Interim report on the evaluation of the introduction of telecare by Portsmouth City Council

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November 2008

Introduction

In 2006, Portsmouth City Council (PCC) commissioned the Centre for Healthcare Modelling and Informatics at the University of Portsmouth to evaluate PCC's introduction of telecare over 3 years. PCC is addressing telecare using the Preventative Technologies Grant, provided by the Department of Health. Within PCC, the Health Improvement and Development Service (HIDS) has created a steering group to manage the project.

The telecare project in Portsmouth

There is currently a widely implemented community alarms service (CAS) in the city but this requires the user to either pull a cord or press a button to request assistance. Modern wireless technology can offer a similar service but without the user having to activate the call. This is of benefit in particular areas, such as falls, where the person who has fallen may not be able to summon help. There are now a wide range of sensors that can be added to the basic infrastructure of the community alarm service that can create a comprehensive telecare service.

The project aims to investigate the possibility of setting up the technology and the processes required to support the implementation of telecare. The outline project included raising awareness of telecare so that it could become a standard part of the care package with a single point of assessment. Once telecare has been prescribed as part of a care package, the technology is installed and connected to the existing call centre in Southampton that currently monitors the community alarm system. There needs to be a response service within the city to attend to the person who has activated the alarm.

Research method

The University of Portsmouth is providing this independent evaluation of the telecare project through involvement in the steering group and by organising and evaluating two pilot studies using two of the main technologies being considered. This report discusses the findings from the evaluation, including identified problems and challenges in setting up the process of telecare. It provides an overview of the two pilot studies with outcomes and suggestions for mainstream implementation.

The study addresses 5 main research questions:

1. How does the introduction of telecare fit into the bigger picture of the provision of Social Care?
2. What are the views of the social care professionals involved in the project? How did their roles change with the introduction of telecare?

3. What are the views of the clients involved in the project? Did it improve their quality of life?
4. What are the views of other stakeholders (e.g. the voluntary sector and informal carers) involved in caring for the clients?
5. What quantifiable factors are affected by the introduction of telecare? Does it result in a measurable reduction in the number of falls, or the number of clients who become recurrent fallers? Does it have other healthcare benefits (e.g. to mental health)?

Before starting, it is useful to define two of the terms that are commonly used.

"Telecare" is the delivery of health and social care services to an individual using a combination of information and communication technologies and sensor technologies. "Assisted living" brings together a range of technologies, systems and services, many of which are associated with the notion of telecare, in order to maintain people's independence and move from a reactive to a preventative care model. This could include concepts in other important areas such as the environment and transport. Assisted living would help to address several key UK government objectives for health and social care, viz: moving care away from hospitals, more emphasis on prevention and self-care, and greater consumer choice over location of, and approach, to care. In doing so it could play a significant role in helping to improve the capacity of the care system to meet future increases in demand as the population ages and as the incidence of certain long-term conditions grows.[1]

The big picture

- How does the introduction of telecare fit into the bigger picture of the provision of Social Care?

Data from the most recent census[2] shows that there are 11 million elderly people in the United Kingdom, and that 16% of the population are aged over 65. The largest percentage growth in population in the year to mid-2006 was at ages 85 and over (5.9 per cent). The number of people aged 85 and over grew by 69,000 in the year to 2006, reaching a record 1.2 million. In two decades from now, a quarter of the entire adult population will be aged over 65 and the number of people over 85 will have doubled.[3] A large proportion of the support they will require will be provided by social services. Alan Johnson, Secretary of State for Health, has said, "The ageing population means expenditure would double in the next 20 years under the current systems"[3] Prime Minister Gordon Brown has stated that "the current system will require fundamental reform"[4] as the Department of Health admitted there could be a £6 billion funding gap in England in 20 years' time, based on projected future demand.[5]

