



Integrating Community Equipment Services

Telecare

Last updated: January 2005







ICES (Integrating Community Equipment Services) is a Department of Health funded initiative across health and social care to develop community equipment services in England, removing unnecessary barriers for users and modernising services. This document is prepared in conjunction with the Department's Change Agent Team and Audit Commission

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- Medway Council
- Wealden District Council, Eastbourne District Council, East Sussex County Council
- Isle of Wight Council

This pack should be read in conjunction with the following:

1) **Curry RG, Trejo Tinoco M, Wardle D (July 2003)** *Telecare: Using Information and Communication Technology to Support Independent Living by Older, Disabled and Vulnerable People – available at http://www.icesdoh.org/article.asp?Topic=89*

2) Audit Commission (2004) Assistive Technology: Independence and well being 4 – available at http://www.audit-commission.gov.uk/olderpeople/olderpeople/olderpeoplereports.asp

3) Audit commission (2004) Older People – Implementing Telecare – available at <u>http://www.audit-commission.gov.uk/reports/NATIONAL-REPORT.asp?CategoryID=&ProdID=BDBE0111-764C-44a4-8A66-1CB25D6974A4</u>

4) **Telecare Policy Collaborative:** <u>http://www.info.doh.gov.uk/etpc/etpc.nsf</u> - use the case-sensitive user name and password: OPADUSER and FORUM

This pack is the January 2004 version and makes the first reference to the Policy Collaborative for Telecare which will report in March 2005. The next update of the pack will be in February 2005.

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How to use this resource pack

The pack is set out for you to copy/paste sections into your own reports when considering telecare as part of improving services for a wide range of people living in the community.

You will need to select the section that you wish to add to your own report, click 'Copy' on the toolbar or use 'Edit/Copy'. When you have located the appropriate section of your report, simply use the 'Paste' icon or click 'Edit/Paste'.

You need to be aware that the context will change when pasted into your own reports. Although this document is not copyright, you may need to seek permission from the authors or the publication if you plan to reproduce part of any of the references.

1 Foreword

For the foreseeable future changes in demography and developments in policy will continue to transform the way services are delivered. To deliver quality social care and related primary care and support services to citizens, all stakeholders will need to work beyond traditional organisational boundaries, structures and systems.

To achieve this we need to embrace new ways of thinking and working. The use of technology, and telecare in particular, will play an essential component. It is for this reason that the Department of Health have set aside £80m over two years (2006-2008) to help further stimulate the ways social care and health economies, working with local stakeholders, can modernise, invest and respond to this challenge.

In some areas, telecare is already enabling us to be smarter in the way we plan, commissioner, procure, deliver and supply services that respond to individual needs, aspirations and lifestyles. It is a rapidly changing market; one that is being revolutionised as individuals become more familiar with telecare and how it can support someone's independence at home, whatever their accommodation.

Industry is also investing heavily in extending the capability of telecare products that can further enhance personal control, support staff and deliver responsive services to meet a specific personal need. For example, supporting someone with dementia in their own home thereby preventing "a move up the care ladder". In addition, telecare is increasingly becoming a wider consumer and lifestyle choice with compatible cable, digital TV and/or the internet access. These advances will further transform the speed of access to information, communication and services in the 21st century.

Getting Started in Telecare is an invaluable resource for policy makers, commissioners, manufacturers/ suppliers and service providers. It gives clear and concise information on how to implement telecare and the outcomes we can achieve for citizens.

Richard Humphries Interim Director Care Service Improvement Partnership (CSIP) January 2005

2 Introduction

The main aim of this pack is to provide a useful resource for commissioners, managers and practitioners in a wide range of statutory and voluntary sector organisations to implement telecare for the benefit of people living in the local community.

The *pack* should be read alongside other key documents including:

- Curry RG, Trejo Tinoco M, Wardle D (July 2003), Telecare: Using Information and Communication Technology to Support Independent Living by Older, Disabled and Vulnerable People (<u>http://www.icesdoh.org/article.asp?Topic=89</u>)
- Audit Commission (2004), Assistive Technology: Independence and well being 4 (http://www.audit-commission.gov.uk/olderpeople/olderpeoplereports.asp)
- Audit commission (2004) Older People Implementing Telecare available at <u>http://www.audit-commission.gov.uk/reports/NATIONAL-</u> REPORT.asp?CategoryID=&ProdID=BDBE0111-764C-44a4-8A66-1CB25D6974A4
- Telecare Policy Collaborative: <u>http://www.info.doh.gov.uk/etpc/etpc.nsf</u> use the casesensitive user name and password: OPADUSER and FORUM

The importance and recognition of telecare are growing.

Telecare and the *Health Select Committee*

Telecare was specifically endorsed by the *Health Select Committee* in July 2002 – "The report recommends that the Department of Health establish "a national strategy to promote the systematic development of telecare solutions as part of a spectrum of care at home". It also calls for the Government to examine ways of facilitating greater uptake of Telehealth solutions within both health and social care".

This pack supports local authorities, health trusts, housing associations, voluntary organisations and others in implementing telecare initiatives under ICES, intermediate care and other Government initiatives.

The pack includes definitions, checklists, draft reports, information for comparative evaluation together with a range of external resources and references to make telecare a reality in your organisation.

As in any change management programme, telecare projects require:

- clear vision
- a purpose
- partnership working
- dedication and commitment from champions
- appropriate funding for programmes
- implementation plan
- review of progress

The pack considers a number of these issues.

3 Definitions of telecare and telemedicine

Telecare is care provided at a distance using information and communication technology (ICT). **Telecare** is the continuous, automatic and remote monitoring of real time emergencies and lifestyle changes over time in order to manage the risks associated with independent living.

In simple terms, telecare includes detectors or monitors (for example, motion or fall detectors) attached to community alarm systems that trigger a warning at a control centre that can be responded to within defined timescales. There are likely to be further types of equipment available in the future with increasing availability of mobile and wireless technology. Some people talk about different generations of technology – this includes:

- First generation handsets and pendants
- Second generation home monitors
- Third generation mobile and wireless technology

Telemedicine is the remote exchange of physiological data between a patient at home and medical staff at hospital to assist in diagnosis and monitoring (this could include support for people with lung function problems, diabetes etc). It includes (amongst other things) a home unit to measure and monitor temperature, blood pressure and other vital signs for clinical review at a remote location (for example, a hospital site) using phone lines or wireless technology. Reference

1) **Curry RG, Trejo Tinoco M, Wardle D (July 2003)** *Telecare: Using Information and Communication Technology to Support Independent Living by Older, Disabled and Vulnerable People – available at <u>http://www.icesdoh.org/article.asp?Topic=89</u>*

Appendix A contains a simple and user-friendly glossary of definitions and common explanations used in this pack.

More information on telemedicine and telehealth will be available in the next update in this pack.

4 The benefits of telecare

Telecare can play an important role in maintaining independence for users and can also provide effective support for carers alongside traditional healthcare, social care and housing initiatives.

Telecare enables people to remain in their own homes with increased safety, confidence and independence. Telecare is increasingly being seen as part of a care package with related services such as home care.

Telecare sensors can help *reduce risk* to a user by:

- Lessening the impact of a known hazard eg shutting off a gas supply or
- Lessening the impact of an incident that has happened eg a user falls and breaks a hip detected by a falls monitor
- Predicting behaviour which could be considered 'risky' e.g. wandering

The table below identifies some benefits for users and carers as well as the organisations providing support.

Table 4 Benefits for users, carers and organisations			
Group/organisation	Benefit	Comment	
Older people, people with disabilities, people with dementia	Supports users in their own homes through housing services or a care package. Increased safety, confidence, re-assurance	Housing – sheltered and extra care Health and social services – single assessment with care plan	
Carers	Confidence and re-assurance that there can be rapid contact if there is a problem	Carer contact via a community alarm control centre or directly eg through mobile phone	
Parents	Confidence and re-assurance that there can be rapid contact if there is a problem	Carer contact via a community alarm control centre or directly eg through mobile phone	
Local authority housing services, housing associations	Provides rapid response cover to support users in sheltered/extra care housing rather than admission to a care home	London boroughs, unitary/ metropolitan/district council responsibilities - sheltered and extra care housing	
Local social services authorities and NHS trusts	Supports users in their own homes as part of a care package	Single assessment process, direct payments for equipment and carers	
Voluntary organisations	Support to users and carers directly or funded through statutory	Direct services provided or funded through public sector grants etc	

	agencies	
GPs, nursing and	Effective component of a care plan	Telecare can play a significant part in
therapy staff, care	under single assessment process	supporting people at home eg long
managers and		term conditions/chronic disease
community-based heath		management
services		

Advances in technology mean that trigger messages can now be sent directly to a carer's home phone or mobile for immediate action.

There are a number of demonstration sites (eg 'smart homes', Disabled Living Centres, ICES sites etc) around the country where typical devices can be viewed and demonstrated in a home environment.

Note: Appendix O has a list of demonstration sites

The following case study illustrates the role of telecare in supporting independent living and the way in which it interfaces with other IT based initiatives.

The Role of Telecare – A Case Study

We are grateful to Dr. Beverly Castleton, Medical Director at N. Surrey PCT for providing the material in this case study.

Mr T is an 80 year old man who has a fall. He manages to summon help and the GP is alerted. Initially, the District Nurse comes round. He has lain on the floor for several hours¹, she picks him up, puts him back to bed but can't find anything obviously wrong except some confusion. To be on the safe side she asks the GP to do a home visit and he does so the next day. Unfortunately it is a locum GP who does not know the patient and does not know that he is not normally confused². (Mr T. is alert and writes books when he is well). This is unknown to both of the assessors thus far. The patient has had another fall before the GP gets there³, but the GP does not make a diagnosis as to the cause of the fall, but simply suggests that Mr T is at risk on his own at home and arranges for him to have a period of convalescence in a local residential home⁴. Convalescence from what is yet to be determined! Unfortunately the staff at the home don't know Mr. T either and he ends up being bed-bound⁵. His regular GP, returning from annual leave 10 days later, goes to visit Mr T in the residential home, and finds him in a very sorry state.

Mr T has extensive sacral pressure sores, probably created when he lay on a hard floor twice, ten days before, and worsened by the fact that he is now bed-bound in the home. He also has bronchopneumonia.

He is admitted to St Peter's Hospital Acute Unit where he remains for the next three months, just surviving the pneumonia, desperately debilitated by the pressure sores and remaining relatively immobile. The hospital suggests that on discharge Mr T goes into a nursing home. Fortunately Mr T has regained some of his cognitive function by then and refuses to go. His nephew and niece also don't want him to be institutionalised either. They request that he be considered for a rehabilitation package and he is taken into our rehabilitation unit⁶. Two and a half months later Mr T goes home. His sacral sores have finally healed. He is gaining some stamina. Initially he walks with a frame, but he discards that a few weeks later. He is back to writing books and lives another ten years of active life⁷.

The individual events that make up this case study have been identified with superscripts in the text. The role of telecare at each stage is described in the table below.

	Event in Case Study	Role for Telecare	Improvement in Outcome
1.	Mr. T's first fall	Mr. T is wearing a pendant alarm	Mr. T summons help immediately, talks to and is reassured by call centre, appropriate carer sent
2.	Mr. T's normal mental state not known to GP on home visit	Better information available to GP via, for example, SAP.	Mr. T's confusion would have alerted GP to a more appropriate diagnosis

3.	Mr. T's second fall	Following first fall Mr. T is automatically given a fall alarm	Call centre knows Mr. T has fallen for second time and sends carer at once
4.	Mr. T has period of "convalescence"	Full telecare package installed in Mr. T's home in conjunction with domiciliary care and assistive technology	Mr. T managed at home. No need for "convalescence"
5.	Mr. T is bed bound in residential home	Telecare installed in residential home	Mr. T and residential home staff take supported risks
6.	Mr. T refuses to go to nursing home going to rehabilitation unit instead	Telecare installed in rehabilitation unit	Mr. T and rehabilitation unit staff take supported risks. Mr. T's length of stay is reduced
7.	Mr. T goes home	Full telecare package installed in Mr. T's home	Mr. T's well-being monitored for the rest of his life ensuring support when it's needed and reducing inappropriate admissions to hospital

From the above table it is clear that at every stage in this client's care, telecare could have played a beneficial role. Furthermore, if some telecare technology had been available to Mr. T at the outset the whole story might have been different with steps (4), (5) and perhaps (6) omitted altogether, saving a large amount of distress to Mr. T and resources to the health and social care services.

Section 13 looks at the advantage and disadvantages of telecare.

5 Housing and telecare

The range of housing stock in the UK is extremely diverse. The majority is in owner-occupation. However, there is also a sizeable stock of social housing, both local authority managed housing and accommodations managed by housing associations and other not-for-profit organisations, including retirement and supported housing for rent or for sale for older and vulnerable people.

The use of technology has made a considerable impact in the way housing is designed, constructed and managed. This includes "smart" digital features that facilitate lifestyle choices and enable occupiers to control their immediate environment and/or packages of telecare that enable occupiers to access formal and informal care and support services in order to maintain their independence at home.

We are hearing of housing being "care ready". Indeed, there are already over 1.4million people linked to a community alarm or first generation technologies. This and subsequent generations of technology and their functionality are explored in a factsheet produced by the Department of Health's Housing Learning & Improvement Network.

Note: Factsheet and related information can be downloaded from <u>http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/TertiaryCare/ChangeAgentTeam/ChangeAgent</u> <u>TeamArticle/fs/en?CONTENT_ID=4073982&chk=rYLmV6</u>

6 Role of the Change Agent Team and telecare

The Health & Social Care Change Agent Team (CAT) was established in January 2002 to tackle delayed transfers of care (or delayed hospital discharges) and associated arrangements. Their purpose is to work across health, social care, housing and the independent sector to:

- offer targeted help to health and social care communities in reducing delayed transfers of care
- support implementation of the key aspects of the National Service Framework for Older People's Services that are concerned with delayed transfers of care
- assist with development of a more integrated approach to commissioning and provision of services, particularly in relation to intermediate care and housing. This includes exploring opportunities for developing care trusts and the use of Health Act 1999 flexibilities

Funding support was provided from the Change Agent Team to facilitate the programme development of telecare in the ICES South East Region. This initiative was led by Rachel Denton with support from Belinda Thorpe (between October 2003 and March 2004) and Mike Clark from the ICES Team.

