

EMERGENCY COMMUNICATION WITH THE DEAF COMMUNITY

RESEARCH REPORT

AUGUST 2002

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EXECUTIVE SUMMARY

METHODOLOGY & KEY AIM

- The research consisted of both qualitative and quantitative approaches.
- In the qualitative research, a total of 15 depth interviews were conducted via text phone with those who had taken part in the Deaf Watch Project. An additional 6 depth interviews were carried out face to face with potential influencers at a strategic level.
- The 'quantitative' research consisted of 29 self-completion questionnaires (52 distributed – 56% response).
- The key aim of the project was to assess the effectiveness of 'Exercise Deaf Watch' in conveying emergency information to the deaf community.

Overview Summary

- Qualitative and quantitative findings from members of the deaf community have been considered in conjunction to enable a detailed analysis of the 'Deaf Watch' exercise. Potential influencers' qualitative findings are discussed separately. Any incidences where numbers are detailed relate to the findings of the self-completion survey.

Deaf Community Summary

- Various modes of delivery were used to transmit the emergency message to the 52 respondents who agreed to participate in the 'Deaf Watch' pilot of which 29 responded:
 - Fax machine (15 received)
 - SMS text (7 received)
 - E-mail (7 received)
 - Ceefax (6 received)
- Out of 29 respondents, 16 currently had textphones. Opinion was split in terms of whether text phones provided a sufficient system in the case of an emergency.
- The majority of respondents recalled receiving one message on the morning of Tuesday 16th April 2002.
- The perceived fastest modes of delivery were the mobile and the fax and e-mail was highlighted as the slowest medium due to one e-mail recipient not checking their Inbox until 20.22pm.
- There were some concerns raised in terms of accessing messages, for example, if mobile or PC were switched off then respondent could miss message or the fax could run out of paper.



- For majority, the key content of the message transmitted was 'Water Pollution'. One respondent recalled 'bottled water' to be provided to those who needed special help from Ceefax message.
- Essentially, the majority of respondents considered the message easy to understand. The fax machine was perceived to be the easiest method of use amongst self-completion respondents. In contrast, depth respondents preferred mode of delivery was Mobile SMS text.
- Over half of respondents (16) indicated that if it were a 'Real Life' emergency they would take action straight away, with a further five respondents taking action within a few hours of receiving a message.
- The majority of respondents indicated that if they were at a distance from their personal sources of information when an emergency situation occurred, they would rely upon SMS text messages to overcome barrier if not at home.
- Perceived barriers to the system were:
 - limited access / ownership of technology
 - cost of equipment (minority)
- Overall, the general perception was that the system now in place was a lot better than it used to be because it was more accessible and a lot faster.

Potential Influencers Summary

- Overall 'Deaf Watch' was positively received, weaknesses were identified but new methods / approaches were welcomed.
- An extensive range of methods were already utilised to communicate with the deaf community.
- There were key concerns raised amongst respondents with regard to monetary and personnel resources (from both a user and provider perspective).
- A single strategy multi-agency approach was welcomed – all parties were keen to be involved and suggested the deaf community should also participate.
- Both Media and Public Services were willing to co-operate – it was felt it should be possible for corporate sector to also be involved to share best practice.
- Overall, a system needs to be in place which is proactive rather than reactive.



Dry Run Exercise Summary

- On Thursday 18th April 2002, a fictional emergency situation was constructed and the details were delivered to the Press Office at GGNHSB. The main aim of this dry run exercise was to evaluate the emergency communication process with deaf community and to achieve a live transmission as quickly as possible.
- On this occasion the technology successfully transmitted the message. Within, 8 minutes of receiving the warning, the communication department drafted a message and sent it to Michael Davis to assess legibility, 9 minutes later the message was e-mailed to BBC.
- A few minor technical problems arose: difficulty accessing a PC and a 'firewall' problem between GGNHSB and BBC delayed transmission by a further two minutes.
- These problems were overcome quickly and the warning message was transmitted successfully onto Ceefax thirty two minutes after the Press Office were initially warned.



1. INTRODUCTION AND BACKGROUND

1.1 Introduction

- Market Research UK was commissioned by Greater Glasgow NHS Board (GGNHSB) to carry out research in order to assess the effectiveness of 'Exercise Deaf Watch' in conveying emergency information to the deaf community.
- In this report we have outlined the background and objectives to the research, the methodology used and the findings from both the qualitative and quantitative research.

1.2 Background

- Following the Burncrooks water pollution incident in Glasgow, it became apparent that immediate information passed on radio broadcasts was not being received by the deaf and hard of hearing community. This was considered to be a potentially serious omission in the communication chain.
- A working party was established under the Greater Glasgow NHS Board Emergency Planning Office to investigate ways in which this shortfall could be overcome. Considerable research was carried out resulting in the proposed scheme, which essentially involves directing deaf people by SMS text message, Fax or E-mail to a specific Ceefax page. An initial trial indicated that the system was viable but flawed due to a BT main server fault.
- The second trial has the support of GGNHSB, Glasgow City Council and BBC Scotland, and involved a fictional water supply incident.
- Different levels of messages were communicated via the various routes and part of the research was to assess the level of knowledge gained (as well as ask deaf participants which routes they used).
- For example, SMS text messaging had a simple message; e-mail and fax messages contained slightly greater detail, while Ceefax detailed all the relevant information and action to take.



