
Service Users' Views of a Mainstream Telecare Product - the Personal Trigger

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Abstract

Telecare is a term that covers a range of products and services that use new technology to enable people to live with greater independence and safety in their own homes. This paper considers the need for design development of a mainstream telecare product called a personal trigger, which provides a means of summoning assistance when help is needed. It is provided as part of a community alarm service and should be worn at all times for continuous protection. The discussion is based on key findings from a survey of 1,324 service users in North East Scotland with a 60% response rate. Telecare technology is often unattractive because the emphasis is on producing a functional, rather than a desirable product. We argue that the telecare industry needs to consider the social and emotional aspects of design as well as function, even though many of today's service users find the current design acceptable. The survey findings can be incorporated into future product designs.

Keywords

Client survey, community alarm service, design, older people, personal trigger, telecare

ACM Classification Keywords

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General Terms

Design.

Introduction

The delivery of healthcare is changing in response to an ageing population, the growth in long-term conditions, and the rising trend in emergency admissions to hospital among older people. Healthcare has been hospital centred and reactive. The evolving model of care emphasises care in the community and preventive care, and high tech solutions such as telecare. Telecare is a term that covers a range of products and services that use new technology to help people to live with greater independence and safety in their own homes. Products include flood and gas detectors, epilepsy and enuresis sensors, and a falls detector. In Scotland, Government is committed to supporting development and installation of telecare technology, to help people avoid going into residential care. Telecare may be offered by the local authority social work services as part of a package of care or can be bought privately.

Community Alarm Service and Personal Trigger

The community alarm service is a widely implemented telecare service that provides a means of summoning assistance when help is needed. It consists of a base unit, a personal (radio) trigger worn with a neck cord, wrist strap, or clothing clip, and call handling (Fig. 1). The base unit incorporates a large emergency alarm button and is plugged into a home telephone line. Pressing the button alerts the Call Monitoring Centre that help is needed; staff talk with the caller through a speakerphone on the unit. Pressing the button on the personal trigger also raises a call through the base unit, provided it is within range. The personal trigger (also known as a community alarm button or pendant

button) is the prevailing solution to the need for some form of user-activation in a crisis and should be worn at all times for continuous protection. However, previous research and accounts from practitioners has revealed that many people do not wear it at all times.



figure 1. A community alarm service base unit and trigger.

- In 2003, a telephone survey of 200 community alarm service clients in Scotland found only 21% wearing their personal trigger at the time of the call [1]. As one solution to the problem, the authors proposed that the trigger should be made more attractive e.g. designed as jewellery. Telecare products are often unattractive because the emphasis is on producing a functional, rather than a desirable object. Consequently, styling and consideration for the user experience – what it feels like to own or to use a product or service – is limited.
- In 1993, a survey of 124 community alarm service clients in North England found over one-third had never used the alarm and none of the 19 supplied with a personal trigger to wear did so, because it was deemed too sensitive or unattractive [3]. Nonetheless, most felt that the service was useful and reassuring. The authors

concluded there should be greater selectivity in service provision and better design of personal triggers to make them more acceptable to people.

- According to the Joint Improvement Team, a Government body that supports the development of telecare in Scotland, practitioners have also cited the unattractiveness of the personal trigger and the very limited choice regards style and colour as one reason why people do not wear it (Fig. 2) [Phillips, personal communication]. Other reasons include forgetting to put it on and the trigger is perceived as a badge of vulnerability that is not acceptable to many people. As a telecare commentator expressed, 'You can have it any way you like as long as it's an unattractive off white box, with a big ugly panic button' [6].



figure 2. The personal trigger has a common appearance across suppliers that is impersonal and conspicuous.

Distance Lab wanted an up-to-date gauge of the problem, to assess the need or desire for design development. We teamed up with Moray Community

Health and Social Care Partnership (MCHSCP)¹ who wanted to assess service provision. This paper presents and discusses key findings from a survey carried out with over 1,300 service users in 2009. It goes beyond [1] by asking users the reason for wearing or not wearing the trigger and what they would change, and it goes beyond [3] by surveying a far greater number of users.