Note: Web link for the Change Agent Team:

http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/TertiaryCare/ChangeAgentTeam/fs/en National Service Framework for Older People:

http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/Public

National Service Framework for Long Term Conditions:

http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/LongTermConditions/LongTermInfor mation/LongTermInformationArticle/fs/en?CONTENT_ID=4002151&chk=/wIFZS

Health Act 1999:

http://www.dh.gov.uk/PublicationsAndStatistics/Legislation/ActsAndBills/ActsAndBillsArticle/fs/en?CONTENT_ _ID=4002304&chk=AaojV3

7 Integrating community equipment services (ICES) and telecare

In 2000, the Audit Commission published '*Fully Equipped*' pointing out the considerable variations in community equipment provision. In 2001, the Department of Health published The Guide to Integrating Community Equipment Services (which specifically references telecare) as part of the NHS Plan and National Service Framework for Older people. A further Audit Commission report in 2002 continued to identify local variations in provision of equipment. Initial funding was made available to health and local authorities through the 2001 guidance. Additional funding is now available through the Access and Systems Capacity Grant covering 2003-2006 for an additional 500,000 items of equipment for 250,000 users (See Section 9 on 'Funding for Telecare. A local authority circular covers the targets for equipment).

Note: ICES Guide to Implementing Community Equipment Services <u>http://www.icesdoh.org/article.asp?page=82</u> Audit Commission, Fully Equipped 2000: <u>http://www.audit-commission.gov.uk/reports/NATIONAL-</u> <u>REPORT.asp?CategoryID=&ProdID=BD34429B-F1B2-4E50-8A82-7A60A7A45302</u> Audit Commission, Fully Equipped 2002 <u>http://www.audit-commission.gov.uk/reports/NATIONAL-</u> <u>REPORT.asp?CategoryID=&ProdID=2103ACC1-7512-46a0-B74C-3D28724585FE</u>

The ICES Team was set up in November 2001 to support the implementation of integrated community equipment services across more than 130 organisations. From October 2003 to March 2004, the ICES Team included a project officer funded through the Department of Health's Change Agent Team to take telecare to the next stage of implementation. The ICES web site <u>www.icesdoh.org</u> provides extensive information on aspects of integrated equipment services. Opportunities should be taken by ICES organisations to include telecare in local Section 31 partnership agreements and funding bids for 2004/05 and beyond. ICES Team Members can provide information about local lead officers and telecare contacts. For ICES initiatives, it is a simple process to include telecare monitors as a catalogue item.

Advantages of including telecare in ICES Section 31 agreement

- Partnership approach accommodates multiple local authority/multiple PCT arrangements
- Joint commissioning health, social services, housing etc together with independent sector etc
- Efficient contracting arrangements and SLAs where outsourced (eg ICES contractor, community alarm service, other contractor)
- Pooled fund manager local 'ring-fencing' of telecare funds within ICES agreement alongside other community equipment
- Procurement single purchasing arrangements, may be through consortium/PASA etc
- Single point of contact, single access, single manager, single inventory/unified stock catalogue item
- Single financial system for ordering/invoicing, single audit arrangements, single VAT regime
- Computer tracking and traceability of equipment
- Demonstration and display options
- Direct payments for range of telecare services
- Trusted assessor, trained technicians able to assess user in home environment, install, test, maintain could be contracted to community alarm service or ICES contractor
- User and practitioner involvement in advisory board to ICES manager
- Use of access and systems capacity grant for 2004/2005 community equipment
- Developmental approach within agreement to cover 2006-2008 telecare (electronic technologies) funding continuity from Access and Systems Capacity Fund
- Seven-day performance indicator for telecare as part of a social care assessment

Barriers to including telecare in an ICES programme

- Poorly constructed Section 31 agreement no development options for telecare
- Working towards ICES pooled fund over longer period not in step with telecare plans
- Difficulties in reaching agreement between partners
- No buy-in from PCTs evidence base and cost-effectiveness disputed
- Major start-up costs eg upgrading a control centre for telecare or telehealth
- No telecare champions, ICES pooled fund spent on other priorities
- Insufficient resources in pooled fund
- Unable to transition from pilot to mainstream funding

ICES documents are available through <u>www.icesdoh.org</u> Access and Systems Capacity Grant 2004/2005: <u>http://www.icesdoh.org/news.asp?ID=253</u> Contact information for ICES Team Members: <u>http://www.icesdoh.org/contact.asp</u>

8 Audit Commission – Independence and Well-being

Following the 'Fully Equipped' documents, in February 2004, the Audit Commission published a series of five reports on the 'Ageing Society' entitled 'Older People: Independence and well-being: The challenge for public services' which examines the ways in which public services support the independence and well-being of older or disabled people. The main document is underpinned by a series of in-depth reports that are available on the Commission's web-site. One of these in-depth reports, 'Assistive Technology: Independence and well-being' concentrates on the part that assistive technology can play.

Note: Audit Commission reports <u>http://www.audit-commission.gov.uk/olderpeople/olderpeoplereports.asp</u> Audit commission (2004) Older People – Implementing Telecare – available at <u>http://www.audit-</u> <u>commission.gov.uk/reports/NATIONAL-REPORT.asp?CategoryID=&ProdID=BDBE0111-764C-44a4-8A66-</u> <u>1CB25D6974A4</u>

9 Funding for telecare

To date, public service funding has generally come through local initiatives in London boroughs, unitary, metropolitan and district councils with housing responsibilities. In some cases, work has been carried out by Housing Associations. For social services authorities, funding is available linked with ICES through the Access and Systems Capacity Grant. Primary Care Trusts have the opportunity of linking telecare and telemedicine initiatives to their Local Delivery Plans for instance as part of chronic disease management and long term condition programmes. Telecare can assist with implementing delayed discharge protocols and intermediate care initiatives for which funding may be available locally across health and social services. Specific funding sources for organisations could include:

- Access and Systems Capacity Grant
- Housing Corporation (for capital infrastructure costs eg electrical sockets/switches and telephone points)
- Reimbursement funds
- Bids for improvements to extra care housing
- Charitable sources
- Equity release
- Individual purchase/hire, rents, service charge or support costs/fees (eg Social Services Departments)

Access and Systems Capacity Grant 2004/2005: http://www.icesdoh.org/news.asp?ID=253

Although there are one-off costs (eg purchase of monitors, upgrade to a control centre), recurring funding is vital to a successful telecare project. Section 31 agreements for integrated community equipment services (ICES) are one way in which funding can be supported over the medium and long term. Momentum will need to be maintained through established funding streams.

Users who have received a community care assessment may choose to have a cash equivalent for telecare as a direct payment.

Direct payment for community equipment: <u>http://www.icesdoh.org/article.asp?Topic=110</u>

Organisations will need to consider the costs and benefits of providing telecare. This will include comparisons with current care plan arrangements for home care, residential and nursing care. The national tariff under Payment by Results will have a significant effect on the implementation of telecare as health and social care organisations will need to look at reducing unnecessary hospital admissions.

Payment by Results – National Tariff: <u>http://www.icesdoh.org/article.asp?Topic=147</u> Long Term Conditions Care http://www.dh.gov.uk/PublicationsAndStatistics/PressReleases/PressReleasesNotices/fs/en?CONTENT_ID= 4100313&chk=k2KzSv

In time, telecare will come to be funded through mainstream sources as its importance and value is recognised.

Other useful websites for possible information about funding including charities & independent sector: <u>www.fundfinder.org.uk</u> <u>www.awardsforall.org.uk</u> <u>www.community-funds.org.uk/grants</u> <u>www.national-lottery.co.uk/newopport.html</u> <u>www.esfnews.org.uk</u> for information about the European social fund.

10 Telecare and the wider health, housing and social care agenda

Much of the telecare technology has been developed with a close link to community alarm systems. These long-established alarm systems typically include telephone handsets and pendants linked to a control centre. Telecare relates to the monitors and sensors which are frequently linked via a telephone handset, electricity supply and standard telephone line.

A strong research base in the UK and around the world has developed and evaluated products from simple smoke and heat sensors to complex telemedicine monitors.

Much of the initial emphasis has been around demonstration sites – eg 'smart' homes that have a selection of sensors or monitors that support independent living. As a consequence projects and programmes have been popular in sheltered and extra-care housing – a 'controlled' environment with limited numbers of people linked to a control centre with clear response arrangements when a sensor is triggered. In addition, there is scope for Home Improvement Agencies (HIAs) to play a greater role in specifying and installing telecare when undertaking property repairs, aids and adaptations to existing homes.

Telecare can make a significant difference in a variety of environmental settings and can link to a range of health, housing and social care initiatives. Telecare is making the transition from protecting 'property' to protecting 'people'. There is still a long way to go, however, sensors are now becoming more reliable and smarter in their performance. In time they will be able to support a wide range of service users in a variety of environments. Section 13 provides further information about the advantages and disadvantages of telecare.

Table 10 shows some examples of the wider agenda where telecare can make a significant difference.

Table 10 Telecar	Table 10 Telecare links to the wider agenda for health, housing and social care			
Health/housing/ social care Agenda	Telecare link	Examples of funding	Comment	
National Service Framework (NSF) for Older People – Intermediate care	 Systems to support: Alternatives to admission Hospital discharge 	 LDP Performance Fund Access & Systems Capacity Reimbursements 	Key feature of delayed discharge protocols	
National Service Framework (NSF) for Older People – Falls	 Systems to support: Falls detection and rapid response with falls monitor Increased confidence with falls monitor, 	 LDP Performance Fund Access & Systems Capacity Reimbursements 	 Hip fractures cost the NHS £1.7bn per year (NSF) In 1999, 204,000 admissions to hospital were fall-related at a cost to the government of £981 million.(NSF 	

		r	••••••••••••••••••••••••••••••••••••••
* Failure to take mod	 Improved compliance with taking prescribed medication using medication reminder device (note: liability issues*) Accident prevention and reduction of admissions to hospital with falls monitor Activity monitor to check success of rehabilitation Manual alarm button that can be worn in bed 	te time could be a serious p	Older People) 95% hip fractures are due to falls (Reference: Falls, Fragility and Fractures' Colin Cryer and Sanjeey Patel) Source: Audit Commission - Assistive Technology: Independence and well- being 4 (February 2004)
		te time could be a serious p	roblem – special attention
National Service Framework (NSF) for Older People – Stroke	bility issues with telecal Systems to support care packages for users and carers following rehabilitation and discharge to improve confidence	 LDP Performance Fund Access & Systems Capacity Reimbursements 	Stroke services should consider including Telecare for rehabilitation to meet NSF targets
National Service Framework (NSF) for Older People – Mental health	Systems to support people with dementia – wandering detection, location devices	 LDP Performance Fund Access & Systems Capacity 	 Increasing numbers of people with dementia - Estimated rise in numbers of people of all ages in the UK will rise over the next 40 years from 741,000 to 1.2 million (Reference: Older Peoples NSF)
NSF for long term conditions – early 2005	To be added when available – late 2004/early 2005		
Delayed discharges legislation/ reimbursements	 Systems to support: Alternatives to admission Community care services for a safe discharge 	Delayed Discharge/ reimbursements	 Delayed discharge protocols Reductions in reimbursements Links to telemedicine Defined services for a safe discharge (may be identified by users/carers)
Fair Access to Care Services (FACS) providing options for managing risk	Systems to support care packages in own homes linked to risk issues	 Performance Fund Access & Systems Capacity 	 Relevant to all risk levels
Single Assessment Process and care pathways	Systems to support care packages in own homes using multidisciplinary assessments	Local Single Assessment Process Implementation	Includes: • Contact • Overview • Comprehensive

Public service agreements (PSAs) – supporting higher numbers of people at home	Systems to support care packages	•	Performance Fund Access & Systems Capacity	ma	Specialist sessments by care anagers, therapists, rses etc Include Telecare development in PSA
Supporting people	Systems to support care packages in sheltered and extra care housing or dispersed through a community alarm	•	Supporting People programmes	•	Partnership work with housing authorities/ associations and voluntary groups
Valuing People – support for people with learning disabilities	Systems to support care packages in own homes	•	Valuing People programmes	•	Partnership work with housing authorities/ associations
Integrating community equipment services (ICES)	Issue of telecare equipment through single point of contact as part of care package. Telecare provided free as part of community equipment (Note: charge can be made for connection to control centre/handset)	•	Access & Systems Capacity	•	Partnership working through Section 31 Health Act, single operational manager with advisory board, stock management, IT systems for tracking users with equipment, authorised assessors, installation, adverse incident monitoring, recalls, demonstration and display areas for telecare products and services ICES specification for services includes telecare. New seven day performance indicator Access to funding through Access and Systems Capacity Grant. Direct payments, self assessment (SARA)
Direct Payments	Payments for telecare sensors, mobile phones receiving images, data etc	•	Care Management funds		
Further NSFs – long term care, children etc	Users with long term conditions and children with disabilities can benefit directly from telecare as part of their care plans			an	SFs for long term care d children due in late 04
Invest to save	Past bids have included innovative methods of providing equipment services				

	1	1	
Independence and social inclusion	Telecare promotes local objectives for independence and social inclusion		
Promoting choice for users and carers	Care options to include telecare, direct payments for telecare		
Equalities and minority ethnic communities	Less intrusive telecare options to support care frameworks	Interpretation/translation costs	Work with local ethnic minority groups
NHS Direct/out of hours and rapid response services	 Telecare run from same control centre with location of out of hours services etc. Restructuring of Out of Hours/ New GP contracts 		
Links to environmental control systems	Future integrated systems will include telecare components		Convergence of assistive technology
Quality and Choice for Older People: A strategic Framework			
National tariff/payment by results	Telecare/telehealth can support people at home to avoid unnecessary admissions		From April 2005, PCTs will have to find tariff amounts for emergency admissions, A&E attendances etc – the cost of telecare/telehealth for people who have multiple admissions for long term conditions See Section 23.3
Long term conditions/chronic disease management	Telecare/telehealth can support people at home to avoid unnecessary admissions		Telecare can support programmes to enable people with COPD/diabetes/epilepsy remain at home – see also National tariff/payment by results
Practice-based commissioning	Telecare/telehealth can support people at home to avoid unnecessary admissions		

Independent sector organisations such as the Royal National Institute of the Blind (RNIB) have developed telecare-related services that use the telephone as a tool to support independence and reduce isolation. Whilst not strictly within this document's telecare definition, these services are important innovations. They include:

- Telesupport which offers information and activity programmes through structured teleconferencing for people with serious sight loss.
- Telebefriending
- Teleconsultation services which utilise teleconferencing to run focus groups over the phone.

