# DERBY PREVENTATIVE TECHNOLOGY GRANT STRATEGY 2006 – 2009

How the Preventative Technology Grant will be utilised to add value to the existing Telecare services to vulnerable adults

## PROJECT AIM:

TO DELAY OR PREVENT HEALTH DETERIORATION AND PROMOTE THE INDEPENDENCE OF OLDER PEOPLE AND THEIR CARERS IN COMMUNITY SETTINGS WITHIN DERBY BY THE EFFECTIVE PROVISION OF TELECARE BASED SYSTEMS

CORPORATE AND ADULT SOCIAL SERVICES
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## **Contents**

## **Chapter 1 - Introduction to Preventative Technology**

Definitions- 3 Needs and Benefits - 4

#### **Chapter 2 - Profiling Derby's Future Preventative Technology Needs**

General Demographics - 6 Local needs - 6 Consultation - 8

#### Chapter 3 - Finance and Commissioning

The Preventative Technology Grant - 11 Derby Investment Plan - 12 Description of Cost Allocation - 15

#### **Chapter 4 - Supporting Systems and Protocols**

Referral, Assessment and Review - 17 Consent, Installation and Maintenance - 18 Access Criteria - 18

#### **Chapter 5 - Performance and Evaluation**

Marketing and Staff Development - 22 Performance Indicator Monitoring - 22 Project Evaluation - 24

#### **Chapter 6 – Long Term Strategic Issues**

Mainstreaming the Service - 26 Projected Savings - 27 Related Long Term Issues - 28

## **Chapter 1 - Introduction to Preventative Technology**

#### **Definitions**

- 1.1 The Department of Health provide a two year Preventative Technology Grant of £375,435k, to Corporate and Adult Social Services from April 2006. The aim of this grant is to use Telecare products to, "initiate a change in the design and delivery of health, social care and housing services and prevention strategies to enhance and maintain the well-being and independence of individuals" DH Circular (2005) 6.
- 1.2 *Telecare* is defined in the White Paper, Our Health, Our Care, Our Say (p221) as, "a combination of equipment, monitoring and response that can help individuals to remain independent at home". For example, monitors within a persons home that detect falls or transmit alerts to a control centre when something is about to, or does goes wrong.
- 1.3 Such solutions support risk management by; -
  - Reducing the impact of a known hazard i.e. a gas shut off valve for someone with dementia
  - Reacting promptly to an incident that has happened i.e. falls
  - Predicting and preventing the consequences of behaviour patterns that may lead to risk incidents
- 1.4 Telecare can provide vulnerable adults with additional support to live at home, provides carer reassurance and can assist health, housing and social care assessors by providing an extra risk management option when care planning with vulnerable adults and carers.
- 1.5 Telecare strategies can therefore support people to live in their own homes in community settings for longer and prevent or delay unnecessary admissions to hospital and residential care.
- 1.6 Such outcomes support several national agendas, the White Paper Our Health, Our Care, Our Say; National Service Frameworks for Older People, Mental Health and Long Term Conditions, Valuing People, Supporting Carers and particularly those moving through intermediate care pathways, those with dementia and people at risk of falls.
- 1.7 Telemedicine or Telehealth can support risk management for health professionals in similar ways and refers to the practice of remote medical care using interactive audio-visual and data communications. For example the monitoring of temperature, blood pressure, breathing, pulse etc with disease specific indicators. It is particularly relevant to those managing long-term conditions and who may present to out of hours and emergency services on a frequent basis.

1.8 Such initiatives offer the potential considerable long-term whole systems savings. Neither the CareLink infrastructure or health agencies have the capacity to introduced telemedicine or telehealth at the present time. The costs of building up such a service are prohibitive and would subsume the majority of the Derby allocation. Therefore the Preventative Technologies Grant will not be allocated to these initiatives.

#### Needs and Benefits

- 1.9 The introduction of the £80m DH grant will stimulate the UK Telecare market leading to rapid development of existing and new technologies. *Third generation* products utilise new technology, partly arising from innovations within mainstream computer and mobile phone markets. The Preventative Technology Grant is unlikely to be used for this equipment until such products are fully tested.
- 1.10 There is a clear rationale for the expansion of first and second generation Telecare within Derby and with several forces driving the central government Telecare initiatives which impact upon the development of the Derby Preventative Technology Grant Strategy. Derby is well placed in comparison with other authorities, having the necessary infrastructure for expansion.
- 1.11 Demographics indicate a rise in the numbers of older people, increasing numbers of people with long-term conditions and therefore older people living longer with increased prevalence of disability. There is evidence of the 'frequent flyer' group who are constantly readmitted to care and whose causal health deterioration could be delayed or prevented.
- 1.12 User and carer groups are requesting more control over their lives, particularly when the natural effects of ageing impact upon individuals. They demonstrate increased awareness of technological progress and of how technology can be matched to need, particularly disabled people and those on direct payments. Traditional service patterns can no longer maintain and promote the independence of individuals and are not as effective as they should be in preventing or delaying entry into more formal systems of health and social care
- 1.13 Pressures on health and social care resources increase, particularly upon acute hospital capacity. There is growing evidence that a return to independence, once acute needs have been met, is best achieved in community settings combined with recognition that there are identifiable groups of people for whom permanent admission to care is premature. Central government emphasis is increasingly on new patterns of service that have the potential to provide whole service outcomes for a locality.
- 1.14 National evaluation studies evidence the role of Telecare in improving the quality of life of users and carers and of impacting upon whole system savings. The West Lothian scheme reduced the average length of stay in nursing homes from 3 years in 1999 to 1.8 by 2002 and saved 3,200 hospital bed days.

