Pre-recorded answerphone messages: influence on patients' feelings and behaviour in out of hours requests for visits

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SUMMARY. The aim of this qualitative study was to investigate the feelings and behaviour of patients requesting out of hours visits on hearing pre-recorded answerphone messages. Actual messages which had been recorded were classified by a group of four people. Examples of each type of message were then played to a second group, of six people, who expressed their feelings about the varying messages. A third group, of 10 people, was asked to invent hypothetical emergency situations of increasing severity. For each of the emergency situations their proposed actions on hearing the different types of answerphone message were recorded. The results showed that people preferred short messages telling them what to do in an emergency and the time of the next surgery. They also felt that the message should be recorded by a doctor and not a receptionist and be delivered in a 'neutral' tone. Proposed actions were not influenced by the content of the message or the person recording the message. The most important factor in deciding which action to take was the tone of the message. A 'strict' rather than a 'neutral' tone tended to discourage patients from calling out their doctor and was more likely to lead to inappropriate responses.

It is suggested that answerphone messages recorded by the doctor, stating what to do in an emergency and the time of the next surgery, delivered in a neutral rather than a strict tone, will lead to the most appropriate responses from patients.

Keywords: telephone techniques; audiotape recordings; patient information; out of hours; communication skills.

Introduction

THE telephone has been used in diagnostic medicine for over 100 years.[1] However, relatively little has been written of its use in primary care. Studies which have been published have largely concerned experience outside the United Kingdom, and mainly cover the volume and availability of telephone calls.[2] Literature on the use of the telephone in managing out of hours calls has largely reported on direct doctor–patient contacts, and the appropriateness of out of hours calls.[3-5]

Many practices use a pre-recorded answerphone message as their first point of contact for patients requiring out of hours visits. This study aimed to establish the variety of messages recorded by practices and to classify them. It also aimed to assess the influence of the answerphone message on the subsequent action of patients, and to assess patients' feelings on hearing the message.

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Method

Selection and classification of messages

The telephone numbers of general practices listed in the Manchester yellow pages directory were used. The practices were telephoned out of hours and the first 50 consecutive messages recorded using an answering machine. The names of the doctors on the messages were subsequently erased from the recording to ensure anonymity. In order to classify the 50 messages a group of four lay people was asked to listen to the first 20 messages and to classify them in whichever way they felt appropriate. The four people were selected as being articulate and able to assert their own opinions. They formed their classification of types of message after discussion without the author being present. The remaining 30 calls were then fitted into the classification by the author.

Investigation of peoples' feelings about types of message

A group of six people was asked to consider a representative message from each of the classification groups. These people were selected from practice patients to produce a diversity in terms of age, sex and ethnic origin. Only messages recorded by receptionists were selected in this part of the study as it was felt the doctors' voices might be recognized.

All the messages were played at the start of the discussion without comment. Each message was then played in turn a second time with specific discussion of each message. The group was asked to comment generally on what they liked and disliked about each message, what they felt about each message, and what they thought they would do in an unspecified 'emergency' situation after hearing each message. Throughout the discussion opinions and feelings from each member were sought with an attempt made to elicit each individual's unbiased view. The discussion was recorded for analysis later.

Investigation of peoples' proposed actions

Another group, of 10 people, was asked to meet on two separate occasions. Again the group was made up of practice patients, selected to provide a diversity in terms of age, sex and ethnic origin. At their first meeting they considered what they thought constituted medical emergencies. They then created three situations of increasing severity.

The least severe scenario was of an elderly relative visiting for the weekend. Late in the evening the relative developed symptoms of cough, headache, aching limbs and high temperature. A moderately severe scenario was of a child who in the middle of the night developed acute stomach pain, vomiting and high temperature. The child, although obviously distressed, was unable to describe clearly what was wrong with her. The most severe scenario was of a five year old asthmatic child who had been slightly wheezy through the day, but woke in the early hours of the morning extremely breathless, wheezing and unresponsive to his usual inhalers. To avoid bias the author was not present at this discussion.

For the second meeting an example of each of the types of message was recorded by a female receptionist and a male doctor, unknown to members of the group. At that meeting the group

was asked to write down, without discussion, what they thought their actions would be in each of their invented situations, in response to each of the recorded messages. They were given a choice of four actions: to wait until the next surgery, to pursue the call in order to contact a general practitioner, to dial 999 for an ambulance or to go to the nearest accident and emergency department. The order of the recorded messages was randomized by drawing lots.

Results

Variety and classification of messages

To obtain 50 recorded messages 72 practices were telephoned. The first group classified the messages by content, tone and speaker.