11 Telecare and social alarm/community alarm systems

Much of the telecare research and development has grown up around the links with community alarm control centres. The Association of Social Alarms Providers (ASAP) provides details of local control centres on its web site. The control centre can receive an 'alert' from the sensor via the telephone system. The operator can see information about the trigger together with the time it was activated and can carry out the agreed response procedure for that individual user eg talking directly to the user, contacting emergency services, contacting a family member, carer or friend who can visit. Some control centres provide their own member of staff to follow up certain alerts or can contact a warden in a housing block. Control centres provide 24 hour coverage with uninterrupted power supplies (including back up for emergencies) disaster recovery plans and voice recording requirements. Control centres can analyse statistical information and lifestyle monitoring data to support a telecare programme. The majority of telecare installations in the country have a local control centre.

Note: The Web site for the Association of Social Alarm Providers (<u>http://www.asap-uk.org/</u>) can provide additional information on control centre arrangements. This includes the ASAP Code of Practice Part One – Calls Handling Operations and Part Two - Dispersed Alarm Operations. ASAP are working with main suppliers to establish a Common Signalling Protocol for alarms and telecare equipment.

The fundamental component is an alarm unit connected to the telephone handset, (or sometimes built into a special telephone set), with large button that directly dials the centre. A pendant can be worn around the neck, on the wrist, in a pocket or pinned to clothing – this has a wireless connection through the handset when the button is pressed.

Telecare has become a natural extension of the service using the same technology to send data via the handset and telephone line. Different alerts can be recognised and may have different responses agreed with the user and/or carer.

Some equipment is still in prototype form. However, several telecare detectors are available commercially with high degrees of reliability.

What can telecare do to *support* a user?

- Set off a local alarm (eg siren, flashing light)
- Turn off a cooker or turn on a table lamp
- Shut off a gas supply or provide an alert for flooding
- Send a message to a control centre as an alert
- Maintain an open line to a control centre for the user to talk
- Request a visit from response or backup services eg carer to visit, ambulance service

Telehealth systems can support vital signs monitoring to maintain people at home, for instance, individuals with long term conditions such as COPD.

Note: Appendix I has information about suppliers

In many cases, there is a charge (weekly or monthly) for the handset and pendant. Telecare monitors provided through ICES should not carry a charge, but could carry a charge if provided through some other means eg where there is no community care assessment.

There is always a delay in responding to a call if another party (family member, carer) has to be contacted. Systems which send alarms based on detected events are typically reactive although a timely response significantly reduces the consequences of many incidents (eg falls). The general practice for control centres is to maintain telephone contact during an incident to provide reassurance to the user assisting them to remain calm whilst help arrives and advising them on what action has been taken.

Systems that allow patterns to be detected are preventative because they allow events and trends to be predicted (eg activity monitors can be used to reduce fall rates). Analysis of these patterns can be important at service user reviews. However, once a person has fallen and injured him or herself, the damage is done to the individual and the costs are incurred to the local health economy although costs and mortality rates are known to go up very quickly if the person is not found within an hour. Reference Systems are becoming more proactive with contextual prompting to help the user to maintain independence.

Many of the sensors now available are passive devices where the service user does not have to interact for a call to go through to the control centre. These devices can be useful for all vulnerable users and particularly those who have early stage dementia eg gas detectors, smoke detectors, infrared sensors, flood detectors.

There are ethical considerations for telecare management as some people may find monitors intrusive. Services may need to engage with the local ethics committee for project approval. See also Appendix H – Ethical issues.

Note: For more information on ethical issues see Appendix H and the Astrid Guide (Hawker publications) www.ASTRIDguide.org

There is a degree of complexity in providing telecare through the public sector in that Social Services is provided through higher tier authorities in county council areas whereas alarm systems are generally provided through district, metropolitan and unitary authorities at a different level of local government. Also, primary care trusts (PCTs) are not always co-terminous with social services departments (some social services departments have several PCTs within their boundaries). In county areas, PCTs are not always co-terminous with district councils. This requires sophisticated levels of co-ordination and partnership working through user-focused project groups working towards seamless services.

Some current alarm services may need to have upgrades to their system to support extensive telecare use and/or telemedicine. Suppliers will provide appropriate advice. See Appendix I for a list of suppliers.

Alarm system protocols are well developed with organisations having accreditation together with Charter Mark and ISO 9000 series in some cases. There are a range of relevant European standards for function, (EN50134), and performance, (EN300 – 220 Class 1 radio), of telecare systems. There is a dedicated frequency, 869 MHz, reserved specifically for social alarms and telecare systems. Modern systems should adhere to all of these standards.

Notes:

Chartermark holders: <u>http://www.chartermark.gov.uk/holders/holders.htm</u> Review of alarm systems: <u>http://www.ricability.org.uk/reports/report-telecoms.htm</u> ASAP publications: <u>http://www.asap-uk.org/Templates/Internal.asp?NodeID=44176</u>

12 Telecare without a call centre/control centre

More advanced telecommunications facilities linked to personal computers (PCs) and mobile phones are emerging.

Technology and communications *developments* which could impact on telecare:

- Broadband internet much faster data transfer including images and text via e-mails and web sites, telephone calls using the internet (Voice Over Internet Protocol, VOIP) etc
- Wireless technology connectivity around the home and in the community without cabling
- Mobile phone technology images (a room in the house), data (eg GPS location to nearest 20 metres), ETDOA (enhanced time difference on arrival) and text (the temperature in a room is below 15 degrees Celsius) from a location sent directly to a mobile phone. Also direct (non-dialled) calls to a handset (from 2004), mobile phones for people who are blind. 3G mobile services support video communication
- Convergence of electrical, IT and telecommunication devices eg through the Bluetooth standard

These developments will continue to open up new opportunities and are not always reliant on a control centre. There are opportunities for direct receipt of calls, messages and data on a carer's telephone. It opens up choice and availability on the high street rather than through a control centre. There are also potential

opportunities for innovation in direct payments. These payments are available as cash equivalents for users who have had a community care assessment and a need has been identified which can be met through telecare provision.

13 Advantages and disadvantages of telecare

As with all service initiatives, it will be important to overcome barriers and manage telecare within established financial and administrative frameworks.

Table 13 covers the advantages, barriers and concerns of telecare from different perspectives.

Table 13 – Advantages of Telecare			
Area	Advantages	Barriers and concerns	Comment
Care Managers	 Options in a care plan either alone or with home care etc Alternative solutions to risk reduction Ability to improve independence. 	Initial cost	Telecare needs to be built into Social Services care management systems. Costing should then be picked up by ICES pooled funding
Carers	 Supports a care plan Provides confidence and re-assurance 	 Lack of confidence in equipment and response Responding to false alarms 	 Demonstration flats helpful Improved reliability Standards
Discharge planners	 Prompt discharge from hospital. Early discharge planning needed. Pre- admission info from DNs and GPs 	 Inappropriate identification of patients who could benefit from Telecare could lead to lack of confidence in equipment. 	Control Centres could provide a "care coordination and reference role" as well as the monitoring service provision itself
District nurses	 Remote monitoring using telemedicine for CDM, e- clinics by DN's or practice nurses. Visits saved so time reallocation for preventative work. Telecare devices such as falls monitors should be included in falls programmes 	 Time for multi- disciplinary training, agreeing protocols etc. Initial cost of setting up 	Comprehensive training, clear protocols and pathways of care vital. Links to NHS direct and other services could be beneficial.
Users	 Supports a care plan Provides confidence and re-assurance May reduce adverse incidents eg falls Reduces isolation 24/7 monitoring 	 'Big brother'/ethical issues Monitors may be abused, disabled, forgotten, lost Compliance issues 	 An early discussion with users and practitioners on ethical and other issues will help to overcome this.
Housing managers	 Support in sheltered and extra care housing To enable older people to live independently 	May be more difficult to co- ordinate in other community	 clarity needed on local capital and revenue funding arrangements

		settings	
Intermediate care	Support intermediate care programmes and rehabilitation. In- patient units can give time to test equipment and gain user and carer confidence	 Lack of telecare awareness of Primary Health Care Team particularly GP's and DN's May lead to uncertainty of benefits 	Follow up after discharge vital to sustain clients rehabilitation and confidence in telecare.
Occupational therapists	 Single assessment process (SAP) OT role in assessing for telecare 	Different types of assessments	 Training and awareness needed in telecare assessment and implementation Useful to include Telecare in SAP discussions
Community Safety officer	 Provides a number of crime prevention roles Bogus caller protection Domestic violence protection Intruder protection 		
Mental Health	 Allows early onset dementia sufferers to stay at home longer Provides respite for carers 	Compliance issues	

14 Best value and telecare

Local authorities need to provide 'best value' services. Telecare should be considered in any review of services covering housing, domiciliary care, disability services, older peoples services, services for independence and services for people with dementia.

Best value reviews will need to have regard to:

- Audit Commission reports and evaluation of telecare
- Control centre/social alarm approach Cost/leasing of monitors with installation and control centre charges (if relevant)
- Comparison with domiciliary care, residential, nursing, sheltered/extra care housing, acute and community hospitals, district nursing services
- Evaluation of costs and benefits at commencement and from first week onwards sample costs, maintenance, overheads etc
- Telecare as a replacement or in conjunction with other services eg care homes, home care and emergency care for long term conditions
- Role of telecare in maintaining independence

In addition, the Commission for Social Care Inspection and Audit Commission carry out Joint Reviews of Social Services. A recent report for Surrey Social Services referred to the value of the Columba Project which features telecare.

Notes:

Best value: <u>http://www.audit-commission.gov.uk/reports/GUIDANCE.asp?CategoryID=&ProdID=E124707B-AD91-4A41-832D-380074DA2821</u> Joint reviews: <u>http://www.audit-commission.gov.uk/product_list.asp?CategoryID=ENGLISH^576^SUBJECT^1997^REPORTS-AND-DATA^195&prodType=JOINT-REVIEW</u> Commission for Social Care Inpsection: <u>http://www.CSCI.gov.uk</u>

15 Commissioning telecare services

Telecare needs to be included in the commissioning strategy for ICES and other partnership services where health, social services, housing and others are involved. The ICES web site has information about commissioning integrated community equipment services.

Commissioning strategies for telecare should include:

- Demographics eg number of people supported at home with care plans
- Work of NSF Local Implementation Teams eg intermediate care, falls prevention
- People with disability and progressive neurological disorders
- People with dementia and other mental health problems
- People with learning disabilities
- Links to environmental controls
- Supporting People strategies
- Single Assessment (SAP) arrangements
- 'Political' drivers for change in an organisation
- Implementing the national tariff under Payment by Results (PbR)
- Practice-based commissioning

Note: ICES commissioning guidelines <u>http://www.icesdoh.org/guidelinescontents.asp</u> Practice-based commissioning:

http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/Public

16 Implementing Telecare

A number of key points have been identified from organisations working on telecare projects. These will be important in achieving successful outcomes for implementing telecare.

Key points for implementing telecare that need to be covered include:

- Developing a clear vision of telecare services
- Commitment from leaders and managers within partner organisations eg through a project board
- Early involvement of users, carers, staff etc
- Consideration of ethical issues and consent (in particular for people with dementia)
- Identification of telecare 'champions' and development time
- Establishing funding (existing and new)
- Awareness and training for practitioners
- Adjustments to existing protocols, care pathways etc
- Providing telecare as a 'mainstream' service
- Monitoring of progress and review of benefits

Here is an example of the activities of a project board in Medway, one of the South East Region's services.

The *project board* meets three monthly and has:

- Authority for the project and its outcomes
- Clear terms of reference
- An overall project plan and authority to take corrective action
- Authority for expenditure
- Decision making powers
- Gives direction and guidance to project lead
- Regular reviews of funding available from a variety of sources

The b**oard**:

- Agrees how to take the recommendations forward at end of project
- May recommend project termination

Headings covered in a three monthly **report** include:

- Progress this reporting period
- Planned work not done
- Problems, current or potential
- Solutions (if identified)
- Planned work for the next period

Source: Medway Council

Many organisations have identified a project officer/manager or telecare champion to get their programme started.

Role of *project manager*.

- Prepares reports for the board
- Implements aims and objectives of project
- Prepares and monitors budget for telecare
- Prepares and monitors timelines for progress
- Coordinates activities with suppliers, community alarm services, practitioners
- Sets out and monitors quality assurances systems
- Obtains views from users, carers, practitioners on progress of project

Some projects have eligibility criteria that may need to be considered by ethics committees (See Appendix H). Care should be taken to ensure that there is no conflict with Fair Access to Care Services (FACS) - this should ensure equitable access to equipment and services based on risk.