2. RESEARCH AIMS & OBJECTIVES

2.1 Overall Research Aim

- To assess the effectiveness of “Exercise Deaf Watch” in conveying emergency information to the deaf community.

2.2 Specific Research Objectives

- The messages:
 - do the messages reach the target group?
 - are the messages understandable (assess readability, content)?
 - do the messages result in the required action / response?
- The technology:
 - does the technology work?
 - what are the hazards?
 - how are the messages developed to be Ceefax compatible?
 - how easy is it to translate messages onto textmessaging, Ceefax, etc.
 - what is the timescale for achieving a Ceefax message?
 - what problems are encountered and how could these be overcome?
 - is the procedure sustainable?
 - how do agencies ensure a suitable level of readability?
- The process:
 - to what extent do the target group make use of the system for these purposes?
 - how accessible is the system?
 - how well did the pathway through the system work for recipients?
 - what is the time taken for recipients to receive messages in different formats?
 - how well did the various methods of communication compare with each other?
 - what are the barriers to using the system?
 - in an emergency situation where participants were at a distance from their personal sources of information, what strategies would participants employ to access information as quickly as possible?

2.3 Research Target

- There were two key target audiences for this research, this included people in the deaf or hard of hearing community and potential influencers who were currently involved with this community.
- A list of potential respondents (52) was supplied to Market Research UK by Greater Glasgow NHS Board of people within the deaf community who had agreed to take part in the ‘Deaf Watch’ pilot. In addition, contact details were supplied for the interviews with potential influencers.

3. RESEARCH METHODOLOGY

- The research consisted of both qualitative and quantitative approaches (run in parallel).

3.1 Qualitative Methodology

- A total of 15 text phone interviews were conducted (target – 20, potential text phone users – 23).
- Six depth interviews (face to face) conducted with potential influencers.
- All respondents were drawn from the list provided by GGNHSB. A warning letter was sent to all relevant respondents prior to fieldwork commencing.
- Market Research UK designed the topic guide with client input, comment and approval prior to the interviews being conducted. Each interview was conducted by an Executive following the pre-agreed topic guide.

3.2 Quantitative Methodology

- A total of 52 self-completion questionnaires were distributed – 29 questionnaires returned (56% response).
- The self-completion questionnaire was designed by Market Research UK with client comment and approval prior to distribution. In particular, the questionnaire was checked for legibility.
- Fieldwork was conducted between 17th April to 17th May 2002.
- All results were analysed using SPSS for Windows software, the industry standard package.

3.3 Observation

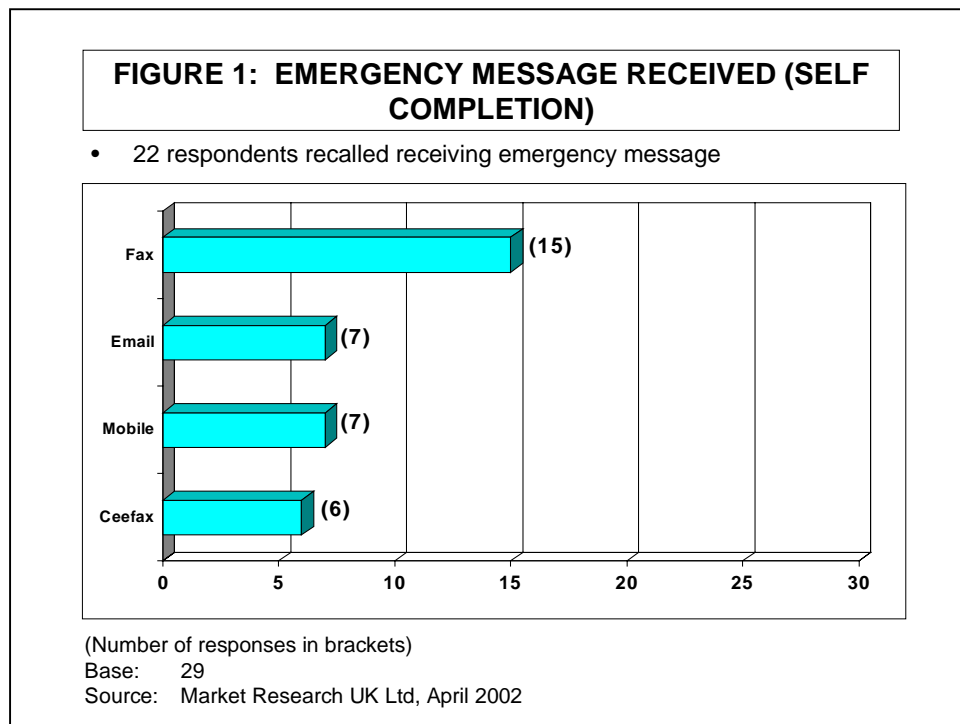
- A Project Executive observed first hand the steps taken by the Emergency Planning Press Office at GGNHSB when faced with a fictitious scenario of water pollution. Observations from this aspect have been incorporated in this report.



