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Big brother or brave new world? Telecare and its implications for older people's independence and social inclusion

Abstract

Telecare is advocated as a means of effectively and economically delivering health and social care services in people's homes, using technology that can monitor activities and safety, provide virtual home visiting, activate reminder systems, increase home security and convey information. Significant planned investment by central government will be rewarded if telecare results in fewer older people requiring institutional care, and more remaining independent in their own homes longer than would otherwise be the case. This paper, which reports on focus group work with older people, carers and professional stakeholders, considers key issues rarely addressed in provider-led studies. Emerging social policy implications centre on the potential impact of telecare on service users' autonomy and privacy and, controversially, as a replacement for human support. We argue that the development of relevant policy and practice in respect of telecare has to pay close and careful attention to concerns held by all stakeholders, particularly in regard to individual choice, surveillance, risk-taking and quality of service.

Key words: choice, human contact, privacy, surveillance, technology

Introduction

Technology, in general, is increasingly seen as contributing significantly to the nature and practices of the welfare state, a contribution that has received relatively little social policy attention in the

UK (Henman and Adler, 2003; Hudson, 2003). This paper aims to advance debate by examining practical and policy implications of a new set of technological social services, known generically as telecare. The enthusiasm and excitement that sometimes accompanies accounts of telecare's potential usefulness is indicated by Tang et al. (2000: vi), who describe how the service can bring 'faster responses to care needs ... continuous monitoring ... closer, albeit virtual contact ... along digital information highways'. Importantly, and controversially as we discuss later, telecare is also advanced as a means of supplying care services economically, given the resource inadequacies of formal support services (Brownsell and Bradley, 2003). Certainly, throughout its report on assistive technology, the Audit Commission (2004a) repeatedly emphasizes escalating care costs and the economic advantages of telecare, for example through its potential to help people avoid hospitalization, or manage at home with less staff contact. Government interest in telecare's development is indicated in a recent Department of Health report, which outlines a target for telecare to be available in all homes that need it by December 2010 (DH, 2002a), with plans to invest £80 million through preventative technology grants to all English local authorities (Lyall, 2005).

According to the Audit Commission (2004a: 12), telecare integrates 'electronic assistive technologies' with 'environmental controls', thereby enabling virtual visiting, reminder systems, home security and social alarm systems, so forming a package that promotes the concept of the 'smart house'. Such development is a further stage on from the community alarm system (Brownsell, 2000), which has provided older people, commonly those living in sheltered housing settings, with the opportunity to activate a radio pendant or cord switch to raise assistance if in difficulties. Telecare technology is generally a more proactive, automatic process, with innovations such as voice prompts, and Passive Infra-red Sensors (PIRs), which detect movements within the home and can be linked to devices that send resulting data, perhaps reflecting unusual or worrying behaviour, to a control centre. Telecare therefore provides services directly to the enduser, as distinct from telemedicine, which uses information and communication technology (ICT) systems for diagnosis and referral (Audit Commission, 2004b).

In a body of literature that struggles to provide good quality information about the effectiveness of telecare and telemedicine (Hailey et al., 2002; Whitten and Richardson, 2002), it is essential

that research becomes better informed of users' needs. Few studies, however, present the views or reactions of potential users of telecare services (Levy et al., 2003). Generally, according to Gann et al. (2000: 48), there is a lack of empirical evidence on the ways in which older people use assistive technology, and caution is necessary when advocating telecare-type solutions. Our paper hopes to address such shortcomings, by reporting on research that encouraged older people, carers and relevant professionals to articulate their preferences and priorities as regards possible uses of telecare services. The research methods of enquiry, as we now move on to describe, were undertaken in a way that provided opportunities for older people, and other participants, to 'understand and articulate' complex needs that arise in the context of telecare issues, a prerequisite, according to Sixsmith and Sixsmith (2000: p. S1:192), for a user rather than provider focus.

For the purposes of this paper, telecare is used generically to encompass terms such as 'assistive technology', 'smart support' and 'smart technology', which are regularly used by authors to describe telecare support services in and around the home.

