



HILLINGDON  
LONDON

Social Services, Health &  
Housing Policy Overview Committee

**TO EXAMINE THE USE OF ASSISTIVE  
TECHNOLOGY BY ADULT SOCIAL CARE TO  
SUPPORT INDEPENDENT LIVING**

***Final Report***  
**2010/11**

Members of the Committee:

Cllr Judith Cooper (Chairman)  
Cllr Peter Kemp (Vice Chairman)  
Cllr John Major (Labour Lead)  
Cllr David Benson  
Cllr Beulah East  
Cllr Pat Jackson



INVESTOR IN PEOPLE

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# Chairman's Foreword

Demographic projections suggest that the number of people in Hillingdon aged over 65 may increase by 8.4% over the next five years to over 37,000 and the numbers of people aged 85 and over may increase by 11%. As the population ages, the number of residents with long term health conditions, such as dementia will increase, which will have a knock on effect on budgets and service provision. Assistive technology is a positive use of technology which will help to address the growing needs of an ageing population. Used effectively, it has the potential to radically change the way services are delivered and provide significant cost savings to the Local Authority.



Our review looked at three key areas:

1. The role and function of assistive technology, including how this service was developing in Hillingdon and best practice elsewhere.
2. The early lessons emerging from the Whole System Demonstrator Pilot<sup>1</sup> and the importance of partnership working to provide excellent services.
3. Service delivery options, early financial implications and the potential areas to make cost savings.

A feature of this review has been the level of engagement that Officers have shown. As a result of this, the value of Assistive Technology has been recognised by Cabinet and some of our recommendations have already been adopted. I have, therefore, taken the unusual step of including those implemented recommendations in the report because I believe they illustrate how far the Council has come as well as setting the scene for the report and the remaining recommendations.

To address these questions we took evidence from a number of sources including our own officers, the London Borough of Newham and NHS Hillingdon. My view is that the proposals in this review, together with the ongoing development work that Officers are currently conducting provide a valuable opportunity for the Authority to improve healthcare provision for those residents with disabilities or long term health problems.

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<sup>1</sup> The Whole System Demonstrator (WSD) programme is a two year research project supported by the Department of Health to establish how technology can help people manage their own health while maintaining their independence. The WSD programme is thought to be the largest randomised control trial of telecare and telehealth in the world.

Finally, on behalf of the Committee, I would like to thank the external witnesses who contributed to our review, and also the officers who advised on the main issues from the Council's perspective. I commend the report and recommendations to Cabinet

A handwritten signature in purple ink, appearing to read 'Judith Cooper', is centered on the page.

**CLlr Judith Cooper**

# Summary of Recommendations

This review examines the use of assistive technology by adult social care to support independent living. Following the evidence received, we make the following recommendations.

- 1. The Committee recommends to Cabinet that Telecare is a positive use of technology which will help the Council to address the growing needs of its' ageing population. Used effectively it has the potential to radically change the way services are delivered.**
- 2. The Committee requests that good quality information and timely advice must be provided for families, carers and service users, working with health professionals to enable them to understand their assistive technology / telecare options to assist them to make informed choices (to address their needs)**
- 3. The Committee recommends that telecare be provided free of charge for a limited period (no longer than 6 weeks) after hospital discharge as part of the re-ablement project to provide assistance. The Committee felt that early exposure to assistive technology will help increase client confidence in the service and encourage further uptake in the service.**
- 4. The Committee recommends that assistive technology should not simply replace personal contact but be part of a package in which AT is a complementary tool which helps to prolong independence.**
- 5. The Committee note that, in line with their original advice, Officers have taken a cautious approach to rebranding, and that the term "TeleCareLine" is under consideration.**
- 6. The emerging body of evidence from various national review pilots has shown how valuable Assistive Technology (AT) / Telecare can be to users and carers. It is therefore essential that the status and profile of AT / Telecare is strengthened so that social care and health professionals consider this technology as an option for all service users and carers**
- 7. Committee advises that effective partnership working will be central to the full development of this service and that to ensure services are delivered. The early evidence from the Whole Systems Demonstrator pilots has shown how important partnership working is. To ensure services are delivered as effectively and efficiently as possible, information sharing rules and procedures must be developed.**

- 8. Evidence shows the potential value of telehealth in supporting people with health conditions to live independently in the community and also in making savings to the health economy. Telehealth is under-developed in Hillingdon and the Committee recommends that officers work with health colleagues to encourage its further development.**
- 9. The Committee requests that officers undertake regular reviews of service costs to ensure the Authority receives value for money from service providers.**
- 10. The Committee recommends that the Authority pursue the development of a comprehensive in-house model, centred on a local call centre (with a responder service operating 24/7), employing local knowledge and request officers to fully explore the cost implications of this option as part of the ongoing Medium Term Financial Forecast work.**
- 11. The Committee recommends that Careline be co-located to the Civic Centre. Moving the service will allow for future expansion as the ASCH&H emergency out of hours services are based with Careline.**
- 12. The Committee agrees that intervention at an early stage can act as a preventative investment and thereby reduce the number of hospital admissions and delay admissions into residential care. The Committee also notes the preventative benefits that telecare offers to residents who do not satisfy the council's Fair Access to Care Services (FACS) criteria**
- 13. The TeleCareLine (TCL) service to private clients is very important and will be a key to the success of the service. The Committee stressed that it is important that the service is marketed as proactively as possible to maximise the take up of self funders.**
- 14. Part of the Project Planning has been to recognise the need to be able to respond to the effects of increased numbers requesting the TCL service. Officers assured the Committee that resources are in place to deal with the expected numbers and ensure a good service is provided**

# Introduction

## Reason for review and terms of reference:

Hillingdon is facing a combination of challenges and included within these are:

- an ageing population leading to increased demand for services and greater budget pressures;
- the national and local policy priority and popular aspiration of preventing avoidable admission into institutional care;
- a contracting council budget arising from national financial situation.