- 1.15 A dementia care project in Northamptonshire established positive outcome whereby 87% of Carers measuring stress levels felt that the project had made a difference in their sense of concern for the safety of the person cared for and almost half felt that the project had improved the confidence of the service user to look after themselves safely.
- 1.16 Telecare cannot replace traditional forms of care and so the provision of equipment will rarely lead to the removal of community services such as nursing or home care. It can reduce other service provision, reducing the frequency of check calls or night sitting services for example but is best used to complement care packages where a range of services are provided aimed at supporting independence and so delaying entry into more formal types of care.
- 1.17 Derby has had an existing, effective and accredited assistive technology service (CareLink) serving over 4000 local people, mainly with lifelines and pendants, for 20 years. CareLink charge a monitoring fee per person per week and further fees for every additional piece of Telecare equipment. Derby homes operate a parallel system with higher charges but underpinned by Supporting People Funding.
- 1.18 Despite strong marketing, Telecare products have not been well utilised by local people with complex needs living in their own homes, nor by health and care professionals. There is some distrust of the reliability of Telecare technology and reluctance to envisage a risk management role for Telecare equipment in care planning. Provision to adults with complex needs in Derby will be expanded using the Preventative Technologies Grant.
- 1.19 Derby is well placed for Telecare expansion because of the established CareLink infrastructure. CareLink will continue to provide equipment assessment installation and maintenance, the call centre and first line response mechanises. In a recent ICES audit, Derby was ranked 11<sup>th</sup> in a national survey of local authority readiness for Telecare implementation.

#### **Chapter 2 - Profiling Derby's Future Preventative Technology Needs**

#### General Demographics

- 2.1 General demographic rends indicate that the numbers of older people are expected to rise year on year for the next twenty years. Health improvements may mean that people live for greater periods with long-term conditions. People are more likely to live alone by choice in their 20's, through divorce and separation in mid age and then by bereavement from the age of 60.
- 2.2 The Local Government Association asserts that the number of over 85's in Britain will rise by 5.6% in 2005 and 5.25 in 2006, with a quarter of this group likely to develop dementia. The Derby projections are that there will a steady rise in the numbers of people aged 60 and over from the current rate of 47.7 per thousand population to 53.1 per thousand in 2013 and 67.3 per thousand in 2028. General Social Services Provision: December 2005.
- 2.3 The 2001 Census states that Derby has 69,455 people aged 50 and over. Of these, 28,163 have a limiting long-term illness, of which 13,162 describe themselves as having a limiting long-term illness and not being in good health. There are 9774 people aged 60 and over have a limiting long term illness and are not in good health. 4079 people aged 75 and over have a limiting illness and are not in good health and 3234 people aged 85 and over have a long term illness are not in good health.
- 2.4 Isolation is a known factor in physical and mental deterioration. Annual Liberation Day surveys show that 23% of older people state that they have no one to call on in times of adversity. Derbyshire Police statistics show that 40% of the victims of distraction burglary have their quality of life affected and two years after such a burglary, victims are 2.4 times more likely to have died or to be in residential care.

## Local Needs

- 2.5 Carers in Derby absorb many of the pressures that such demographics present. There are 23,625 unpaid Carers in Derby representing 10.9% of the population. 16,018 provide care for 1-19 hours per week, 3637 of those are aged 60 and over and 1496 of the total class themselves as not in good health.
- 2.6 2,743 provide care for 20 49 hours per week, 756 of those are aged 60 and over and 441 class themselves as not in good health, 4,888 provide care for 50 hours or more, 2,131 of those are aged 60 and over and 1106 of the total class themselves as not in good health, 8,873 of those providing unpaid care are economically inactive.
- 2.7 Carers provide substantial levels of care across the community at low cost and can themselves live with economic and social exclusion, ill health and the affects of ageing processes. It is estimated that the up to a third of carers can experience some forms of depression.

2.8 Evaluation evidence suggests that people with early onset of dementia may be particular beneficiaries of Telecare. The projected numbers of people with dementia in Derby are;

AGE	2005	2015	% INCREASE
65-74	544	617	13%
75-84	1,236	1,272	3%
85+	1,282	1,705	33%
ALL 65+	3,062	3,594	17%

Source: Supported Accommodation Strategy

- 2.9 In Northampton, 14 clients requiring dementia care were supported over 15 months. Support costs averaged at £275 per person and the average cost reduction per person per week was 17.5%.
- 2.10 At March 2004, there were 1645 people registered as deaf or hard of hearing in Derby, 85 people aged 65-74, 210 aged 75 and over. There were 80 people registered as hard of hearing aged 65-74 and 635 aged 75+.
- 2.11 At March 2003, there were 2285 people registered as blind in Derby, 240 aged 65 to 74, and 1695 aged 75 and over. There are 1240 people registered as partially sighted in Derby, 140 are aged 65 to 74and 920 are aged 75 and over.
- 2.12 The Audit Commission Report, Assistive Technology: Independence and Well Being 4 page 8, give percentages of the average 65 plus population with particular impairments that are the result of the ageing process or lifestyle. The extrapolated figures for Derby are; -

Common Condition Affecting 65+ Age Group	Incidence in the Population of aged 65+	Derby Estimate (Total numbers of 65+ = 37,200	
Arthritis	50	18,600	
Hypertension and Heart Disease	30	11,160	
Diabetes	11	4,092	
Hearing Problems	32	11,904	
Cataracts / other forms of visual degeneration	26	9,672	
Mobility Problems	35	13,020	
Dementia (25% of these live alone)	5	1,860	

Source: Extrapolated figures from Assistive Technology: Independence and Well Being: Audit Commission.