4. RESEARCH FINDINGS – DEAF COMMUNITY

4.1 Message Received

- The majority of respondents recalled receiving a letter from Greater Glasgow NHS Board explaining the background to the project (23 of 29). In addition, a high number recalled the recent emergency message (22 of 29), most of these respondents (17) thought they received one emergency message from GGNHSB. This finding was also supported by the qualitative research where the majority recalled receiving one message.
- The majority of respondents recalled that they received an emergency message on Tuesday 16th April 2002, this was concurrent across all communication methods.



- The most quoted method of receiving the emergency message amongst postal respondents was the fax (15), other common methods were SMS text (7) and e-mail (7). Similarly, a small minority of depth respondents recalled receiving the message via the fax and most commonly recalled mode of delivery included e-mail and SMS text. Some of these results are quite disappointing given that all 29 respondents should have received a message through all available mediums to them.
- Although, a high level of respondents stated they received the message in the morning, the time the message was initially received ranged from 08:20 to 20:22. An e-mail recipient recalled the latter. Accessibility has been highlighted as an issue here, this will be discussed further in Section 4.5.

Figure 2: Time Initially Received Message (Self Completion Summary)

COMMUNICATION METHOD				
	Fax	Mobile	Email	Ceefax
AM	-	08:20	-	-
	09:15	09:20	-	-
	09:20	09:22	-	-
	09:27	-	09:27	-
	09:30 (x4)	09:32	-	09:40
	10:00	-	10:01	10:05
	11:30	-	11:24	-
PM	12:00	-	-	-
	-	14:00	14:00	-
	17:21	-	17:25	17:30 (x2)
	-	-	20:22	-
	11 out of 15	5 out of 7	6 out of 7	4 out of 6

Source: Market Research UK Ltd April 2002

- As well as a few non-responses, there were two incidences where respondents recalled Monday 15th April as the date initially received message and one Ceefax recipient looked up the message 24 hours after it was originally sent.

4.2 Perceived Content of Message

- Of those respondents who recalled the recent emergency message, 17 (in self completion research) correctly identified 'water pollution' as the main area of content in the fictional water supply incident. This corresponds with the majority of depth respondents, who also recalled a 'water problem'.
- Depth respondents also spontaneously recalled 'dirty water', 'burst water main' or that the 'water was unsafe' to drink. A minority also recalled:
 - *Alberton water alert*
 - *boil water first before drinking*
 - *more information available in Ceefax*
- Amongst depth respondents there was no spontaneous recall of bottled water being available, as most had not checked Ceefax. However, we had good reason to believe that Ceefax would have been checked by most had they thought it was a real incident (see Section 4.4). One respondents (self completion) recalled 'bottled water' would be provided to those who needed special help.
- Different levels of messages were communicated via the various routes. The following warnings overleaf were transmitted on Tuesday 16th April 2002.



SMS Text Message

- SMS text messaging had a simple message format:

“TEST – DEAF ALERT – WATER PROBLEM IN ALBERTON, BOIL ALL WATER – CHECK E-MAIL, FAX OR CEEFAX PAGE 179”

E-mail/Fax Message

- E-mail and fax messages contained slightly greater detail:

“There has been an accident at Riverburn Water Treatment Works and as a result, the water in Alberton has been slightly polluted.

All water must be boiled before being used for drinking, food preparation and washing. Water may be used normally for flushing toilets.

NO OTHER AREAS HAVE BEEN AFFECTED.

See more details on Ceefax Page 179”

Ceefax Message

- Ceefax detailed all the relevant information and action to take:

“There has been an accident at Riverburn Water Treatment Works and as a result, the water in Alberton has been slightly polluted.

All water must be boiled before being used for drinking, food preparation and washing. Water may be used normally for flushing toilets.

Riverburn Council will provide water tanks at the corner of Plumbton Street and Gaston Street.

Riverburn Water will supply bottled water to people who need special help.

NO OTHER AREAS HAVE BEEN AFFECTED”.

- The following table illustrates the recalled message content across the different communication methods and highlights the level of knowledge gained depending on mode of delivery used in the self completion research.

Figure 3: Message Recalled

COMMUNICATION METHOD			
	Fax	Mobile	Email
Water Pollution	11	6	7
To boil water	7	2	3
Riverburn Water Treatment Works	6	-	3
Can flush toilets normally	5	-	3
Go to Ceefax for more details	3	3	3
Test Run / Deaf Alert	-	6	-
Alberton	-	2	-
No other areas affected	3	-	3
BASE (for each method)	15	7	7

Source: Market Research UK Ltd April 2002

- Based on the out-take of the Ceefax message, one respondent from the Ceefax recipients, specifically recalled that 'bottled water' would be provided to those who needed special help and a further two respondents considered a 'water tap' would be at corner of street.

