

# case study

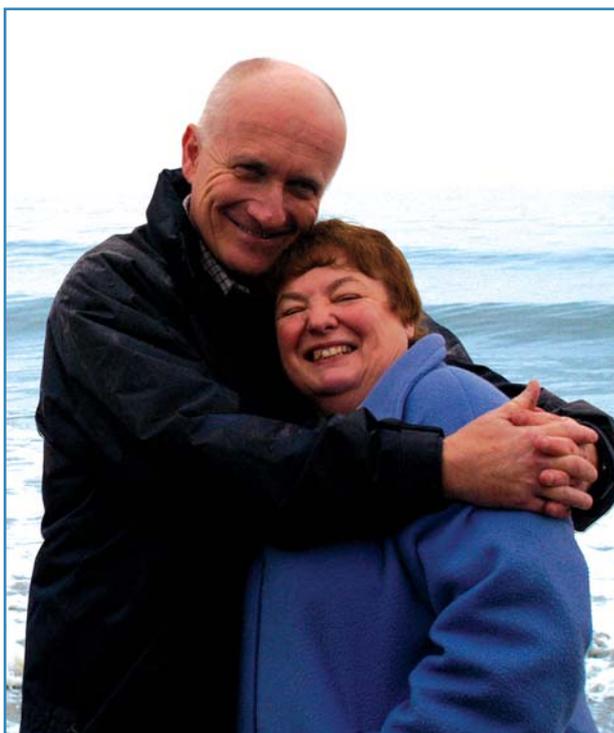


**Sector:** Health and Social Care  
**Client:** Stockton-on-Tees Borough Council

**Application:** Evaluation leads to joint funding a mainstream telecare service

## the challenge

Stockton-on-Tees Borough Council covers a population of 186,000 and the number of over 65's is planned to increase by a massive 46% by 2021. 20% of the population report having a limiting long-term condition. It is a borough of wide contrasts, with over a third of the population (60,780) living in areas that are within the worst 20% of deprived areas nationally, whilst 11% fall within the top 20% of most affluent areas.



The Preventative Technology Grant (2006-08) provided a catalyst for change in the borough and now the grant has been spent. How did the Council go about developing a mainstream telecare service jointly funded by the council and the Primary Care Trust?

A draft evaluation was taken to the Adult Care Partnership Board which showed that **total savings for 150 clients would be an estimated net saving of £220,954 pa.**

All the reassurance you need



*“Telecare has been fundamental in terms of transforming people’s lives. People have gained a huge amount of independence and confidence and it’s allowing people to have the choice to stay in their own homes for as long as possible. We’ve had a strong evaluation and very good qualitative and quantitative evidence which fully supports the direction of travel.”*

Ruth Hill, Head of Adult Strategy, Stockton-on-Tees



### Case study highlights

- The majority of the Preventative Technology Grant (PTG) money was spent by the end of year 2 (£22,000 carried forward) - now mainstream joint funding between PCT and social services has been secured
- Integrated commissioning between social care and health
- Very strong evaluation and evidence of success
- Telecare is being prescribed by social care and community matrons
- Good user numbers for a small unitary authority
- Partnership working with provider (Care Call)
- 6 week free telecare service for all before any charging starts
- Councillor sits in all steering group meetings and has championed telecare at Councillor level

## Telecare in Stockton-on-Tees

Stockton-on-Tees is a unitary authority, coterminous with the PCT and has joint commissioning arrangements. This partnership has allowed Social Care and Health to share funding for telecare which demonstrates a commitment to preventative solutions which help people to live independently. Telehealth plans are also in place with Tunstall.

The telecare pilot commenced in 2006 funded by the Preventative Technology Grant of £258,980 over 2 years. A steering group was set up consisting of social workers, health care teams, community matrons, GP's, community safety teams, a councillor, residential care teams, nursing care teams and even leisure service representatives.

The steering group produced a delivery strategy and managed the arrangements for the introduction of telecare throughout the borough. This included commissioning local community alarm service provider, Care Call, to undertake the training of staff and clients, the installation of equipment and collection of data for monitoring purposes. Interestingly, Care Call's responders are CSCI registered.