- 2.13 National studies show that there are health outcomes for BME populations can be worse and that coronary heart disease is high in South Asian elders, stoke is high in some elders from south Asian countries and the Caribbean, diabetes is high in elders from the Caribbean, Africa, Asia and the middle east, cancers are high in Irish people, prostrate cancers are high in Caribbean men.
- 2.14 Telecare take up, beyond the basic lifeline and pendant, has been low in Derby yet there is clearly room for service growth, particularly amongst groups with complex needs. At December 2005, adult social services supported;

SERVICE	NUMBER
Intensive Homecare	416
Admissions 65+ Into Care	300
Admissions 18-64 Into Care	39
Adults 18 – 64 with physical impairments helped	839
to live at home	
Adults with Learning Disabilities helped to live at	473
home	
Adults with Mental Health difficulties helped to	404
live at home	
Older People (65+) helped to live at home	4,273
Adults receiving Direct Payments	198
Carers receiving services	452
Assessments of Adults leading to a provision of	1684
a service	

Source: Social Services Information Section

- 2.15 In 2004 / 05, 2228 households received home care for five hours or less, 1568 of those for two hours or less. West Lothian connected over 1000 homes at a cost of £800,000 and as a result, people remained in their own homes longer and delayed discharges rates were reduced from 3.48 per 1000 population to 2.14. The Project Team has identified benefits to be gained in particular instances. I.e. those with; -
  - Learning disabilities supported to live in the community or living with long term conditions (epilepsy)
  - Early dementia where families and professionals are trying to support life at home
  - A night sitting service
  - Respiratory or coronary conditions
  - Physical well being calls or under five hours of care per week
  - Carers providing many hours of care per week
  - A risk of falls
  - Intensive care packages
  - Specific health issues as members of BME populations
  - Little community support recently discharged from hospital

- Experience of isolation at home
- Long-term stays in community hospitals that could be cared for at home
- Long-term conditions frequently readmitted to hospital for short periods
- 2.16 A pilot scheme introduced in the Allestree and Mackworth areas and targeting existing users will provide precise information on which groups can best utilise Telecare products. Several of those contacted have taken up the offer of Telecare equipment.

#### Consultation

- 2.17 A consultation event on March 3<sup>rd</sup> will ask participants to name the daily problems that they most need help with and how Telecare equipment can best help with these problems. Ninety-one older people participated, some as individuals, some as part of older peoples groups and some of groups for older people. Participants were asked key questions about the draft Preventative Technology Strategy; their needs in the home and how Telecare can best meet these needs.
- 2.18 Full details of the feedback are attached in Appendix Two. The main concerns voiced related to cost, isolation and fears that Telecare would be used to replace the personal element of face to face that is highly valued by users and carers and which is useful in identifying emerging problems at an early stage.
- 2.19 Participants were given a pre meeting opportunity to view telecare equipment and discuss solutions with suppliers before the formal consultation session. Many were able to pick out specific items of equipment and relate products to their everyday needs. Themes relating to the reduction of feelings of isolation, added reassurance and crime prevention were constant. Specific needs such as dementia and falls were discussed across the groups as were the use of telecare to support personal safety and provide carer relief.
- 2.20 Examples noted that could meet identified need were; -
  - Falls detectors
  - Gas and CO2 detectors
  - Bogus Caller Units
  - Movement sensors
  - Light sensors

Specific reference was made to the fact that the availability of a 24 / 7 check and response system was provided unprecedented levels of reassurance.

2.21 Consultation feedback and CareLink experience to date echoes the DH Preventative Technologies Circular 2006 (5) which states that the main beneficiaries of Telecare are typically, "older people and people with long term conditions and disabilities who will be able to maintain more effective control over their independence, dignity and health and older people living alone who are starting to become forgetful or anxious, who may be able to remain independent and in more control of their lives for longer without intrusive visiting from health and social care professionals".

2.22 The health needs of older people in Derby are therefore likely to increase in parallel leading to increased pressure on hospital beds, intensive home care and residential and nursing placements. Telecare has the potential to radically change the way in which person centred services are delivered and meet locality targets contained in the Community Strategy.

#### **Chapter 3 – Finance and Commissioning**

#### Preventative Technologies Grant

- 3.1 The Preventative Technology Grant share for Local Authorities is determined using the Relative Needs Formula. The grant is paid under Section 31 of the Local Government Act 2003 without condition. £80m is available to local authorities in England over two years and DH estimate that an additional 160,000 people will benefit from Telecare as a result.
- 3.2 The funding is provided to all local authorities with social services responsibilities but with an expectation that they work with NHS and Housing partners. "Telecare will be most effective when implemented as an integrated service". DH Circular 2006 (5)
- 3.3 £375,435 will be paid to adult social services, £141,124 in 2006 and £234,310 in 2007. Agencies are expected to mainstream services from 2008 from within existing budgets.
- 3.4 The grant is provided without restriction other than its use except that effective use of the grant will, "help local authorities and their partners achieve key PSA targets around supporting people with long term conditions and improving patient and user experience, in particular supporting older people to live at home".
- 3.5 The CSCI Delivery and Improvement Statement will include a requirement to monitor and report on the pre grant baseline volume and the number of people aged 65 and over supported with one or more items of Telecare in their own home. Councils are also expected to report on numbers supported with Telecare in partnership with other agencies and on numbers supported using Telecare without social services input.
- 3.6 Whilst the DIS reporting requirement centres on provision to those aged 65 and over, the grant can be used to provide Telecare services, "where appropriate, for the benefit of people of all ages including those with long term conditions, learning disabilities, mental health problems and those needing end of life care".
- 3.7 Expenditure on infrastructure, defined as staff training, additional staff, information for users and carers, publicity, administration costs and ICT development is allowable under the grant and will be monitored on equipment provision will be monitored together with the amount on equipment and on providing the service.
- 3.8 DH statistics indicate a support figure of £500 per person per annum. In theory, this suggests that an additional 375 vulnerable older people can be supported using Telecare in Derby during the span of the grant. However, CareLink estimate that the local figure per person could be lower in the long term. For example, in some hospital discharge cases or Intermediate Care where short-term reablement is the primary care plan outcome. Therefore the

Derby Project Team estimates that between 600 and 750 vulnerable people could be supported with Telecare using the PTG. The costs detailed below are based upon the higher of these estimates. I.e. provision under PTG to an additional 750 people.