Assistive technology has an important role in addressing these challenges.

The use of assistive technology links into the Hillingdon Sustainable Community Strategy theme of improving health and social care by enabling people to live independently at home. It also links into the following strategies and plans:

- Wellbeing Strategy
- Older People's Plan
- Disabled People's Plan
- People with Physical and/or Sensory Disabilities Strategy 2008 – 2013
- Commissioning Strategy Plan 2009 - 2014
- Disabled Children Strategy 2009-2011
- Carers Strategy 2008 – 2013

The focus of the above plans and strategies is enabling Hillingdon residents to live independent lives over which they enjoy choice and control over the services they receive. The use of assistive technology is integral to the delivery of this and also the Support, Choice and Independence Programme that is seeking to implement the personalisation of adult social care services in Hillingdon.

The review provides an opportunity for the Committee to identify recommendations that will assist in the more effective use of this technology to the benefit of Hillingdon's residents.

## The review sought to:

1. Review how assistive technology has been employed by other London Boroughs and to review current best practice.
2. Examine the opportunities presented by telecare and telehealth systems to prevent avoidable admission into residential and/or hospital, including assisting carers in their caring role.
3. Examine the telecare mobile response service pilot.

4. Make recommendations that will help officers and partners address any identified gaps in the role and function of assistive technology to support Hillingdon residents to remain independent and assist the council in achieving cost savings.
5. Make recommendations with full costings to Cabinet/Cabinet members based upon the findings of this review.

### **Methodology:**

The Committee used three meetings to examine this issue. In September 2010, officers from Adult Social Care provided a background report on assistive technology and also took the opportunity to demonstrate some of the key technologies to the Committee. We also held three witness sessions to discuss and receive evidence relating to the review.

Meetings held in September and October with a further one in November involved taking evidence from a range of witnesses:

#### **First Witness Session: 1<sup>st</sup> September 2010**

This first session (including an officer background report) provided an overview of the role and function of assistive technology and an update on progress made in Hillingdon. This witness session also examined several fictitious case studies in detail to illustrate how assistive technology might be used in a number of different scenarios and to develop further lines of questioning to use at later witness sessions. Witnesses included:

- Head of Commissioning
- Head of Access and Assessment
- Equipment demonstration – Careline Manager
- User/carer perspective

#### **Second Witness Session: 14<sup>th</sup> October 2010**

This session examined partnership working and highlighted a number of future challenges faced by the Department to deliver excellent services for people with long term health problems. Witnesses included:

- Representative from Newham
- NHS Hillingdon representative
- Age UK

### **Third Witness Session: 9<sup>th</sup> November 2010**

The final session examined the resource implications of any proposed delivery models, e.g. social enterprise schemes, income generation opportunities. The witnesses included:

- Head of Finance (Adult Social Care, Health and Housing)
- Joint Commissioning Service Manager

The next section of the report provides background on the main issues, and then presents the main issues arising in our evidence. We then make recommendations to Cabinet, which we believe will address these issues.

# Background

## What Is Assistive Technology?

There is no agreed definition of what assistive technology actually is, as this is a rapidly evolving area with a number of new and emerging applications. As such, it is best seen as an umbrella term for assistive, adaptive and rehabilitative technologies for those people with long term illness or disabilities.

In 2004, the Audit Commission defined assistive technology as:

*“any item, piece of equipment, product or system that is used to increase maintain or improve the functional capabilities and independence of people with cognitive, physical or communication difficulties”.*

## What types of Assistive Technology are there?

<b>Conventional types</b>	Jar openers; bath seats and mobility assistance - grab rails, walking sticks and walking frames
<b>Electronic devices</b>	Include stair lifts, electric wheelchairs. Devices to use the phone or communication devices to replace speech
<b>Telecare</b>	<p>These systems usually require a response from another person. These devices use telephone networks to check on a person who lives in their own home when alerted. Telecare sends an alert signal via a base unit a community alarm or monitoring service / call centre</p> <p>In care homes, Telecare services include:</p> <ul style="list-style-type: none"> <li>• Window or door sensors</li> <li>• Falls monitors</li> <li>• Bed sensors to prevent falls by activating a light when someone gets out of bed</li> <li>• Bed/chair occupancy sensors</li> <li>• Epilepsy sensors – trigger an alarm if someone has a seizure</li> <li>• Epilepsy sensors – trigger an alarm if someone has a seizure</li> <li>• Flood sensors – trigger an alarm if there has been a flood in a room, e.g. an overflowing bath</li> </ul>
<b>Communication aids</b>	<ul style="list-style-type: none"> <li>• Sophisticated communication boards, or more simple visual scanning devices</li> <li>• Text-to-speech software</li> <li>• Braille devices, tactile devices and other software</li> <li>• Voice-activated software</li> </ul>

## **Why is Assistive Technology so Important?**

### **Demographics and Importance**

The ageing population in Hillingdon and changing demographics makes the application of assistive technology critical to enabling disabled residents and those with long-term conditions, especially dementia, to remain independent in their own homes. Without it the cost implications for the council and key partners such as the NHS would be considerable.

Hillingdon has a population of approximately 253,000. It is estimated that there are currently 34,000 people aged over 65 in the Borough. This is projected to increase by 8.4% in five years to 37,100. The numbers of people aged 85 and over is expected to increase by 11% within this period to 5,500. The 2001 census did identify that there were 36,000 people in Hillingdon who considered that they had a limiting long-term illness and 45% of these were older people. Stroke is one of the main causes of disability and its occurrence is concentrated in the older population. In 2008/9 (the last year for which validated data is available) 3,209 people were reported by GPs as living with stroke. This is projected to increase to 4,351 by 2015.