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[1] Barlow J, Curry R, (2007) Assisted Living Innovation Programme, Roadmapping Exercise, Workshop Report, 08 Jan 2007.
[2] Office for National Statistics, 2001 Census Data, http://www.statistics.gov.uk/cci/nugget.asp?ID=949
[3] http://www.politics.co.uk/news/health/public-health/future-uk-s-social-care-under-spotlight-$1222335.htm Retrieved 26-05-08
[4] http://www.communitycare.co.uk/Articles/2008/05/12/108164/gordon-brown-adult-social-care-funding-needs-fundamental-reform.html Retrieved 28-05-08
[5] http://www.communitycare.co.uk/Articles/2008/05/12/108164/gordon-brown-adult-social-care-funding-needs-fundamental-reform.html Retrieved 28-05-08

In line with agreements on new burdens, local government will need to spend some existing resources differently and the Government will provide specific funding to support system-wide transformation through the Social Care Reform Grant. According to the Government, "One of our aims will be keeping individuals in their homes as long as possible and making institutional care not the first but a later resort."[6] This follows on from the Government's National Director for Older People, Professor Ian Philp, who, last January, launched a blueprint to shift NHS and social care services towards early intervention and supporting people with long-term conditions.[7]

The proposed reforms support the future telecare model, which is based on early intervention and designed to reduce the number of admissions into care homes. The Secretary of State also announced a £31 million programme to test the potential of innovative technologies such as telecare.[8] These "Whole System Demonstrator" pilots are being rolled out in Kent, Newham and Cornwall, where telecare pilots have already been successful.

An older person's well-being may depend on the quality of the care package that he or she receives from their local authority. Wellbeing can be measured in outcomes such as:

- improvements in physical functioning
- better morale
- ensuring personal safety and security
- having control over everyday life

Telecare can provide *outcome focused* services – these aim to achieve the goals, aspirations or priorities of people who use care services. They can be contrasted with services that are standardised across all users, rather than being designed with the needs of an individual user in mind, and are organised according to needs determined mainly by those who commission or deliver them.[9]

The Government White Paper *Our Health, Our Care, Our Say*[10] undertook a major consultation to find out what people want from health and social care.

The older people surveyed said they want services that are based around their needs and that:

- help them to make choices and take control of their health and wellbeing by understanding their own health and lifestyle better, with more support on prevention and promoting their independence

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[6] Putting people first: a shared vision and commitment to the transformation of adult social care,(10 Dec 2007),
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_081118
[7] Mithran Samuel, "Tsar Ian Philp launches blueprint to support elderly people",
http://www.communitycare.co.uk/Articles/2007/01/29/103055/tsar-ian-philp-launches-blueprint-to-support-elderly.html Retrieved 16-04-08
[8] http://www.politics.co.uk/news/health/public-health/future-uk-s-social-care-under-spotlight-$1222335.htm Retrieved 26-05-08
[9] http://www.communitycare.co.uk/Articles/2008/05/22/108280/improving-care-packages-and-outcomes-for-older-people.html Retrieved 22-05-08
[10] Our Health, Our Care, Our Say, White Paper, DoH, (30 Jan 2006),
http://www.dh.gov.uk/en/Healthcare/Ourhealthourcareoursay/index.htm

- offer easy access to help when they need it, in a way that fits their lives; to get the service they need, people want more information about where it is best for them to go
- meet the whole of their needs, particularly if these are ongoing, and support their wellbeing and health, not just focusing on sickness or an immediate crisis; and are closer to where they live, provided these services are also safe and cost-effective

As well as providing a service to the recipients, telecare has a huge impact on their carers. There are six million carers in the UK, according to the 2001 Census[11]. This was the first year that the census included a question on this topic. It found that 1.25 million carers provide an average of over 50 hours of care per week. About 316,000 carers describe themselves as permanently sick or disabled, and, of these, 124,900 care for 50 hours or more every week. More than half of those providing 50 hours care per week are over 55 years old.[12]

Feedback from carers is that telecare can provide a sense of security for them knowing that they are not alone in providing the care. Like the rest of the country, Portsmouth can't afford the vast number of appropriately skilled staff to deliver these services by conventional means, and therefore will rely on technology to provide them on a large-enough scale to cope with the expansion of demand.