## Derby Investment Plan

- 3.9 The Investment Plan below shows the Project Team two-year projections, allocated as a result of an audit of the existing CareLink service and analysis of information within the Derby Commissioning Strategy for Older People. Grant allocation is within the tolerance of DH Circular 2006 (5). Further description of expenditure within each element of the plan is provided in the accompanying table.
- 3.10 Despite the existence of an established service, there will be additional start up costs to be borne from the grant. For example Training and marketing costs will be higher in year one. CareLink estimates that it has the ability to take in the projected additional volumes in year one but is less likely to be able to maintain that position in year two, especially given the unknown nature of the complex needs that assessors may present. The need to boost response mechanisms has therefore been identified as a major cost in year two.
- 3.11 Likely scenarios are that the CareLink response team will need to expand and be trained to manage more complex situations. It is also possible that the major risks presented by such situations can not be managed by CareLink and that community nursing or homecare services must be diverted in order to effectively manage such risks, particularly risk arising 'out of hours'. The Project Team will monitor Telecare take up over the first six months of the project in order to be able to identify trends arising from the needs of these complex cases.
- 3.12 Users eligible under FACS and the Carers of those eligible will be provided with free equipment by social services but levied the usual CareLink monitoring fee. The legal position is that equipment provided as a result of a community care assessment (required to establish FACS eligibility) can not be charged for whereas Housing departments are allowed to levy charges for monitoring purposes. The Strategy position is consistent with that of neighbouring authorities and DH advice.
- 3.13 Income from fees levied as a result of PTG support will be identifiable and reinvested in the CareLink service during the life of the grant in order to assist the mainstreaming of the post 2008 service. The average weekly fee per person as of March 2006 is £3.05 per person or £3.45 if CareLink is a key holder.
- 3.14 The usual weekly cost per add on sensor is typically £0.75 per person. Therefore an individual with complex needs who is FACS eligible and subsidised under the PTG with three to five sensors could benefit from between £2.25 to £3.75 per week

- 3.15 Those ineligible will pay the monitoring fee and additional fees per item of equipment used. Individuals will be referred for benefit checks to maximise income with an exemption route to the Head of Disability Services established. Those assessed as likely to benefit from Telecare products will be able to use direct payments to do so if they wish although there may be economies of scale from the PTG project to be advised.
- 3.16 CareLink will at present continue to procure equipment under its agreement with Tunstall Ltd. Under this agreement, equipment stocks are leased from Tunstall and held by CareLink. They are re-ordered once installed in an individuals home and then replenished within two days of order. CareLink can source sensors elsewhere if assessors specify a model not available from Tunstall.
- 3.17 A service specification will be developed by Contracts in order to establish a preferred provider list for equipment by April 2007. The specification must allow for systems compatibility and ensure that new and proven products can be purchased from the most appropriate supplier. PASA procurement regulations to come into effect from June 2006 may provide a savings via a national joint agency procurement mechanism.
- 3.18 The multi agency DICES Board will manage the day to day expenditure consistent with other integrated equipment provision. CareLink will invoice DICES monthly in arrears for equipment provided to users and carers eligible for Telecare under the grant. Social Service SPA team will process the invoices with sub code to denote expenditure under the PTG.

## DERBY PREVENTATIVE TECHNOLOGY STRATEGY INVESTMENT PLAN

## **PROJECTED COSTS 2006-08**

	2006 / 07			2007/08		
	Cost	Totals	Cost	Totals		
Staffing						
Occupational Therapy Suppor Manager Enhancement Integrated Project Worker Staff Development	t 20,000 3,000 30,000 2500		21,000 3,110 31,110 2,600	57,820		
Equipment						
Basic Telecare Units Add On Sensors Six week Trial Mobile Technology Minor Adaptations	13,500 37,500 7,500 1,000 5,000		20,750 56,250 11,250 2,000 7,500	97,750		
Response Mechanisms						
CareLink Whole Systems	0		20,000 30,000	50,000		
Marketing						
Publicity Public Consultation Independent Evaluation	2,000 2,000 7,250		2,075 2,075 14,250	18,400		
Contingency	9,875	9,875	10,340	10,000		
TOTAL		141,125		234,310		