Fair Access to Care Services (FACS) is the priorities system that social services apply to people seeking help. It is intended to produce a fair system of allocation between people living in the same service catchment area, but it does not address inter-council differences. FACS focuses on personal independence, ranking need into four levels: critical, substantial, moderate and low. Councils are allowed to decide whether they have enough resources to provide help for all four of the eligibility criteria levels, or just some of them.

People that do not meet the eligibility criteria and will not get a service may still receive information and advice on other sources of help. If someone appears to be eligible for help, social services offers an assessment that focuses on 1) autonomy and freedom to make choices, 2) health and safety 3) ability to manage personal and other daily routines 4) involvement in family and wider community life.

For example, a client would be classed in the highest (critical) banding level when:

- Life is, or will be, threatened; and/or
- Significant health problems have developed or will develop; and/or
- There is, or will be, little or no choice or control over vital aspects of the immediate environment; and/or
- There is, or will be, an inability to act on informed choices; and/or
- Serious abuse or neglect has occurred or will occur; and/or
- There is, or will be, an inability to carry out vital personal care or domestic routines; and/or
- Vital involvement in work, education or learning cannot or will not be sustained; and/or
- Vital social support systems and relationships cannot or will not be undertaken.
- Vital family and other social roles and responsibilities cannot or will not be undertaken.

Example of *criteria* for a telecare project:

- Capabilities of user to understand arrangements and willingness to participate (note any ethical issues)
- User acceptance to wear monitors, pendants etc
- Agreed procedures in place when sensor is triggered eg call a relative or carer
- Capabilities and willingness of carers to be involved
- Response times and standards for service agreed with all parties

The recent ADSS/LGA publication "All Our Tomorrows" talks about "inverting the triangle of care". Telecare is a big enabler and supporter of this concept.

Note: All our Tomorrows: Inverting the triangle of care, Association of Directors of Social Services/Local Government Association, October 2003 <u>http://www.adss.org.uk/publications/other/other.shtml</u> Fair Access to Care Services: http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndG uidanceArticle/fs/en?CONTENT_ID=4009653&chk=nadbwI

17 Reviewing and evaluating telecare programmes

Many trials and evaluations have taken place to look at the effectiveness of telecare (See Section 23 for references). This pack is based on the implementation of some schemes in the South East of England and elsewhere. Many organisations are now moving straight to an implementation plan (sometimes with phasing) rather than carry out further trials in their own area where they are convinced of the benefits. Organisations may save money by learning from others and cutting down the project lead-time (this could reduce start-up time from 18 to 6 months). However, it must be emphasised that there are a number of important points to get right at the start of a project eg funding, awareness building, staff training, protocols for answering control centre calls.

There may still be a number of occasions where local authorities/trusts need to carry out some form of review or evaluation.

Examples where a *review or evaluation* may be needed:

- Preparing a best value report
- Testing a new alarm system or mobile facility
- Links to environmental control systems or communication aids
- Testing algorithms or protocols to support trigger responses
- Costing and cost benefit
 - Example 1:Northampton 14 clients requiring dementia care were supported over a period of 15 months. Telecare equipment per client cost £275, average cost reduction/client/week of care was 17.5%
 - Example 2: West Lothian Over 1000 homes have been equipped with simple telecare sensors at a cost of £800,000. Clients remained at home longer and delayed discharges were reduced to 2.14/1000 from 3.48/1000 in Scotland overall
- Action research
- User involvement/choice and feedback
 - Example 1: Dementia Voice is conducting a two year research project in Dorset, Bournemouth and Poole including focus groups with users and carers. Results should be available at the end of 2004
- Option appraisal (control system based systems versus other applications)
- Preparing a business case for presentation to a Board, PEC (Professional Executive Committee), Cabinet

Carrying out a review is part of good management practice and provides an opportunity to ensure that aims and objectives are being met.

A *review* would cover:

- Management and partnership arrangements
- Commissioning and funding
- Performance have aims and objectives been met?
- Technical and other barriers have they been overcome?
- Availability of new products
- Environments in which equipment is used
- Service developments
- User and practitioner views, ethical considerations
- Did it work?
- Future arrangements

Evaluation of services is critical because it helps to demonstrate the benefits (and problems) of telecare to users and other stakeholders, and helps support informed procurement and strategic decisions. However, there has been no truly rigorous evaluation of telecare. Existing demonstration and pilot projects have generally been set-up without regard to evaluation.

A fundamental problem is that telecare interventions cannot be subjected to the same evaluation methods as many medical innovations because the user population is too diverse, the conditions it is trying to manage too diffuse and the surrounding environmental context too varied. Furthermore, there are simply too few schemes and they are too recent to generate data of a sufficient scale and scope to lend itself to careful analysis.

18 Optimising the benefits for users

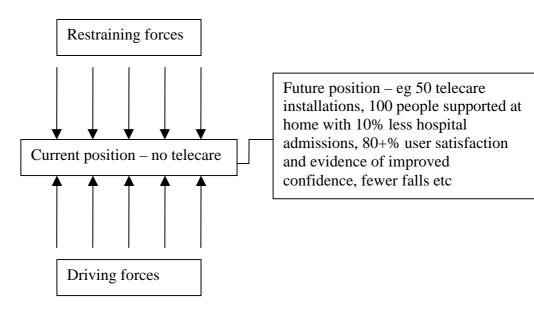
Table 18 identifies types of users who may benefit from telecare.

Table 18 Users who may benefit from telecare		
User types/carer situation	Reason for benefiting	
Older people recently discharged from hospital with concerns about going home	Increased confidence to live at home	
Users living in local authority/housing authority dwellings	Warden and home care support, extra care housing (Information and advice from the Housing LIN in the Change Agent Team)	
Users with a history of falls	Increased confidence to live at home Rapid response to fall decreasing likelihood of hypothermia, fear and complications (Falls detectors are being linked to the development of a falls register under the NSF (Older People) in Isle of Wight)	
Users with mild dementia	Carer confidence in respect of wandering	
Users with shortness of breath with A and E visits (includes COPD and heart failure, Angina etc)	Telemedicine vital sign monitoring	
Users with epilepsy	Telecare monitors with infrared camera backup as an alternative for night sitter services	
Fear of violence or intrusion	Increased confidence to live at home	

19 Managing the change

Many of the issues associated with implementing telecare occur in a wide range of change projects – eg reluctance to try out new approaches, funding, awareness raising.

There are a number of simple organisational development tools that can be used to manage a change process. One such tool is force field analysis. In the force field below, the current and future positions are identified. The driving and restraining forces for change are inserted onto the force field. Steps are taken to increase the driving forces and reduce the restraining forces to get progress in the right direction.



Driving forces for change could include:

- Clear vision and commitment from all organisations
- Identified targets
- Telecare champions
- Involvement of staff who are providing services eg housing officers, care managers, district nurses
- Additional or re-directed funding
- Training about the benefits and arrangements for installation of telecare etc
- Care pathways eg falls prevention, stroke rehabilitation, Chronic Obstructive Pathways Disease (COPD) monitoring
- Alternatives to hospital admission, discharge pressures, handling waiting lists
- Increasing independence and well-being for users
- Best value and value for money

An action plan would set out:

- Detailed aims and objectives
- Responsibilities for achieving the aims and objectives
- Funding and funding sources
- Timelines/deadlines
- Barriers to implementation and how they will be overcome

Table 19.1 covers some examples of barriers to implementing telecare and how solutions can be developed.

Table 19.1 Barriers to implementing telecare and how they could be overcome				
Barrier	How this barrier could be	Comment		
	overcome			
General reluctance to change, deep-rooted professional attitudes	Costs/benefits, education and support for care managers, users, carers etc	Time needs to be allocated for Multi- agency training; early involvement of all staff (eg workshop with all key agencies) will help joint working. SAP discussions should help.		
Social Services and housing at different local government levels	Set up working partnerships, link to ICES Section 31 agreement	Unitary authority areas should have an advantage with partnership arrangements. Areas with several different councils and PCTs will need to concentrate on whole systems approach.		
Evidence based requirements for health, randomised control trials (RCTs)	Much of this work is now done. Provide services to users/carers who may benefit based on the evidence. Carry out regular reviews. Use	Evidence is available in the Audit Commission's report 'Assistive Technology: Independence and well- being 4'		

	action research and adjust	
Project to mainstream transitions Care management	Look at investment in project eg project officer time etc. Compare costs and make decision Protocols must reflect service	Investment in project officer time to set up systems has been proved to be beneficial and a good short-term investment of funds. Involve staff representatives from all
protocols – care options, implementation of FACS and delayed discharges	options available to care managers	groups in preparing protocols to create ownership
Funding	 Supporting People funding. Link to ICES and use Access and Systems Capacity funding Other potential sources of funding if Voluntary Organisations in partnership HIA's Community safety 	Linking telecare development with other NSF targets will help to raise the profile at Strategic level and inclusion in jointly agreed Local Development Plans (Approach used in Isle of Wight)
Cost comparisons	Compare with major community and acute hospital services	Comparatively small investment can lead to real cost savings but time will be needed to capture long term benefits. National tariff charges likely to be considerably higher than telecare costs for emergency hospital admissions
Ethical issues, 'big brother' concerns (See also Appendix H)	Empowering users and carers through demo sites, newsletters, training education	Could add info on ethical approval if trials are being done to build up business case.
Other:	<insert examples<br="" own="" your="">here></insert>	

It is suggested that steps to overcome barriers should be included in an implementation plan. The ASTRID guide provides a discussion of the ethical issues and a way in which ethical dilemmas of this kind can be framed and considered by those responsible for making decisions.

ASTRID Guide <u>www.ASTRIDguide.org</u>

Table 19.2 is an example of an action plan provided by the Isle of Wight available during the project period (Oct 2003 to March 2004).

Table 19.2 Barriers to implementing telecare and how they could be overcome				
Barrier	Action Plan	By Whom		
1 Telecare development seen in isolation to other priorities	 Link to strategic plans ie: Supporting People, Local Delivery Plan (LDP), 'Health and Well Being' plan 	Chief Executives of Health and Social Services		
2 Telecare developments will take up too much time	 Link to work currently being done for NSF for Older People Falls Management, Single Assessment (SAP), ICES Identify Champions to take development forward 	Falls Coordinator/Lifeline Manager, Social Services Department (SSD)		
3 Duplication of paperwork	 'Falls Fragility' screening tool can form part of telecare assessment for people who have fallen and SAP contact assessment. Can be completed by Health SSD, lifeline 	Falls Co-ordinator		

4 Lifeline system requires upgrading to support telecare	 staff, voluntary organisations etc Raising awareness of telecare at a strategic level and linking it to other current target areas including delayed discharges, ICES equipment, falls register development can make a solid case for funding 	Lifeline Manager
5 Lack of funding to carry out a telecare project.	 Start small. Use existing lifeline clients. Community Care funding 	Lifeline and Social Services managers
6 Response system may not be robust enough to support telecare	 Link Lifeline, mobile wardens, Out of Hours (OOH) Services, Fire, Ambulance, Police together 	Lifeline manager with leads from all services
7 Telecare may not be seen as sustainable for the future	 Link to ICES (include in section 31 agreement) NSF, PCT Local Development Plans etc. will help to build a solid business case for future funding 	Project Group for Telecare Development

20 Managing telecare performance

Implementation of telecare will be part of a performance framework within your organisation. There will be some local measures that you may need to develop. Introducing telecare should recognise the importance of standards for services and competencies for staff.

Short term measures should be output based eg number of installations. Longer term measures should be outcome based eg number of people delayed from Residential Care, reductions in unnecessary hospital admissions.

Table 20 lists some performance measures together with responsibilities.

Table 20 Performance measures for telecare				
Performance measure	Responsibility	Comment		
Response times to triggers to a control centre	Alarm system manager, Housing Officer	Example in Medway sheltered housing: Two Flood detectors installed in the bathroom and kitchen of clients flat, client had put the plug in and left the tap running. The detector sent a signal to the control centre identifying the problem, the operator alerted the scheme manager and a disaster was averted.		
Assessments commence in 48 hours, completed within one months	Social Services	Telecare included as part of contact and specialist assessment (Single Assessment Process, SAP)		
Provision of equipment within seven days	ICES Single Operational Manager	D54 indicator for Social Services PCT performance indicator Many items can be installed quickly through integrated ICES systems		
No reimbursements from ICES equipment	Social Services/ICES Single Operational Manager	SITREPS reporting		
User satisfaction	Various	Questionnaires can be sent out to users and carers to gain qualitative information Example in Medway - Contact Darren Gunn 01634 331517		
Trial based measures	Project Lead/ Suppliers	Example of eligibility criteria agreed to test telecare for users leaving hospital or intermediate care to reduce risks, allows earlier discharge and to test acceptability.		

		Eastbourne project Contact Caroline Brown Tel: 01424 712645
Linking Response Systems to Mobile Wardens	Alarm Manager	In the Isle of Wight, the Community Alarm Manager also manages mobile wardens and domiciliary care provision allowing a more seamless approach for response
Use of a Control Group as part of the evaluation of a small telecare pilot	Project lead and steering group	In the Isle of Wight, a comparator group matched as carefully as possible with telecare users, issues such as comprehension, compliance, type of housing and care package supplied
Staff knowledge/skills in assessment, technical matters	Project lead and steering group	The importance of staff skills and training cannot be overestimated

In addition, telecare will impact on national indicators for housing, health and social services and can contribute significantly to the health and well-being of users and residents.