The professionals' view

- What are the views of the social care professionals involved in the project? How did their roles change with the introduction of telecare?

During the course of this study, we have spoken to many of the social care professionals involved with the Portsmouth telecare pilots. Overwhelmingly, they have been supportive and engaged thoroughly with the process. Their overall concern is the care and support of their clients. All the professionals interviewed have been open to new ways of providing this care, as long as it proves of benefit to the recipient.

These findings may not reflect the attitude of *all* social care professionals since those interviewed had all come into contact with telecare in some form or another, and we did not interview any who had not. However, there was no negative feedback at all from the ones we did interview.

Professionals in charge of identifying care packages did not see their role changing with the introduction of telecare. Their job is to identify the most appropriate help for their clients and this includes the use of telecare devices.

One problem that arose was that when social workers had identified the need for a telecare prescription, the client was not always able to be included in the pilot project because the client did not meet the criteria for inclusion (see below). One social worker became frustrated that the service was available but they could not use it in a case where they thought it would be of significant benefit. It shows that it is important to keep people engaged with the introduction of new technology and services, since there is the possibility that when obstacles prevent them from accessing the service they will lose interest. There has been training provided for a large number of people

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[11] General Household Survey, Office for National Statistics Census 2001, Office for National Statistics, 22 November 2005, http://www.statistics.gov.uk/cci/nugget.asp?id=1268
[12] http://www.communitycare.co.uk/Articles/2008/05/09/46026/carers.html Retrieved 09-05-08

involved in identifying care packages, but this will need to be an ongoing process. It is important to ensure that when training in telecare has been provided, it is followed up and there is evidence of use. Unfortunately, in these pilots, there has been a long period since the initial training and the project has not progressed as envisioned. Those who received training at the start of the project may have become disengaged from the process. If there is too long between training and implementation, the users will either forget or lose interest.

There may also be resistance to change where telecare may alter the nature of the work for some of the professionals. The falls response service does not currently exist and this will require a change in job description for those involved. There must be open dialogue, clear information, training and a facility to allow feedback for those people affected.

The clients' and stakeholders' views

Two pilot projects were reviewed to answer two groups of questions:
- What are the views of the clients involved in the project? Did it improve their quality of life?
- What are the views of other stakeholders (e.g. the voluntary sector and informal carers) involved in caring for the clients?

Medication dispensers pilot

Background

The medication dispensers are battery operated carousels that release a dose of tablets at a pre-set time. They have a tray that is loaded with the prescription by a pharmacist. The insert is then loaded into the carousel and this is locked to prevent unintended access to the tablets. The dispenser works on a timer that releases the dose at the pre-set time. It gives an audible and visual alarm to make the person aware it is time for their medicines. The alarm is stopped by turning the carousel over 180° and taking out the tablets. The next dose of tablets remains locked away until the time to take them.

The carousel could be linked to the CAS via a wireless link to the telephone to alert a carer that medication had not been taken. However, this was not implemented in the trial due to the problems in providing a response service.

There were strict criteria for admission to this pilot, since several problems could arise from using this device. The first criterion was that the person receiving the dispenser had someone who would visit each day to ensure that the dispenser was being used correctly. This person needed to check that the tablets had been taken and that the dispenser was operational. The second criterion was that the pharmacist and GP were in agreement that the client be trialled with the dispenser, and also that the pharmacist would be willing and prepared to fill the prescription into the inserts. The third criterion was that each person suggested for the trial was visited by a researcher to ensure that the dispenser was appropriate. This included checks such as the type of medication being used, any well-established routines that the pilot might disrupt, and agreement and support from family and carers. Information was provided to the clients and the carers, and informed consent obtained before admission onto the pilot.

<u>Users of the medication dispensers</u>

The medication dispensers have been prescribed to people with difficulty in remembering to take their tablets. These, by definition, are often people with mild to moderate dementia.