Survey on the Personal Trigger

Distance Lab and MCHSCP issued a survey on the personal trigger to the Partnership's entire database of 1,324 community alarm service clients. We achieved a very good response rate of 60% (795 returns). The format of the survey was multiple-choice questions and space for free text comments. Tunstall is the main supplier in Moray [8].

Background Information

Respondents are mostly women (79%), and aged 75 years and over (79%). A small percentage is under 50 years (2.6%). Most live on their own (81%), and most were given a personal trigger because they live alone (73%) and/or because of mobility issues (74%).

Use of the Service

Almost two-thirds of people have had their trigger for up to four years (63%). Most have never used it to summon help (65%) and most have never wanted to use it but found it out of reach (85%). However, a significant minority (11%) has found themselves without their trigger when it was needed.

¹ MCHSCP brings together acute, primary, public health, social work and mental health services for a population of 90,000. National Health Service (NHS) Grampian and the Moray Council are the "parent" organisations for MCHSCP.

Wearing and Not Wearing the Trigger

Nearly one-third of clients wear their trigger only some of the time, very occasionally, or not at all (30%). Contrary to expectation, the majority of clients said that they wear their trigger all or most of the time (69%). However, most remove it at night (67%) and when leaving the house (68%). It is also removed in the shower or bath, when a carer or loved-one is in the house, at the kitchen sink, and in the garden. One respondent wrote (she removes it) 'If I am wearing unsuitable clothing, it is too obvious'. Just a small percentage does not remove their personal trigger at any time (8%). Clients are advised to remove their trigger for sleeping to avoid strangulation. The problem is that people forget to put it on again when getting out of bed during the night, when accidents frequently occur. According to Tunstall, 70% of falls occur at night and falls account for 10% of acute hospital admissions in the UK each year [5]. For older people, the consequences of a fall can be fatal.

Reasons for Wearing and Not Wearing the Trigger

Most people wear their trigger because it makes them feel safe (68%) and it gives their family peace of mind (56%). Other reasons include feeling supported (36%), feeling more independent (31%), feeling less anxious and stressed (30%), and needing less help from their family (11%). The main reasons people do not wear their trigger are because they could press it by accident (19%) and they forget to put it on (13%). Other reasons include not wanting to be a nuisance (7%), not wanting to be labeled as vulnerable (2%), and the trigger is uncomfortable or annoying to wear (5%). Contrary to expectation, especially as the majority of respondents were women, a lesser reason for not wearing the trigger is that it is unattractive (3%).

Five Changes to the Trigger

We suggested five changes to the trigger. Most popular were the trigger would send a call for help if the wearer has a heavy fall (69%) and it would work outside the home (54%). Some, including people with sight loss, liked the suggestion that it would not need to be worn e.g. a voice activated trigger (22%). The least popular changes were added features such as a watch or music player (9%) and again, contrary to expectation, making the trigger more attractive and available in a range of styles and colours (13%).

Changes Clients Would Make to Their Trigger

We asked clients what they would change about their personal trigger. In order of number of comments received, the ideas concentrated on: keeping things as they are; aesthetics; button sensitivity and conspicuity.

Nothing! Some wanted no change emphatically.

- 'Billy would not change anything. He said it has a function and works well. It is not a toy and should not be dressed to look like a toy'.
- 'Nothing. It serves the purpose as it is. No need to change style or colour. If anyone wants more jewellery they should buy their own'.
- 'I personally do not think it requires any changes. It is after all a protection device not an entertainment centre!! It works well and as they say 'if it ain't broke – why fix it?''.

Aesthetics Comments on the way that the personal trigger looks were mostly focused on the cord, which many referred to as string. The cord irritates the skin (some had an allergic reaction), the cord is unsightly, and the cord gets dirty. Two ladies had taken the

initiative and replaced the cord with a ribbon to stop skin irritation and a silver chain that doesn't show under lower neck jerseys. Others also suggested a chain rather than a cord, e.g. 'Nothing that costs much and ask people to buy them', as well a choice of colours to suit clothing. The cord is available in white only and looks grubby over time.