4.3 Perceived Ease of Understanding Messages

- Overall, the majority of respondents in the depth and self-completion research considered the emergency message easy to understand if they recalled receiving it.

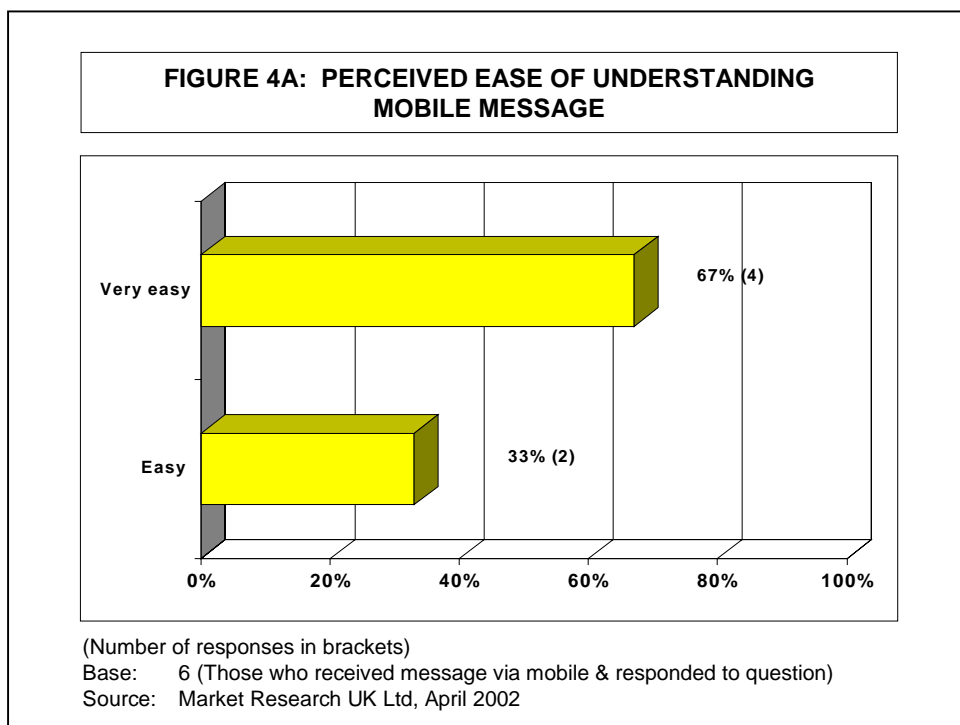
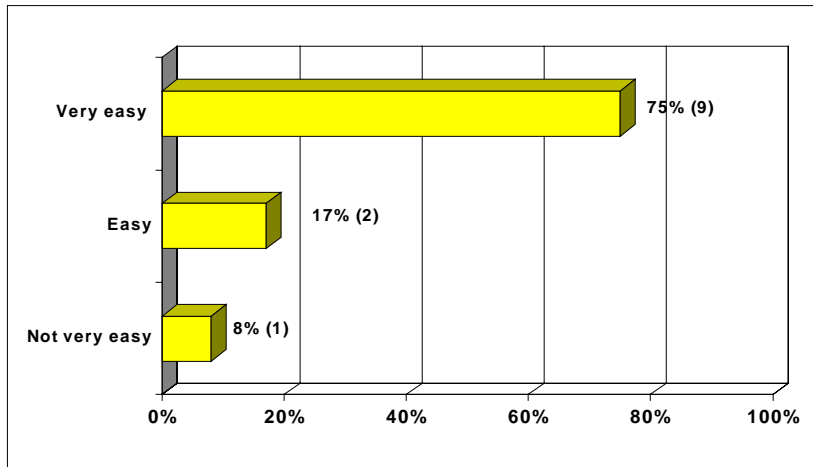


FIGURE 4B: PERCEIVED EASE OF UNDERSTANDING FAX MESSAGE

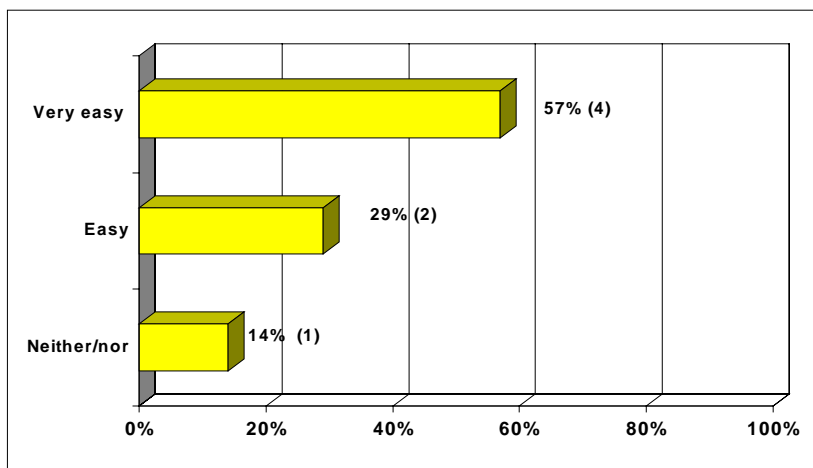


(Number of responses in brackets)