4 client groups were targeted:

- People with long-term conditions who were more likely to be admitted to hospital and/or care homes
- Intermediate Care clients recently discharged from hospital and in need of a significant level of support
- Community Mental Health service clients with dementia and other cognitive illnesses
- Older people, physical disability, sensory loss and learning disability social work teams

270 people were using or had used telecare by June 2008 (defined as 2 or more pieces of equipment) which overachieved the target of 200 people for the year. The target for 2008-09 is 300 users. In addition there are currently 4500 community alarm service users.

On average 20 installations are carried out each month.

# Evaluation of the telecare pilot Nov 2006 - Nov 2007

The draft evaluation was taken to the Adult Care Partnership Board which showed that total savings for 150 clients would be an estimated net saving of £220,954 pa.

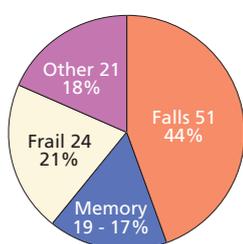
The 13 month pilot directly supported the mainstreaming of telecare services in Stockton.

## What has been achieved?

Since November 2006, the service has installed 137 telecare packages and the first 13 months of service resulted in:

- 330 urgent and 6 non-urgent telecare activations needing staff to attend client's homes
- 64 telecare sensor activations which have enabled staff to attend clients who had fallen
- 31 telecare sensor activations showing a client wandered, with staff finding 30 of the clients  
The other client was taken in by a neighbour and the police were contacted

## Reasons for referral



18% other includes: Huntington's disease, Multiple Sclerosis, diabetes, support for living with cancer, learning disabilities

51% of all referrals come from the Older People social work teams, followed by OTs (19%) and self referrals (7%)

## Reduction of care home/domiciliary care hours

Each telecare client receives a six week joint review and at the time of this report (May 2008), 90 reviews had been completed with social work professionals stating that:

- 42 telecare installations will delay care/residential care admission and eventually lead to a reduction in care home admissions (47%)
- 26 telecare installations have resulted in stopping a care home admission (29%)
- 11 telecare installations have resulted in no economic benefits (12%)
- 7 telecare installations have resulted in reduced domiciliary care hours (8%)
- 4 telecare installations have resulted in stopping nursing/residential care home admissions (4%)

## Hospital Accident and Emergency attendance avoided/bed days saved

The key statistics when looking at this is the sensors detecting incidents early and making staff aware that there may be a problem. This is highlighted by the main key incidents of sensor activity:

- 64 clients found on the floor
- 31 client walking about activations where clients were found and returned safely to their property
- Of these 95 incidents only 7 of the "clients on the floor" category led to ambulances called and attending the hospitals accident and emergency services

With telecare staff attending the remaining call outs within an average of 14 ½ minutes from the time the incident occurred, it could be assumed that due to the nature of the incidents, the service has saved the local PCT:

- 88 ambulance call outs, in the region of **£13,904**, at an average £158 per ambulance call out
- £6,424 saving in A&E admissions based on £73 per call average standard cost of A&E admission (PCT average standard A&E admission)
- £66,528 in bed days saved if each case had resulted in a 2 day hospital stay. Based on £378 per day hospital bed (PCT average cost per day of hospital bed 2008)

See back page for breakdown of total savings.

*“The success of telecare is down to positive partnership working with a whole range of stakeholders, including Tunstall. It’s about having a vision of what telecare can achieve and working towards that vision as a team.”*

Peter Smith, Strategic Commissioner for Independent Living and Lead Officer for Supporting People, Stockton-on-Tees



## Mainstreaming of telecare secured for next 2 years

The evaluation was integral in securing PCT and council investment to ensure the mainstreaming of telecare going forward. Because of the success of the pilot, there is a commitment of 2 years funding of £150,000 each year from the PCT (local delivery plan arrangement) and £50,000 per year from the council’s adult social care fund - a total of £400,000 over 2 years.

## Telecare pricing

Telecare is offered free for the first 6 weeks as it is linked with intermediate care arrangements. This enables clients to test out the equipment in relation to their particular needs. During that time, a financial assessment is carried out.

Thereafter the cost to the client is £7.70 a week which includes 24 hour monitoring, mobile response and all the equipment, regardless of type of sensors.

## Barriers to telecare progress

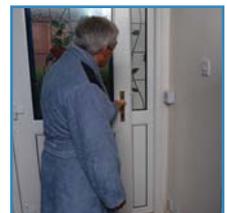
As we are all operating in a changing culture, there was anxiety about bringing in new technology and the impact it would have on people’s roles. That soon was allayed by the good practice coming through. One of the outcomes was that word spread very quickly in the social care teams and individuals started to influence other stakeholders by the positive outcomes they were getting for their clients.