National *performance indicators* relevant to telecare:

- Social Services Performance Assessment Framework (PAF, RAP)
- A5 Emergency admissions of older people (interface indicator affecting NHS indicators)
- C28 Intensive Home Care
- C32 Older people helped to live at home
- C33 Avoidable harm to older people (e.g. falls)
- D41 Delayed discharges from hospital (interface indicator affecting NHS indicators)
- D42 Carer assessments
- D54 Percentage of equipment delivered in 7 days (Social Services)
- E49 Assessment of older people per head of the population
- E50 Assessment of adults and older people leading to the provision of a service
- Health Authority Performance Indicators
- SITREPS/DTOC reporting
- CHI indicator for percentage of equipment delivered in 7 days (PCTs)
- Health outcomes
- Emergency readmission following discharge from hospital
- Effective service delivery
- Proportion of people returning home after a stroke
- Proportion of people returning home after a fractured neck of femur Patient/carer experience
- Clinical effectiveness and outcomes
- National tariff costs from April 2005

Organisations should consider how implementation of telecare will impact on their main performance indicators eg can a care plan with telecare support more older people in living at home (C32) with intensive home care (C28)? The provision of telecare can support carers through more flexible care plans. It is advisable to look at the whole system when considering investment in telecare and performance measures – eg could telecare reduce lengthy hospital stays and save 'bed-days' in your area? Could telecare provide an alternative to residential and respite care?

Personal social Services Indicators:

http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/SocialServicesPerformanceAssessment/PerformanceEvidence/PerformanceEvidenceArticle/fs/en?CONTENT_ID=4078425&chk=H/fpJT

Healthcare performance indicators:

http://ratings.healthcarecommission.org.uk/Indicators_2004/

21 Costing a telecare initiative

When setting out, it is important to build a cost model for telecare.

Building a *cost model* for a telecare initiative should include:

- Identifying a technology partner/supplier to work with (this may involve tendering)
- Equipment, installation, maintenance, control centre upgrades
- Training for health and social care staff, users and carers
- Technicians and control centre staff to install equipment unless part of daily living items
- Comparison to "What If" costs should be made to highlight the savings (or net costs) of the Telecare service. These are then mapped against benefits eg re quality of life.

There are various ways of setting out a cost benefit analysis for telecare. Here is one example using a simple grid.

<u>User</u> <u>type</u>	<u>Equipment</u>	<u>Number</u> of users	<u>Equipment</u> <u>£ per user</u>	<u>Maintenance</u> (pa) per user	<u>Staff</u> <u>support</u> <u>per</u> <u>user for</u> <u>telecare</u> (pa)	Adjustments to care plan per user(pa) (eg 1 hour less home care per week)	<u>Difference</u>
Discharge	Monitor a,b,c etc	Х	£E	£L	£S	£A	£X(E+L+S-A)
Falls	Monitor a,b,c etc	Y	£F	£M	£T	£B	£Y(F+M+T-B)
Dementia	Monitor a,b,c etc	Z	£G	£N	£U	£C	£Z(G+N+U-C)
The grid above identifies the monitor types used for particular users. The number of users for each group is determined and the average equipment cost per user is determined. Staff and maintenance support costs are added. On the other side of the equation, reductions in home care packages, maintaining a user in the community rather than in a care home or in an acute bed etc are factored into the equation. The difference provides a simple determination of the costs associated with telecare. As							

Note: Higher cost installations will exceed OJEU requirements and will need to be advertised in accordance with EU requirements. A specification for Integrated Community Equipment Services covers some references to telecare. A detailed specification will be needed to provide, install and maintain equipment.

well as the direct impact on care packages which can be costed, there are other benefits such as

increased confidence for users and carers in the community which are more difficult to cost.

Table 21 includes some of the costs incurred by projects in the South East for implementing Telecare.

Table 21 Some costs incurred in implementing telecare			
Work/tasks/purchases	£	Reference/source	
Cost of telecare equipment (care line system, Fall detector, smoke detector, flood detector, movement detector) for trial with 30 users	£14,000 approx	Medway project	
Training for care managers	£600	Medway project	
Installation,annual service charge, repair and maintainence for 30 people	£16,000	Medway project	
Project support, promotion and research	£5,000	Medway project	
Telecare System for 23 users	£600 per user approx £15,000 equipment £5,000 consultancy time £5,000 set up smart flat for demonstration.	Eastbourne Project	

Upgrading of care line to cover all areas on the Island including all Sheltered Housing and support	£55,000	Isle of Wight
telecare		

There are some examples appearing which show cost savings in addition to significant benefits for users.

Example of telecare *cost/benefits*:

Tameside Metropolitan Borough Council purchased 30 telecare Systems for £600 each (£18,000). £4,000 was spent on capital equipment (mainly PC's) for the project.

Installation was carried out by wardens from a Housing Association as part of their regular duties. Batteries (£8 per system per year) were replaced by the two project staff. There was no other maintenance cost.

The service saved £152,000 in its first 11 months by reducing the incidence of falls, evenly split between health and social services.

In some situations, local authority and healthcare organisations have small amounts of identified money to kickstart new projects.

Example of amounts of project money and what could be implemented (this will depend very much on progress already made):

 $\pm 5,000 - 8$ to 15 consultant days for project scoping or 5-10 sets of telecare monitors or training for staff

£10,000 – 15 to 20 consultant days to set up arrangements for telecare implementation or 10-20 sets of telecare monitors or upgrade of control centre or 6 months project manager as temporary post or secondment

£20,000 – Independent project evaluation, control centre upgrade or improvements to response systems or 20-40 sets of telecare monitors

£50,000 – Investment in telemedicine or 50-100 sets of telecare monitors

22 Summary

This 'Getting Started' pack will be updated further in February/March 2005 as more information becomes available. Further work is planned on:

- Engaging the public in using telecare to promote independence and well-being
- Involving individual users to ensure all ethical issues are met including informed consent and choice
- Ensuring assessors are equipped to consider telecare as a care option
- Ensuring credible evaluation takes place
- Ensuring more evidence is available

The pack provides an opportunity for organisations to rapidly implement telecare (eg within six months) with prospects of success.

23 References

23.1 Publications

For a comprehensive set of references go to: <u>http://www.icesdoh.org/article.asp?Topic=89</u> and download the pdf file called *'Telecare: Using Information and Communication Technology to Support Independent Living by Older, Disabled and Vulnerable People' (2003)*

Audit commission (10 Sept 2004) Older People – Implementing Telecare – available at <u>http://www.audit-commission.gov.uk/reports/NATIONAL-REPORT.asp?CategoryID=&ProdID=BDBE0111-764C-44a4-8A66-1CB25D6974A4</u>

Anthea Tinker and Peter Lansley - At Home with AT paper

Peter Lansley, Claudine McCreadie' Anthea Tinker, Susan Flannagan, Kate Goodacre and Alan Turner-Smith - Adapting the homes of older people: a case study of costs and savings

Peter Lansley, Claudine McCreadie and Anthea Tinker - Can adaptation and AT pay their way? Sept 2004

Brownsell S and Bradley D ed Porteus J (2003), Assistive Technology and telecare: forging solutions for independent living, The Policy Press 2003, ISBN 1 86134 462 7

Curry R G, Trejo Tinoco M, Wardle D (July 2003), <u>The Use of Information and Communication Technology</u> (ICT) to Support Independent Living for Older and Disabled People

Marshall M et al (2000), ASTRID: A social and technological response to meeting the needs of individuals with dementia and their carers – A guide to using technology with in dementia care, London: Hawker Publications.

Porteus J and Brownsell S (2000), Using Telecare: Exploring Technologies for Independent Living for Older People, Anchor Trust, ISBN 0 906178568. Available for download from <u>http://www.anchortrust.org.uk/publications/telecare.html</u>

Tang P, Gann D, Curry R G (2000), Telecare. New Ideas for Care @ Home. ISBN 1 861342160, Bristol: Policy Press.

Tang P, Venables T (2000), 'Smart Homes and Telecare for Independent Living'. Journal of Telemedicine and Telecare, Vol 6 no 1

Woolham J and Frisby B (2002), 'Building a local infrastructure that supports the use of assistive technology in the care of people with dementia'. *Research Policy and Planning* (2002) vol 20 no 1.

Woolham J, Frisby B, Quinn S, Moore and Smart W (2002), *The Safe at Home Project*, London: Hawker Publications.

ASAP Code of Practice: the accepted standard for the professional management of social alarms services (endorsed by the DTLR/ODPM as the applicable technical standard within the Supporting People guidance). Attainment of the standards within the Code of Practice is determined by ASAP following an independent audit of the service. There are three parts to the Code of Practice (1 Calls Handling Operations, 2 Dispersed Alarms Operations, 3) Response Service Operations). ASAP is developing a new web site to cover telecare. More information is available at the ASAP web site at <u>www.asap-uk.org</u>.

ASAP Good Practice Guides: Planning, design and construction; Business continuity planning; Management of performance; Managing access; Management of computer systems. Available to nonmembers at a cost of £40 each from Maureen Harvey, Administrator, Association of Social Alarms Providers, 4 Beaufort House,Beaufort Court, Sir Thomas Longley Road, Rochester, Kent, ME2 4FB. Tel 01634 304200

Department of Health (2001), National Specialised Services Definitions Set available at www.doh.gov.uk/specialisedservicesdefinitions/5disequip.htm

House of Commons Health Committee (2002), Delayed Discharges, HC 617, The Stationery Office Limited. Also at <u>www.parliament.uk/commons/selcom/hlthhome.htm</u>

Housing LIN factsheet (2004), Assistive Technology and Extra Care Housing, <u>www.doh.gov.uk/changeagentteam/housing-lin.htm</u>

King's College London and the University of Reading (2004) - Tinker A. McReadine C, Stuchbury R, Tuner-Smith A, Cowan D, Bialokoz A, Lansley, P, Bright K, Flanagan S, Goodacre, K, Holmans A Introducing Assistive Technology into the Existing Homes of Older People: Feasibility, Acceptability, Costs and outcomes. Institute of Gerontology King's College London ISBN 1-872342-17-5

Ricability (2002), What's New? in products for easier and safer living

Ricability (2003), Calling for help: a guide to community alarms http://www.ricability.org.uk/reports/report-telecoms/Community%20alarms/contents.htm

23.2 Websites

Association of Social Alarms Providers (ASAP): an advice and good practice network for the telecare and alarms sector. Membership may be useful for those equipment services seeking to include telecare within their package of support. The website also provides a facility for the advertising of tenders and job vacancies in the specialist sector. www.asap-uk.org

ASTRID Guide www.ASTRIDguide.org

Alzheimer's Society website www.alzheimers.org.uk

Change Agent Team website www.changeagentteam.org.uk

Counsel and Care website www.counselandcare.org.uk

Dementia Voice: <u>http://www.dementia-voice.org.uk</u>

Disabled Living Centres Council (DLCC): <u>www.dlcc.org.uk</u> - DLCS are starting to feature telecare systems around the country

Durham people at home and in touch project:

http://www.durham.gov.uk/durhamcc/usp.nsf/web/pages/CFD637B5BB85FFE580256CD7003F2317?opendo cument

EASTIN: <u>http://www.eastin.info/home.aspx?ln=en&pg=keynote</u>

Foundation for Assistive Technology <u>www.fastuk.org/</u> - FAST provide comprehensive information about developments in assistive technology

Housing LIN website: www.changeagentteam.org.uk/housing

Housing Options: www.housingoptions.org.uk - Housing information for people with learning disabilities

Integrating Community Equipment Services (ICES) web site www.icesdoh.org

National Initiative for Telehealth (NIFTE) Framework of Guidelines is the result of a national, multistakeholder, interdisciplinary collaboration and consists of a structured set of statements designed to assist individuals and organizations with the development of telehealth policy, procedures, guidelines, and/or standards. <u>http://www.cst-sct.org/</u>

New Technology in Elderly Care <u>http://ntec.org.uk/</u> (There is a short video at '4 – Videomonitoring' – this is a good example of assistive technology in practice. You will need 'Quicktime' on your computer to view it. If the video does not run, you will need to download 'Quicktime' from http://www.apple.com/guicktime/download/standalone/)

Ricability <u>www.ricability.org.uk</u>

SATA www.sata-uk.org.uk

Social Alarms and Telecare Association (SATA): Further details to be added later

Smart Homes databases - www.rethinkinghousebuilding.org

Supporting People website <u>www.spkweb.org.uk</u>

Telemedicine Information Service <u>www.tis.bl.uk</u> - including supplier database, project listings and organisations

Additional Links – A comprehensive set of links on ageing and disability can be found at http://www.fp.rdg.ac.uk/equal/useful_links1.htm

23.3 Long term conditions and payment by results

Matrix report: http://www.natpact.nhs.uk/uploads/Matrix%20CDM%20Evaluation%20Report.doc NHS Improvement Plan: http://www.publications.doh.gov.uk/nhsplan/nhsimprovementplan-ch3.htm natpact site: http://www.natpact.nhs.uk/cms/2.php Why is long term condition management important? - includes PowerPoint and other presentations to download: http://www.natpact.nhs.uk/cms/336 NHS adaptations of US models - see examples for Evercare, KP etc: http://www.natpact.nhs.uk/cms/328.php Chronic disease compendium: http://www.publications.doh.gov.uk/nhsplan/nhsimprovementplan-ch3.htm Case Management (Castlefields): http://www.natpact.nhs.uk/cms/334.php Evercare: United Healthcare: http://www.uhc.com/ http://www.evercareonline.com Interim report for PCTs (with disease categories listed on page 35): http://www.natpact.nhs.uk/cms/186.php Learning from Evercare: http://www.natpact.nhs.uk/cms/258.php Evercare and Medicare/Medicaid: http://www.cms.hhs.gov/researchers/demos/Evercare.asp Evercare in Bristol/South Gloucs: http://www.bristolnorthpct.nhs.uk/publications/reports/evercare/ Kaiser Permanente: http://www.kaiserpermanente.org/ Veterans Affairs (USA): http://www1.va.gov/health_benefits/ Welsh Telehealth: http://www.telehealthwales.co.uk/info-set.html Payment by results: http://www.dh.gov.uk/Consultations/ClosedConsultations/ClosedConsultationsArticle/fs/en?CONTENT ID=4 069462&chk=nppgJP Dear Colleague letter, March 2004: http://www.dh.gov.uk/assetRoot/04/07/82/27/04078227.PDF NHS Reference Costs 2003 and National Tariff 2004 ('Payment by Results Core Tools 2004'): http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPoli cyAndGuidanceArticle/fs/en?CONTENT_ID=4070195&chk=UzhHA3 http://www.dh.gov.uk/assetRoot/04/07/01/09/04070109.pdf Payment by results core tools 2004 (CD): http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPoli cyAndGuidanceArticle/fs/en?CONTENT_ID=4080578&chk=82Py0J DoH response to consultation preparing for 2005: http://www.dh.gov.uk/assetRoot/04/08/60/68/04086068.pdf National Tariff 2005/2006 (Note: final arrangements for April 2005 available from end of October 2004) : http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPoli cyAndGuidanceArticle/fs/en?CONTENT_ID=4091529&chk=f%2Bcvh8

