Commentary

Help – we need a helpline! A public health audit case study

Gwendolyn Lowe, Meirion R. Evans and Paulette Myers

Summary

Multi-disciplinary public health audit involving whole departments is often perceived as difficult to carry out in areas other than the annual report of the Director of Public Health. This paper describes the audit of an emergency telephone helpline set up during a meningococcal disease outbreak and provides standards that could be applied to any emergency helpline set up in response to issues of public health concern.

Keywords: audit, hotlines, emergencies, disease outbreaks

Introduction

There is currently a requirement for departments of public health to demonstrate involvement in internal audit,¹ and examples based on one region’s approach have been published.² In particular, involvement of the whole public health department has been stressed. In the era of clinical governance, the pressure to demonstrate active participation is likely to increase for all public health physicians. However, it is often extremely difficult to find suitable topics for audit because much of the work undertaken in public health departments is not repeated, so the audit cycle cannot be completed. This means that communicable disease issues and the annual report are regularly audited, but other potential topics are seldom considered.

The setting up of an emergency telephone helpline is a relatively rare undertaking in any department of public health, but one in which most departments will participate at some time. In fact, because of the unpredictable nature of public health incidents, some departments may need to set up a helpline more than once within a short space of time with little advance warning. For example, one department set up a helpline following media disclosure of cases of HIV-infected doctors twice within 2 years.³

We report on the audit of an emergency telephone helpline and propose a set of standards for telephone helplines based on our findings.

Background

A high-profile meningococcal disease outbreak occurred in the Pontypridd area of south Wales during February 1999, in which cases were clustered in several schools.⁴ Three people died: a 16-year-old schoolboy, a teacher at another school and a retired woman living in the community. Understandably, this resulted in intense public anxiety and national media attention, and the public health department was overwhelmed with calls.

A dedicated helpline was therefore set up, with five lines staffed by non-medical volunteers from the Health Authority, supervised by a public health physician at all times. Staff involved included nurses, research workers and service development officers. After the first 24 h of operation, structured forms were provided for recording calls. The helpline operated for 12 days and cost an estimated £10 700 in staff time (including medical support staff). Extra telephone lines were made available by diverting existing telephone extensions via the health authority switchboard. A total of 1825 calls were documented, although this is a considerable underestimate, as many straightforward calls were not recorded because staff were working under intense pressure.

Methods

Standards were set retrospectively after the helpline had closed. A search of Medline from 1966 to April 1999 using the MeSH terms ‘telephone’, ‘hotlines’, ‘emergencies’, ‘disease outbreaks’ and ‘disaster planning’ identified one paper on how to run an emergency medical helpline.⁴ It failed to locate any standards for emergency telephone helplines against which we could audit our performance. An Internet search also failed to locate suitable external standards.

Internal standards were therefore developed from an extensive debriefing of all the staff who had taken calls on the helpline. They were asked to identify the major problems encountered and to provide suggestions on ways in which the

Faculty of Public Health Medicine 2000
Printed in Great Britain

Public Health Directorate, Bro Taf Health Authority, Temple of Peace and Health, Cathays Park, Cardiff CF10 3NW.
Gwendolyn Lowe, Specialist Registrar in Public Health Medicine
Meirion R. Evans, Consultant in Communicable Disease Control
Paulette Myers, Consultant in Public Health Medicine
Address correspondence to Dr M. R. Evans.
© Faculty of Public Health Medicine 2000
operation of the helpline could be improved. These were formalized into a set of standards agreed by all the staff involved.

An informal audit of the quality of record-keeping was also conducted. Of the 1825 documented calls, 100 were chosen for detailed analysis. Twenty records were randomly selected from each of the second to fifth days of the incident (when several hundred calls were received daily) plus 20 records comprising all calls on three of the remaining 7 days (when between two and 36 calls a day were being taken). All calls taken on the first day (before the structured record form was available and the helpline was functioning smoothly) were excluded. This method ensured that a reasonable selection of days and different call-takers were represented. Records were analysed for completeness of data including caller’s name and telephone number, time and date of call, details of call, action taken and name of the call-taker. As a sizeable minority of callers were hostile or abusive, requesting callers’ numbers was not appropriate for all calls. Suitability of advice given was assessed subjectively by one of the authors (G.L.). The data were used to develop a set of standards for record-keeping.