It’s also important to have good publicity and the Care Call team has marketed the service well by allowing promotional materials to be given out around the council, and at all access points, libraries, GP surgeries, public places and by running local events.

### Mini case studies

#### Client found at bus stop within 10 minutes of leaving home

A client was found within 10 minutes of property exit activation. At 3.35am, the client was standing at a bus stop waiting to get a bus to town.



#### Bed sensor enables quicker rehabilitation

At 1.40am, a bed sensor was activated following a fall after getting out of bed. The client’s blood sugar level was low and he was very confused. Although the client was admitted to hospital, his rehabilitation was greatly helped by the early discovery of the fall.



#### Enuresis sensor enables improved comfort

An enuresis sensor was fitted at the 6 week review to assist the Social Worker in proving the need for a more appropriate type of continence product. Data was collected proving that the current continence products were not appropriate and more suitable products and aids were provided.



# Gas detector potentially saves lives

6 properties were fitted with gas shut off valves and were subsequently activated 13 times, suggesting that there was potential for an explosion on each occasion. This gives an indication of the value of that particular piece of equipment. The council's in-house service Corgi registered gas fitters supported all installations.

## Case Studies

### Stockton's 200th and first child user of telecare

#### The problem

Lucy is 3 years old and suffers from seizure-like episodes due to being born with one of her heart's pumping chambers missing. More recently the seizures have been lasting longer and becoming more severe. This has meant that she has slept in the same bedroom as her parents who have been unable to sleep in case they don't wake up in time to help Lucy.

#### The solution

Telecare was installed which consisted of an epilepsy sensor placed in the bed which can detect different levels of seizure. Upon activation, the device raises an alarm. The mat is so sensitive that if Lucy shakes or moves for seven seconds, it will go off and alert her mum in the other bedroom and send a message to the Care Call centre. The epilepsy sensor will show doctors if there is a pattern to the seizures regularity and whether they are getting worse.

#### The outcome

Lucy's mum, Sarah said her daughter *"really loves life and is so happy."* Until doctors can find out the cause of her seizures, Sarah said she is delighted to have the new telecare system. *"The equipment has given me peace of mind,"* she said. *"I can sleep better knowing I will be alerted if Lucy is in trouble. The equipment will give us, and the doctors, information into the regularity and severity of her seizures as well as ensure we can get her medical attention."*

Councillor Ann McCoy, Stockton Council's Cabinet member for adult services and health, said: *"This is an invaluable piece of equipment which can detect changes to alert carers about the onset or taking place of a seizure."*



Picture and story courtesy of Middlesbrough Evening Gazette

## Mini case studies

### Recovery aided by early detection through inactivity sensor

An inactivity sensor placed a call to show a client had not been passed the sensor for the last 2 hours - staff attended and found the client confused and dehydrated on her sofa. It was estimated that it would have been 5 hours before a carer would have visited the property. Although the client did need hospital admission her recovery was aided by the early detection of her condition.

### A decline in health highlighted by Property Exit Sensor

For one client, the property exit sensor activations rose considerably due to a decline in health. Telecare services supplied details of activations to the occupational therapist to enable her to show the client's family the extent of their mother's worsening condition and a new care package was agreed.

For further information  
please contact marketing  
on 01977 660206



## future savings

For the next 150 clients, if the percentages from the 90 initial reviews are replicated, then the figures would become:

- 70 telecare installations delaying care/residential care admission and eventually leading to a reduction in care home admissions (47%)
- 43 telecare installations resulting in stopping a care home admission (29%)
- 18 telecare installations resulting in no economic benefits (12%)
- 12 telecare installations resulting in reduced carer hours (8%)
- 7 telecare installations resulting in stopping nursing/residential care home admissions (4%)

From this data we can see that, not including the installations that will delay and eventually lead to a reduction in care home/residential admissions, the estimated total cost savings for 150 clients are **£1.021m pa.**

However this does not take into account the additional care packages that will have to be set up to run alongside telecare to prevent the above residential/nursing care home placements which would cost £333,074.

### Economic benefits

Therefore the total saving for 150 clients would become an estimated £600k pa gross.

In addition the cost of lost client contributions from the avoided services (c. £324,250) and the cost of the telecare service (estimated at £143,585 for 150 clients), gives an estimated net saving of £220,954 pa.

# Tunstall

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