Dementia mainly affects the over-65s and its prevalence increases with age. The Alzheimer's Society says that more than 680,000 people have dementia in the UK, costing about £17bn a year in formal and informal care. It estimates numbers will rise to almost 950,000 by 2021, and more than 1.7 million by 2051.

Although the people receiving the dispenser benefit from a regulated intake of medicines, the pilot has shown that it is their carers who predominately benefit from the technology. It is often the main carer (either a social worker or a family member) who requests the dispenser, not the actual user. Although a number of letters were sent to individuals inviting them to participate, there has only been one self-referral to the Medication Pilot. Recipients of the dispenser are often unaware of the benefits as they will just "do as they are asked" by their carers. The ease of mind that the dispenser gives to the carer is knowing that "Mum will take her tablets correctly". From our observations, the family member requesting the dispenser is often highly stressed about the medication problem. The clients on the dispenser pilot often have several tablets to take 3 to 4 times per day at set times. It is essential that the correct tablets are taken at the correct time and the routine can become very complex.

The carer often sees the dispenser as the only solution left. Other systems may have been tried, including monitored dosage system trays such as NOMAD trays[13]. Tablets dispensed in this way can be abused in many varied and novel ways. One client was taking all the tablets of the same colour at a time, another would work their way left to right across the tray (opposed to down and up) thereby taking all their morning medication on day one, all the lunchtime medication on day two, etc. Even if the system of laying out the tablets in the correct doses is adhered to, the client must remember 4 times a day to take the tablets. There can then be confusion as to whether they have taken the dose and the next dose may be taken shortly afterwards as they have forgotten they have had the tablets. This leads to the concern that the person may be either under or over dosing on the medication.

Although it is not possible to measure how much the medication dispenser will save on hospital admissions or GP visits, it is clear that there is a significant problem and the dispenser may be one way to help.

<u>Problems observed with the medication dispensers</u>

The problems with the dispensers were much related to the client group.

Two dispensers were returned because they did not perform in the way expected by the client. One machine's alarm would not stop, due to the client not turning the device the full 180° required. The client managed to extract their tablets by only turning the device about 150°.

Another was returned because 'it would not give out the tablets'. Unfortunately, it was not possible to ascertain the exact problem as the client could not explain the details but it was assumed that there was a problem with the battery.

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[13] These systems lay out tablets in trays in daily doses to remind patient when the tablets are due.

The level of panic in the client group when the machine fails to perform exactly as shown is high and requires immediate response. The clients have often been told that taking their medication is very important and they do remember this. If they are unable to comply with this instruction, they become extremely concerned. Once the device fails to perform in the expected way, even once, it is no longer trusted by the client. No rational argument will change the perception that it does not work, and removal is usually requested. It is essential that there is some form of immediate response when the alarm is not deactivated or fails to go off. As noted above, the dispensers are wireless devices and should be able to connect to the community alarm system but currently there is no response service to support the monitoring and therefore the continued installation of these devices.

Medication pilot conclusions

The results of this evaluation show that in cases where the devices do work without problem they become invaluable.

The benefit to carers is the clearest result, particularly family members. Knowing that "Mum" is taking their medicine properly means that they do not have to find some way to visit up to 4 times a day. In one particular case, where the family do not live close by, the option of admitting the client to a nursing home was being considered, solely due to the medication management issue. This client, however, still remains in their home. This person has accepted the dispenser and realises its importance, so much so that if she needs to go to bed early she will take the dispenser with her and put it under her pillow so that she can hear the alarm, but so it will not disturb the neighbours.

However, when problems occur there has to be an immediate response and even this may fail to reduce the concerns of the user enough for them to continue using the device. If use of the dispenser is to become commonplace and a mainstream service, it is essential that:

1. it is an effective solution for the recipient's problems
2. there is a response service
3. the device is monitored on a regular basis

Falls monitor pilot

Background to the falls pilot

The falls monitor is a small electronic wireless device worn by the client. If the client falls, they press the button on the device and an alarm is sent to the call centre through the community alarm installed in their home. The call centre then telephone the client to check on the situation and appropriate response is put into action e.g. no action (because it was a false alarm or the client has managed to get up by himself or herself), call a key holder, or call an ambulance.