Base: 12 (Those who received message via fax & responded to question)

Source: Market Research UK Ltd, April 2002

FIGURE 4C: PERCEIVED EASE OF UNDERSTANDING E-MAIL MESSAGE

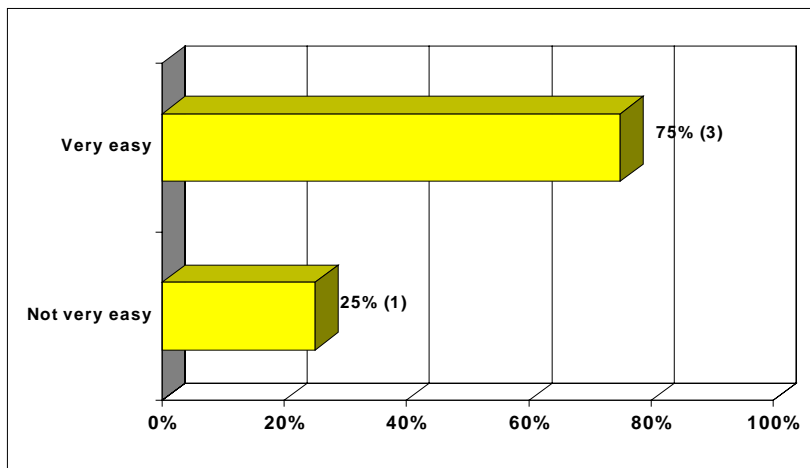


(Number of responses in brackets)

Base: 7 (Those who received message via e-mail & responded to question)

Source: Market Research UK Ltd, April 2002

**FIGURE 4D: PERCEIVED EASE OF UNDERSTANDING
CEEFAQ MESSAGE**



(Number of responses in brackets)

Base: 4 (Those who received message via Ceefax & responded to question)

Source: Market Research UK Ltd, April 2002

- The depth respondents were able to provide further comments regarding ease of understanding the messages, a selection of comments are listed below:
 - *'clear and concise'*
 - *'easy to read and take on board'*
 - *'language easy to understand'*
 - *'perceived to have a good knowledge of English'*
- Only a minority of comments were negative whereby a few felt some words were hard to understand. There was an expectation that ease of understanding would be dependent upon individual circumstances and the level of reading ability for individuals involved.

4.4 Required Action Taken as a Result of Emergency Messages

- After being alerted by the emergency message, only a small number of self-completion respondents (6) looked at the specified Ceefax page. The perceptions of content of the emergency Ceefax message included that 'an emergency situation was going on' (3), 'Deaf Watch' (2) and 'background to questionnaire' (2).
- It could be argued that the limited action taken was as a result of the fictional emergency, therefore respondents did not think it necessary to check Ceefax.
- The high level of respondents who said that if a 'real life' emergency had taken place they would have taken action 'straight away' (16) or in 'a few hours' (5) supports this viewpoint.

4.5 Attitude Towards Overall System

- The depth interviews provided detailed feedback regarding attitudes towards the system overall.
- In the past, the Deaf Community was perceived to have relied on TV and newspapers as a source of information. Fortunately, as technology has evolved a communication system has been created that all respondents perceived to be better and faster. The general consensus was that any message received was better than none.
- There were two key factors that respondents took into consideration with regard to their preferred method of communication, namely accessibility and ease of use.
- Mobile SMS text was the most commonly preferred method amongst depth respondents. Most stated that it was easy to use and accessible at home and at work. It was viewed positively as a source of information and was regarded as a step forward for the deaf community.
- Although text phones were considered accessible, a minority of respondents felt that they took too long and were time consuming as a means of communication.
- Respondents agreed that the fax was a direct and quick mode of delivery. However, a few did not have access to a fax thus it was not appropriate to some. It was mentioned that a fax machine could be provided by Social Work (no additional cost), however this may be dependent upon individual circumstances. A number of respondents also thought fax was good as it allowed them to forward the information to others and they could re-read it to check details contained.
- Most respondents stated that e-mail was easy to use although not all respondents were comfortable with it. Access was limited to those respondents that owned or had use of a PC (about half) and also needed to take into consideration how often the respondent checks their e-mail. Despite these negative perceptions, e-mail was now seen as being more acceptable than it has been in the past.
- The general consensus was that Ceefax was a tried, tested and trusted source. It was an accessible mode of delivery that provided up-to-date information. There were suggestions that the clarity of information could be improved. Also, some respondents would like to have more control over the Ceefax pages in order to speed them up. A minority mentioned the desire to have access to Ceefax at work too.
- Respondents agreed that it was vitally important to be kept informed, however, a few considered source of information to be dependent upon seriousness of issue. Therefore, if there was no urgency to relay the information then 'Deaf Club' meetings and letters were mentioned as suitable delivery channels.