## PREVENTATIVE TECHNOLGY GRANT 2006 - 2008: DECSRIPTION OF COST ALLOCATION

COST	DESCRIPTION OF COST ITEM	REASON FOR YEAR 2 CHANGE
Staffing	Infrastructure costs required in addition to current Housing funding to ensure effective	
	implementation. Project support from within existing CASS and Housing budgets.	
Occupational	Half time backfill to enable the secondment of an Occupational Therapist from existing	Inflation only
Therapy	social services staff. The post holder will promote Telecare as the departmental	
Support	champion. The post holder will link Social services and CareLink by the provision of	
	specialist assessment, occasionally joint with CareLink or health assessors, relating	
	occupational therapy knowledge of disability need to Telecare products on request.	
Manager	Enhancement for the existing CareLink Manager to allow for the extra responsibilities	Inflation only
Enhancement	involved in developing, managing and evaluating the expanded scheme.	
Integrated Project	Backfill for the secondment of a Community Care Worker to be seconded to enable	Inflation only
Worker	Integrated Service Development. The Post holder will focus on the integration of	
	Telecare processes across health, social care, housing and voluntary agencies.	
	I.E. The long term development and implementation of multi agency referral,	
	assessment protocols and information sharing protocols, specialist training provision to	
	multi agency staff (including to community and voluntary sectors and emergency	
	services). The post holder will also provide a specialist research and evaluation	
	function to the Project liaising with the project team and independent evaluation.	
Staff	Specialist technical training and user group updates for CareLink staff from equipment	Inflation only
Development	suppliers. General awareness training for 700-multi agency staff each year on the	
	aims and objectives of the project, matching Telecare to assessed need and referral	
	assessment and information sharing protocols.	
Response	New Telecare provision to people with complex needs will test the CareLink capacity	Year one CareLink
Mechanisms	to respond to higher volumes and more specialist risk management situations.	capacity adequate.
	CareLink and 24/7 community response provision may have to be expanded by 2007.	

## PREVENTATIVE TECHNOLGY GRANT 2006 - 2008: DECSRIPTION OF COST ALLOCATION

COST	DESCRIPTION OF ITEM	REASON FOR YEAR 2 CHANGE
Equipment	Purchase, installation and maintenance of Telecare equipment to those users and carers supported by the Preventative Technologies Grant.	
Basic Units	Purchase of 300 Lifeline units and pendants IN Year One and an additional 450 in year two.	50% year two rise
Add on Sensors	Anticipated purchase of add-on sensors for 300 people in year one and an additional 450 in year two.	50% year two rise
Six Week Trial	Provision of a six-week free trial of equipment to 300 people in year one and 450 in year two.	50% year two rise
Mobile Technology	Purchase of mobile computers to assessor and response staff. This will test the ability of response staff to remotely access client data when responding to an alert.	Inflation only
Minor Adaptations	Utilisation of existing minor adaptation procedures to ensure the timely fitting of equipment to industry standards for 300 people year one and 450 people year two.	50% year two rise
Marketing	The costs of entrenching Telecare potential within public and professional cultures and of presenting a multi agency business case for sustainability.	
Publicity	Estimated costs for information to be delivered to all existing users and carers. Leaflets to all public outlets and three media campaigns, one every six months.	Inflation only
Public Consultation	Three strategy consultation events for older people in Derby over two years to first endorse strategy direction then monitor and then refine strategy implementation.	Inflation only
Independent Evaluation	Full evaluation over two years of the project to establish an evidence base for sustainability. Dual focus will be improvements to the quality of life of those subsidised from the Preventative Technologies Grant and of the impact upon health and social care performance indicators and budgets. Evaluation commences in year one but main cost borne on report delivery in year two.	Set up cost year one, delivery cost year two.
Contingency	Identified Project Risks. I.e. equipment purchase if take up has been under estimated or to boost response mechanisms if the capacity of the existing team has been underestimated.	Inflation only

## **Chapter 4 - Supporting Systems and Protocols**

#### Referral and Assessment and Review

- 4.1 Telecare provision, where appropriate, can support vulnerable people to stay in their own homes for longer periods, preventing or delaying permanent admission to care, speeding up hospital discharge and reducing engagement with Ambulance, A+E and out of hour's community services.
- 4.2 Once briefed, assessors quickly become accustomed to and skilled in matching Telecare products to individual need. Telecare provision becomes part of mainstream assessment and care planning for health and social care professionals so providing extra options for those implementing care plans.
- 4.3 Users experience quality of life increases in choice, independence, security, confidence and quality of life and carers experience additional levels of reassurance. Telecare can work well with direct payments and individual budgets. The key is appropriate referral and needs led assessment.
- 4.4 Where possible, all existing assessment and referral systems, protocols and forms will continue with amendments made to render information sharing documents single assessment compliant. The Derby: Derbyshire Information Sharing Protocol will apply.
- 4.5 Assessors should consider Telecare provision as a first option when care planning, much in the same way that rehabilitative and direct payment options are considered before more formal service provision. A full guide to staff processes is provided in Appendix Three.
- 4.6 Referral for CareLink Telecare provision will continue to be made by telephone referral direct to CareLink staff. However, access to support under the Preventative Technology Grant is only open to those who are FACS eligible. At present, only social services assessors or those with delegated powers of assessment can make this decision.
- 4.7 Anyone from social services making a referral should first assess presenting needs and make an eligibility decision consistent with adult services Fair Access to Care criteria. Is the individual eligible for community care services or not? Assessors should record the eligibility on SWIFT as usual and also record the fact that a referral has been made to CareLink.
- 4.8 The service that Telecare provision is anticipated to replace, delay or prevent (i.e. residential care) should also be recorded as directed by the Information Section. This will help DICES track the finance of those supported under the grant and provide management information to the independent evaluation team.

- 4.9 Assessors from other agencies should refer as usual by phone to CareLink but in addition to the referral information, are asked to state whether the individual has social services involvement giving the SWIFT number where available or if not known, state whether it is their intention to refer to social services for other needs.
- 4.10 Community care assessments will identify eligibility for the subsidised scheme. Those who are eligible and the carers of those eligible will be able to access the PTG subsidy. Those ineligible for community care services will still be eligible for CareLink services but will not be subsidised under the grant. A referral for benefit maximisation should be made in all instances.