The clients selected for the falls pilot were taken from a group who attended the Falls Clinic at the Mountbatten Centre in Portsmouth. These clients were identified as "serial" fallers or at high risk of falling. The Mountbatten programme teaches confidence through exercise, learning to recover from a fall and falls management. According to the Community Falls Officer, it has proved to be a highly successful scheme. The participants of the falls programme were informed about telecare, the

PCC initiative and, in particular, the falls monitor. Requests were then made for volunteers for the pilot study.

The first interesting fact was that many of the participants did not see themselves as at risk of falling again and thought other people would benefit more from the devices than themselves. This was clearly at odds with the evidence in that they were there because they had fallen – one lady who refused the device fell only 10 minutes later! Several people had strategies already in place for calling for help – many of these were by use of mobile telephones – and couples were less likely to join as they felt they would have assistance from their partners. The other main reason given for not participating in the study was living in sheltered housing where pull-cord alarms are already installed throughout the building.

Feedback from users of the falls monitor

Interviews have been held with the 12 clients who joined the pilot study. The interviews took place approximately 6-8 months after installation of the falls monitor and community alarm.

Recipients of the falls monitors have provided very positive feedback on the concept of the monitor. Clients felt that attending the Mountbatten Centre course had increased their confidence. All those interviewed agreed that the falls monitor had helped sustain their increased confidence in managing falls. Although the falls monitors have not led to an increase in the activities of the clients, they all maintain that they "do the same amount of activity as before their falls". It would not be reasonable to expect participants to increase their activity levels given their age and general state of health. However, this is encouraging as serious fallers who lose confidence will often reduce or limit their activities for fear of falling[14].

All clients confirmed that they felt an increased sense of security for having the monitor and knowing that help would come in the event of a serious fall. Carers also supported this finding saying it allowed them to go out of the house without worrying if their partner had a fall while they were not there. All recipients also told us that they thought everyone should have a falls monitor, as they were such a good idea. When the clients were first approached to join the pilot there seemed to be some concern over having and using new technology. However, after receiving the monitors, there appears to be no fear or resistance to the technology. Credit should go to the installers who were highly praised by all clients spoken to, as they not only fitted but also explained the devices to the clients.

There were few negative comments about the monitors. These ranged from being a bit cumbersome to wear (female participants only) to false alarm triggers from the device. The false alarms were the most significant problem, as the monitor is prone to activation by even small movements. One lady stated that she "would sit in her chair and not fidget" when her partner went out for fear of activating the alarm accidentally. The alarm is sounded in the house as well as contacting the call centre and the noise it makes it very loud, several participants were scared by the noise when the alarm did go off. The interviews revealed that many of the participants were prioritising the times they would wear the detector because they did not want to

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[14] Cumming R, Salkeld G, Thomas M, and Szonyi G, (2000) Prospective Study of the Impact of the Fear of Falling on Activities in Daily Life, SF-36 Scores, and Nursing Home Admission, The Journals of Gerontology Series A: Biological Sciences and Medical Sciences,55.M229 – M305, http://biomed.gerontologyjournals.org/cgi/content/abstract/55/5/M299, Retrieved 08-October-2008

set off the alarm and "be a nuisance". All the participants in the pilot received a device that is activated when it reaches an angle of 60° and these will now be replaced with a new model that activates on a 70° tilt. Feedback will also be sent back to the manufacturer on the usability of the device.

It is essential that for this particular piece of telecare to become mainstreamed the actual technology needs to be reviewed. All the participants were in agreement that the device was a good idea, and they felt increased confidence knowing that there was help available if they needed it. Many participants also suggested people they knew who would also benefit from the falls detector. However, for it to serve its purpose the device needs to be worn at all times and currently this is not the case.