4.5.1 Attitudes to Text Phones

- In the self-completion research respondents were asked about their views of text phones in relation to emergency situations. Around half already had a text phone and so obviously this factor will colour results.
- In terms of text phones providing a sufficient system in the case of an emergency, respondents were equally divided. Ten agreed with the statement and ten disagreed. The main reasons for seeing them positively were that they were 'most helpful' (3) and 'Deaf people can answer the phone' (2).
- They were seen negatively by some as there may be 'nobody in to answer' (3), or due to having a 'preference for another method' (1) or because they had 'no text phone' (1).

4.6 Perceived Barriers to System

- Even though the majority of respondents indicated that they would react straight away to a 'Real Life' emergency situation, the accessibility of the system was dependent on methods used.
- In some instances, there was a time delay from when message was initially sent, to when some respondents actually received message. Although, the majority received message by 14:00, one e-mail recipient did not receive warning until 20:22. This highlights the perceived problem if the PC is switched off then this could act as a barrier. A minority felt the cost of equipment was a barrier, particularly for a PC. The assumption that the deaf community would have this technology was disliked by respondents.
- Even though the perceived fastest modes of delivery were the mobile and the fax, there were some concerns that if mobile was switched off then respondent could miss message or the fax could run out of paper. Conversely, the perceived advantage of the mobile was that it did not rely on the recipient being at home.
- Another concern expressed was the style of message and the need to take into account different reading abilities of recipients.

4.7 Strategies Adopted To Access Information When Away from Home

- It was important to consider how best to overcome the problems arising from respondents not being at home.
- The majority of depth respondents relied on SMS text messages to overcome this and a minority also mentioned that family and friends were usually aware of their whereabouts.
- Common methods adopted for text phone system if not in the house were, 'text phone answer machine' and 'use mobile phone'.
- Most respondents relied on newspaper/TV subtitles for news in general, followed by Ceefax and a minority mentioned the Internet and family/friends as other sources of information.

4.8 Suggested Improvements to Overall System of Communication

- In the depth and self completion research a wide range of improvements were proposed by small number of respondents and these are detailed below:
 - if serious/health issue:
 - police Involvement
 - flash information on terrestrial television channels
 - more interaction between Deafclub and other parties involved
 - increase amount and clarity of information on Ceefax
 - visual signer message via e-mail (to illustrate message if English isn't too good)
 - state time emergency started
 - SMS centre for Emergency Services (Police, Fire, AA, Ambulance)
 - take into account the needs of elderly deaf people (not comfortable with technology)
 - give free mobiles
 - more publicity ~ raise awareness
 - ensure it's a real emergency

4.9 Future Desires

- The system was seen as faster and more accessible than before. There was a strong desire for the system to continue and expand in order to protect the deaf community from a potentially serious health hazard. The system was described as valuable and worthwhile providing a quick and easy to use service where previously there had been a struggle for information.

5. RESEARCH FINDINGS - POTENTIAL INFLUENCERS

5.1 Background to Respondents

- The respondents' role varied:
 - Journalist (3)
 - Senior Public Service Policy Officer (2)
 - Public Service Officer (1)
- Areas of responsibility included:
 - National/Regional Emergency Co-ordinators for 'Front Line' Public Service
 - Senior journalists with national media company, communicating news via: Ceefax and online.

5.2 Communication With Deaf Community

- The majority of respondents stated that they did not communicate *specifically* with the deaf community rather had an inclusive policy that catered for the general public as a whole.
- Respondents indicated that there were systems in place to react and communicate with all sections of the population in an emergency via various mediums detailed below.
- **Media** have used various delivery channels to communicate with community:
 - Television: used subtitles and Ceefax
 - Radio: public announcements
 - Online: website announcements and e-mail messages
 - Newspapers: warning in newspapers
 - Leaflets: door drops that inform local residents of situation
- **Local Authorities:**
 - used fax and e-mail services in the past to inform community
 - also support groups active within local area that target various members of the community
- **Emergency Services:**
 - Strathclyde Police employ interpreters who can sign language
 - an Internet-based facility also provided, that can be accessed by deaf people to alert them of a situation
- **Translation Organisations:**
 - Their services are used by various organisations to communicate with the deaf community
- At present, there is no set method in place, the systems used are totally dependent on the emergency situation that has arisen.

- There was thought to be a continuous review and revision of systems. These systems were described as adaptable and flexible to new thinking and targeting specific minorities.