Appendix A Definitions and explanations

Table for Appendix A	Definition (overlage tion
Term	Definition/explanation
Active sensor	'Intelligent' sensors that actively detect alerts and trigger a response automatically
Association of Social Alarm Providers (ASAP)	Trade organisation with accreditation procedures for alarm systems
Assistive technology	Any equipment or system that assists people who have difficulties due to age or disability in carrying out everyday activities for example, walking stick or helping hand
Bed occupancy Monitor/Mattress sensor	A trigger that detects whether a bed is occupied – this could be set within time limits
Broadband internet	High speed internet connections (10-20 times the speed of standard modem links)
Camera	Small cameras (still or video) for room monitoring. Video cameras for direct conversation. Video phones
Carbon monoxide monitor	A monitor that detects excess gas in the air from cookers, heaters etc (Carbon monoxide is odourless and very poisonous)
Care package	Services provided for a user following an assessment under community care legislation
Chair monitor	Detects chair occupancy
Community alarm	Telephone handset (and pendant) linked to control centre using standard telephone lines. There may be a charge
Control/call centre	Computerised control/call centre with round the clock operators responding to triggers/alerts from handsets/pendants in user's homes – details about the caller, trigger and the response arrangements are displayed. Action is taken eg visit
Chronic Obstructive Pulmonary Disease (COPD)	Symptoms of shortness of breath etc often leading to hospital admissions for older people that could be avoided with better community support. Telehealth systems could monitor user's vital signs (BP, temperature etc) in the home
Dementia	An accepted medical condition where user loses orientation to time, location etc. There is deterioration in parts of the brain leading to 'cognitive impairment'. User may be at risk eg wandering with increased falls, leaving cooker or tap on. Telecare can provide systems for reducing risk
Delayed discharge/delayed transfers of care (DTOCs)	A delay in a discharge/transfer of care from hospital where community care services are not in place may lead to a daily reimbursement
Electronic tracking	Using GPS or ETDOA and mobile phones to detect user location where wandering
ETDOA	Estimated Time Difference On Arrival - coordinates that can locate a person to 5 metres if they are holding a device
Ethical issues	Concerns expressed about a 'big brother' approach associated with telecare
Extra care housing	Purpose designed retirement housing with access to 24hr on-site care and support
Falls Monitor	A monitor that triggers a call to a control/call centre when a user has fallen to the floor
Flood detector	A detector that senses water where there should not be eg overflow of sink, bath or washing machine
GPS	Global Positioning System – coordinates that can pinpoint a person to 20 metres if they are holding a device
Heat Extremes detector	Detects low temperature, high temperature and rapid rise in temperature, (indicating a fire). This is especially useful in a kitchen where a smoke detector is liable to false alarm
Hip protector	Substantial protection built into underwear to fit over both hips to offer

	cushion effect if a fall or knock occurs
ICES	Integrating community equipment services across health, social
	services with links to housing, education etc
Intermediate care	Services provided in the community (up to six weeks) to support
	hospital discharges and alternatives to admissions
Motion detector	Monitor that detects movement of a user during set times (similar to
	burglar detector in a room)
Panic button	A push button at an appropriate place to alert the call centre to a
	problem eg bogus caller at door
Passive sensor	A sensor which can be triggered by an individual
Pill dispenser	A device for monitoring tablets to be taken at appropriate times (Note liability issues)
PIR Detector	Passive Infrared Monitor that detects movement of a user during set
	times (similar to burglar detector in a room)
Pressure pads	Pads under a doormat, for instance, which may indicate that someone
	is leaving their home
Smart house	A dwelling incorporating a communications network that connects the
	key electrical appliances and services and allows them to be remotely
	controlled, monitored and assessed for demonstration purposes
Smoke detector	Monitor for smoke in a home which sends a trigger message or could
	provide a link to cutting off an electrical supply
Social Alarm	See community alarm
Telecare	The remote or enhanced delivery of health and social services to
	people in their own home by means of telecommunications and
	computerised systems (Reference: Barnes)
Telemedicine/telehealth	The practice of medical care using interactive audio visual and data
	communications, this includes the delivery of medical care, diagnosis,
	consultation and treatment, as well as health education and the
	transfer of medical data (Reference: WHO)
Temperature detector	A monitor that detects high or low temperatures
Video	Two way video contact between user and carer
Water detector	See 'Flood Detector'

Appendix B Purchasing and procurement of telecare equipment

As already mentioned there are continuing developments in telecare equipment and many items have only recently moved from prototype to production. This means that it is important to look at obsolescence when purchasing. Compatibility and upgrade paths will be important. It will be necessary to consider whether equipment can be used on other systems where a control centre is used. Consideration should be given to how equipment is specified when tendering or exploring options. Following a specific approach or a single supplier model may limit options for purchase.

User choice may become a key issue in equipment provision. This may be through direct payments. Increased choice may raise compatibility problems eg a user would like a direct payment for a system that does not have a control centre or a monitor is available from supplier A and may not link with a control centre from supplier B.

Commissioners, users and practitioners will be involved in the advisory board for the ICES single operational manager and may carry out evaluations of telecare. Early consultation with users and carers will assist in determining equipment to consider.

There are many technical references covering the evaluation of different monitors in different circumstances. An evidence-based approach may be required as part of health's approach to telecare.

In procuring/purchasing telecare under ICES, local authorities and trusts will need to have regard to the standing orders and financial regulations of the lead agency under the Section 31 (Health Act 1999) agreement. ICES funding will come from a Section 31 pooled fund operated by the pooled fund manager.

Unless, the local authority/trust is part of a specific project or trial, it is unlikely to be using prototype monitors. Agreed protocols will need to be considered for trials and evaluations. An Ethical Committee decision may be required for trials.

The lifecycle expectancy of monitors, IT upgrades will need to be factored into cost calculations.

Appendix C New directions in telecare

There are a number of exciting new developments which may impact on telecare in the coming months:

- New/improved products
- Remote technology
- Broadband internet
- Wireless/Bluetooth technology
- Mobile phone technology
- Support for lone worker policies health and safety for staff
- Links to domiciliary care contract monitoring through the same technology
- Links to emergency services to facilitate witness protection, racial harassment and domestic violence

Appendix D Telecare and delayed discharges/transfers of care

The delayed discharges legislation from January 2004 requires that social services reimburse health for delayed discharges under certain defined circumstances. The legislation requires users and carers to be involved in identifying their needs at an early stage whilst still in hospital. Formal notices are served to trigger assessments and identify a planned discharge date. A key issue with the legislation is what is meant by a 'community care service for a safe discharge'. A user or carer may refer to the value of telecare in supporting a discharge to the person's own home. A care manager may have the opportunity to add telecare to the care package if it is within a care pathway or discharge protocol. In many cases, telecare solutions may be more cost-effective than traditional care packages including residential care.

A delay to the discharge could result in considerable reimbursement costs to social services – telecare may be a viable option as part of a delayed discharge pathway or protocol for supporting a prompt discharge. Effective telecare may support increased confidence in the first days after discharges with fewer readmission problems. The purchase and installation of telecare against a series of reimbursements may be very cost-effective. Funds set aside to manage reimbursement could be invested in telecare services. Telecare could form an effective component of intermediate care packages with a review after six weeks.

Note: Delayed discharge legislation and reimbursements: http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/TertiaryCare/Reimbursement/fs/en

Appendix E Telecare and direct payments

Local authorities must be able to provide a cash alternative to community care services as part of a care plan. This would include telecare.

Considerations for telecare and local authority direct payments:

- Innovation in the use of direct payments in care packages eg a carer could ask for a new mobile phone that will send photos from the user's home together with reports on whether the temperature is within a specified range
- User and carer involvement and choice
- Arrangements for maintenance, repair and replacement
- Insurance cover for loss
- Training
- Telecare as a community care service for a safe discharge (Delayed Discharge Legislation 2003)
- Support for direct payments users

Note: Direct payments:

http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/FinanceAndPlanning/DirectPayments/fs/en www.icesdoh.org/article.aspTopic=110

Community Care, Services for Carers and Children's Services (Direct Payments) Guidance England 2003: <u>Direct Payments Guidance: Community Care, Services for Carers and Children's Services (Direct Payments)</u> <u>Guidance England 2003</u>

Appendix F Charging for telecare

There are no restrictions on making charges for basic community alarm systems and connection services, however, the law was changed for community equipment in Summer 2003 to cease charging for equipment made as part of a community care assessment.

Table for Appendix F				
Situation	Charging	Comment		
Community alarm system and pendant only	A weekly/monthly charge is typically made for this arrangement	Generally not part of a community care assessment		
Telecare attached to community alarm system as part of housing (no community care assessment)	A weekly/monthly charge is often made for this arrangement			
Telecare not attached to community alarm system as part of housing (no community care assessment)	A weekly/monthly charge could be made for this arrangement			
Telecare attached to community alarm system as part of community care assessment, equipment through ICES	Not possible to charge for the telecare equipment			
Telecare not attached to community alarm system as part of community care assessment, equipment through ICES	Not possible to charge for the telecare equipment			
Telecare/telehealth provided as part of a chronic disease/long term condition management programme	Not possible to charge for the telecare/telehealth equipment as part of a health service			
Direct payments	Not possible to charge for the telecare equipment	See http://www.icesdoh.org/article.asp?To pic=110		

Appendix G Case studies and scenarios

Example 1

Identifying users to be involved in telecare was an initial problem until the local telecare group set up implementation plans for particular client groups eg people leaving hospital, vulnerable people who could be supported at home, people with dementia. Care managers were involved in identifying individual users who could clearly benefit from telecare services within their care plan. Users were involved in understanding how telecare could support them at home. Training and support for care managers also broke down barriers to providing telecare as a mainstream service.

Example 2

Therapists were used to taking service users along to the local Disability Living Centre (DLC) for assessments for daily living. The room settings in the DLC contained a number of items which could be used for assessments for everything from kitchen equipment to beds and riser-recliner chairs.

Staff were having difficulties understanding how telecare could make a difference in the same way as standard therapy and home nursing items. Placing telecare items in the same room settings helped staff to overcome the technology barriers.

A movement detector in the lounge, a smoke detector in the hall, a flood detector in the bathroom, an occupancy detector in the bed helped staff to understand how telecare could make a significant difference to maintaining independence at home.

Example 3

Staff and some managers in health and social services recognised that telecare could make a difference, but were having difficulty in convincing service commissioners and funders on the benefits for users, health and social care organisations.

A group was formed with key managers and practitioners to take the programme forward. These became telecare champions. A variety of funding sources were examined and steps were taken to cost monitors and service arrangements and compare them with other forms of care. A quick review of the available evidence from other projects was helpful. They visited a 'Smart House' in a neighbouring area. They soon realised that telecare as part of a care plan agreed with a service user could make a significant difference to the number of people who could be supported at home.

Example 4

Staff looking at telecare implementation felt constrained because of the lack of funding for purchasing monitors and maintaining an effective follow up service. There was no forward planning and no continuity of funding streams.

The Section 31 agreement for ICES with pooled funds over three years offered a way of phasing in telecare implementation with some funding certainty through the Access and Systems Capacity Grant.

Example 5

The local authority partner as part of ICES recognised how telecare could be used to support people at home, but the primary care trust remained unconvinced and were not looking for additional funding through their local delivery plan (LDP).

A quick evaluation indicated that telecare and telemedicine services could make a difference to:

- People regularly attending A and E services
- Chronic disease management through video links and/or vital signs monitoring
- Discharge planning arrangements
- Number of falls at major cost to the health economy

Example 6

The Isle of Wight (IoW) is developing a telecare project with 12 people currently using lifeline services and having 12 well matched others as a control group. There is joint working with the Falls Management group who are setting up a falls register and wanting to test out a Falls Screening Tool. There are also links to two district nursing teams who are helping to develop the Single Assessment process and the falls screening links well with the contact assessment which can be carried out by many agencies. These nursing teams will be also referring patients to the project. Funding for upgrading the lifeline system will also allow the IOW to offer telecare to all areas on the island including some sheltered housing provided by private Housing Associations who are currently awaiting connection. The system will also enable telemedicine to be considered when their Intermediate Care Services are to be expanded next year.

Example 7

Medway are testing out whether by using telecare they can support the theme "A Healthy Medway" by supporting the growing older population to remain in their own homes and improving the support to people vulnerable to falls. They aim to inform a case for telecare to become part of mainstream services. The pilot group of 30 people are taken from five categories (falls, mild dementia, hospital discharge, socially excluded and geographically isolated. Results should be available in July 2004.

Example 8

East Sussex - Wealden District Council and Eastbourne Borough Council have recognised the importance of merging the Community Alarm Services in the area so that one provider will cover the county. Currently they serve 8000 clients in private, council and housing association sheltered accommodation. It is expected that this merger should be a more cost-effective and efficient way of delivering the service and will be able to support the growing development of telecare within the area. The organisations are looking at using telecare to support hospital discharges.

