



in partnership with:



Telecare and Telehealth

Assessment of Key Opportunities
Leicester City Council

May 2011

Background

As part of a regional JIP project, an evaluation of local telecare was carried out for a representative sample of 96 telecare users, to review the outcomes and efficiency of their support from 1 April 2007 to 4 April 2011

The evaluation considered the outcomes and costs of support for all cases sampled with a telecare element, and compared these with the most likely alternatives and costs if telecare had not been provided. These judgements were made by local care managers to ensure credibility.

Other contextual information was also gathered. Local NHS intentions for telehealth service developments were also collated and interviews carried out.

Results (1): Is telecare effective?

Telecare was effective in providing support or managing risk for all telecare users, with 47% of people receiving telecare to avoid or defer additional Social Care or NHS services. For 15 people telecare was felt to have avoided or delayed residential or nursing care placements.

In reviewing the outcomes associated with telecare use, the evaluation found that 7% of installations were provided purely for preventative purposes to people who would have received no community care services. For a further 46% of people who received telecare as an addition to an existing care package, it was judged that there would have been no alternative service if telecare had not been provided.

Telecare provided to the remaining 47% of the sample (45 people) was instrumental in avoiding or deferring the escalation of support requirements as follows:

- 33% (15) avoided or deferred an increase in Home Care
- 40% (18) avoided or deferred a Hospital Admission
- 4% (2) avoided or deferred a Nursing Home Placement
- 29% (13) avoided or deferred a Residential Home Placement
- 2% (1) avoided or deferred the need for Reablement
- 4% (2) reduced the need for Respite Care
- 2% (1) avoided or deferred the need for Supported Living Services

Fifteen service users were helped to remain at home through the use of telecare with home care and day care services. It was considered that if these service users had not had telecare support, their needs would have escalated to the point where a care home placement would have been necessary.

It is not clear from the evaluation whether telecare is being used to step down care and if all care managers are actively considering assistive technology as part of support planning. Consideration should be given to routinely assessing for telecare within statutory reviews.

Impact of Timing of Intervention with Telecare

There is no evidence to suggest that telecare is being considered inappropriately or too late: 85% of service users in the sample had had telecare for longer than 9 months: 77%

had had telecare for longer than one year. However, 54% of these service users had telecare for preventative or reassurance purposes. Improving awareness and early assessment of telecare potential to prolong independence will be helpful.

What happened to users at the end of the evaluation period was examined and of the 96 people included in the evaluation 51 were still using telecare, of which 42 also had other community support services. Of the remaining 45 users:

- 1 was receiving Continuing Health Care
- 22 had died
- 1 had moved out of the area
- 3 went into Nursing Care
- 18 went into Residential Care

Over half of the people who were admitted into residential care were helped to remain at home with telecare for more than a year; just 4 were supported for less than six months before going into residential care.

Twenty two people were supported with telecare at the end of life, eleven for more than a year and three for less than six months.

Where telecare is used for short periods of time before admission into residential or nursing care or at the end of life, this may suggest that it has been introduced too late.

Results (2): Does Telecare contribute to efficiency gain?

The evaluation covered the period 1 April 2007 to 4 April 2011. During this time it is estimated that cumulative efficiency gains between £166,822 and £185,358 were associated with telecare use in Social Care and for NHS provision in the range of £57,797 to £64,219.

Efficiency gains for the NHS resulted from avoided admissions to hospital, based on the presenting need and admission pattern of people included in the sample.

However, the savings achieved for different service user groups varied significantly. In particular, people with dementia demonstrated higher savings that need further investigation.

There was no evidence of services being reduced through the use of telecare, and it can be concluded that telecare has been effective in reducing the escalation of care in some cases and as a supplement to existing care packages in many other cases.

Average Annual Efficiency Savings

Average costs/ savings shown below are per person per year.¹

Cohort	Social Care Savings		NHS Savings	
	Lower Range	Higher Range	Lower Range	Higher Range
All Telecare Users	£432	£480	£150	£166
Reassurance	-£112	-£102	£0	£0
Prevention	-£72	-£65	£0	£0
Other Telecare Users	£1,011	£1,123	£319	£355

of which:

Dementia	£2,116	£2,351	£282	£313
Frailty	£606	£673	£460	£512
Learning Disability	-£10	-£9	£0	£0
Mental Health	£272	£302	£378	£420
Physical Disability	£0	£0	£0	£0
Sensory Impairment	£0	£0	£0	£0

Savings achieved over the period of the evaluation

The savings shown below are those achieved within the full period of the evaluation.

Cohort	Social Care Savings		NHS Savings	
	Lower Range	Higher Range	Lower Range	Higher Range
All Telecare Users	£166,822	£185,358	£57,797	£64,219
Reassurance	-£18,008	-£16,371	£0	£0
Prevention	-£1,666	-£1,514	£0	£0
Other Telecare Users	£182,918	£203,243	£57,797	£64,219
of which:				
Dementia	£132,575	£147,306	£17,645	£19,606
Frailty	£47,397	£52,664	£36,010	£40,011
Learning Disability	-£42	-£38	£0	£0
Mental Health	£2,980	£3,311	£4,142	£4,602
Physical Disability	£0	£0	£0	£0
Sensory Impairment	£0	£0	£0	£0

Average savings for evaluation period

The following table shows the average saving per person over the period of the evaluation.