5.3 Initial Reactions To Deaf Watch Pilot

- All of the respondents positively perceived the concept, but foresaw practical strengths and weaknesses detailed below.
- **Strengths:**
 - *direct and immediate communication to the deaf community and therefore there is confidence the message will be received*
 - *immediate communication will enable a response if there was confusion or the message was not received*
 - *encompasses all visual communication methods.*
- **Weaknesses:**
 - *accessibility was an issue ~ respondents had similar concerns to the deaf community respondents, i.e. limited access due to technology (no PC or mobile) and the financial cost to the deaf community*
 - *concern expressed as to how to alert attention to sent messages*
 - *financial cost to organisation was also raised as a potential weakness*

5.4 Involvement In 'Deaf Watch'

- **The Frontline Emergency Organisation** currently had their own national internal system in place, therefore they have to adhere to the national guidelines. The organisation has expressed interest in being updated on development and progress of scheme.
- Sub-groups also exists representing hard of hearing (Strathclyde Emergency Co-ordination Group).
- **The National Media Company** would be interested in facilitating such a system via Ceefax and demonstrated a willingness to provide technical expertise and advice.
- Both organisations stated that they would require increased funding and human resources to implement 'Deaf Watch System'. Other issues to be considered were training, relevant technical resources and available time capacity.

5.5 Perceived Process for Development of 'Deaf Watch System'

- It was believed the initial process should target strategy makers i.e. key policy makers/C.E.O. It was felt that a multi-agency approach with one strategy was the most desirable approach.
- If the process was accepted at a strategic level it was thought it would filter through to tactical frontline level via internal processes including policy discussions and committees.

5.6 Suggested Improvements

- The regional infrastructure for multi-agency co-operation was thought to be already in place to help develop 'Deaf Watch', however, awareness should be raised.
- The weakness of current procedures was perceived to be that organisations were reactive and would need to be more proactive and have systems in place prior to all emergency situations.
- There was a perceived need for a multi-agency knowledge sharing although it was acknowledged that there were barriers to this specifically in relation to data protection.
- It was thought members of the deaf community should be involved in the decision process and there was a need to assess the actual size of the community.
- Best practice from the corporate sector should be adopted. For example, Utilities already have well developed systems in place to cater for hard of hearing customers.
- The National Media Company were very keen to be associated with future approaches to communication and willing to provide technical expertise and resources.

6. EVALUATION OF DRY RUN EXERCISE

6.1 Method

- To give further insight into the emergency communication process with the deaf, a pilot exercise was conducted at GGNHSB.
- The Emergency Planning Department and Market Research UK constructed a fictitious emergency situation, the details of which were to be delivered to the Press Office at GGNHSB.
- Although other departments were aware that an exercise was to be conducted, the date and time of this exercise were not disclosed in order to create as much of a 'real life' situation as possible.
- A Market Research UK Executive working on the project observed the process from the delivery of the initial warning to the time BBC were satisfied the warning Ceefax page would be live.

6.2 Breakdown of Dry Run

- The section overleaf details the notes from the Pilot Exercise conducted on Thursday 18th April 2002.

Press Office → Communication Department

- 10:38
- Message of Water Pollution delivered to staff in press office
 - Staff had to move to P.C. in Communications Department due to different staff being in Press Office than usual
 - Initial information received fed through to Communications Department
 - Drafted message to be sent to BBC

Communications Department → BBC

- 10:46
- Message drafted: -

THIS IS A TEXT MESSAGE

Warning: Water Contaminations in Alberton due to water contamination of the public water supply in ALBERTON. Residents are advised to boil all tap water before drinking, preparing food and washing.

Tanks with fresh water will be set up in the street soon. In the meantime the water board will provide bottled water to all those who need it.

For further information contact ALBERTON WATER BOARD on 0141 000 0000.

'Stand by for further information updates on this Ceefax page'.



- 10:47 Message sent to Michael Davis to assess legibility via e-mail
- 10:48 – 10:54 Waited for response from Michael
- 10:55 Decision made to send message directly to BBC via e-mail
- 10:56 Message sent to BBC via e-mail
- 10:57 Communication Department telephone BBC to inform message is imminent
- 11:02 Michael Davis responds to give comment on legibility
- 11:04 BBC contact Communication Department to inform that message has not yet been received. Potential problem of 'Firewall' with BBC e-mail system
- Communications Departments verbalise initial part of emergency message
- 'Due to water contamination of the public water supply in ALBERTON. Residents are advised to boil all tap water before drinking, preparing food and washing'
- 11:05
- Consideration given to alternative method of fax by Communications Department
- 11:07
- Message re-sent via e-mail
- 11:08
- BBC contact Communications Department to inform initial part of message is live on Ceefax
- 11:10
- Full message live on Ceefax

6.3 Overview of Dry Run Exercise

- Prior to the observation it was hoped that the message would go live onto Ceefax within 30 minutes of the initial warning to the Press Office.
- The actual time taken to achieve this goal was 32 minutes, however a number of problems were overcome during this time:
 - *difficulty accessing PC due to staff being off*
 - *'Firewall' e-mail problem between GGNHSB and BBC ∴ e-mail not received*
 - *decision then taken to verbalise initial part of emergency message*
- It was considered that problems with e-mail could be overcome using either fax or verbalising message on the telephone.

6.4 Overview of Technology Used

- In order to achieve this piece of research it was necessary to invest in a textphone for depth interviews with the deaf community.
- A Uniphone 1150 Textphone was purchased with ease from The Royal National Institute for Deaf People (RNID).
- This textphone was compatible with RNID Typetalk, had an answerphone for text messages and also incorporated a standard telephone handset for hard of hearing users.
- From a research perspective, this method allowed us full accessibility to potential respondents. We were at liberty to ask all questions required to achieve the objectives whilst maintaining important flexibility depending upon the response given.
- We believe that this method of interviewing would be successful in the future, when the views of the deaf community or hard of hearing are to be explored.