Methodology

The research upon which this paper is based is being funded by the Engineering and Physical Sciences Research Council (EPSRC), as part of the EQUAL (Extending Quality of Life) programme. We report on a first phase piece of work undertaken by the authors, who are members of a research consortium that includes academic architects, engineers, gerontologists, clinicians, as well as housing providers and a commercial telecare technology provider.¹

The main objectives of our fieldwork, which took place in Plymouth, South Buckinghamshire and Barnsley/Rotherham, between June and December 2004, were: to introduce the possible uses of telecare through discussion of specially designed case scenarios; to explore the extent to which older people, carers, and professionals consider telecare to be a valuable/potentially valuable service; and to encourage constructive comments on telecare's future development. Given our task of probing the attitudes of people to a potential rather than established service, we were asked to conduct focus group discussions, in order to explore views, interests and concerns. In order to meet these objectives, we were asked to recruit 30 older people, 15

	Older people	Carers	Professionals	
Plymouth	31	17	15	
South Bucks	25	27	13	
Barnsley/Rotherham	36	11	11	
Total	92	55	39	

Table 1 Sample numbers by region

carers and 10 professional stakeholders from each area, targets that were exceeded in most cases (see Table 1). In total, we carried out 22 focus groups, five with carers, seven with professionals, and 10 with older people.

We identified members of the focus groups through the assistance of professionals working in the relevant geographical areas, as well as through word of mouth. Our intention was to recruit a purposive sample of older people and carers who would be interested in discussions about telecare, a service not yet widely publicized or developed. We were not unduly concerned about the representative nature of the participants, or their existing support needs, given the exploratory nature of this phase of research. However, we did manage to include older people and carers from various socio/economic backgrounds, living in a variety of circumstances. The majority of older participants lived in mainstream housing and were aged over 75; carers were largely responsible for older dependants, although some cared for younger family members; professionals represented health, social services, housing and voluntary sectors (for professional affiliation by area, see Table 2). Lay participants had very little, if any, experience of new technologies other than video-recorders and, to a small extent, computers. Professionals involved in the groups all had key responsibilities for the support of older people and knew of the remit, if not the actual practicalities, of telecare services.

The structure of the focus groups centred on discussion of three case scenarios, drawn up to highlight a range of situations in which telecare services could be applied, all intended to generate debate and reflection on relevant personal and professional experiences and perspectives. An abridged version of these case scenarios is set out below.

The case scenarios were piloted in reference groups of older people, who did not subsequently participate in the substantive

Table 2 Professional affiliation by rec	บดาเ
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Sector	Plymouth	South Bucks	Barnsley/Rotherham
Health	3	4	5
Social services department	3	6	3
Local authority housing	1	0	2
Housing association/trust	4	2	0
Voluntary agency	4	1	1
Total	15	13	11

research. Members of the research consortium were also consulted at various stages in the design of the case studies, and provided constructive comments before the final versions were agreed upon. Case scenarios were presented in a standard way to each group, and

Case scenario 1 Mrs Lewis forgets about the bath and also wanders

Context	Contribution of telecare		
Mrs Lewis, who lives alone in a	A flood detector system will cut		
small flat, is becoming forgetful,	the water flow and detect if the		
has left bath taps running,	bath water is not drained after a		
sometimes forgets to get out of the	reasonable time, alerting the		
bath until she is cold, and wakes in	monitoring centre or an identified		
the early hours, to go for a walk or	carer. A 'Wandering Monitor'		
visit friends.	sensor will detect movements and		
	produce a verbal message		
	reminding her of the time and		
	encouraging her to go back to bed.		
	If she continues to exit through the		
	door, a silent alert is then sent to		
	the monitoring centre or an		
	identified carer.		

Case scenario 2 Mr Agnew is prone to falls and also has little social contact

Context

Mr Agnew is 86, lives alone and rarely leaves his first floor flat, in which he regularly has falls. He is socially isolated, and would like to have more regular contact with health practitioners.

Contribution of telecare

He could wear a fall detector sensor, which will automatically detect a fall and alert the monitoring centre or an identified carer. He could also benefit from an electronic sensor that would detect significant changes to his blood pressure, and raise an alert accordingly. A computer would provide access to the Internet and possible contacts, information about befriending services, and opportunity to talk to health professionals.

Case scenario 3 Miss Busbridge has irregular sleep and disrupted routines

Context

Miss Busbridge is aged 99, has no family and is very independently minded. Her sleep pattern is erratic, and she sometimes neglects to eat or drink as regularly as she should. She knows there are risks involved with her disrupted routines, but insists she does not want people visiting and bothering her.

