadia
C Highton

Correspondence and reprint requests to: Mr Crouch.

Accepted 7 August 1998

Telephone advice appears to be increasingly valued by the general public1-3 and it has been shown that a considerable proportion of callers to accident and emergency (A&E) departments could be managed without needing to attend the hospital.1,4-7 However, the workload implications of advice calls to the A&E department tend not to be routinely measured, and national data on the demand for telephone advice in A&E departments have been lacking. Extrapolation from two recent studies suggests that telephone advice accounts for between 3–5% of the total A&E workload,2,8 but each of these studies was based on single departments making the generalisability of these findings questionable.

The purpose of this study was to establish current demand, practices, policies, and procedures relating to telephone advice from A&E and minor injury units (MIUs), and views about future developments.

Methods
In September 1997, all 313 A&E departments and MIUs listed in the Directory of Emergency and Special Care Units (1997)9 were sent a postal questionnaire addressed to the senior nurse. A prepaid envelope was enclosed with the questionnaire and respondents were asked to return the completed form within three weeks.

The questionnaire was modified from one used in a national survey of A&E telephone advice in Australia.2 It was piloted with three senior nurses and amendments made following their recommendations.

Results
The data were coded and analysed using the Statistical Package for the Social Sciences (SPSS). Not all of the questions were answered; percentages given below relate to the number of respondents for whom information was known.

Of the 268 (85.0%) of hospitals/units that responded, 237 (88.4%) described themselves as being full A&E departments, 18 (7.6%) were MIUs, and 13 (4.9%) were other types of facility.

The majority of responses (59.9%) were received from departments seeing fewer than 51 000 new patients a year (median: 31 000–50 000; quartiles 61 000–70 000, <30 000). The mean number of whole time equivalent nursing staff employed was 29 (median: 27;8; quartiles 19.9, 38).

The mean number of calls received per day was 15.5 (median: 12; quartiles 6, 20) for weekdays and 21.0 (median: 17; quartiles 10, 29) at weekends. Seasonal variation in demand for advice was reported in 118 (48.8%) departments, with the summer described as the busiest period by 102 (86.4%) respondents.

In all, 234 (89.0%) respondents felt that A&E departments should provide telephone advice to the general public, and 258 (97.0%) reported that their staff routinely give telephone advice. Only 14 (5.4%) stated that the number of calls received by their department was included in their workload figures, but 238 (91.9%) felt that they should be.

Only 47 (17.9%) departments currently provide training for telephone consulting, and in 43 departments this included the use of guidelines. In four departments it related just to the provision of first aid. Fifty three (20.3%) described having a formal policy in relation to telephone consulting.

In all, 177 (69.4%) stated that their staff routinely documented advice calls, while 78 (30.6%) did not. For those that documented
calls, most frequently (167, 92.8%) this involved a paper record. A small minority used computers (five, 2.8%) or audio/digital tape (four, 2.2%) to record the call.

In response to open questions about improving the provision of telephone advice to the public a number of ideas were suggested ranging from protocols to advertising the service to the public (table 1).

**Table 1 Ideas for improving the provision of telephone advice (n=198)**

<table>
<thead>
<tr>
<th>Idea</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formalised recording of calls</td>
<td>69 (34.8)</td>
</tr>
<tr>
<td>Named nurse</td>
<td>79 (39.9)</td>
</tr>
<tr>
<td>Implementing protocols</td>
<td>88 (44.4)</td>
</tr>
<tr>
<td>Advertising the advice service to public</td>
<td>22 (11.1)</td>
</tr>
<tr>
<td>Providing staff with specific training</td>
<td>46 (23.2)</td>
</tr>
</tbody>
</table>

**Discussion**

This paper reports findings from the first national survey of telephone advice provided by A&E and MIUs in the UK. There appears to be considerable variation in the amount of telephone advice that is being given in different departments, but the demand for advice over weekend periods appears consistently higher than during weekday periods.

Extrapolation of the findings to all 313 UK A&E and MIUs suggests that just under two million calls for telephone advice are currently being made each year. This indicates that at least 10% of new A&E contacts with patients occur over the phone, a rate that is 2–3 times the level reported by previous studies.

With rising demand for A&E services, effective management of workload is increasingly being discussed, and encouraging patients to call A&E before attending may offer an effective method for managing demand. It appears, though, that most A&E departments in the UK are ill prepared to expand this area of work, with few units providing staff training or guidelines. Other studies have indicated inadequacies in the assessment and advice given to callers to A&E departments, and clearly greater attention needs to be given to monitoring the quality and safety of telephone consultations. This may require additional resources to meet the training and operational issues that have been identified.

An alternative approach to managing the demand for telephone advice may soon be available in all areas through NHS Direct. This nurse led 24 hour telephone advice and information service will cover the country by the year 2000. Although there are still many unanswered questions about NHS Direct and the extent to which it will augment, substitute, or duplicate the activities of current service providers, it may present opportunities for redirecting advice calls currently received in A&E and MIUs to call centres staffed by nurses specifically trained for this role. For this to be effective in terms of providing an integrated service, agreement on patient referral and the transfer of clinical information between NHS Direct and A&E departments or MIUs will have to be established. This model may be more cost effective in terms of achieving reliability and consistency in telephone advice than the development of this role in all A&E departments and MIUs. However, integration of this nature may take some considerable time to achieve, and in the meantime the results of this study suggest a need to consider more immediate ways of improving and systematising the provision of telephone advice in A&E and MIUs.

The authors express their thanks to Dr Daniel Fatovich for his permission to use and modify the questionnaire.

Conflicts of interest: the first two authors developed the TAS decision support software and provide consultancy to the marketing company.