#### Consent, Installation and Maintenance

- 4.11 CareLink staff will continue to match individual needs to specific Telecare equipment with the assistance of the social services Occupational Therapist where appropriate or via a joint visit with coprofessionals such as Intermediate Care nursing.
- 4.12 Individuals must give consent in order to participate in the free six week trial and again at the end of the trial period if the recommendation is to continue with equipment provision. Real concerns exist that Telecare involves elements of remote monitoring and surveillance and those involved in the provision of Telecare will need to carefully explain how the technology is to ensure that it is only used for the purposes agreed with users and carers.
- 4.13 An individual who does not give consent can rarely be provided with Telecare equipment. Capacity to give 'informed consent' will be an issue in a minority of cases. The essential equation will be the balance of assessed risk to an individual's independence against the benefit of Telecare provision.
- 4.14 In many instances, information will held by CareLink and / or adult health and social care services. Not all information held on an individual is passed on to other agencies, only that necessary to resolve the presenting problem. For example, a control centre may hold information about a person's nocturnal movement but if they fall requiring an emergency response, only information relevant to the fall is shared.
- 4.15 CareLink will continue to order equipment and lead on the installation, maintenance and review of that equipment in including the review that concludes the free six-week trial. However, health and social care staff must check the continued suitability of any Telecare equipment provided at the point of the planned care plan review as well as the eligibility decision. CareLink will also advise on product development.

- 4.16 The hierarchy or CareLink response mechanisms will remain. I.e.
  - -Call the household when an alert is raised
  - -Call the nominated carer
  - -Activate CareLink response team
  - -Refer to community response services
  - -Trigger emergency services
- 4.17 Anticipated increases in the number of vulnerable adults accessing Telecare and in the range of presenting needs may mean that existing responses systems have to be expanded. Falls co-ordination is one example of where gaps in response mechanisms may be exposed. Current knowledge regarding specialist response mechanisms, for example to those with learning disabilities (i.e. with epilepsy) or mental health difficulties (i.e. with early dementia) may need to be developed as the impact of the grant is assessed.
- 4.18 Summary of Criteria for support under the Preventative Technology Grant. The individual must be; -
  - Adult aged 18 or over
  - A resident of Derby
  - With needs that could be met by Telecare
  - And eligible under FACS
  - Or a Carer if the cared for person is eligible
  - Who give informed consent to participate
- 4.19 The Project Team will periodically review these criteria. Recommendation for change will be made to the DICES Board.

## PROCESS - MAINSTREAMING TELECARE Install basic Assessor Care Link (Social Services / Health) Community / Alarm and plug & play completes equipment referral form once FACS eligibility confirmed Joint assessment Order minor adaptations / ancillary work Co-ordinator with Contractor if necessary / Review appropriate Feedback to Assessor Assessor Care Link

#### **Chapter 5 - Performance and Evaluation**

#### Marketing and Staff Development

- 5.1 Telecare must be effectively marketed to ensure take up of the grant subsidy, given the low Telecare uptake to date amongst people with complex needs. This will be targeted at Housing, health and adult social care staff and users and carers. Both groups may be wary of technology and issues arising from its use with vulnerable people and do not yet fully understand how Telecare can support the promotion of independence and individual care planning.
- 5.2 A Telecare leaflet describing the services available under the grant is in development and will be distributed to all known service users. The leaflet will be also distributed to all common public outlets including web based access points. A quarterly Telecare newsletter will keep staff up to date with new developments.
- 5.3 Media publicity will be generated once the grant is received, implementation protocols confirmed and the Assistive Technology Strategy mandated by Derby older peoples partnership. This will be repeated every six months to encourage take up.
- 5.4 A bid has been submitted to the Southern Derbyshire Training Consortium for staff development support. Nine briefing sessions took place between March 23<sup>rd</sup> and April 7<sup>th</sup> to support health, housing and social care staff make Telecare judgments as part of the assessment and care planning process. Approximately 150 staff attended and sessions are planned for a further 150 staff in May.
- 5.5 To assist assessor performance, a social services based Occupational Therapist will be trained as a Telecare Champion. The individual will be responsible for supporting Telecare assessment and advising professionals across agencies on Telecare eligibility.
- 5.6 The CareLink control centre and response teams will be provided with specialist training to enable them to encompass responses presented by those who may have specialist needs. I.e. people with Learning Disabilities.

#### Performance Indicator Monitoring

- 5.7 A new performance indicator measuring the number of people supported by Telecare products against a March 2006 baseline is introduced to the spring Delivery and Improvement Statement by the Commission for Social Care Inspection.
- 5.8 The baseline will be the numbers of users aged 65 and over who already have one or more items of Telecare in their own homes (or equivalent such as Extra Care / Warden Housing) at 31<sup>st</sup> March.