Dementia is primarily a condition faced by older people and the ageing population in Hillingdon indicates that this is going to be a major cause of need in the future. Projections suggest that the number of older people with dementia is likely to increase by 7% to 2,694 in the five years to 2015. 67% of the increase can be attributed to the over 85s, which is expected to grow by 11% within this period. People with learning disabilities are more susceptible to dementias as they get older. Projections suggest that the number of people with learning disabilities living into old age is increasing and it is predicted that there will be an increase of 7.6% between 2010 and 2015.

### **Local Aspirations**

Extensive consultation nationally and locally shows that the vast majority of older and disabled people wish to remain independent in their own homes. Assistive technology has an essential role to play in ensuring that this aspiration becomes a reality. The use of assistive technology in the form of telecare as an essential mechanism for addressing the needs of the ageing population and in making savings in the cost of care provision was identified in a Department of Health study published in October 2009 by John Bolton about the use of resources in adult social care and also the Audit Commission publication *Under Pressure* published in February 2010.

# Findings & Recommendations

## 1 The benefits of the service to residents and the Council

We started our review by examining the role and function of assistive technology. This highlighted that assistive technology could provide clear benefits to residents and the Council in a number of ways.

From a purely financial perspective, we heard that the successful implementation of assistive technology could provide significant cost savings in the following ways:

- where the cost of supporting a resident at home was less than that of residential care after taking the cost of domiciliary care and any other community care service into consideration.
- by reducing the scale of a domiciliary care package, e.g. through the provision of medicine dispensers.
- saving money to the health economy through the prevention of a hospital admission or readmission.

As assistive technology is a relatively recent development, we heard that real-world, empirical data relating to its impact was not readily available. However, officers explained that there was a growing body of both qualitative, quantitative and case study evidence which suggested telecare could make a significant impact on the lives of older people and help them to live independent lives for longer. We noted the following findings:

### North Yorkshire County Council

Costs had been reduced significantly at North Yorkshire County Council (NYCC) which was regarded as a national leader in the use of telecare and had invested heavily in this approach since 2005. During 2009, NYCC had analysed a sample of 122 new telecare users during a two month period and the following results had been identified:

- 48 cases would have been residential, dementia residential or nursing
- 74 cases would have been care at home requiring decreased levels of domiciliary care
- 33% reduction in care costs (annualised analysis = net average efficiency £3,180/person countywide)

## **University of Kent based study**

In relation to a study by the Personal Social, Services Research Unit (PSSRU) based at the University of Kent, we heard that the findings reported that medium need equipment installation costs were £350 to £450 and higher needs ranged from £700 to £900 per week with ongoing running costs of £5 to £10 / week / client (*when compared with the weekly cost associated with residential care this represented significant savings*).

## **Croydon Study**

The Department of Health publication 'Use of Resources in Adult Social Care', published in October 2009 included a number of case studies. The Croydon study showed how closer working with the PCT could help reduce the number of admissions to residential care.

## **Coventry Council**

Further case study evidence from Coventry Council evidenced a 2% reduction in their Learning Disability spend; which we were informed would equate to an approx £0.5 million saving to the London Borough of Hillingdon.

## **Health Benefits of Telecare**

To put this into context and illustrate how costs might be saved, officers highlighted how telecare had played a considerable role in preventing avoidable hospital attendance and admission. Falls were cited as an example of a form of a major cause of injury for older people which could lead to a loss of confidence and a progression towards decreasing levels of independence. Whilst it was acknowledged that telecare could not stop this from happening, it could help to prevent it, e.g. as a result of a bed sensor triggering a light to come on if an older person gets out of bed at night. We appreciated how savings might be made when officers explained that in this particular scenario, the estimated cost within an acute setting of addressing the needs of an older person with a hip fracture could be in excess of £10k.

Assistive technology has the potential to benefit the PCT and the Council as it will reduce some of the burden placed on emergency services and hospital beds, as well as reducing the length of stay and number of visits to General Practitioners. In the longer term, an embedded assistive technology service will bring about even greater savings through self monitoring and a degree of self diagnosis which would further reduce the impact on health services. We noted that these potential savings will have even greater resonance for the Council given the "*Healthy lives, healthy people White Paper: Our strategy for public health in England*" which sets out the long-term vision for the future of public health in England and the proposals that councils will be able to set their own

priorities for public health spending, when they take over responsibility for public health from primary care trusts from April 2013.

Of course, the introduction of assistive technology has a far wider range of benefits than just financial cost savings. Most importantly, from an individual point of view, assistive technology has the potential to:

- promote people's long term health and independence
- improve quality of life for people and their carers
- improve the working lives of health and social care professionals
- provide an evidence base for more cost effective and clinically effective ways of managing long term conditions.

Based on what we had heard, we agreed that assistive technology was a good idea which could complement existing services and provide substantial savings to the Authority.

**Recommendation:**

**The Committee recommends to Cabinet that Telecare is a positive use of technology which will help the Council to address the growing needs of it's ageing population. Used effectively it has the potential to radically change the way services are delivered.**

## **Demonstration of Telecare Technologies**

In addition to hearing from officers, the Older People's Housing Services Operations Manager provided the Committee with a practical demonstration of some of the key telecare technologies. We were shown how programmable pill dispensers, bogus caller alarm systems, tilt detectors and armchair sensors worked and discussed the applications for wandering sensors which were linked to both door sensors and global positioning systems.

The demonstration prompted a series of questions which included:

- The sensitivity and radius of wandering systems and whether these could be customised to react to particular types of medical condition.
- Whether wandering systems might have other applications such as assisting clients with some mental health conditions.
- Whether or not the council (in all cases) would be the first point of contact with the user, if an alarm had been triggered.
- Whether some of the tracking technology was susceptible to dead spots (when the sensors would not work) similar to problems associated with mobile phone usage and if so what mitigating action could be taken?

