Emergency department telephone advice: a survey of Australian emergency departments

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Abstract

Objective

To ascertain the nature and extent of telephone advice to the public provided from the emergency department.

Method

A postal survey of all emergency departments in Australia (n=147).

Results

An 88% response rate was achieved. Sixty seven percent of emergency departments provide telephone advice. Seventy five percent of Directors of Emergency Medicine consider telephone advice to be worthwhile. The mean number of calls received each month is 627 per emergency department (range 4-12,500). Only 24% of emergency departments provide training on telephone advice. Fifty nine percent of departments do not document the calls.

The general impression was that providing telephone advice was time consuming and distracted emergency department staff from direct patient care. Lack of funding to provide a dedicated service was frequently commented upon.

The survey data indicated that there are at least 27.6 calls per 100 emergency department attendances; i.e. for every 100 attendances, there are a further 27.6 occasions of service.

Conclusions

The provision of telephone advice from emergency departments is common practice in Australia and appears to be *ad hoc*. This service has a particular advantage for those who have difficulty accessing medical care. More formalised systems should be established. This would relieve a considerable burden from emergency departments freeing resources for direct patient care.

Introduction

Emergency department (ED) staff are frequently telephoned by members of the community seeking medical advice. However, providing such a telephone advice service is time consuming and removes staff from direct patient care. It is difficult to determine the amount of human and financial resources which are utilised to provide this service as many EDs do not monitor the number of calls received or the time spent answering enquiries.

The purpose of this study was to determine:

- how many EDs in Australia provide a telephone advice service
- the staffing structure within each of these EDs
- who gives the telephone advice
- the number of telephone calls received each month
- general questions regarding the provision of telephone advice.

Method

A postal survey of all EDs in Australia was undertaken during September/October 1995. The Medical Directory of Australia[1] was used to obtain the name and address of each department. A questionnaire, covering letter and reply paid envelope were sent to the Director. One hundred and forty seven EDs were identified. A second questionnaire was sent if no response was received within five weeks. All responses were entered into a computer database and analysed using the SPSS statistical software.

Results

A total of 130 responses (88%) were received with 92.2% of these being from public EDs. Of the total number of responses, 45% were EDs accredited by the Australasian College for Emergency Medicine (ACEM)[2] and 80% had a Director of Emergency Medicine. The average ED attendance for 1994 was 27,744 (median 26,000; range 3,330 - 65,000). Sixty two percent of EDs surveyed were located in the metropolitan area and 80% treated both adults and children. Medical staffing within the ED varied with resident medical officers staffing 82.5% of EDs, consultants 63% and registrars 57.9%. A greater proportion of staffing was undertaken by interns, resident medical officers, registrars and consultants in ACEM accredited EDs compared with those not ACEM accredited. These results are summarised in Table 1.

An ED telephone advice service (TAS) was provided in 67.2% of departments surveyed, with 38.4% of these having ACEM accreditation. TAS was provided in 56% of metropolitan and 87.7% of rural EDs. The average number of calls per month during 1994 was 627 (median 193). The number of calls received per month ranged from as few as four up to 12,500. Based on the annual ED attendance figures and number of advice calls received we estimate that there are about 27.6 calls per 100 attendances.

Of those EDs not providing a TAS, hospital policy was cited as the reason in 12% of responses, legal impediments in 20% and a combination of both in 22%. Almost half the respondents cited other reasons such as 'difficult to diagnose over the phone' or 'takes up too much time' as the factor preventing telephone advice.

Telephone advice was provided entirely by registered nurses in just over 40% of cases with a combination of registered nurse and medical officer providing a further 40%. Enrolled nurse and support staff provided little telephone advice. These results are summarised in Table 2.

Training in telephone advice was provided in only 24% of EDs. Less than half the calls (41.2%) were being documented (58.6% of non accredited EDs document the calls compared

Table 1. The number of EDs by level of medical staffing for ACEM and non-ACEM accredited departments

Level of medical staff	*ACEM accredited*	*Non ACEM accredited*	*All EDs*
Interns	52 (89.7%)	31 (45.6%)	83 (65.9%)
Resident medical officers	56 (96.6%)	48 (70.6%)	104 (82.5%)
Registrars	52 (89.7%)	21 (30.9%)	73 (57.9%)
Career medical officers	26 (44.8%)	38 (55.9%)	64 (50.8%)
General practitioners	23 (39.7%)	30 (43.5%)	53 (41.7%)
Consultants	53 (91.4%)	27 (39.1%)	80 (63.0%)