Contribution of telecare

A bed occupancy sensor would notice if Miss Busbridge fails to return to bed after a reasonable time. A voice prompt will gently remind her to get back into bed and raise an alert if she fails to do so. Sensors could record her use of kitchen appliances such as the fridge or the kettle, and judge whether Miss Busbridge is at risk, alerting local support services.

participants were then encouraged to discuss their views and thoughts. All lay participants received a small payment to cover their time and travel expenses.

Transcripts of the focus group meetings were subject to content and thematic analysis. This paper conflates the views and opinions put forward in respect of the case scenarios and wider discussion, in order to present a concise and thematically framed discussion. However, where it is useful to account for a particular point through reference to the case scenario that prompted it, that case scenario is duly identified. The names of those in the case scenario material have been changed to protect confidentiality.

This paper first considers telecare's significance for individual choice and self-determination, then turns to issues raised in respect of privacy and surveillance, and finally examines possible resource and care service implications.

Choice and self-determination

Client/patient choice is the government's 'big idea' for health and social care developments, and is also part of the wider agenda of improving social inclusion of marginalized or vulnerable people (Rankin, 2005). Many participants spoke favourably of the potential preventative benefits of telecare devices, such as fall detectors, blood pressure monitors, flood detectors and automatic sensors, which could give older people and informal carers 'peace of mind'. In addition, there was a professional viewpoint that ICT, such as video conferencing, could allow ready access to a client and therefore help reassure health or social care practitioners about that individual's well-being. Positive implications of telecare for individual choice and selfdetermination were also raised. Participants thought that ICT may provide an older, virtually housebound person such as Mr Agnew (case scenario two) with more choice in respect of the ways in which he interacts, to be 'in control of his own world and his own contact'. Telecare can also be seen as a way of increasing options that allow an individual to choose to stay put for longer, as well as remain less obligated to informal carers for daily monitoring. A number of professionals thought that system procedures providing clients with more financial control, such as Direct Payments, would give older people greater choice to buy telecare services.

Behind many of the comments raised in the context of choice was that it is closely aligned with older people's sense of selfdetermination in running their own lives. In this context, both professional and lay members of the focus groups raised concerns about telecare services potentially undermining individual choice and independence, either by inadvertently producing dependent, learned behaviour (for example, Mrs Lewis [case scenario one] may not bother turning taps off, expecting this to be done automatically) or by restricting opportunities for risk-taking (it was argued Miss Busbridge [case scenario three] should sleep, eat and drink when and what she wants to at her age). Such self-determination may, of course, conflict with feelings of anxiety harboured by informal carers. And yet carers often presented a balanced view that, while they would like a comprehensive monitoring system to offer safeguards, older people have a right to 'take the risk of living the way [they] want to'. Without adherence to such a right, developments such as telecare will become 'like big brother'.

Another way in which telecare can become like 'big brother', according to participants, is if people are in some way pressured to accept it. In this respect, participants indicated that telecare should not be oversold, and should not automatically be targeted at all older people, many of whom are able and active and have all their 'faculties', but at those who are frail, disabled or have additional support needs, otherwise it would be 'too premature'. A salutary example was given by one professional, who described how her local authority had bulk purchased voice prompt devices, intended for installation in the homes of older people, to prompt them not to open the door to strangers and to keep doors properly secured. The devices still sit in the professional's office, as 'nobody wanted them', the result, perhaps, of a lack of consultation and a blanket response to a perceived problem on which there had been insufficient consultation. This is an all too common problem, according to the Foundation for Assistive Technology, which argues that the current approach to telecare service development relies on installing large numbers of standardized systems, rather than closely matching telecare to the needs of individuals, which may reflect the vested interests that dominate new technology developments (Down, 2005).

There may, of course, be grey areas, where a person struggles to retain independence without services but could benefit from the help telecare would provide, and in so doing remain in their home longer.

In such cases, participants generally suggest that it would be wrong to pressure an individual to accept telecare for their own good. Participants claimed it would be far better for professionals to enter into careful 'negotiation' with a potential service user, present telecare as an option, provide necessary information to assist the person make an informed choice and help her have 'control' over the decision-making process. Another way in which people exercise control is by maintaining privacy within the home environment, and this theme surfaced throughout group discussions, often in connection with concerns about surveillance.