Cohort	Social Care Savings		NHS Savings	
	Lower Range	Higher Range	Lower Range	Higher Range
All Telecare Users	£1,738	£1,931	£602	£669
Reassurance	-£409	-£372	£0	£0
Prevention	-£238	-£216	£0	£0
Other Telecare Users	£4,065	£4,517	£1,284	£1,427
of which:				
Dementia	£7,365	£8,184	£980	£1,089
Frailty	£2,154	£2,394	£1,637	£1,819
Learning Disability	-£42	-£38	£0	£0
Mental Health	£745	£828	£1,035	£1,151
Physical Disability	£0	£0	£0	£0
Sensory Impairment	£0	£0	£0	£0

Return on Investment

The return on investment for people with dementia demonstrates that telecare is used most effectively with this group, achieving a return of £1.56 for social care and £1.63 jointly with NHS.

Cohort	Social Care	Overall
All Telecare Users	£1.13	£1.18
Reassurance	£0.98	£0.98
Prevention	£0.00	£0.00
Other Telecare Users	£1.27	£1.36
of which:		
Dementia	£1.56	£1.63
Frailty	£1.13	£1.23
Learning Disability	£0.88	£0.88
Mental Health	£1.04	£1.10
Physical Disability	n/a	n/a
Sensory Impairment	n/a	n/a

The return on investment was calculated by comparing the cost of supporting people with telecare and other social care services with the cost of supporting them without telecare. The table above shows the cost for supporting people without telecare for every £1 spent supporting someone with telecare.

Extrapolating Savings to all telecare users

Based on the results of the evaluation, savings for the 1,138 people who had telecare during 2010-11 are estimated to be between £491,682 and £546,314 for Social Care and £170,348 to £189,276 for the NHS.

The estimates are based on the annual average saving per person and include a proportion of 54% of people in receipt of telecare for prevention and reassurance purposes only. It is estimated that providing telecare to people for prevention or reassurance purposes costs between £58,658 and £64,523 per year.

Improved care manager awareness and targeting of telecare should increase the potential savings that can be achieved through the use of telecare.

Results (3): Is Telehealth being implemented?

Leicester has an active small scale programme of implementation. There is a positive outlook but the scale has been limited partly by funding and partly by early stage patient recruitment difficulties. Specialist nurses and community matrons are especially interested, and have recent experience from a COPD project which has shown benefits for one PBC area, in avoiding 33 hospital admissions and reducing the need for face to face contacts.

The value of detailed information from the supplier about the system has emerged as a vital part of preparation (for example, it was not clear at the outset that BT phone connections were essential and this led to a loss of early candidates selected).

GP commitment is important, and there is a need to invest time in this. Setting up requires dedicated project management. Commitment to a single provider is not recommended: it would be better if information about different providers was available.

Conclusions

The key conclusions from the evaluation are:

- Telecare has been effective overall in prolonging independent living, particularly where it has been used as part of a wider support package
- Significant efficiency gains were demonstrated for people with dementia
- Where telecare has been allocated purely for 'prevention' or 'reassurance' purposes, no clear financial benefits can be demonstrated
- There is potential to expand telecare for most user groups: decisions on targeting will benefit from the use of evaluation evidence
- Telehealth services are operational on a small scale and are showing some early success. Further development is included in commissioning plans for 2011-12.

Looking Ahead: Improving and Expanding Telecare

What more can be achieved?

Population projections for Leicester show an average of 5-6% increase in the number of people who will require some level of support by 2015.

	2010	2015	Percentage growth by 2015	Total Supported 2009-10	Estimate Non FACS eligible
Population aged 65 and over	35,400	37,600	6.2		
Total population aged 65 and over predicted to have:					
Dementia	2,606	2,710	4.0	845	1,761
Total population aged 65 and over estimate to be unable to carry out:					
Domestic Activity	14,882	15,425	3.6	5,530	21,544
Self Care Activity	12,192	12,672	3.9		
Total population aged 18-64 predicted to have:					
Moderate or Severe Learning Disability	1,128	1,196	6.0	980	148
Serious Physical Disability	3,874	4,086	5.5	970	2,904
Mental Health	14,765	15,536	5.2	875	13,890
Early onset Dementia	64	68	6.3	19	45

Source: *Projecting Older People Population Information System, Projecting Adults Needs and Service Information (DoH, May 2011)*

The demographic trends clearly indicate a need to continue with changes in the way people are supported, to contain pressures for additional expenditure.

This represents only a small proportion of the population receiving a care service, and suggests significant scope to expand telecare for FACS eligible service users: doing this is likely to bring a significant increase to efficiency gains.

Using telecare alongside other services such as reablement, crisis response, intermediate care and rehabilitation can also help to prolong independent living, manage risk and reduce carer stress and breakdown.

During 2010-11, telecare supported 1,138 people of whom 7% (83) are estimated to be non FACS eligible. It is estimated that 16% of people over 65 and less than 5% of FACS eligible people aged 18 to 64 were supported with telecare during 2010-11.