Discussion

- What quantifiable factors are affected by the introduction of telecare? Does it result in a measurable reduction in the number of falls, or the number of clients who become recurrent fallers? Does it have other healthcare benefits (e.g. to mental health)?

The evidence from the pilots

The Portsmouth pilots' results are currently too small to provide statistically significant evidence of savings or benefits; however, they have produced anecdotal qualitative data that supports findings from other published works. It is appropriate to conclude that should the Portsmouth pilots be extended, they would continue to support the findings of other pilot studies. Assuming that the other areas of concern identified in this report are addressed, it is reasonable to extrapolate the findings from other studies to support the case for telecare in Portsmouth.

There is evidence from the pilot studies that suggests that telecare improves medication management and reduces the potential for under- or overdosing on tablets. Although not quantifiable, there will be a reduction in hospital admissions and GP visits along with long term conditions brought about by poor medication management.

Comparison with other schemes

Findings from the Portsmouth telecare pilots support the evidence available that shows that telecare enables independent living that might not be otherwise possible.

- In West Lothian, nearly all 51 users in their telecare pilot reported that the technology enhanced their quality of life, and supported them by enabling independence and control over their own lives[15].
- In Kent, interviews with 124 users and carers again found that most people felt telecare increased their independence and helped them to continue living in their own homes[16].
- Data from the Smart Support at Home scheme in West Lothian shows they have achieved the lowest proportion of delayed hospital discharges of older people in

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[15] Bowes A, McColgan G, Bell D, (2006) Smart Technology for Community Care for Older People: Innovation in West Lothian, Scotland, http://www.ehealthnurses.org.uk/pdf/WestLothianTelecare.pdf Retrieved 8th Oct 2008
[16] Skidmore C, 2006, Benefits of Telecare, Presentation Slides, Telecare 2006. http://www.kent.gov.uk/SocialCare/health-and-wellbeing/telecare/benefits-telecare.htm

Scotland and had reduced the average stay in private care homes from 36 to 18 months.[17,18]

- Evaluation of the Safe at Home scheme in Northampton suggested that telecare had helped to keep people living independently in their own homes for longer.[19]

Potential cost savings

There are very few studies that have successfully managed to evaluate telecare in terms of potential cost savings, however, internal reviews by PCC have identified several cases where the cost of implementing telecare should reduce the cost of traditional social care packages[20]. If installation of telecare can reduce the amount of time required for visits from health and social care, there will be cost benefits. Allowing people to remain in their own homes for longer, and thereby delaying admission to care homes, also provides a potential cost saving. Given the costs of purchase, installation, monitoring and response, it is estimated that telecare could prove, at the worst, to be cost neutral to PCC. There would however be a large financial commitment to redesigning the services, policies and procedures to ensure mainstreaming is viable.

Reflections on the process

The telecare project has been running since 2006 and it wouldn't have achieved as much as it has without the involvement of Jonathan Smith and Rosanne Brown. Despite this, telecare has made little headway to becoming a mainstream service. There has been evaluation of several technologies and identification of the framework required for telecare. The steering group has been well supported by members of housing, social work, home care and *Help the Aged*. There has been much work put into communication and awareness training throughout PCC. However, telecare has not progressed as the potential suggested. There are now a falling number of installations, due to a number of problems:

1. The telecare service has been planned on the assumption that it will have a response service to support it. This has yet to be set up.
2. When the telecare alarm is activated, it contacts the call centre in the same manner as the community alarm. There is then a protocol to follow to deal with the alarm. Currently the call centre is refusing to support calls from the medication dispenser because of perceived liability issues.