Privacy and surveillance

Magnusson and Hanson (2003) indicate that privacy and confidentiality are core issues with ethical implications for telecare service development, because of the risk factors associated with possible uses of personal data and the potential for unjustified paternalism, a concern that Lyon (2001) conceptualizes as the care and control motif underlying basic ambiguities of surveillance. The subject of privacy arose in a number of contexts in our research, particularly in regard to issues of data protection and ownership, surveillance, and the personal context of risk-taking.

A number of carers made positive statements about the depth of information that lifestyle monitoring and devices such as wandering alerts can generate, and the likely increased knowledge they would subsequently have about a person's risk levels at home. Professionals recognized this benefit, and spoke of a consequent better understanding of daily patterns of behaviour, an 'aggregate' picture, suggesting that such data would help build 'a better profile of the individual' and potentially lead professionals to worry less about a particular situation. However, there was a general view that the data generated in respect of each individual have to be subject to strict guidelines of confidentiality. In particular, participants raised the spectre of commercial companies acquiring lifestyle data and using them to direct marketing strategies or target individuals in order to sell aids or adaptations, which would be 'an infringement of their rights', a concern shared by those examining the private sector's access to medical research databases (Graham and Wood, 2003) and government departments more generally (Whitaker, 1999). One way to

prevent this happening, according to professionals in our research, is for local authorities to draw up a list of accredited providers with which they contract, on behalf of service users. Of course, this would not stop older people privately buying a telecare service on the open market, a situation that worried professionals, particularly if there were no safeguards about privacy and no certainty about the support services to back up the technology, an issue discussed elsewhere in this paper. Allied to this is the worry that agencies such as the Department for Work and Pensions may obtain access to data about an individual's functioning ability, such as the number of times a person requires attention in the night, and that these data could be used to refute an application for financial benefits such as attendance allowance. Participants may have been reflecting the unease held by Lyon (2001: 7) that our surveillance society increasingly allows western governments to 'probe behind the front door to discover what lifestyles obtain'.

According to many participants, we live within a culture of creeping surveillance. This may not be surprising, given the growth in monitoring individuals arising from advances in technology as well as the political expediency of decreasing civil liberties in the name of security (Fitzpatrick, 2003; Graham and Wood, 2003). On a practical level, surveillance is an issue for some older people living in supported housing settings, and a number of participants commented on how existing community alarm systems can feel intrusive, producing a 'sense of being watched'. Similar fears emerge in telecare studies. Magnusson and Hanson (2003) describe how a number of frail older people and their carers felt worried that ICT equipment could enable other people to see into their home, and Brownsell and Bradley (2003) found that respondents needed reassurance that their warden could not see them via the lifestyle monitoring systems. There are echoes here of the Panopticon metaphor, whereby the imagined power of surveillance is all pervasive. As Whitaker explains, the Panopticon, Bentham's proposal for an all-seeing prison edifice, would render inmates visible at all times to observation by the unseen inspector, an idea that Foucault developed to highlight power relationships and a 'political technology' that induces 'a state of conscious and permanent visibility' (1999: 33). Fisk (2003: 238) makes a fundamental point in regard to this aspect of telecare when he says that if there is to be surveillance that gathers personal information about domestic routines, the consent of the service user is vital. Such consent appears not

to have been requested in the study evaluated by Bowes and McColgan (2003: 16), with staff objecting to the use of video 'to view a person in their house without their knowledge', evidence perhaps of Whitaker's (1999) contention that new technologies can reduce the private spheres in which people have traditionally sought refuge and self-definition, and an indication of Lyon's (2001) proposition that we live in a society preoccupied with risk.

Risk-taking

Older people who are becoming frail but want to remain in their own home may have strong reasons why they wish to keep their daily routines and behaviour private. Of particular importance is the reluctance to publicize difficulties, or as one professional put it, 'this whole issue of who finds out about your deteriorated state'. Relevant studies, such as that of Brownsell and Hawley (2004), have noted that older people do not always want falls within the home to be known or responded to, for fear of negative consequences such as pressure to relinquish the home and move into institutional care. It is also important to note in the context of falls that an older person's psychological priorities may differ from those of carers or service providers. For example, in their empirical study of the ways in which risk of falls were 'constructed' by older people, Ballinger and Payne (2002: 305) argue that while service providers are 'oriented to the management of physical risk', older people themselves are more concerned with the risk to their 'personal and social identities', and the challenge to 'self-image'. Ballinger and Payne argue that reductionist studies have generally paid insufficient attention to the social context and conceptual construction of risk-taking behaviour, and the importance to older people of avoiding the stigma of an identity as frail or vulnerable. Risk-taking is also closely aligned in later life with the issue of autonomy, particularly in respect of maintaining control within the home environment (Percival, 2001; Rubinstein, 1989). This emphasis on the self-perception of the older person is crucial, according to Jensen et al. (1998: 255), who consider 'self-esteem' as 'one of the most valuable indicators of adjustment in old age'. Self-esteem is also a hallmark of older people's sense of independence, alongside 'continuity of the self' (Secker et al., 2003: 375).