Example 9

Eastbourne set up a project to look at using telecare for speeding up hospital discharge from their local District General Hospital and their Intermediate Care Unit. £20K was set aside to purchase wrist monitors for 20 clients initially, and £5K for some consultancy time to help set up the project. This system is worn like a wristwatch, requires no installation and is able to detect changes in the users condition through skin conductivity. It is hoped that these systems will be provided for a period of 6-8 weeks on initial discharge when they may be able to be replaced by other sensors and monitors. These systems can therefore be used for other discharge patients.

Appendix H Ethical issues

Telecare raises some fundamental questions about surveillance and possible loss of privacy and autonomy. Pilot projects have shown that, if used correctly, telecare technology is accepted by users and carers and connotations of 'Big Brother' can be overcome (Gillies, 2001). These suggest it is not the *form* of technology which determines the ethics of its use, but *how* it is used in an individual case. Telecare must be used within an overall care plan to support independence rather than to control 'problem' behaviour.

The danger that telecare might lead to increased isolation or unacceptable reductions in staffing support must be guarded against.

The Astrid Guide (Marshall, 2000) provides pointers to some of the ethical issues around telecare and assistive technology, noting that similar ethical issues, such as the balance between risk and safety, arise in the provision of other forms of care where technology is not involved. It suggests how to develop ethical protocols and how to deal with the issue of informed consent.

The question of informed consent has important implications especially for those with cognitive impairment, as well as raising more general questions such as how often consent should be sought (every time a service is changed?) and who should be asked to provide consent (informal carers as well as the service user?).

Another fundamental question that may arise is over the right to *refuse* to participate – this might lead to a two-tier service, for those who had agreed to telecare and those who do not wish to participate.

Legal issues

Telecare services will have to meet the requirements of the new audit and inspection bodies being established for health and social care. The Commission for Health Improvement (CHI) review of clinical governance asked three pertinent questions:

- What is it like to be a patient/service user?
- How good are the systems for safeguarding and improving quality of care?
- What is the capacity in the organisation for improving the patient/service user's experience?

There is an emerging discussion on the legal aspects of telecare. Broadly, issues in this area relate to ownership of the data and data protection and security. Stanberry (1997, 1998a, 1998b) has explored such issues as confidentiality and the patient's rights of access, data protection and malpractice.

References

- Gillies, B. (2001) Smart support at home: an evaluation of smart technology in dispersed housing. University of Dundee.
- Marshall, M. (2000) ASTRID: A social and technological response to meeting the needs of individuals with dementia and their carers. A guide to using technology within dementia care. Hawker Publications Ltd.
- Stanberry, B. (1997) The legal and ethical aspects of telemedicine. 1: Confidentiality and the patient's right of access. *Journal of Telemedicine and Telecare*, 3: 179-187.
- Stanberry, B. (1998a) The legal and ethical aspects of telemedicine. 2: Data protection, security and European law. *Journal of Telemedicine and Telecare*, 4: 18-24.
- Stanberry, B. (1998b) The legal and ethical aspects of telemedicine. 3: Telemedicine and malpractice. *Journal of Telemedicine and Telecare*, 4: 72-79.

Appendix I Suppliers and contractors

A full list of suppliers with contact information is available through the Telemedicine Information Service at: <u>http://www.tis.bl.uk/tm/owa/orgs.find?otype=Company</u>

The following suppliers have been identified as providing types of telecare systems, support or advice in the project organisations in the ICES South East Region. They are not endorsed by the Department of Health and the order of listing does not indicate preferences by either the Department or the ICES team. It is not intended to be a comprehensive list (see the Telemedicine Information Service database).

Attendo: 1 Centurion Business Park Bessemer Way Rotherham South Yorkshire S60 1FB Tel: 01709 389300 <u>www.attendo.co.uk</u>

Huntleigh Healthcare Limited: 310 - 312 Dallow Road Luton Bedfordshire LU1 1TD Tel: 01582 413104 www.huntleigh-healthcare.com

Tunstall Group Ltd Whitley Lodge, Whitley Bridge Yorkshire DN14 0HR

Tel: 01977 661234 www.tunstall.co.uk

Vivatec Limited: Crane House Molly Millars Lane Wokingham Berkshire RG41 2RZ Tel: 0870 2430 999 www.vivatec.co.uk

Telecare supplier web sites (alphabetical order): Attendo www.attendo.co.uk BT www.bt.com/homemonitoring Cardionetics www.cardionetics.com Docobo www.docobo.co.uk Freewalker www.safetycall.co.uk Initial www.iess.co.uk Home Telehealth Limited www.hometelehealthltd.co.uk Huntleigh Healthcare www.huntleigh-healthcare.com Jontek www.jontek.com Just Checking <u>www.justchecking.co.uk</u> Nestor <u>www.primecare.uk.net</u> Tunstall <u>www.tunstallgroup.com</u> Tynetec <u>www.tynetec.co.uk</u> Vivatec <u>www.vivatec.co.uk</u>

Appendix J Protocols for telecare

It is important to have agreed protocols and procedures in place for telecare. ASAP provides some codes of practice that will assist for community alarm systems.

Developing protocols and procedures:

- Robust response mechanism is required and community alarm services need to be clear about how to respond with the growing use of telecare for early hospital discharge patients who may have some form of medical instability
- Good response links for medical intervention and advice important, this may be from rapid response, intermediate care teams, district nurses or the ambulance service.
- Skills of support planning and outreach as well as technical skills in fitting equipment.
- Public liability insurance needs to be robust when fitting equipment in private dwellings
- Joint training of response teams/ services/manufacturers/care line services is helpful when developing response protocols

Note: ASAP: http://www.asap-uk.org/

Appendix K Report to a Board/Cabinet/Project Steering Group/PEC

Organisations will need to provide reports to boards, cabinets and professional executive committees (PECs) on telecare. Parts of this document can be copy/pasted into your reports. If you refer to the contents of any papers or journal articles, you need to provide appropriate references and check copyright in the normal way.

Sample *report headings* could include:

- Introduction the aims of introducing telecare in your area
- Background demographic information, delayed transfers of care
- Current and future positions mainstreaming of projects, rolling out telecare programmes as part of housing, health and social care
- Appraisal/costs and benefits comparisons with other forms of care
- Support for client groups, equality issues involvement of users in their own care plans and service developments, services for women and ethnic minority groups in the community
- Funding funding options for purchase of monitors, ongoing maintenance etc

Appendix L Tools for implementing telecare

If you are considering implementing telecare in your organisation, simple checklists can be useful. This will help you focus on aims, objectives and outcomes for your programme. An example is included below (add your own items).

Item	Action required Yes/No	Action by	Action commences (date)
Vision and			
commitment			
established			

Ob ensuring a interatifie of		
Champions identified		
Link to priorities		
established		
Link to advisory board		
Research from current		
schemes		
Cost/benefits of		
telecare		
Implementation plan		
prepared		
Users, carers and staff		
involved/ consulted		
Awareness and		
training provided		
Demonstration site(s)		
established		
Review date identified		
Insert your own		
checklist items		

Appendix M Evaluating suppliers

The table below is a simple matrix for evaluating suppliers (Insert information from suppliers):

Supplier	Control system (£)	Tele - products	Services (£ - annual/rec urring)	Maintenance (£ - annual/recurring)	Meets requirements – fully or in part
Supplier A	Alarm system – hardware and software	Smoke, flood, bed, PIR, falls, vital signs etc	Connection s, updates, training	Call outs, help desk etc	
Supplier B	Alarm system – hardware and software	Smoke, flood, bed, PIR, falls, vital signs etc	Connection s, updates, training	Call outs, help desk etc	
Supplier C	Alarm system – hardware and software	Smoke, flood, bed, PIR, falls, vital signs etc	Connection s, updates, training	Call outs, help desk etc	

Appendix N ICES and other specifications

An ICES specification prepared by the NHS Purchasing and Supply Agency (PASA) together with the ICES Team and Audit Commission is available at <u>http://www.pasa.nhs.uk/rehabilitation/ces/</u>. This refers to Telecare in Section 9. The general clauses together with forthcoming terms and conditions (available from PASA from May 2004) will support outsourcing of services and in-house service level agreements.

An ASAP specification for community alarm systems involving a call-centre is available at <u>http://www.asap-uk.org/Templates/ASAP_Master.asp?NodeID=44175</u>.

You will need to ensure that you are following your own purchasing and procurement arrangements. You need to be aware of EC tendering requirements for larger purchases.

Appendix O List of smart homes

Organisation	Area	Name	Tel no
Aspire Housing (smart room in sheltered housing)	Newcastle-Under-		01782
ccooper@aspirehousing.co.uk	Lyme, Staffordshire	Chris Cooper	635200
			01606
Cheshire	Cheshire	Lena Dewsbury	545703
			01442
Dacorum Borough Council	Hertfordshire	Lou Wilson	228615
	Eastbourne, East		01323
Eastbourne (William Daly Centre)	Sussex	Mark Bannister	443371
			02890
Fold HA	N Ireland	Kevin McSorley	440110
Gloucester			
http://www.dementia-			0117 975
voice.org.uk/Projects/Projects GloucesterProject.htr	n Gloucestershire	Meg Price	4863
			01483
Guildford	Surrey	Gerry Allmark	444340
			01495
Gwent Healthcare NHS Trust	Wales	Julie Davies	353200
Kent	Details to be added		
			01536
Kettering & Corby	Northamptonshire	Dick Beeby	414353
			0151 443
Knowsley	Merseyside	Carole Bayliss	3943
			01625
Macclesfield	Cheshire	Mary McConkey	426300
			01634
Medway	Kent and Medway	lan Wake	333016
			01604
Northampton	Northamptonshire	Barbara Archer	236109
			01603
Norwich	Norfolk	Dyllis Faife	223529
			01933
Wellingborough & East Northants	Northamptonshire	Wayne Smart	220710
			01506
West Lothian	Scotland	Katy McBride	773741
		-	01695
West Lancashire DC	Lancashire	Cath Winter	577177

Appendix P Telecare examples from ICES Regions

South East

ICES organisation	Progress
Brighton and Hove	Stephanie McIntosh, CareLink Manager, Tel: 01273 293409
East Sussex	ICES/CAT Project site
Isle of Wight	ICES/CAT Project site
Kent	Three major projects underway
Medway	ICES/CAT Project site
Milton Keynes	Project – no details at this time
Oxfordshire	Project – no details at this time
Southampton	Chris.webb@SCPCT.nhs.uk
Surrey	Columba Project, Guildford Borough Council projects

London

ICES organisation	Progress
Croydon	Under consideration
Ealing/Hammersmith and Fulham	See http://ntec.org.uk/
Newham	Major initiatives planned for early 2005
Redbridge	Under consideration
Footorn	·

Eastern

ICES organisation Norfolk	Progress	
Norfolk	Dyllis Faife	

Northern and Yorkshire

ICES organisation	Progress
Durham and Darlington	People at home and in touch project Contact:
	pam.mills@durham.gov.uk
Gateshead	LorindaRussel@gateshead.gov.uk
Kirklees	Falls monitors as part of community alarm service
Leeds	Martin.Kennard
South Tyneside	Contact:Tara.graham@s-tyneside-mbc.gov.uk

South West

ICES organisation	Progress
Cornwall and the Isles of Scilly	Contact: Mike Orton 01872 324340
Gloucestershire	Contact: Germaine Sibieta 01452 891486
South Gloucestershire	Contact: David Webster 01454 868686

North West

ICES organisation	Progress
Stockport	Wendy.Elsworth@stockport.gov.uk
Knowsley and St Helens	Linda Farrington

Trent

ICES organisation	Progress
Rotherham	St Johns Court Richard Nicholson
Sheffield	Contact: Tim Miller@sheffield.gov.uk

West Midlands

ICES organisation	Progress
Birmingham	Project Chris.mould@birmingham.gov.uk
Coventry	Project Ron.purves@coventry.gov.uk
Sandwell	Project and implementation programme - Contact: Barry Downs
Staffordshire	Aspire Housing in Newcastle-Under-Lyme with Staffordshire Social Services
Wolverhampton	Contact: Helen Finnerty

Appendix Q Telecare conferences

Date	Location	Title	Organised by
11 January	Brighton		Housing LIN – Jeremy Porteus –

2005		Fully booked
20 January 2005	Sedgefield	housinglin@e-a-c.demon.co.uk – Jeremy Porteus
26 January 2005	London	http://www.laingbuisson.co.uk/assist ivetech05.htm

The Foundation for Assistive Technology (FAST) has events listed month by month <u>http://www.fastuk.org/list_events_by_date.php</u>

Appendix R Evaluating Telecare

This appendix on evaluating telecare has been prepared by Dr Richard Curry. It is aimed at organisations that are working on major telecare projects and complex initiatives where telecare may be employed.

The evaluation of telecare – the delivery of health and social care services to the home using a combination of sensor and information and communication technologies – is not straightforward. The objective of the evaluation is to assess the impact that the use of telecare has had and where possible present this in financial terms. To do this requires evaluation of the direct outcomes of the project and an analysis of the indirect consequences for each of the immediate stakeholders. In turn this must be seen in the wider context of the local health and social care economy. Evaluation is an important activity for this reason but also good evaluation builds up a strong evidence base, facilitates direct comparisons between projects implemented in different parts of the country and allows best practise to be identified. However, it requires a sound framework. Such a framework does not exist leaving many telecare pilot projects having difficulty developing an evidence base to help those organisations implementing telecare in the future make well informed decisions about investment in this new method of service delivery. One of the reasons for the current weak evidence base is that early telecare pilot project designs did not lend themselves easily to evaluation. This note provides guidance on the issues that need to be addressed when implementing and evaluating telecare.

We have developed a model of a telecare service breaking it down into five components, viz. referral and assessment, installation of the equipment, monitoring, response and review (Barlow et al). Each of these five components is a sub system in its own right and can be provided in a number of ways depending, for instance on the client group for whom the service is being provided, the resources available locally and the care setting.