Sensitivity Many people commented that the trigger is too easily set off going about daily business e.g. doing the housework or holding a grandchild. The cord does not have an adjustable fastener to allow people to wear their trigger at any length. This can be a problem, especially for women; the too-long cord dangles and knocks against objects, such as the cooker and kitchen sink, accidentally sending an alert call. One respondent wrote 'If possible I tuck the alarm in my bra to prevent activating it accidentally.' The wrist-worn version was suggested as less likely to be pressed accidentally.

Conspicuity Several people told us that they would like their personal trigger to be less bulky and less conspicuous, and to look more like a piece of jewellery.

- 'I find it is very obvious worn around my neck and generally wear a necklace to try to cover it'.
- 'I am not vain, but if people see it, they comment on it, and why am I wearing one when I am not a pensioner. It can be a lifesaver, but I hate the comments'.
- 'I don't like to wear it outside my clothes when I am in company – I realise this is foolish pride'.

Additional Comments

Mostly, people gave positive feedback about the service and expressed their gratitude.

Discussion of Survey Findings

Similarly to [3], we found the main reason people do not wear their trigger is because it is easily activated unintentionally, and a significant number has never used their trigger to summon help. Allocation of the service will be reviewed by MCHSCP. Contrary to [3] and our own expectation, aesthetics was found to be much less significant, despite the large majority of respondents being women. Here, we restate that we surveyed a far greater number of service users than [3]. Possible reasons why those surveyed do not consider attractiveness to be of utmost importance are:

- Respondents may not have wanted to appear unappreciative. The majority were aged 75 years and over with more than one-third over 85 years. The veteran generation tends to respect authority and be grateful for what they are given. E.g. one respondent wrote 'We should be thankful to have such a button'. However, the next generation of retirees, baby boomers, will have higher expectations of healthcare services and demand choice and individuality.
- Most clients were given a personal trigger because they live alone and/or because of mobility issues. Presumably, people become less concerned with how they look as they spend more time at home alone. Further, the trigger is removed when leaving the house, because it will not work and when a carer or loved-one is in the house because it is not needed i.e. when others are around to see. People may feel differently if they lived in sheltered housing with shared facilities e.g. a communal lounge. Or if their trigger worked outside the home as the survey showed that people would like and which is possible using mobile

technology e.g. the 'Easy 5 Mobile Care Phone' [4] works anywhere there is mobile phone coverage.

Generally, most people seemed to view the personal trigger at its most basic level, as a safety-net device, and therefore found the current design adequate. However, we don't think the design suggestions that were made should or can be ignored. A good analogy is the development of reading glasses as articulated in [7]. In the 1930s, National Health Service (NHS) glasses were labeled as medical products and styling was considered inappropriate even though they were known to humiliate wearers. In the 1970s, in response to consumer demand for choice and styling, government acknowledged the importance of styling for glasses and a few designers developed stylish products. Today, fashionable glasses are widely available through the NHS and high street shops and are desirable even to people who don't need them. Telecare could emulate this success by addressing form as well as function as a matter of course, in the design of products and services.

Conclusion and Next Steps

Telecare can help people to live independently at home, and around 1.4 million people in the UK were linked to a community alarm service in 2005 [2]. This paper has presented the views of nearly 800 clients on the personal trigger that is supplied as part of the service. The main findings are: clients view the service extremely positively, but almost two-thirds have never used their personal trigger to summon help and less than 8% wear it at all times; over two-thirds of clients wear their personal trigger at least most of the time, predominantly because it makes them feel safer; almost one-third of clients wear their personal trigger only some of the time to not at all, mostly because it is

too sensitive or they forget to put it on. Contrary to expectation, the unattractive appearance of the personal trigger was found to be less significant, despite the large majority of respondents being women. However, over the coming years, many older people will have higher expectations of public services. In anticipation, it is important that the telecare industry considers the social and emotional aspects of design as well as function.

We are currently preparing a second phase of work to rethink the personal trigger from a fresh and less technological perspective.

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