Table 2. Who provides telephone advice in the ED

Advice provided by:	N	%
Registered nurses	43	41.3
Medical officers	18	17.3
Registered nurses or medical officers	41	39.4
Registered nurses, medical officers, enrolled nurses or clerks	1	1.0
Registered nurses, medical officers or clerks	1	1.0

with 18.2% of ACEM accredited EDs). Only 23.3% of metropolitan and 25.6% of rural EDs provided formal TAS training. Whilst almost three quarters of the respondents felt that providing TAS was worthwhile, formal policies existed in only 61% of EDs. The proportion of metropolitan and rural EDs having TAS policies was 62.9% and 59.5% respectively.

Finally, each director was asked to comment upon emergency department telephone advice. The most common comment was that minimal advice is given and that patients are always advised to come to the emergency department or see a doctor if concerned.

Other comments expressed a range of views including 'an extremely difficult area', 'it is unwise, misleading, open to misinterpretation and abuse', 'not allowed to diagnose and manage over the phone' and 'telephone advice is discouraged ... however many staff cannot avoid the temptation of being helpful'. Others stated 'it is an appropriate and inevitable role for an ED', 'a useful customer focussed service' and 'telephone triage needs to be documented and recognised as an important part of ED work'.

There were comments related to the resources required: 'it is very labour consuming and expensive', 'needs separate funding and staff to work well' and 'it is policy to record advice given but this creates more work and the volume of calls precludes this'. Other comments included; 'if any such service is to be developed, it should be centralised and experience suggests the greatest area of demand is paediatrics' and 'wouldn't it be nice to have a dedicated funded advice line'.

Lack of access to medical care is an issue with comments including 'being a rural hospital, our decision was that we would continue phone advice mainly because of: geographic location, distance for patients to travel, lack of alternative after hours medical resources', 'some of the population we serve live 50-60 minutes away from any medical care. Phone advice is important for them', 'refusal to provide phone advice would generate a lot of community antagonism (and quite justifiably)' and 'my personal experience with telephone consultation is that it is very useful in determining that sick or doubtful patients are reviewed and unnecessary presentations are avoided'.

Discussion

Telephone callers for advice constitute a significant proportion of workload in EDs around the world. Despite this, it has seldom been studied in detail. This survey represents the first national Australasian study of emergency department telephone advice.

A high response rate of 88% was achieved. This revealed that approximately two thirds of EDs in Australia provide telephone advice. Overall, registered nurses are most likely to deliver the advice. While providing this advice is mostly considered worthwhile, the majority of hospitals do not provide training. Less than half the EDs document the calls usually because the volume is so great and no dedicated resources have been allocated for this purpose.

The main reasons given for not providing telephone advice were a combination of medicolegal concerns and hospital policy. During the survey, a formal legal opinion obtained by the Victorian Emergency Department Association was brought to our attention (M Westmore: personal communication). This opinion was sought because of concerns about the possible medicolegal consequences, of advice given by staff members over the telephone. The following opinion was provided by Mr John Snowdon of Phillips Fox Solicitors. The following points were made:

- The mere asking of questions over the telephone provides no guarantee that the information gained in response will be accurate or meaningful.
- By offering specific advice or recommendations over the telephone, the hospital accepts a legal duty of care to the caller and/or the person in respect of whom the caller is ringing.
- The substance of the primary message conveyed by the person responding to a telephone enquiry should be: telephone diagnoses and recommendations are a poor substitute for clinical examination and assessment. If you have any concerns about

the person subject of the call, have him or her seen immediately by a general practitioner. Alternatively, bring that person in for assessment at our emergency department.

- If that message is stressed consistently and habitually, the prospect of both medicolegal complications and an adverse health outcome are significantly reduced.
- Less harm is likely to result from the hospital staff member declining to become involved in providing specific recommendations or advice.
- Having said that, common sense dictates that in many instances, emergency advice can and should be given as to steps which should assist the patient and the caller, on a short term basis, pending the obtaining of formal, medical assistance.
- In summary, proper use of the telephone can facilitate patient care and maximise the availability of human resources. On the other hand, inadequate, inaccurate or thoughtless but well meaning advice and recommendations delivered over the telephone, without the benefit of clinical assessment (and often without the benefit of adequate knowledge or experience) can create rather than solve problems.