Content. The group identified three types of message which told patients: what to do in an emergency and no other instruction; what to do in an emergency and the time of the next available surgery; what to do, using a more complex message including the elements of the previous type of message.

Tone. This was recognized by the group as more difficult to classify, and a much more subjective concept. However the group perceived messages to be either 'neutral' or 'strict'. There were no encouraging messages.

Speaker. The messages were recorded by a receptionist (invariably a woman) or by a doctor. The group discussed the difficulty of differentiating between receptionists and women doctors, but felt they could make a confident distinction by the accent and manner of the speaker.

All messages were then classified (Table 1). Thirty three were recorded by receptionists and 17 by doctors. Twenty eight messages gave instruction on what to do in an emergency only, in a neutral tone (19 of these were recordings by receptionists). A further five gave this message but in a strict tone (three of these were recordings by receptionists). Fourteen messages gave instruction on what to do in an emergency and the time of the next available surgery (eight were recordings by receptionists); all 14 were of neutral tone. Three messages were more complex and were all recorded by receptionists in a neutral tone.

Feelings about the different messages

Following the classification of the messages the second group, of six patients, heard one message from each of the four categories shown on Table 1:

- A simple instruction on what to do in an emergency, giving another telephone number.
- A simple instruction on what to do in an emergency, accompanied by the time of the next surgery.
- A more complex message giving different telephone numbers to ring at various times with various doctors 'on call'.
- A simple instruction on what to do in an emergency but in a strict tone.

Analysis of the recorded discussion revealed that the group expressed a general preference for messages that were clear and distinct, informal, concise, pleasantly delivered, delivered in a variable pitch, confident and friendly. They particularly liked messages to be repeated (all of the examples were repeated). All the members of the group disliked messages that were described as slow, drawn out, delivered in a flat intonation, formal, delivered in a 'speaking clock' voice, complicated or patronizing. They all preferred to hear their own doctor's voice as it made them feel better and gave them confidence. They felt it was more personal and thought it an advantage to be able to visualize the face attached to the voice.

Table 1. Classification of the 50 answerphone messages according to content and speaker.

	No. of answerphone messages by content			
Speaker	What to do in an emergency	What to do in an emergency and time of next surgery	More complex message	Total
Receptionist	22[a]	8	3	33
Doctor	11[b]	6	0	17
Total	33	14	3	50

[a]Three of these were delivered in a strict tone. [b]Two in a strict tone.

The first message — what to do in an emergency — was described by four of the six members of the group as giving confidence but made the remaining two anxious about who would be on the other telephone number that was given. One worried that it might be yet another answerphone. Four of the patients would pursue the call but two thought they may simply dial 999. No one was likely to wait until the next surgery having made the initial decision to telephone.

All the members of the group felt confident about and reassured by the second message — what to do in an emergency plus the time of the next surgery. They thought they would be more likely to wait until the next surgery than on hearing the first message, but it would not put them off pursuing the call if necessary. All thought it no more or less likely that they would dial 999.

Five members of the group said they were made to feel confused, anxious and frustrated by the more complex message. One woman thought she would panic if very ill. Four thought they would be more likely to replace the receiver and dial 999 than on hearing the previous message. They were also more likely to wait until the next surgery if their problem was not an emergency. One of the group said he would ring the first number he heard rather than wait for the whole message. Two patients welcomed the extra information.

The simple instruction on what to do in an emergency but delivered in a strict tone made two patients feel disappointed, but four felt patronized. 'Am I wasting my time?', was a comment that all agreed with. Two thought it would make them feel guilty about pursuing the call, and wondered if they would get 'told off'. All agreed that they would be more likely to wait until morning and less likely to dial 999 than on hearing the other messages as the instruction was to pursue the call only in real emergencies.

Actions resulting from the messages

The actions the 10 people in the third group said they would take, in each of the three scenarios of emergency situations, on hearing the four different messages recorded by both receptionist and doctor (eight messages in all) are summarized in Table 2. Responses to each scenario seemed fairly consistent except for the message recorded in a strict tone. In the least severe scenario, for the first three messages most patients said they would pursue the call but a minority would wait until the next surgery. In the moderate and severe scenarios most said they would pursue the call but one or two said they would dial 999. The strict tone produced a wider range of proposed actions. In the least severe scenario nearly as many patients would wait until the next surgery as would pursue the call, but one or two would dial 999.

Table 2. Actions that would be taken by the 10 patients in each emergency scenario following each type of message.