- 5.9 Social services will then be expected to report on the number of projected users in 2006 / 07 and 2007 / 2008. These are projected at 300 and 450 respectively. The 2007 DIS will then request actual figures for the previous year as well as the readjusted projections for 2007 / 08.
- 5.10 Figures must be provided for provision by CSSR alone, by CSSR in partnership with other agencies and by other agencies without CSSR input. Therefore there is a clear audit link to numbers supported with Telecare using the Preventative Technologies Grant. Social Services Information Section and CareLink will work together to provide annual returns.
- 5.11 Total expenditure on infrastructure, defined as staff training, additional staff, information for users and carers, publicity, administration costs, ICT development) must be provided as well as the figure for expenditure on Telecare equipment and service.
- 5.12 Overall agency performance monitoring will be by the multi agency DICES Board with quarterly reports presented representing referrals to CareLink, provision under the grant, alerts triggered and user outcomes. The Telecare project team will monitor flows monthly for the first six months of the project.
- 5.13 Expenditure will be monitored via the SPA team to be consistent with general equipment procurement. CareLink will continue to monitor standard management information. Social Services Information section will monitor those supported under the grant, the Delivery and Improvement Statement indicators and any other requirements imposed by grant guidance or changes to national performance frameworks.
- 5.14 The Preventative Technology Grant ends on March 31<sup>st</sup>, 2008 and local partnerships are expected to support the continuation of services from mainstream budgets. The main contributors will be housing, health and social care agencies.
- 5.15 Telecare provision has the capacity to impact upon B11, B12, C26, C27, C28, C29, C30C31, C32, C62, D41, D54 and acute and community health equivalents and the evaluation partner will be asked to advise on how evidence can be collected to provide robust links between Telecare provision and PAF improvements.
- 5.16 Robust and independent evaluation of the benefits of the project is essential to prove that savings in terms of bed days and delayed placements have been secured by Telecare provision. To this end, an evaluation partnership is proposed with a recognised expert local body independent of project stakeholders.

#### Project Evaluation

- 5.17 Project evaluation will attempt to first determine the positive effects of the provision of Telecare on the quality of life of those with complex needs. It will then combine this material with that routinely collected by CareLink, CASS Information Section and Derwent Shared Services to determine the effect of project provision upon the locality Adult performance framework.
- 5.18 Examples of questions to be considered are; -
  - What were the overall benefits to users and carers?
  - What specific concerns do users and carers have about Telecare?
  - Was the installation and maintenance of equipment timely?
  - Did it function properly?
  - Were staff knowledgeable about Telecare?
  - Were people given sufficient information to make an informed choice?
  - Was the speed of the referral, assessment, and installation adequate?
  - Were the assessment and review of sufficient quality?
  - Did the equipment provided meet the assessed need?
  - Was the CareLink response timely, appropriate and effective?
  - Were any equipment problems resolved quickly and appropriately?
- 5.19 The quality of life study will encompass a questionnaire distributed to all supported under the grant, focus groups of users and cares, selected case studies and critical incident examination. The evaluation study will be monitored by a sub group of the Telecare Project Team. The group will report to DICES every six months from October 2006 but expects to present interim findings and end of project results to multi agency commissioning groups in order to secure long term project funding.

#### **Chapter 6 – Long Term Strategic Issues**

#### Mainstreaming the Service

- 6.1 The Preventative Technology Grant runs from 2006 to 2008. CareLink itself, funded by Housing, is likely to continue to operate past that date but vulnerable adults will no longer be subsidised by the Preventative Technology Grant.
- 6.2 There should be a commitment to continue to provide a service to those subsidised during the two years of the grant. As equipment has already been purchased for them using the grant, this commitment will be cost limited and the provision will have generated income to CareLink via the weekly monitoring fees.
- 6.3 New users with complex needs will be required to pay both an equipment charge and the monitoring fee from April 1<sup>st</sup> 2008. This could be a cost to the individual of between £5 and £7 per person per week at current figures. CareLink experience and the 2006 consultation exercise provide evidence that this level of charge will restrict take up amongst vulnerable people.
- 6.4 It is unlikely that the service will be able to meet the needs of new users with complex from 2008 unless mainstream funding is provided to extend the service. Any savings evidenced by the Telecare project will be subsumed by existing services. Therefore the primary DH objective, which is to replace more traditional forms of care with preventative measures targeted at whole system improvements, will not be met.
- 6.5 National and CareLink evidence suggests that younger disabled people and those in with early onset of long-term conditions may be the greatest beneficiaries of Telecare. These groups also present needs that require long-term service provision and intensive demands upon services in older age. Such prove to be the most likely to become accustomed to combined Telecare: direct care packages and so provide greater savings to services over a longer time span to the health and care system.
- 6.6 To become mainstream provision available to all vulnerable adults in Derby, Telecare (and possibly telemedicine from 2008) must be funded from core budgets by health and social care and housing agencies. Potential income is raised from CareLink monitoring fees. Whole system savings on existing services will need to be demonstrated in order to reinvest in a 2008- 2013 Assistive Technology Strategy. This emphasises the need for evaluation of the outcomes two-year project.
- 6.7 Falls is a primary and illustrative example of an area where savings can be made by integrating services and ensuring that Telecare is integral. A study in Bedfordshire estimated the falls impact on the NHS.

- 6.8 Around 30% of over 65's living in the community will fall per year. The rate of falls injury hospitalization, increase exponentially for over 65's with rates being higher in women than men. Local information indicates that falls account for 3% of medical admissions and aapproximately 50% of orthopaedic admissions.
- 6.9 In the Bedford area, 420 people are admitted to hospital due to a fall per year and 140 are admitted to hospital with a hip fracture per year. National figures from the Audit Commission propose an average cost of £5000 per person as the cost of hospital care alone with additional costs for GP, community intermediate and social care. In Bedford for example, 14 GP visits are required per person after a fracture compared to the period before a fracture.
- 6.10 The Audit Commission also provides estimates of the savings to be made from investing in telehealth to manage patients with chronic obstructive pulmonary disease (COPD) in Assistive Technology: Independence and Well Being 4 (p24). In 2001/2 there were an 81,283 hospital admissions in England with COPD taking up 725,790 bed days. At the then figure of £250 per bed day the cost was £181m. The Audit Commission estimated that this could be reduced by 30% using telemedicine monitoring resulting in a national saving of £54m per year at 2002 figures.
- 6.11 The Audit Commission, Assistive Technology: Independence and Well Being 4 (p43) state that benefits will, "require extra investment in the short term, whereas any cost benefits will only become clear in the long term to other parts of the health and social care system....funding strategies that integrate a whole health and social care community are needed in order to target modernisation strategies and money at the most appropriate level of care".
- 6.12 The table below highlights savings that the current equipment supplier, Tunstall Ltd estimates to be the scale of the potential monetary savings available to Derby City Council, if they were to achieve similar results to other local authorities in Britain. Such whole systems savings could be reinvested in the mainstreaming of an integrated Telecare service with common access and consistent charging regimes for all Derby residents