Key points of the responses and the subsequent discussions included:

- Whether rebranding Careline was strictly necessary and the possibility that if this was done, it might confuse elderly users. Members suggested that before any rebranding took place, a strong business case for this would need to be presented by officers.
- The re-enablement service currently had a 23% success rate. It was noted that officers would be using a combination of occupational therapy and telecare to improve this success rate.
- The plans in place to deliver assistive technology. Officers explained that this was not just about demand and it was anticipated that using new technology would have staff resource implications.
- Other important issues raised by the Committee included the need for officers to investigate self-funding patterns, anticipated demand and ways of marketing the re-enablement service.
- In relation to the performance indicators mentioned at the meeting, Members agreed that it was essential to track the numbers of referrals back to hospital (through the PCT) and usage patterns so the Council could establish whether the service paid for itself.

## **2 Details about aspects of how telecare works - branding, where it is housed, a "local" call centre**

### **Assistive Technology covered in the scope of the review**

As the term assistive technology is so broad we focused on the following areas:

- community equipment
- minor adaptations
- door entry systems
- telecare and telehealth

### **Community Equipment Service**

We heard that Hillingdon has a high performing community equipment service which has been jointly funded with Health since 1993. This service provides daily living aids on a loan basis to people who meet the eligibility criteria for social care or who are registered with a Hillingdon GP. The service is available to children as well as adults and the equipment available ranges from simple items such as walking sticks or raised toilet seats to more complex items like electric hoists or four-section electric beds.

A pooled budget arrangement means that clinicians across health and social care, such as occupational therapists, are able to prescribe equipment according to their clinical competence, which prevents users having to see different people according to where their equipment needs are identified as meeting a health or social care need.

During 2009/10 the Council and the PCT were part of a collaborative procurement exercise that was led by the Royal Borough of Kensington and Chelsea (RBKC) and involved six London councils and PCTs in total. The key objective behind the collaboration was to secure greater efficiencies through increased economies of scale. An initial saving of £60k was achieved and opportunities for this to increase are created by the possibility of other councils entering into the framework agreement that is hosted by RBKC. This sets common prices and terms and conditions that other councils would be bound by should they wish to join it. The more councils that join, the greater the opportunities for savings on equipment cost. The tender resulted in Medequip Assistive Technology Ltd being appointed and the new contract started on the 1<sup>st</sup> April 2010 and was in the early stages of implementation at the time of the review as prescribers got used to new ordering systems, especially information technology.

## Minor Adaptations and Door Entry Systems

The minor adaptations service provides adaptations up to the value of £1000 to individuals' homes. Officers explained that minor adaptations would include equipment such as grab rails by a door or near a toilet or bath. It could also refer to basic aids such as ramps to provide access for people with mobility issues.

Door entry systems includes the installation of key safes, coded entry systems and flashing light door bells for people with a hearing loss.

Both the minor adaptations and door entry systems services were included within the collaborative procurement exercise referred to above.

## Telecare

**Telecare is a subset of assistive technology.** It is the name given to a range of equipment (detectors and sensors) that will raise an alarm with another person in an emergency. The alarm might be raised with a carer who lives in the same home as the person with the telecare equipment or they may live nearby. More usually the alarm is picked up by a locally based alarm centre, which in this borough is Careline. Examples of telecare detectors include fire, flood, gas, carbon monoxide and falls. The following are examples of telecare sensors: exit, bed, and chair sensors. These are particularly helpful for people with dementia who are prone to wandering. Telecare equipment can be very sophisticated, e.g. safer wandering devices that are linked into the GPS system and enable a person who goes wandering to be located and systems that remind people to take medication.

During 2009/10 439 older people received telecare systems. This includes people with the lifeline system and those who have a broader range of sensors and detectors as well. A target of assisting 450 older people and 20 younger disabled younger adults was set for 2010/11.

The main beneficiaries of telecare are older people, especially those with dementia, but it can also assist people with other disabilities such as learning disabilities, mental health needs and younger adults with physical and/or sensory disabilities. The responsibility for the supply, installation, maintenance and collection of telecare equipment transferred to Careline from a private provider on the 1<sup>st</sup> April 2010. This action brought these functions together with the response service into one place with the intention of creating cost and process efficiencies.

The effectiveness of telecare as an alternative to residential care is dependent on there being a robust response service that users, carers and family members as well as professionals can rely on. At present the response to an alert entails contacting identified key holders or the emergency services where this is not possible. From January 2011, a pilot mobile response service will operate 24/7 and will involve both Careline staff as well as staff from the in-house Home Care Team. The beneficiaries of the pilot will be service users whom care management staff

have identified as being vulnerable to admission into residential or nursing care or a potential Hospital Accident and Emergency attendance. The purpose of the pilot is to clarify the volume and nature of call outs and therefore the level of staffing required to support the service.

## Telehealth

*Telehealth* refers to a system which enables the management of an individual's health condition at a distance or in their own home. For example, technology can enable a person to monitor their own vital signs, such as blood pressure, pulse rate, or temperature or a remote monitoring centre can take readings of physiological data and warn a clinician, e.g. a GP, if the measurements fall outside the expected parameters.

Telehealth systems can provide an early alert system for people with conditions such as chronic pulmonary obstructive disorder (COPD), heart disease, diabetes and hypertension, etc.

The development of telehealth in Hillingdon is in its very early stages in Hillingdon and preliminary discussions with NHS Hillingdon to look at the options for taking this forward took place on the 28<sup>th</sup> June 2010. We noted that exploring the feasibility of establishing an integrated telecare and telehealth service is one of the tasks within the Wellbeing Strategy action plan<sup>2</sup>.