Serendipitously, the helpline was set up again briefly in May 1999 in response to another school cluster of meningococcal disease and we were able to re-audit performance against the telephone helpline standards we had developed. A total of 63 calls were received and all the records were audited for completeness. The standard of practice was assessed by inspecting the helpline room during the incident to check that specific requirements were met and by debriefing those who assisted on the helpline.

Results

Audit of telephone call records

The audit of call records showed that the subject of the call was always noted and that advice given was accurate but details of the caller and of the action taken were frequently omitted (Table 1). On the basis of these data, standards for the percentage of calls to be recorded were proposed (Table 2). The standard form for recording calls was refined (Figure 1) and more tick boxes were included to help reduce the time taken to complete documentation of uncomplicated calls.

Table 2 Standards of good practice established following audit of an emergency helpline

<table>
<thead>
<tr>
<th>Record-keeping</th>
<th>Training</th>
<th>Briefing</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% of calls will be documented using a standard form</td>
<td>All staff should have a formal training session from a designated person before working on the helpline</td>
<td>All staff on the helpline should be formally updated on the situation at least three times daily</td>
</tr>
<tr>
<td>90% of records will be complete with respect to the date and time of call, type of enquiry and name of the call-taker</td>
<td>Training should include emphasis on accurate record-keeping, strategies for dealing with difficult callers, standard answers to common enquiries, and guidance on when to refer a call on</td>
<td>A designated person should be responsible for each day’s briefings</td>
</tr>
<tr>
<td></td>
<td>A mock helpline exercise should be conducted every 18 months</td>
<td>Copies of all disseminated public information (e.g. press releases) should be given to each helpline operator before it is issued</td>
</tr>
<tr>
<td></td>
<td></td>
<td>An information pack should be available at each telephone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A briefing board with key information (e.g. status of cases) should be kept in the helpline office as well as in the incident control room, and both should be updated simultaneously</td>
</tr>
</tbody>
</table>

n.a., not applicable.

Standards of good practice

Staff debriefing identified a number of issues that were considered to warrant improvement. These included mainly issues of staff training, briefing and supervision. Together with the set of standards for record-keeping developed from the audit of call records, these were developed into a set of standards against which future helpline performance could be evaluated (Table 2). Standards for confidentiality were considered but felt by staff to be unnecessary, as they were already bound by rules of confidentiality. Standards for shift duration were considered inappropriate in a public health emergency.

Re-audit

Re-audit showed that all the standards for good practice had been met and all calls (as far as we could ascertain) had been documented. Record-keeping was much improved, with each individual data item being 90 per cent or more complete. All four required items were complete on 84 per cent of the forms. Two further standards were developed as a result of the re-audit: (1) the person in charge of the incident should formally designate the person responsible for setting up the helpline and
for carrying out staff briefing; and (2) simple instructions on how to set up the helpline should be included as an appendix to the health authority’s major incident plan.

**Discussion**

Guidance on running an emergency medical helpline has been published previously, but there are no generally accepted standards for such helplines. We developed a set of local standards through a process of audit and staff debriefing of an emergency helpline set up in response to an outbreak of meningococcal disease. Inevitably, the method by which the standards were developed means that they contain an element of subjectivity. The calls recorded were a selected sample (usually the more unusual or difficult calls), which may have introduced bias when assessing percentage completeness of data items such as the caller’s details. However, when tested in a subsequent incident the standards were found to be robust. Although the standards were drawn up in response to an outbreak of communicable disease, the basic principles should be equally appropriate for emergency helplines set up in response to a variety of public health incidents. We therefore suggest a set of 10 standards for general use (Table 3). The standards fall into three main categories – training issues, briefing issues and record-keeping – and the rationale behind these is worth examining more closely.