Many of these points are valid but apply predominantly to a city location where there is easy access to medical care. Emergency department telephone advice has been identified as being invaluable for those who are isolated or distant from medical care[3]. Indeed, this was highlighted in some of the comments received during the survey. Also, the use of protocols for telephone triage have been assessed and found to be effective[4,5].

In summary, there are two basic rules of telephone advice: it is not possible to diagnose over the telephone and the best advice will always be to recommend a face to face consultation.

The survey also provided a snapshot of EDs in Australia. The attendance figures for 1994 extrapolate to over 4,078,368. This is consistent with previous reports[6] and it should be remembered that a number of private EDs opened around the time of the survey. Interestingly, non ACEM accredited departments were much more likely to document telephone advice calls and were more likely to provide this service.

Not withstanding the lack of reliable data on the actual number of advice calls received each month, we calculated the average number of calls received related to the emergency department attendance figure. For all cases this was 27.6 calls per 100 attendances. That is, for every 100 attendances, there are a further 27.6 occasions of service. This equates to 1,125,630 telephone calls for advice to EDs in Australia each year (approximately two every minute). When it is considered that the actual figure may be several times higher, then the true impact on the ED is fully realised. Remarkably, this figure is consistent with the only prospective measurement reported of 32.8 calls per 100 attendances[3].

One hospital sent details of a formal Telephone Advice Service currently in use at the John Hunter Health Service, New South Wales[7]. This 'Kids Kare Line' offers extended hours telephone access to people with sick children. Following implementation, there was a 10% reduction in ED attendances and a 20% increase in hospital admissions from the ED. It is believed that this service results in more appropriate use of the ED with callers being directed to more appropriate health services.

The comments provided by respondents express a variety of views. It appears that most EDs consider telephone advice to be time consuming and of nuisance value but almost inevitable with the benefit of promoting better community relations. Previous work has demonstrated enormous community support for emergency department telephone advice[3]. However, this study has demonstrated that an *ad hoc* approach is frequently used. This is not acceptable for such an important aspect of ED work, when previous reports demonstrate the quality of advice to be variable and potentially harmful[8,9].

EDs need to address this issue as telephone advice is rated exceptionally high by the community[3]. There is a need to increase training and develop location specific strategies. An alternative approach would be a centralised Telephone Advice Service accessed by a 1800 freecall number. It should be staffed by appropriately trained personnel and funded accordingly. All calls should be electronically recorded and formal quality assurance, policies and protocols established. The provision of medical backup is essential.

Such a system would help relieve a considerable burden for emergency departments, thus freeing resources to provide direct patient care. In addition, it has

particular advantages for those who have difficulty accessing medical care.

Acknowledgments

This study was made possible by a research grant from the Commonwealth Department of Human Services and Health (Ambulatory Care Research and Pilot Program) and the support of the Health Department of Western Australia, Health System Policy Branch. The authors are grateful to Dr Rick Lowen and Shauna Fatovich.

References

1. The Medical Directory of Australia. 20th ed. AMPCo, 1993.
2. Australasian College for Emergency Medicine. 1995 Annual Report.
3. Fatovich DM, Jacobs IG, McCance J, Sidney K, White R. Emergency Department Telephone Advice Service Study. A Report to the Commonwealth Department of Health and Family Services, 1996.
4. Levy JC, Rosekrans J, Lamb GA, Friedman M, Kaplan D, Strasser P. Development and field testing of protocols for the management of pediatric telephone calls: protocols for pediatric telephone calls. Pediatrics 1979;64:558-63.
5. Strasser PH, Levy JC, Lamb GA, Rosekrans J. Controlled clinical trial of pediatric telephone protocols. Pediatrics 1979;64:553-7.
6. Cameron PA, Bradt DA, Ashby R. Emergency medicine in Australia. Ann Emerg Med 1996;28:342-6.
7. Best Practice in NSW Health 1994:49-52.
8. Verdile VP, Paris PM, Stewart RD, Verdile LA. Emergency department telephone advice. Ann Emerg Med 1989;18:278-82.
9. Aitken ME, Carey MJ, Kool B. Telephone advice about an infant given by after-hours clinics and emergency departments. New Zealand Med J 1995;108:315-7.

(Accepted: 27 February 1998)