These concerns may be particularly pertinent for those with mild or moderate dementia living at home. Marshall (2001) suggests that while technology can help people with dementia stay at home longer, there are serious obstacles, including the lack of back-up personnel to ensure that devices work effectively and in a way that enhances social inclusion. Interestingly, themes of personal contact, hands-on care and back-up requirements emerged as key indicators, generally, of participants' willingness to engage with telecare, as we now explain.

Human contact and social inclusion

There was a strongly held view, across all groups, that telecare should be provided as part of a community care package, rather than as a stand alone service, and so take proper account of older people's social integration and the importance to them of human support.

The importance of potential telecare service users maintaining and strengthening personal contact was highlighted throughout focus groups, usually by way of proclaiming that telecare should not 'take the place of face to face contact', thereby reducing even more a person's connection with a social world. The contact with home carers, for example, was cited as valuable not only because it provides the opportunity to monitor a person's well-being at close quarters but also because the interaction may include a conversation about the local community, helping the housebound person feel socially connected. As one older participant said, 'I look forward to my carer coming through because you get some gossip'. However, home care is a rationed service and drop-in centres and clubs are also limited because of budget cuts (Shaping Our Lives National User Network, 2003; SPAIN, 2002). The support and monitoring provided by informal carers, whether family, friends or neighbours, is highly valued by older people. Such informal carers 'keep an eye on you', and that close, sometimes tactile form of personal interaction is favourably compared to the envisaged limitations of telecare. There is acknowledgement, however, of the diminishing availability of informal carers, because family and friends work, have moved away, or are simply in short supply.

It is not surprising, therefore, that older people with Piper alarm systems sometimes use them to engineer human contact that is otherwise missing in their life. One participant, an alarm call centre manager, spoke of the frequency with which service users press their alarm button, purely to hear a human voice and have 'a chat'. The manager, frustrated that he only has resources to deal with life and

limb emergencies, is now of the opinion that 'emotional support' may be a 'legitimate' use of the alarm service, which needs to be costed so that the potential for having necessary staff available is examined. In this way, technology could be used to help foster social contact, but the same manager emphasized the need for more resources to make this a reality.

Despite this potential social use of community alarm systems, there was a fairly widespread view that telecare technology could actually discourage older people's efforts to maintain personal contacts. In this regard, many participants used the case study featuring Mr Agnew (case scenario two) to point out the limitations of the Internet. It was commonly thought that someone who is spending a great deal of time at home, and lives alone, should go out and meet people, or have 'an Age Concern befriender' visit him at home, rather than rely on the Internet for contacts. There was concern that ICT could actually discourage the required effort in this respect, which, in turn, could adversely affect fitness, mobility and general well-being. In this respect, one carer spoke of her husband, a wheelchair user, who uses a computer 'endlessly' but 'doesn't actually socialise, personal contact is not there'. Such concerns led one professional to remark, 'there needs to be a proper balance between technology and personal contact', a conclusion also reached in a recent study of the acceptability of assistive technology to older people (McCreadie and Tinker, 2005). This 'proper balance' may be threatened, however, if telecare is seen as a service that actually replaces hands-on care staff, a fear expressed by members across the groups.

Replacement of hands-on care

The Audit Commission (2004a) has indicated that telecare technologies may usefully replace traditional 'human effort', particularly in situations where staff carry out more mundane tasks. This notion was strongly refuted by participants. One carer spoke of the potential for routine contacts to highlight subtle changes in a person's condition, to notice the 'little things that can be missed . . . things you can't quantify'. Professionals endorsed this view, suggesting, for example, that a district nurse, who visits to check a person's blood pressure, 'might pick up on some other things as well'. In this context, the rationing of home help time, largely a result of social services

departments' rigid application of Fair Access to Care Services eligibility criteria (DH, 2002b), emerged as a key concern for older people, not least because such personal contact validates the individual and helps address emotional issues as well as practical tasks, as we have already discussed.