## Accessing Telecare in Hillingdon

### Eligibility for Telecare

We were pleased to learn that anyone who is a Hillingdon resident, or someone acting on their behalf, could apply for telecare. With the Personalisation agenda<sup>3</sup> gathering momentum, championing choice, independence and well-being and to ensure residents were aware of their telecare options, we agreed it was essential that clear information was made available.

### **Recommendation:**

**The Committee requests that good quality information and timely advice must be provided for families, carers and service users, working with health professionals to enable them to understand their assistive technology / telecare options to assist them to make informed choices (to address their needs)**

<sup>2</sup> The Wellbeing Strategy focuses on the contribution that health, adult social care and housing can make to achieve the broader objective of improving the wellbeing of Hillingdon's residents. It outlines Hillingdon's partnership priorities and ambitions for improving the wellbeing of our residents and their families over the next 5 years

<sup>3</sup> Also known as the transformation agenda is about giving people who need social care services more control in their lives. Empowerment will mean that people can be responsible for making their own decisions and choices to fashion the support, which suits them

The main way of doing so is through Hillingdon Social Care Direct (HSCD). Presently, there are two levels of telecare service in Hillingdon:

- a) *Bronze service* – This is the basic service consisting of lifeline, smoke detector and bogus caller alarm. It is a universal service available to any Hillingdon resident for a monthly charge of £4.91. The charge is for the monitoring service and not the equipment. Anyone just wanting the bronze service can approach Careline directly.
  
- b) *Silver service* – This level of service is available to Hillingdon residents following a community care assessment. This enables residents to access more complex detectors and sensors to support independent living also at a *monthly charge of £4.91 per month*. Assessments for the silver service are currently undertaken by the Critical, Substantial Teams, Review and Specialist Teams within Adult Social Care and also the Hospital.

Officers explained that Hillingdon Hospital was a key source of referrals and these accounted for 45% of referrals during 2009/10 and was responsible for 40% of referrals up to the end of Q3 2010/11.

### **Monitoring and the Response Service**

Having examined service provision and eligibility, we looked at monitoring / the response service and how telecare would work in practice. Officers explained that unless a carer was self-monitoring, an alert would be received by the Careline switchboard. Careline staff would then seek to contact the resident. If the resident could not be contacted current protocols stated that they would try to telephone an identified responder, i.e. someone who lives nearby who can visit if necessary.

We noted that the increasing number of single person households would mean that restricting telecare to those people who had responders would severely limit the number of people who could benefit from this service. In these circumstances, we heard that clients had a key-safe affixed outside their front door so that it would be possible for emergency access to be gained where necessary.

In cases where the responder could be contacted or if there was no responder and it was not possible to contact the resident, then Careline would telephone the emergency services. This does not apply in sheltered housing as there is a limited mobile response service paid for through the tenant's rent that means that staff will visit if the tenant cannot be contacted or where further assistance is required.

## **Reablement Service**

We heard that an essential component of the emerging Adult Social Care Commissioning Strategy for the next five years was that no one should be admitted to residential care from hospital or the community without being considered for a period of reablement.

### **Recommendation:**

**The Committee recommends that telecare be provided free of charge for a limited period (no longer than 6 weeks) after hospital discharge as part of the re-ablement project to provide assistance. The Committee felt that early exposure to assistive technology will help increase client confidence in the service and encourage further uptake in the service.**

The provision of telecare is an integral part of the reablement function and it is intended that the Reablement Team will consider all referrals it receives for telecare.

While there were clear benefits to be had from the technology, including the ability of the user to regulate the level of personal contact through self monitoring, it was important to reassure residents that opting for assistive technology would not be a substitute for personal contact.

### **Recommendation:**

**The Committee recommends that assistive technology should not simply replace personal contact but be part of a package in which AT is a complementary tool which helps to prolong independence.**

We also acknowledged that some people, especially older people, might be intimidated by new technology and enquired whether systems could be adapted to suit the needs of specific user groups, such as dementia sufferers, which might be frightened by a combination of lights and sounds emitted from some of the devices. To address this issue, we were informed that the intention was to build up telecare provision incrementally so that the user would gain confidence and familiarity with the technology over time.

## **Mobile Response Service Pilot and Safer Wandering Pilot**

Officers explained that a **mobile response pilot** was being developed in response to an ageing population and increasing incidence of dementia. The key aspects of the service were:

- The pilot was being developed to avoid the numbers of admissions into residential or nursing care.
- To be successful it was essential that residents, their families and professionals had confidence in the support structures intended to enable people to live safely in the community.
- The mobile response service would be available 24/7 and would be provided by the in-house Home Care Team.
- Using the in-house Homecare Team ensured access to personal care should this be required and represented a part of its transition to become a reablement service.
- The pilot would consist of new users identified by care management or through the Hospital.
- Participants in the pilot would be those identified by professionals as being at risk of residential, nursing home or hospital admission.
- the purpose of the pilot was to:
  - identify the number of attendances required;
  - identify reasons for attendances;
  - quantify resources required to support the service.
- The key success measures would be:
  - period admission to residential/nursing home avoided;
  - hospital attendance/admission prevented.
- In view of the cost of the mobile response service, it was unlikely that it would become a universal service. However, this would not prevent residents nor their families seeking to buy into it should they wish to do so. It was not intended that this option would be made available in the early stages of the pilot.

Officers explained that the **safer wandering pilot** was closely related to the mobile response pilot. People at risk from wandering would have a wrist watch like device attached to their arm which would set off an alert if the person went beyond a pre-set distance from their home. The alert will initially be detected by the equipment supplier, Evron, who will then notify Careline. The intention is that the mobile response service will then go out to the person, whose exact location will have been identified through GPS, and encourage them to return home. It is envisaged that the safer wandering device will be used in conjunction with exit sensors.