We have used this five component model to derive a checklist of activities as shown below. In general the more closely each item can be specified or described the more straightforward it is to obtain objective data and undertake a project evaluation.

- The patient or client group to be supported
- The care process to be enhanced through telecare
- The care setting
- The scale of the proposed service (the number of patients or clients served)
- The scope of the proposed service (the functionality of the service)
- The referral process into the service
- The equipment installation, maintenance and monitoring service
- The response service
- The fit with existing care teams
- The capacity of the existing care teams to provide the response

It is important also to distinguish between costs incurred in the establishment of the project and its running costs. An example of this would be the initial re-training of staff in the assessment of clients to identify those suitable to receive a telecare service as against the routine dissemination of best practice lessons.

Like any other health and social care intervention, telecare must be evaluated in terms of the outcome it produces. This is not always straightforward because of the difficulty of ascribing the observed outcomes uniquely to telecare. The first consideration is the recruitment of patients. This must be random to ensure that there is no bias introduced into the project. Then there are two main approaches to identifying the contribution of the telecare intervention. Either to have a control group – that is a similar group of people with the same needs profile who receive a service but without the telecare component - or conduct a before and after study comparing a similar period before the use of telecare to afterwards. The choice of study design

will be dictated by a number of factors including the care setting and the facility for recruiting people onto the study.

Telecare evaluation is usually a mixture of qualitative study and quantitative data collection. The role of the qualitative study is to elicit the views of the stakeholders. A number of survey instruments have already been developed to do this in a standardised way.

In addition, in the implementation of a telecare service different stakeholders in the care process are seeking and experience differing outcomes.

Fig 2 shows a table ascribing benefits to a typical group of individual organisations that might collaborate on the implementation of a telecare service. The table gives improved quality of life and greater control over independent living as the benefits of telecare to clients. These terms are not of course universal and individual clients will have their own priorities. An important feature of telecare is that it can be tailored to meet individual need but this presents an extra dimension for evaluation. Client-based outcomes will have to be measured against how closely the service meets their needs and their satisfaction with the service.

Whilst all the collaborating organisations are likely to have improved client care, quality of life and client choice as objectives, their longer term objectives such as workforce development, reducing demand and developing a culture of self care, are the ones that may make a telecare service sustainable for them.

The implementation of a telecare service always takes place within an existing service framework but adds new dimensions to the service. For instance, the better use of resources through better targeting of interventions may allow the service to accommodate more clients or the better use of information from clients may allow earlier intervention and develop a preventative role for the service.

Those evaluating telecare need to be alert to the direct outcomes and indirect consequences of telecare and factor those into the evaluation. Inevitably, the evaluation of telecare costs and benefits will involve attributing a monetary value to the outcome. This will be easier for the direct outcomes than for the indirect consequences, though the financial implications of the indirect consequences of, for instance, creating a climate of self confidence amongst frail elderly clients which manifests itself as a reduction in numbers of falls, could be enormous.

The approach of identifying stakeholders and then identifying direct benefits and indirect consequences to analyse a recently completed telecare project can be seen in the Columba project (see below). This shows clearly the distribution of outcomes.

One of the consequences of the Columba project is the increased use of community services. In certain circumstances this might be seen as placing an additional burden or dis-benefit particularly on social services. This is an example of costs and benefits not being evenly distributed which is a feature not just of telecare services. Despite this imbalance the evaluation may still be able to show a positive cost benefit by considering the whole local health and social care economy. In this much larger economy and by taking a holistic view it is possible to offset dis-benefits to one organisation against the gains of another. Such opportunities are only available where there is joint working between health, housing and social services and PCTs, and councils adopt a whole system approach.

To summarise, the evaluation of telecare can be treated as a multi-stage process. Firstly, the evaluation of the project or local implementation which requires identification of the primary objectives and outcomes and the associated direct costs of the organisational restructuring. Secondly there is an analysis from the various stakeholder perspectives to factor in the estimates of any indirect outcomes. Finally, a full cost benefit analysis may only be possible by taking a holistic view of the larger health and social care economy allowing dis-benefits to one stakeholder to be offset against benefits to another.

The Columba Project

The Columba project was a collaborative venture between North Surrey PCT, Woking PCT, Surrey Social Services and Runnymede Borough Council. The objective was to divert clients who were leaving hospital from residential home back into the community. This was achieved through a combination of social, functional and physical re-ablement coupled with telecare. The project proved very effective with two thirds of patients in the pilot being diverted from residential care over the year of operation. In addition, continuous monitoring of the clients by the Careline service provided information to community care teams that allowed an intervention and prevented a hospital re-admission. The service has now been adopted as part of mainstream care delivery in North Surrey.

Six stakeholder groups can be identified in this project: the clients and their family carers, professional health and social care staff, and the three organisations involved in the provision of the new re-ablement and telecare service.

Stakeholder	Direct Benefit	Indirect Consequence
Clients – Frail Elderly	Return to own home	Increased confidence and improved self
		care
Carers	Reduced care burden	Fewer restrictions on own lifestyle
Professional Staff	New care option	New role and increased job satisfaction
NHS	Reduction in discharge delays	Better information about community based clients. Potential to intervene to avoid hospitalisation
County Council Social	Reduced pressure on care	Better information about community
Services	home beds	based clients. More care delivered in the community
Runnymede Borough Council	More residents supported in the community	Opportunity to promote other local community services

Appendix S Policy Collaborative for Telecare

In July 2004, as part of the 2004 Spending Review, The Chancellor announced £80 million funding for a social services' Preventive Technologies Grant over two years from April 2006. This is to extend the benefits of new technology 'community alarms', with the aim of reducing the number of avoidable admissions to residential care and to hospital.

Modern, responsive electronic community alarm-type devices can do much more than alert a carer or call centre to an event that needs investigation to ensure that a person is safe. They may, for example, remind the person of things they should do. This allows them to stay in control of their lives for longer and gives them and their carers reassurance owing to reduced risk of untoward events. Technologies for the remote monitoring of health conditions could also, in time, share the same infrastructure as care-oriented technologies, and many people would benefit from both types of monitoring. Technical advances mean that the devices are easy to install and that they are relatively unobtrusive.

As well as the improvements in quality of life, efficiency gains to the health and social care systems are possible because 'just-in-case' admissions of older people to hospital and residential care are still common. Electronic technologies can therefore contribute to a number of important agendas such as:

- Admission avoidance and timely discharge.
- Falls prevention strategies.
- Saving lives through more reliable fire/smoke detection for older people.
- Timely information to inform people's care package reviews.
- Improving quality of life and reducing care costs for people with long term conditions and with strokes.
- Better monitoring of people with chronic obstructive pulmonary disease (COPD) and diabetes which can alert to changes in condition and significantly reduce out-patient attendances.

A number of influential publications referenced research in this area and influenced policy development by the Department. The Audit Commission's *Fully Equipped* reports in 2000 and 2002, followed by *Older People — Independence and Well-being* (February 2004) and particularly the sub-report on assistive technology, are notable examples.

As the Preventive Technologies Grant will not be ring-fenced, services will not need to prepare bids to the Department to obtain a share of the funding. However, its distribution through social services' baseline funding means that councils and their PCT partners will need to have in place before April 2006 plans to take forward the implementation of the Government's policy to expand the uptake of these technologies. To achieve this policy not only councils will need to be prepared, but most of the other 17 stakeholder groupings identified so far, and in particular the equipment manufacturers must have made appropriate preparations.

The complexity of the policy, the need to develop it rapidly, and the need to involve a large number of stakeholders were all factors that led to the decision to develop the policy within the framework given by the Department of Health's Policy Collaborative initiative.

What is the Policy Collaborative?

The Collaborative is an experiential improvement programme for policy teams and stakeholders to develop better policies, and more quickly, than before. This year 'electronic technology' is one of six policy topic areas involved in the Collaborative. The topic areas work within all the usual constraints of deadlines, interference, unpredictability and scarce resources, but the approach is fundamentally different to the traditional 'consult and tell' approach to policy development. It involves stakeholders actively shaping the development of the policy from the start and modifying it as they learn from each other. A 'let's try something different' culture is encouraged and learning comes as much from things that are tried and do not work, as from successful changes. Collaborative methodologies have been widely and successfully applied to health services in the USA and in England but trying to apply them to policy making is experimental. The collaborative work is part of the Department's change management programme and is being carried out in conjunction with the NHS Modernisation Agency.

Who is involved?

The main body of collaborative stakeholder representatives (the 'stakeholder group') comprises 55 people from the following sectors:

- Academics
- Call Centre Providers
- Care Homes
- Community Equipment Services
- Consultants working in the field
- Environmental Control Services
- Government Departments
- Housing Associations
- LA Housing Departments
- Manufacturers
- NHS Provider Trusts
- Primary Care Trusts
- Professional Associations
- Social Services
- Strategic Health Authorities
- Trade Associations
- Service users
- Voluntary Organisations

Many more people want to participate than it is possible to accommodate, and currently there is a mailing list of nearly 400.

The six collaboratives are supported by a small team of facilitators and project managers from within the Department and there is high-level interest in the lessons that other parts of the Department can learn. There is also a small 'core team' that bridges the collaborative support team and the stakeholder group. It monitors progress and will, if necessary, resolve problems and intervene to keep the collaborative on-track.

What has happened?

The collaborative process began with a day-and-a-half for the main stakeholder group to come together, to learn about the process and techniques to apply and to rake up all the issues that need to be addressed — at least, for our collaborative there was a lot of raking! The principal techniques are a simplified form of process mapping, setting objectives and measures, and conducting 'learning loops' or 'Plan, Do, Study, Act (PDSA)' cycles. There are then four follow-up days for learning and further work on the issues plus, it is hoped, some cross-fertilisation with the other collaboratives.

It was soon realised at the initial days that the issues are so complex that there will not be time in the main events to deal with them all and so six working groups (and now too a cross-government department working group) were set up. Four of these had their first meeting before the 14 September. They are:

Service redesign. Its remit is to continue the process mapping and to suggest an 'ideal process'. It
will cover such knotty problems as: how introduction of the technology can trigger local service reengineering; how potential inequities between owner occupiers, council tenants and tenants of
registered social landlords can be avoided, and what the preferred methods of procurement,
installation and maintenance are.

- Technical issues. Primarily for manufacturers, the remit is to identify technical matters that could form barriers to the success of the project, and to set up a mechanism to resolve them. It does not have to resolve them itself once these tasks are done, group members will be at liberty to join other working groups.
- Engagement strategy. This group has to develop an understanding of the messages that need to be disseminated and the best ways to communicate them to the target audiences. As the funding is not ring fenced, local involvement of potential users and carers, councils and other stakeholders will be vital to the widespread implementation of the policy.
- Terminology and drafting. From the start it was recognised that the terminology in this field is varied and used by different stakeholders to mean different things. The technologies are changing and the policy should not be unnecessarily constrained by the use of certain terms. The collaborative must be clear about the terminology it uses. As the policy emerges it needs to be captured in words that express it accurately and concisely.

The groups that have not met to date are:

- Training. If the policy is to succeed, there are implications for the staff training of a number of the stakeholders including councils, health services, voluntary organisations and manufacturers. This group will aim to point them in the direction of useful training frameworks and organisations.
- Evidence base. To underpin the policy, this group will undertake an exercise to identify relevant evidence and categorise it into 'Good (but unproven) ideas', 'Good practice' (that is, it has demonstrated its effectiveness in a single organisation), and 'Proven practice' (shown to be effective for a number of organisations).

The overall aim of the Collaborative is to produce, by March 2005 a clear, shared vision towards which everyone is committed to working. This will probably take the form of a draft joint health and council circular on the use of the Preventive Technologies Grant, which is supported by good practice information that will enable all the stakeholders to put appropriate plans in place during the year 2005/06.

One of the aims of working in a collaborative way is to share the stakeholders' initial perceptions of the policy agenda, which naturally focuses on their particular interest, as in 'I know exactly what the problems are and how to solve them', and change them to a wider, deeper and shared understanding as in: 'These are the problems and issues and this is what we plan to do about them.' To do this, however, requires some consistency of membership, which is quite difficult for busy people who are in demand. We have therefore declared two principles that will enable us to make progress and avoid constantly re-visiting old ground:

- 1. The collaborative stakeholder group works in a 'permeable bubble'. That is, it has a collective identity, but is permeable to a two-way flow of ideas with the many people who were not able to join that group. It is, at the discretion of the working group leaders and the core team members, open to the substitution or occasional addition of members.
- 2. Each working group has delegated responsibility for decision-making on behalf of the rest of the collaborative membership. It should be the over-riding assumption that if a working group arrives at a decision it has done so by debating and resolving the issues, and the decision should not be subsequently challenged by members not present at those discussions. Matters will only be looked at again (by the core group) if decisions of groups run counter to each other. If a working group cannot arrive at a decision on an issue it can be referred back to the whole Collaborative.

What has the Collaborative produced so far?

- 1. A process map, still under development. Examination of existing routes by which people get this equipment are very varied. It is probably not possible to pin it all down, but by making the effort to map, a clearer idea develops of how it 'should' be done.
- 2. The identification of issues for the engagement strategy and the technical issues to resolve.
- 3. A 'headline' definition of the purpose of the grant, which is:
- The purpose of the Preventive Technology Grant is to initiate a profound transformation in the design and delivery of health and social care services and prevention strategies to enhance and maintain the well being, self-esteem, independence and autonomy of individuals by using electronic technologies to support them to live safely and securely at home. At this level, terms such as 'telecare' and 'electronic assistive technology' have been avoided so that the inclusion of new developments are not pre-empted, and to keep the definition generic and easily understood. This needs to be supported and illustrated by examples which may use those terms.
- 4. A list of suggested outcome measures.

Anyone who wishes to be added to the email contacts list, or to volunteer to join a working group, should contact Karl Blackshaw via <u>karl.blackshaw@dh.gsi.gov.uk</u>