A great deal of concern was expressed, notably by professionals, that staff will inevitably be withdrawn as a result of the introduction of telecare services. Professionals cited cases where, because of resource constraints and the 'tight staffing situation', local authority social services departments are looking at IT based self-assessment programs, 'so social workers won't be required to go in and do what they do at the moment'. Other studies have alluded to such anxieties. Nurses involved in the implementation of a home telecare service, reported by Hibbert et al. (2003: p. S1:56), were concerned that the 'ultimate goal' of the exercise was 'replacing their roles with technology'. Sourbati (2004) has revealed that most sheltered housing tenants saw online services as a substitute for physical activity and human contact and as a threat of further isolation, while Tang et al. (2000: vii) consider 'risks' of telecare to include 'increased isolation of care recipients and carers through decreased physical face-to-face interaction with carers and physicians'. Interestingly, Bowes and McColgan (2002) discovered during follow-up interviews with telecare service users that a number had started to feel less safe at home because they saw less of their general practitioner (GP) there. Indeed, in a similar but later study, Bowes and McColgan (2003: 6) discovered that those in receipt of smart technology received fewer GP visits than the 'comparator group' of people who did not have the technology. Such findings reinforce a conclusion reached by Graham and Wood (2003) that digital technology encourages a move away from direct human intervention as surveillance becomes more automated.

The Audit Commission (2004a) concedes that home visiting reduces mortality by around 25 per cent, and admissions to long-term care by around 45 per cent, but considers assistive technology to be more efficacious and economic than personal assistance. The Commission would no doubt be interested in the views of our participants, who were strongly of the opinion that if telecare is to be properly resourced with locally based response teams, there is likely to be a great deal more demand for staff contact, if only to follow up on alerts. As one older participant noted, 'some [professionals] may see this [telecare] as a threat to their livelihood . . . in fact, it should

prove that there's a lot more of them needed'. Indeed, as we now go on to discuss, the need for adequately staffed back-up services is often described as a prerequisite of effective telecare provision.

Back-up services

Many older participants made the point that telecare will necessitate a rigorous and well co-ordinated back-up support system to have credibility as a service, and cannot, therefore (continue to) rely on informal carers, inadequately resourced services, or poor professional collaboration.

Carers were concerned that their involvement would be seen as a cheap alternative to statutory services and that telecare could result in more demands being made on informal carers, because they would be first in line to respond to alerts, such as those presented by people who tend to wander. After all, as one carer commented, if the policy behind telecare is to keep people at home longer, informal care is likely to be exploited by 'professional agencies that are either stuck for cash or stuck for beds'. Professionals, obviously in sympathy with such sentiments, confirmed that a great deal of care in the community depends on informal care, and are worried at the levels of 'stress' this puts on family members and the potential for such support to 'break down'.

Participants also raised doubts about whether services are sufficiently resourced to provide an ongoing telecare service, given that there are currently too few support staff to cope with demand, that social services departments are 'on their knees . . . [and] can't follow up with aids to old people', and that if a 24 hour service is required, existing services are likely to be even more stretched. Professionals endorsed these concerns. One said, 'everything does depend on the availability [of] care networks . . . we are working so flat out, certainly within nursing and social care'. Another said that as a result of resource constraints in her area, intermediate care, which includes rehabilitation work to help people stay at home, is not followed up with longer term resources, with the result that older people are then 'completely unsupported', which can lead to a revolving door of further admission to hospital or residential care, something, of course, that telecare aims to reduce.

The challenge for professionals may involve a reconfiguration or remodelling of services, 'to respond within a 24 hour situation'. This

is certainly the conclusion of technology specialists researching in this field, who argue that technology as a support tool is only as effective as the speedy availability of appropriate services (Lyall, 2005). Additionally, a speedy response would have to be provided by at least two staff responding to an alert in cases of falls, and such staff would also have to be trained so they could respond to the needs of people with sensory and cognitive impairments. Collaboration may therefore be very important, and alarm call centres are likely to be pivotal in coordinating a unified service response. However, according to a manager of an alarm centre, his service has been 'disaggregated . . . from the local authority', and is effectively a commercial call centre, with the result that 'my links with housing and social services aren't anywhere near as strong as they probably need to be'. Knowledgeable commentators fear that privatized, centralized call centres are, indeed, likely to become commonplace as the telecare client base grows and local authorities experience pressure to reduce costs, with the consequent loss of local response and the dilution of specialist services (Down, 2005). Another professional in one of the focus groups described the absence of joined-up service responses in her district, with the primary care trust, county council and district council all having different response strategies that 'need to be drawn together'.