The Mobile Response Service became operational on the 7<sup>th</sup> January 2011. . Now that the Mobile Response Service is operational the intention is to start using the safer wandering equipment before the end of 2010/11.

## **Equipment Procurement and Maintenance**

Officers explained that telecare equipment prices were set under a national framework agreement that the NHS Purchase and Supply Agency (PASA) tendered for in 2004. This agreement came into effect in May 2005 and 12 equipment suppliers were appointed to it. This agreement expired in May 2010 and was replaced with a further framework agreement that the government's procurement agency, Buying Solutions, tendered on its behalf. There are now 23 telecare equipment suppliers on this framework and this includes companies such as Tunstall and Chubb, with whom the council currently has most dealings.

We were informed that the telecare equipment used to support vulnerable residents is covered by the manufacturers' warranty, which is generally 12 months. This means that if the equipment becomes faulty during that period the manufacturer is required to replace it free of charge. The experience of officers has been that our equipment suppliers have generally been prepared to replace equipment that has become faulty within its expected lifespan at no extra cost. This reflects a recognition of the council's significant purchasing power and is likely to continue as the numbers of people supported by telecare in Hillingdon increases.

## **Components of a Telecare Service and Re-Branding the Service**

We heard any telecare service comprises of a number of processes and functions and these can be summarised as follows:

- enquiries and referrals about and for telecare;
- assessment for telecare;
- purchase of telecare equipment;
- equipment installation and collection (when no longer required);
- maintenance of equipment;
- monitoring for alerts;
- alert response.

In Hillingdon, since the 1<sup>st</sup> April 2010 responsibility for the equipment purchase, installation, collection and maintenance functions, as well as that for monitoring alerts and the alert response had been placed with Careline<sup>4</sup>. Before this date only the monitoring and alert response functions were with

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<sup>4</sup> Careline is a 24 hour monitoring service staffed by trained operators which offers vulnerable people help and security at the touch of a button connected to their phone line. It provides a 24 hour, 365 days a year emergency service, enabling clients to live as independently as possible within their own home.

Careline and the other functions were contracted to Medequip Assistive Technology Ltd. The responsibility for undertaking assessments has always sat with assessment and care management and it is intended that this will continue.

We learnt that the decision to place all of the functions apart from assessment with Careline was taken for a number of reasons which included;

- reducing the number of organisations involved in the delivery of telecare would improve efficiency by reducing confusion about roles and responsibilities;
- complexities arising due to having partners with incompatible IT systems that would be eliminated by having an in-house provider, thus improving efficiency;
- Careline's fixed costs meant that it would be a more cost effective option. The equipment purchase, installation, collection and maintenance functions were included as part of the West London transforming community equipment services tender that the Royal Borough of Kensington and Chelsea led in 2009. Only Medequip Assistive Technology Ltd submitted a bid for telecare and appointing them to provide this service would have resulted in the council incurring a charge for each item of equipment installed and collected, as well as a separate maintenance cost;
- placing all functions with Careline (apart from assessment) was an integral part of the strategic development of the service that could see it offering services to other local authorities and health economies.

## **Rebranding**

While the Committee appreciated why service responsibility had moved to Careline, it was mindful that if any re-branding exercises were deemed necessary, steps should be taken to avoid confusing residents and safeguards put in place. During the review officers considered re-branding options that would minimise the possibility of confusion being caused to residents.

### **Recommendation:**

**The Committee note that, in line with their original advice, Officers have taken a cautious approach to rebranding, and that the term "TeleCareLine" is under consideration.**

We noted that the intention is that Careline will also provide a monitoring service for those people identified as being at risk should they not receive a call from their domiciliary care agency and that in these cases, the alerts will be identified through the council's Electronic Call Monitoring Service (ECMS).

### 3 Partnership working

In October we heard from Martin Scarfe (WSD Programme Director), London Borough of Newham, Simon Jennings, NHS Hillingdon and Chris Commerford, Age UK. The theme of this meeting was partnership working and also the type of challenges the Directorate would be facing in the future to deliver excellent services for people with long term health problems.

Mr Scarfe's presentation focused on the development of telecare / telehealth and the Whole System Demonstrator (WSD) Trial currently underway in the London Borough of Newham. The following points were noted:

#### **Whole System Demonstrator (WSD)**

The Newham Whole System Demonstrator (WSD) Trial was a two-year research project funded by the Department of Health. Its aim was to establish a national business case to measure the benefits of assistive technology in the homes of persons with long-term health and social care needs. Newham's PCT were successfully selected to become one of three sites to take part in the trial – the other two were Kent and Cornwall (making this the largest telecare trial anywhere in the world).

#### Newham WSD Trial

As well as providing a business case for assistive technology, the WSD trial in Newham was a response to the needs of an ageing population and the implications this would have for the future of health and social services. The Committee was informed that the business objectives of the trial were to reduce:

- emergency hospital bed days and admissions;
- accident and emergency attendances;
- numbers admitted to residential care and nursing homes;
- financial and staffing pressures in the region.

and the clinical/social objectives of the trial were to:

- promote users long-term health and independence;
- improve quality of life of user's and carers;
- improve working lives of health/social care workers

We heard that more than 1,500 people located across the borough were involved in the Newham trial and participants were identified through patients' General Practitioner (GP) and social care records. In terms of the methodology employed, Mr Scarfe explained that the trial focused on two main patient/user groups which included:

1. Telecare patients with: a social care need, physical disability, frail and elderly, risk of hospital admission or falls and
2. TeleHealth patients with: Chronic heart disease (CHD), Chronic obstructive pulmonary disease (COPD), Type 2 diabetes and Previous hospital admissions.