7. CONCLUSIONS AND RECOMMENDATIONS

- The 'Deaf Watch' exercise has provided a valuable and informative insight into the limitations of various modes of delivery when communicating messages to members of the deaf community. There are a number of key recommendations, which we would make, based on the research findings, clearly these should be considered in the wider context.
 - Need to take into account the accessibility and financial constraints of users of the system.
 - Greater involvement of members of the deaf community in decision-making process regarding the set up of future systems.
 - Evaluate other sectors that already have well-developed systems in place for hard of hearing people.
 - Mode of delivery used may be dependent on seriousness of issue.
 - Content of message needs to be addressed in terms of readability, visual message, important details (time incident happened).

Appendix I:

Copy of Topic Guide Used ~ Textphone Depths



GREATER GLASGOW NHS BOARD GU1616
FINAL TOPIC GUIDE (TEXTPHONE DEPTH)

INTRODUCTION

- Moderator will explain via Textphone that we are conducting research on behalf of Greater Glasgow NHS Board.
- In addition:
 - thank respondent for their time
 - assurance of confidentiality

MESSAGE RECEIVED

- Have you had any recent emergency messages from Greater Glasgow NHS Board?
- What was this emergency message about?
- Did you feel the message was easy to understand – explore reasons why?
- What did the message (s) tell you about? If necessary probe on:
 - *a water problem?*
 - *to boil all water?*
 - *to check e-mail, fax or ceefax? If yes, what page?*
 - *that water had been polluted?*
 - *to boil water prior to drinking?*
- Which would be your preferred method of communication? Why?
- Are there any methods you would prefer not to be used? Why?
- How did each of the messages compare to each other? Is there any particular method, which you feel was the best?

BARRIERS TO SYSTEM

- How well did you manage to find your way around the system of messages? EXPLORE FULLY
- In your opinion, are there any barriers to this type of system? If not mentioned probe on:
 - cost of buying equipment e.g. computer, mobile phone
 - cost of maintaining equipment
 - cost of phone-calls, e-mail messages
 - need to be at home to get message
 - usually keep computer switched off (only collect e-mails when switched on)
 - mobile switched off
 - forget to carry mobile with me
 - fax runs out of paper
 - style of message makes it difficult to understand?
 - Ceefax turns page too quickly

Attitude Towards System

- If there was an emergency, how would you get the information if you were not in your house?
- How do you normally receive news in general? If not mentioned probe on Ceefax, Newspaper
- How do you feel about the information being on Ceefax? Do you think this is a good system?
- Can you think of any ways this system of communication could be improved?
- Before this system, how did you used to hear about information like this?
- Do you think that the system now is better than it used to be? – the same? Not as good? – EXPLORE FULLY
- Do you want this system to continue? – Explore reasons why? and why not?
- Any other comments?

THANK RESPONDENT



Appendix II:

Copy of Self Completion Questionnaire Used ~ Deaf Community



Appendix III:
Graphical Analysis of Self Completion Findings



Appendix IV:
Copy of Topic Guide Used ~ Potential Influencers



DEAFWATCH PROJECT
FINAL DISCUSSION GUIDE – POTENTIAL INFLUENCERS
GU1616

INTRODUCTION

- Thank respondent for their time
- Background to research
- Assurance of confidentiality
- Introduction of tape recorder

CURRENT SITUATION

- Background to respondent in terms of role within company/organisation, background to company / organisation in terms of size and type.
- Could you clarify for me your role in relation to communication with the deaf community.
- And in what ways does the company communicate with the deaf community at the moment?
- Explore strengths and weaknesses of each method.
- How would you like to communicate with the deaf community? **EXPLORE FULLY**

Reactions to Deafwatch Pilot

READ OUT

GGNHSB have recently conducted an exercise to evaluate communication with the Deaf Community in the Glasgow area. This included using methods such as SMS Text, E-mail and fax. A series of messages were sent to 52 people who agreed to take part in the Pilot. We then conducted Text telephone and Self Completion interviews to investigate the level of understanding of these messages.

- **What are your initial reactions to a system like this?** – explore perceived strengths and weaknesses...
- Do you feel that the organisation here would want to be part of taking this kind of system forward?
- In what way do you feel a company / organisation such as this could be involved? And to what extent?
- What types of resources do you feel a company / organisation such as this would need to put towards the development of such a system?



- What do you think the process would be for the way forward for such a system mentioned, probe on:-
 - *committee*
 - *policy discussions*
 - *key policy makers*

- What do you think would be useful in order to take this forward?

- If not mentioned probe on:
 - *executive summaries of the report*
 - *presentations*
 - *discussions with those involved*

- Are there any other comments you would like to make?

THANK RESPONDENT & CLOSE