Given these views and priorities in regard to the availability of adequate support systems, it is perhaps no surprise that the question of cost and resources, our final theme, was regularly raised in group discussions.

Cost and resource implications

Many participants thought that central government, perhaps through the NHS, should fund telecare, certainly if the service is intended to help people stay put, safely, in their homes. A major issue behind many of the questions about cost was the likelihood of sufficient funds being made available by the state. Suggestions were made about how costs could be constructively managed by the state. There was a strong view that telecare devices and allied services should initially be provided on a trial basis, to obviate premature and perhaps unnecessary commitment of funds. Professionals also advocated the recycling of leased telecare devices, to offset user costs. Nonetheless, there was concern that telecare will not be a cheap option, requiring as it does 'a

lot of back-up', especially if it involves a 24 hour response service, and professionals who work in the call alarm sector reiterated that such a service is 'actually very expensive'.

A point repeatedly made, however, was that there is currently under-resourcing of even basic aids and safety features in the home, notwithstanding their potential to prove economic over the long term. An internal memorandum to social services staff in one English local authority, seen by the authors, provides graphic illustration of this point. The memorandum first highlights the projected overspend on the equipment budget before urging staff: not to issue bathing aids unless the person has a 'medical requirement to bathe'; not to issue trolleys where a person can eat and prepare food in the same room; and, tellingly, not to issue expensive equipment to eliminate risk, as this result is 'rarely possible'. One wonders whether telecare can really attract the government departmental support required if, as this memorandum indicates, older people's basic creature comforts and safety requirements are treated as luxuries the state can ill afford. In this context, the Audit Commission (2002) finding that the Department of Health cannot even ensure sufficient provision of wheelchairs, prosthetics and leg irons, is another indication that preventative strategies (of which telecare may be one) do not necessarily have a long political shelf-life. Resources are also important in relation to staffing levels. According to Ware et al. (2003), care managers with responsibility for commissioning services for older people have insufficient capacity to meet users' and carers' needs. Front-line staff, such as wardens and concierges, vital for reassuring vulnerable older people that help is at hand if needed, are already being cut back (Percival and Hanson, 2005).

Conclusions

Policy and practice across the domains of social care and health are paying ever greater attention to telecare service developments, which politicians, providers and academics herald as a major tool in enabling older people to remain longer in their homes and avoid institutional care. Studies are only now beginning to attend to the views and aspirations of prospective recipients of telecare services. Such an approach is important, as new technologies can only be properly understood and

designed by paying close attention to their social context (Fitzpatrick, 2003). This paper, the result of focus group discussions with older people, informal carers and service providers, is part of the process of increasing our knowledge and understanding about the potential benefits and possible contra-indications of telecare.

Participants in our study draw attention to positive aspects of telecare as well as to concerns and questions that merit greater attention, including those relating to privacy and surveillance, issues that highlight the interplay between social citizenship and individual freedom and that telecare providers need to acknowledge are of fundamental importance to people, including those in need of support services. Social policy plans for telecare also need to take account of the importance to older people of human contact and the reluctance of all stakeholders to see new technological innovations replacing handson care. There appears to be interest in and enthusiasm for a telecare service that is well integrated with other support systems, and a key aspect of any such holistic provision will be the ability of the person to choose their preferred service and for that service to be tailored to meet an individual's changing needs and aspirations. Telecare services will therefore need to be properly costed and resourced if they are to gain the confidence of potential service users and professionals.

Critically, development of telecare, if it is to be well targeted and accepted, will have to ensure that the consumer voice is more to the fore, and rather less taken for granted. Certainly, the profile of priorities such as choice, risk-taking and social integration should be acknowledged and incorporated into developing policy and practice guidelines. It is encouraging to learn that there are innovations taking place, with personal meanings informing system development and qualitative protocols, in a 'bottom-up approach' (Emery et al., 2002: 32). With so much potential investment at stake, an open debate is essential if telecare is to do all that is claimed of it and stand the test of time.

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