Message/recorder	No. of patients taking action, by severity of emergency situation											
	Least severe				Moderately severe				Severe			
	Wait[a]	Pursue call	Dial 999	A&E[b]	Wait	Pursue call	Dial 999	A&E	Wait	Pursue call	Dial 999	A&E
What to do in an emergency												
Receptionist	4	6	0	0	0	9	1	0	0	8	2	0
Doctor	2	8	0	0	0	10	0	0	0	8	2	0
What to do in an emergency and time of next surgery												
Receptionist	2	8	0	0	0	8	2	0	0	8	2	0
Doctor	4	6	0	0	0	9	1	0	0	8	2	0
Complex message												
Receptionist	3	7	0	0	0	8	2	0	0	8	2	0
Doctor	4	6	0	0	0	8	2	0	0	8	2	0
What to do in an emergency delivered in a strict tone												
Receptionist	5	3	2	0	0	7	3	0	2	4	3	1
Doctor	4	5	1	0	0	9	1	0	1	5	3	1

[a]Wait until next surgery. [b]Go to the nearest accident and emergency department.

In the severe scenario there was a wide spread of actions including one or two patients who would wait until the next surgery. Overall the message in the strict tone led to fewer calls being pursued. Comparing the responses to the message 'What to do in an emergency' delivered in a neutral and strict tone showed that in 49 cases callers would pursue the call on hearing the message in the neutral tone compared with 33 cases for callers hearing the message in the strict tone (Table 2). Thus the chance of the call being pursued was 48% higher for the message delivered in a neutral tone compared with the message delivered in a strict tone.

It was assumed that the appropriate action to the least severe emergency scenario would be to wait until the next surgery, and that the other two scenarios should have led to a request for the general practitioner to visit. It can be seen that the message 'What to do in an emergency' delivered in a neutral tone led to 41 appropriate actions being taken and 19 inappropriate actions compared with 34 appropriate actions and 26 inappropriate actions when the message was delivered in a strict tone (Table 2). Thus, the chance of an inappropriate action was 37% higher when the message was delivered in a strict tone. Extremely inappropriate actions would be to dial 999 in the least severe emergency scenario, and to wait until the next surgery in the most serious scenario. The message 'What to do in an emergency' delivered in a strict tone led to six extremely inappropriate responses. However, there were no extremely inappropriate responses to the same message delivered in a neutral tone.

Discussion

The contractual requirement for availability is quite specific for general practitioners.[6] However, the criteria for accessibility, particularly out of hours, are less clear. No guidelines exist about how doctors should be contacted out of hours, or how telephones should be used. This study showed that in the Manchester area, about two thirds of practices use a message recorded on an answerphone to tell patients what to do if a doctor is needed out of hours. It is therefore important that an appropriate message is placed on the answerphone.

The results of this study indicate that patients have a preference for short and clear instructions, and particularly for the message to be recorded by a doctor, and to be repeated. Complicated messages or those that were given in a strict tone were disliked.

Patients' actions did not seem to be influenced by whether the message was recorded by a doctor or a receptionist, or by the content of the message. However, a message delivered in a strict tone led to fewer calls being pursued and to a greater number of inappropriate actions being taken. Thus, the message delivered in a strict tone could lead to dangerous outcomes.

This investigation was a qualitative study, and therefore sought to establish what factors may influence patients' feelings and actions. It did not seek to quantify those factors. In classifying the calls a small group of people was used, and therefore individual idiosyncracies may have influenced the classification. However, the ease with which the remaining 30 messages fitted the classification suggests that it was reasonable.

When examining the feelings engendered by the types of message, another small group of people was used. It is therefore possible that this group responded atypically. However, every attempt was made to draw out genuine feelings and this is supported by the range of views expressed. These views cannot be quantified but gave a good impression of how the group felt. It would seem likely that the type of views expressed would be reproduced with a larger sample of people, and are reasonable expressions of feelings towards the messages.

When considering which actions the patients reported they would take in the event of an emergency, it must be remembered that these were not real life scenarios or real life responses. However, an attempt was made to create realistic emergency situations, by asking the third group to invent their own scenarios. Proposed actions were then recorded at a second meeting and without discussion among the group. Inferences from this phase of the investigation must be made with caution, but it seems reasonable to suggest that the results are likely to reflect the actual outcome. An investigation of actual actions on hearing actual messages would give more reliable information, but would be considerably more difficult to carry out.

This qualitative study supports the proposition that the message on answerphones does influence patients' feelings and behaviour. A strict tone seems likely to reduce the number of calls made to doctors and may lead to inappropriate actions,

some of which may have dangerous outcomes. It is suggested that messages should be recorded by the doctor. Instructions on what to do in an emergency and the time of the next surgery should be given, and messages should be repeated. The tone of the message should be neutral rather than strict.

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