The technologies used in the trial included:

- (Telecare) a combination of alarms, sensors and other response equipment (working 24/7) so that a call for help could be raised in case of an emergency. However, it was important to note that this was not intended to replace human contact. This echoed one of the Committee's key concerns which they highlighted throughout the review.
- (Telehealth) providing daily care management and an early warning should readings go outside normal parameters. Telehealth also allowed early intervention e.g. change of medication and onward referrals to be made.

### **Successes of the Newham WSD Trial**

Although the Newham WSD trial was not due to finish until May 2011, the Committee heard that there had been a number of notable successes. These included the positive reaction the trial had received from the medical community. Mr Scarfe explained that (in Newham) the majority of GP's had endorsed and signed up to the trial and so far, no negative feedback had been received. We also heard that in broader terms, positive outcomes had included:

- Greater stakeholder engagement
- Positive clinical outcomes
- Extensive collaboration between the WSD call centre and external health and social care professionals.
- Very positive feedback had also been received from users and professionals.

### **Recommendation:**

**The emerging body of evidence from various national review pilots has shown how valuable Assistive Technology (AT) / Telecare can be to users and carers. It is therefore essential that the status and profile of AT / Telecare is strengthened so that social care and health professionals consider this technology as an option for all service users and carers.**

## Partnership Working

We heard that one of the important reasons for the success so far in Newham had been the partnership working between the Council and PCT. Members were keen to ensure this relationship was replicated in Hillingdon.

### **Recommendation:**

**Committee advises that effective partnership working will be central to the full development of this service and that to ensure services are delivered. The early evidence from the Whole Systems Demonstrator pilots has shown how important partnership working is. To ensure services are delivered as effectively and efficiently as possible, information sharing rules and procedures must be developed.**

Referring to the structures in place in Newham, Mr Scarfe explained that at present, telehealth and telecare were separate stand-alone services, but the intention in Newham was to integrate these services in the future. In overall terms, the Committee heard that 9 separate datasets would need to be analysed to measure how successful the WSD trial had been and it was anticipated that this task would take about 6 months. However, early results had been encouraging.

### **Recommendation:**

**Evidence shows the potential value of telehealth in supporting people with health conditions to live independently in the community and also in making savings to the health economy. Telehealth is under-developed in Hillingdon and the Committee recommends that officers work with health colleagues to encourage its further development.**

Analysis in Kent in 2010 of 60 patients with long-term conditions receiving telehealth systems identified a 60% reduction in acute care costs after 4 – 6 weeks and a 40% reduction in GP contacts. Analysis in 2010 of 15 patients with long-term conditions over two GP practices identified a reduction in acute care costs of £32.5k over a six month period.

## Funding

Mr Scarfe explained that in relation to funding streams, telecare (in Newham) had been maintained by capital funding whereas Department of Health funding had supported the WSD. We heard that in relation to the future, it was anticipated that telecare would be funded by top slicing of Adults' budgets and telehealth would be supported by a mixture of Commissioning intentions and Staffing efficiencies. In his view, for services to be successful, further

investment would be necessary and more would need to be done to integrate Health and Social Care services providing a joined up service, directed and controlled through a control centre.

### **Good Practice**

The Committee heard that for assistive technology to be implemented successfully a number of conditions would need to be in place. These included:

- Assessments for Telecare and Telehealth.
- Care Pathways
- Control Centre (accredited) – allowing for huge financial savings to be made at 3 or 4 control centres across London.
- Monitoring
- Response Protocols
- Reports
- Survey
- Risk (Combined Model)

In addition to the early results from the Newham WSD trial, we heard that a number of common learning points had emerged from the three WSD trials taking place across the country. These were:

### **Key learning points about installation, monitoring and response when working at scale**

- The level of planning and basic project/programme management involved is really significant when working at scale and at speed.
- It is important to plan installations and work closely with the supplier/install team. There needs to be flexibility in these arrangements.
- Demand management is important – people have come on and off the trial in spikes, so the demand is not even. This affects resourcing and staffing arrangements.
- Don't underestimate the technical and logistical issues – eg, power sockets and telephone line in the home, availability of broadband (for instance, Newham has an eight-day turnaround for connections for their telehealth service).
- There is a need for flexibility in arranging assessments and installations, including out-of-hours service, as people can have active and busy lives even though they have high levels of need.

- Communications are important for staff and service users – e.g., setting expectations, booking visits.

### **Early lessons for integrated working from across the three sites**

- Senior commitment is necessary.
- Data sharing and handover are important – initially, we underestimated the time for setting up data sharing agreements and ensuring the slick handover of responsibility from one organisation to another.
- Pockets of excellence may not spread across a large local authority area – it is important to work towards high standards.
- The WSD programme is recognised by the sites as a vehicle for more integrated working.
- There are differences in culture, motivation and performance metrics between organisations (including the private sector and the third sector).
- A common goal is needed

### **Learning points about working with suppliers, third sector<sup>5</sup> and independent organisations and the role of housing services**

- Many of the participants were already working with earlier telecare and telehealth programmes in the sites at a smaller scale. Some organisations were new.
- It is important to work with housing services and the third sector – many organisations are already providing services that should be part of a total care package.
- It is important to ensure flexibility and that contracts and service level agreements are in place.
- Governance must be in place to handle sensitive personal information.
- It is important to work with voluntary organisations to raise awareness and set up user forums – to hear the user voice and allow people to share their experiences

Simon Jennings, (Chief Information Officer), NHS Hillingdon provided his views on telecare and telehealth. The following points were noted:

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<sup>5</sup> Charities, the voluntary sector and not for profit organisations

Members heard that overall, London had been slow to engage with telecare. Referring to recent developments in Hillingdon, he explained that NHS Hillingdon had looked at redesigning the dementia pathway (the whole system of dementia care) and were exploring the ways in which telecare (through early intervention) could play a greater role in the preventative agenda. In addition we were informed that by using data from social services, hospitals and GP's, NHS Hillingdon were looking at the BUPA models to see what it could do differently in the future.