The importance of a brief training session before working on the helpline was a lesson we learnt halfway through the incident. Such a session obviously needs to be tailored to the situation and to the background of the staff. It should make explicit to those involved what is expected of them, for example in terms of record-keeping and confidentiality, and provide

---

**Table 3**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Train staff</td>
<td>Ensure they understand their roles</td>
</tr>
<tr>
<td>2. Brief staff</td>
<td>Prepare them for the incident</td>
</tr>
<tr>
<td>3. Keep records</td>
<td>Maintain an accurate record of all interactions</td>
</tr>
<tr>
<td>4. Ensure confidentiality</td>
<td>Protect the privacy of all participants</td>
</tr>
<tr>
<td>5. Follow up</td>
<td>Follow up with callers as necessary</td>
</tr>
<tr>
<td>6. Review</td>
<td>Regularly review the effectiveness of the helpline</td>
</tr>
</tbody>
</table>

**Figure 1** Standard form used for recording telephone calls to emergency helpline, Bro Taf Health Authority, February 1999.
Table 3 Ten standards of good practice for an emergency telephone helpline set up to deal with a public health incident

1. A simple written protocol should exist on how to set up the helpline.
2. One named individual should have responsibility for briefing helpline staff.
3. All staff should have a formal training session before working on the helpline.
4. Helpline staff should be updated several times daily on the evolving situation.
5. All information disseminated to health professionals, the media or the public should be made available to helpline staff before release.
6. A basic information pack should be available for each helpline operator (possibly attached to each phone).
7. An up-to-date briefing board should be available in the same room.
8. A standard call record form should be used and at least 90% of calls received should be documented.
9. Data recorded on calls should be at least 90% complete with respect to date and time of call, type of enquiry and name of caller/taker.
10. A debriefing session should occur after the incident has finished.

Guidance on dealing with difficult situations. Frequent briefing is also vital, and lack of up-to-date information was the most common complaint of the helpline operators. Briefing may need to be carried out in two sessions so that the lines remain continually staffed. In a rapidly changing major incident, briefing is required several times a day. Not only may the situation change rapidly, but major news bulletins (which often contain inaccurate information) may result in a surge of calls demanding clarification of what was heard. A copy of all material issued, such as press releases or updates for general practitioners (GPs), needs to be given simultaneously to helpline operators, as specific queries inevitably follow. In addition, a noticeboard with important information clearly displayed is essential, so that operators can immediately confirm or correct statements made by callers. If they have to leave the phone to check, this undermines the caller’s confidence in the credibility of the service. Attaching general information to the phone so it is not easily removed can also be helpful. In our case such information included a description of the signs and symptoms of meningococcal disease.

It is vital for the person in overall control of the incident to designate one named individual closely involved with the situation to be responsible for briefing and training. If no one individual is designated, then briefing of the helpline staff tends to be overlooked. Debriefing of staff after the incident is also important. This can incorporate a formal audit of the helpline against a set of standards such as those we propose (Table 3).

Standards for record-keeping are easy to set, but it is extremely important that staff are aware of why good documentation is important. The number of calls received can be used to assess the level of public concern about the situation, and press releases can be tailored to address specific issues raised. We found that records of calls were a valuable source of information about delayed adverse reactions to the vaccine and antibiotic programmes carried out as outbreak control measures. This information was provided by GPs calling the helpline as well as by parents of the children involved. Others have found data from helplines to be a useful starting point in epidemiological investigation even though callers are likely to be a biased, self-selected sample.

A local protocol giving simple written instructions on how to set up an emergency helpline is crucial, as staff with this knowledge may be unavailable at the time of an incident. Such instructions can be included as an appendix to outbreak and major incident plans, along with the standards of good practice and record-keeping.

Conclusions

Audit of the performance of an emergency telephone helpline is simple to carry out, relatively quick, and can result in improvements to the service offered on a subsequent occasion. It also has the advantage of being a multi-disciplinary audit, involving non-medical public health staff from both within and outside the department. Audit can also decrease the stress on those staffing the lines, as they feel able to demand the support and resources they need by using the standards set to justify such requests.

Acknowledgements

We are indebted to the many individuals who volunteered to staff the helplines at some very difficult times, and who were positive, helpful and honest during this audit. We would also like to thank Mrs Mary Clissold, who designed the standard form.

References


Accepted on 7 October 1999