	2009-10			Percentage in Residential / Nursing placements	Percentage FACS eligible receiving Telecare
	Community Based Services	Residential Care	Nursing Care		
Population aged 65 and over	4,150	1,125	255	25.0	16.3
Total population aged 65 and over predicted to have:					
Dementia	440	315	90	47.9	32.9
Total population aged 18-64 predicted to have:					
Learning Disability	725	250	5	26.0	3.9
Physical Disability	925	30	15	4.6	7.3
Mental Health	685	185	5	21.7	1.6
Early onset Dementia	15	2	2	21.1	43.9

Source: National Adult Social Care Intelligence System, 2009-10 RAP P1 data (Information Centre, May 2011)

Telecare can be safely considered as a substitute or part substitute element of support for more people aged over 65 to help deal with the rise in demand for care from demographic changes.

The wider use of telecare at an early stage for people with dementia is predicted to prolong independent living and defer or avoid the need for additional services, including care home admissions.

Specific financial modelling of the different levels of efficiency savings possible with expanded telecare use can be carried out using data provided in this evaluation with the DH Telecare Planning tools.

How should telecare expansion be targeted?

This evaluation suggests that telecare may be particularly cost effective with:

a) Older people who have dementia:

The evidence suggests that it is possible to extend independent living safely through the skilled deployment of telecare, enabling carers to continue for longer than would otherwise be the case, and saving money. The eventual outcome is often an admission to a care home, but carers may well prefer to extend independent living where telecare can provide monitoring and safety assurance, for example at night.

b) People who have a learning disability:

Although limited use is made of telecare for people with a learning disability, emerging national evidence indicates that support for people who have learning disabilities in group homes and other independent living is a potentially productive area in which some forms of telecare may safely replace other monitoring. Waking night cover may sometimes be reduced safely where telecare can provide a safe level of monitoring.

c) People with physical disabilities and carers:

Although limited use is made of telecare for people with a physical disability, telecare can be used to prolong independent living, and to make better targeted use of home care or

personal assistant time and effort. There is also a frequent benefit to carers, for example in enabling them to work or to have respite.

Summary of Recommendations

a) Telecare

Prevention:	<p>Publicise and market telecare actively as part of the prevention strategy. An estimated 27,074 people aged over 65 will require some help with a domestic or self care activity, with 5,530 receiving a community care service and the remaining 21,544 not receiving a service.</p> <p>Extend telecare access to people who would not be eligible for Social Care services. Telecare used at an early stage can help prevent carer break down and reduce the level of service required at a later stage.</p> <p>Review charging policies and business processes for assessment and access to telecare to take this into account. Income from future charges to self-funders may be considered as an increased source of income for investment.</p>
Assessments and Reviews	<p>Strengthen the requirement to consider telecare in initial support planning for any person who is eligible for community care services, and in reviews. Re-assess routinely for telecare use in reviews. Upgraded care manager training and revised business processes may be needed.</p> <p>Consider the use of assistive technology earlier in the care pathway to improve its effectiveness and prolong independent living.</p> <p>Establish telecare-focused self assessment for people who are not FACS eligible to improve access and encourage more people to make independent arrangements that prevent the escalation of care needs.</p>
Support planning: people with dementia	<p>Extend telecare use to prevent the escalation of support requirements for people over 65, especially those with dementia, to support independent living for longer periods. Consider assistive technology earlier in the care pathway to prolong independent living.</p> <p>Extend the use of activity monitoring systems to ensure that any potential residential placement is the most appropriate option for the individual before placement.</p>
Support planning: people with Learning Disability	<p>Review telecare for this group in more detail to understand how telecare can increase independent living, and further reduce the rate of residential placement, which is currently 26% of people supported.</p> <p>Other evaluations conducted across England demonstrate that significant savings can be achieved through reducing the use of</p>

personal assistants and sleeping night provision.

Commissioning: **Monitor, improve telecare management information and set targets:** currently only 16% of people aged over 65 and less than 5% of people aged 18-64 are using telecare as part of their support package.

Review commissioning strategies to ensure that telecare forms an integral part and is embedded in all support planning.

Improve knowledge of the market to identify new suppliers, new equipment and its potential benefits.

b) Telehealth

Information: **Identify and share information about the most likely beneficiaries** in Health and Social Care: including people who make most frequent use of services / have repeated non elective admissions/ GP appointments.

Shared Learning: **Review jointly health benefits of both telecare and telehealth** equipment including the current COPD scheme, and other lower cost approaches, (e.g. telephone monitoring) and stand alone equipment.

Commissioning and Procurement: **Consider business case for joint procurement** based on joint commissioning of integrated call centres, installation and response service management.

Performance Management and Evaluation: **Consider integration of telecare and telehealth indicators** within routine reporting.

ⁱ The evaluations calculated efficiency gains by comparing the cost of supporting people with telecare to the cost of supporting them without telecare. Local judgement is used to determine the anticipated services without telecare and a lower estimate adjustment of 10% is applied to the calculated efficiency gains providing a range that can be used for planning.