## **Projected Savings for Derby: Tunstall Ltd**

Area of opportunity	Relevant case study	Nature of cost benefit
Dementia care	Northants "Safe at Home" project	£67,000 saved across a group of 18 people over a period of 12 months - £71.58 per week, (£3,722.22 per annum)
COPD care	Fold Telecare pilot with Foyle Health and Social Care Trust in Londonderry	85 bed days saved across 6 patients in a 4-month period – 42.5 bed days per annum per patient, 0.82 bed days per week per patient, saving £99.57 per week per COPD patient, (£5,177.64 per annum). This also gives the Acute Trust extra capacity by freeing up beds
Residential Care Home	West Lothian Scotland	Reduced the average length of stay per client from 30 months to 18 months, 40% reduction in residential care costs
Reduced package of care hours, resulting from reablement services and telecare	West Lothian Scotland	Reduced average package of care by 3.02 hours per week per client, saving £30 per week per intensive home care client
Delayed discharge	West Lothian Scotland	Delayed discharge rate is 1.64 per 1,000 over 65s, 40 % less than the Scottish average
Intermediate Care, Preventing Admission to Hospital and speeding up discharge	Carlisle	532 clients used the service in total, 447 of those clients either avoided going to hospital as a result, or were discharged early, i.e. a minimum of 447 bed days saved, (and probably a lot more than this), saving the equivalent of 64 weeks at £850 per week, £54,400 in total. This also gave the Acute Trust the equivalent of 64 week's extra capacity. 85 clients were prevented from going into hospital in the first place as a result of the availability of this new service.

Source: Tunstall 2005. Analysis of Potential Savings Available to Derby City Council

### Related Long Term Issues

- 6.13 Telecare provision within children's services is limited, occurring in some families with disabled parents. Evaluation studies have concentrated upon adult provision and so Telecare gains for children are relatively unknown. Any future project aimed at establishing an integrated mainstream service for Derby should scope unmet need.
- 6.14 Derby Homes, working with Tunstall and CareLink, fitted a housing unit close to the city centre with telecare equipment and used the facility as a temporary 'smart home'. Visitors were able to examine equipment installed, bed sensors, pressure mats and door systems for example that were connected to the CareLink monitoring centre.
- 6.15 Many health, housing and social care staff were able to visit the facility before it returned to general housing allocation, commenting positively on how the project had demonstrated the capacity of telecare to meet the needs of vulnerable people. There is potential for telecare equipment to be installed as standard in other housing and residential complexes in the future. In 2006, a bid has been made for a test scheme based in the Derwent New Deal area. This would support initiatives arising from the Derby multi agency Supported Accommodation Strategy.
- 6.16 Telemedicine or telehealth is where regular information on an individuals vital clinical signs and information specific to a health problem, such as asthma, hypertension or diabetes can be transmitted to a specialist monitoring centre. This is an exiting development, linking to the National Service Framework for Long Term Conditions and supporting the Expert Patient Programme. There is benefit here to community matrons who will be supporting people with long-term conditions but the supporting PCT infrastructure is not in place. There is also limited capacity within the existing CareLink systems to expand technology to take in telemedicine and no specialist clinical skill at the monitoring centre. There are potential whole systems savings to be made from telemedicine initiatives.
- 6.17 Third generation products utilise new technology, mainly arising from the rapid development of mainstream computer and mobile phone markets. Personal computers offer additional monitoring possibilities through the development of the Internet and broadband. 'Virtual visits' are envisaged where remote visual checks and assessments can be made. Clinical and care planning decisions can be made based upon previously collected intelligence in conjunction with electronic care case recordings Such systems could reduce the need for inpatient, out of hours and emergency engagement.

- 6.18 Many people already use their PC to shop, having items delivered to the door with items such as 'letterbox fridges' proposed to complete the process. Environmental control, a person's ability to control household appliances, and fittings such as curtains, drawers, kettles, fridges etc is technically possible but can be financially restrictive. Third generation technology could bring this independent living capacity within the means of a greater proportion of the population.
- 6.19 Development of any new initiatives will present capacity issues for CareLink. Should the Preventative Technology Grant lead to a mainstream service, then assessment, installation, monitoring and response capacities may be challenged.
- 6.20 There will also be parallel Telecare and call centre systems operating within Derby for the period of the Preventative Technology Grant. CareLink and Derby Homes are the two biggest Telecare systems using different and sometimes incompatible equipment and with disparate charging regimes.
- 6.21 The introduction of Derby Direct may also impact and the potential of telemedicine linked to NHS systems or a joint health, housing and social care system must also be considered. If not, Derby as a community could be faced a situation where different and incompatible equipment is in use, inconsistent access criteria applied, response mechanisms duplicated and discriminatory funding and charging streams.
- 6.22 The project team will monitor new technological developments closely, work with finance to model future mainstream options and report to DICES Board in 2007. It is recommended that senior level, inter departmental level discussions begin in autumn 2006 to examine the feasibility of multi agency commissioning of a fully integrated Telecare service for all residents from 2008.