These two issues are limiting the number of people who can receive telecare. The lack of a response service is the biggest single failure in this project. Without this service, each person wanting telecare must have at least two key holders to contact if the alarm goes off. Many of those requiring telecare are the most frail and vulnerable in society and often do not have friends or family close by. Numerous attempts have been made to address the problem of a response service but, often

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[17] Kelly D, (2005), Smart Support at home: the integration of telecare technology with primary and community care systems, BJHC&IM, Vol 22, No3, April 2005
http://www.bjhcim.co.uk/issues/v22-3/v22-3kelly.htm Retrieved 8th Jan 2008
[18] Barlow J., (2006) Building an evidence base for successful telecare implementation – updated report of the Evidence Working Group of the Telecare Policy Collaborative chaired by James Barlow, Care Services Improvement Partnership, Health and Social Care Change Agent Scheme, November 2006 pg.6
[19] http://www.northamptonshire.gov.uk/adults/home/telecare_home.htm Retrieved 28th Jan 2008
[20] Desktop Review, Conducted by Suzi Buckley, for J Smith as part of HIDS Telecare Project, 2008.

after much work, a barrier is reached and a new approach must be considered. This service may be the most significant cost to implementing telecare. Training will have to be provided to the responders and there will be the continual cost of employing staff.

Another problem is that the PCT has not engaged well with this project, although there is a crossover between health and social care. A response service could triage all calls received and could attend to minor falls, saving the current cost of dispatching an ambulance. The other cost saving to the PCT would be from attending to minor falls that could become serious health issues if the person is left lying on the floor until the next time somebody visits. The PCT and PCC should be working together at the highest levels to ensure the well-being of the elderly community is achieved without duplication of services and ensuring the appropriate department is providing the appropriate service.

Looking to the future

For the telecare initiative to become a mainstream service in Portsmouth, several critical success factors must be achieved.

1. A robust framework must be created on which all telecare applications can be added with ease. The framework must cover the whole care cycle; the initial assessment, prescribing telecare, installation, monitoring, appropriate response and review. This process should also allow information to be collected at each stage of the cycle for ongoing review of the effectiveness.

2. Education and training is essential to raise awareness amongst social workers and carers. The government's statistics show there is a market for telecare and older people have also expressed the desire to have "control" over their lives and remain living independently for as long as possible. However, the people who are assessing the care package needs can only reach this market if there is an awareness of the telecare services available. It is possible that unless the initiative is maintained a lack of interest or apathy may occur. Discussions on implementation of telecare have been ongoing for several years and there is still along way to go before it becomes part of the normal everyday business for the Health Improvement and Development Service. It is essential that motivation and engagement is maintained and that progress and successes are widely communicated.

3. Telecare can only succeed if there is an appropriate response to the monitors and alarms installed. An inappropriate response or no response at all defeats the purpose. It is this part of the cycle that has proven the most difficult to implement so far.

4. Consideration must be given to the telecare equipment selected and how to provide it. There is a need for economies of scale but each telecare package must meet individual needs. Any framework developed must be both scaleable and sustainable. The stress on various services must be identified and addressed. The current situation with the installers must be evaluated and their exact role identified. Currently they are installing, educating and training users in the use of the products. This means they are effectively moving from being technicians to becoming members of the care team.

5. Finally, a charging policy must be agreed. Although there are savings to be made by using telecare in some instances, there will still be a financial impact on social

services. Given the government's estimates of expenditure in the next 20 years, social services should be considering methods to reduce this funding gap now.

Finally, some observations.

There is more telecare equipment installed directly by PCC than has been covered by these pilot studies. There is also a greater demand than the installers can cope with.

The focus for the future should be directed away from the pilot studies and onto "mainstream" installations. The pilot studies have provided a useful insight into the advantages and problems of telecare. Undoubtedly, lessons could be learned from further pilots, but continuing the studies would probably not provide much in the way of new insights, only more data to support the current findings. What is required is a commitment to address the issues identified in this report and to use telecare routinely.

In our view, the future for telecare in Portsmouth is bright. PCC and its staff have shown a willingness and enthusiasm for introducing technology to help some of the frail residents of the city. The challenge now is to further develop these services so that they deliver the benefits on a wider scale and with increasing efficiency.