The intention was for the BUPA models to be used to evaluate 3 models of care for inclusion in the improved Pathway. These models were:

- a) Telecare deployment –working jointly with the Borough
- b) Introducing a Mental Health Liaison at Accident and Emergency and
- c) Intermediate care which is a combined operation with community and social service.

It was anticipated that the conclusions and recommendations arising from this modeling would be published in December 2010.

Further work conducted by NHS Hillingdon included a Dermatology pilot which had been approved and would involve 18 General Practitioners from 18<sup>th</sup> October 2010. Members noted that the programme involved GP's using a Teledermatology service to assess patient conditions, through transmission and clinical assessment of images of the condition.

Members heard that indications had shown that there were clear efficiencies from the process change, which resulted in reduced diagnostic time for patients, and at a lower cost. It was noted that the business case anticipates a £28,500 recurrent saving in referral costs for the pilot, which is £198,700 recurrent saving for a full Hillingdon deployment.

Chris Commerford, from Age UK provided her views on telecare and telehealth. The following points were noted:

- Telecare could offer choice and independence to users and increase the confidence of those people living at home.
- The role played by Careline was supported as it offered a strong local service.
- While it was acknowledged that telecare had many advantages it was important that it complemented social contact rather than replaced it.
- It would be useful to offer people being discharged from hospital free telecare services for 6 weeks to help them remain independent and establish whether they wished to purchase these services (telecare and telehealth) in the long term.

Key points of the responses and the subsequent discussions included:

- With reference to the WSD trial in Newham, it was noted that as most GP's had entered the trial and GP's had controlled the funding, there had not been a postcode lottery and there had been a commonality of response.
- Members were encouraged to learn that nursing had not suffered as a result of the introduction of telehealth and had benefited from systems providing more information in real time so that preventative care could be provided.
- With reference to the telecare response service in Newham. Of 2,500 people receiving telecare services, there had been 10,000 alerts in the first 6 months, of which 50 % had been false alarms. Of these 5,000 alerts, 700 had generated either an emergency or in-house response. Making a judgement as to whether or not this was cost effective, would be dependent on the specific needs of service users.
- The number of control centres across a given area, co-ordinating telecare and telehealth services was crucial. As the complexity and demand for services would vary from area to area a one size fits all approach could not be taken. Control Centres could be used to provide numerous additional services such as out of hours social work and repairs management and therefore there would be scope to introduce higher charges for higher levels of response.
- In relation to call centres, it was noted that NHS Hillingdon was currently looking at commercial sector business models with a view to moving away from small local call centres to larger more centralised services.
- Members agreed that long term demographic change meant that telecare and telehealth was an emerging marketplace and there was considerable scope for services to be developed so that long distance care could be provided for elderly relatives.
- Members agreed that providing telecare for a limited period after hospital discharge was a good idea.
- That Officers be requested to investigate providing an all councillor seminar on telecare / telehealth and for this to include a demonstration of telecare equipment.

## **How Has Assistive Technology Developed Elsewhere?**

### **Practice in Other Boroughs**

There are a number of variations in the models of telecare service provision. To compare and contrast the approach taken in Hillingdon, we examined practice in other London Boroughs. We noted that the following approaches had been taken:

- *Bromley* – there were four levels of service each incurring a different weekly charge;

- *Camden* – provided two levels of service and had outsourced the monitoring function to a company based in Kent;
- *Ealing* – access to telecare was restricted to people at risk of falls or people with a dementia diagnosis. The monitoring function was provided by Tunstall, which was one of the main equipment suppliers in the country. Their Homecare Service provided a mobile response during office hours;
- *Newham* – a branch of Newham Homes (the council's arms-length management organisation) called Newham Telecare Network provided all aspects of the telecare service, including the initial assessment.

The essential criteria supporting the emerging Hillingdon model is that it addresses the changing needs of our residents in a way that is efficient, effective and affordable.

### **Areas for Development**

Officers highlighted that there were a number of areas which required further work. These included:

- *Performance indicators* – We heard that these had not yet been applied as some IT issues were still outstanding arising from the implementation of the new Integrated Adult Social Care system (IAS), i.e. electronic ordering and staff training, and also some staff recruitment matters.
- *Developing technology* – It was acknowledged that telecare and telehealth was a rapidly moving area. There was a standard list of equipment but other items can be provided where this would address assessed need. The Committee agreed that for any assistive technology to work effectively, it was essential that any equipment provided must be compatible with the monitoring equipment.
- *Telehealth* – It was noted that a pilot focussed on dermatology based in 18 GP practices in the borough was in progress. The benefits of establishing further pilots intended to assist in keeping people with chronic obstructive pulmonary disease (COPD) or diabetes in their own home would be explored over the next year.
- *Publicity* – Officers explained that publicity materials were currently being developed to be distributed to users and their carers and also to assist professionals. The Committee agreed that good quality information and signposting needed to be provided for both carers and service users to enable them to understand their AT options to assist them to make informed choices to address their needs.

## 4 Costs and financing the service

At our final meeting, we examined the resource implications of different proposed assistive technology delivery models, e.g. social enterprise schemes and the income generation opportunities.

### Proposed Model of Service Provision

At the beginning of the meeting, officers reminded the Committee that the purpose of telecare was to:

- contribute to Hillingdon residents to remain independent in their own homes for as long as possible; and
- prevent avoidable admission or readmission to hospital.

Officers explained that it was for these reasons the intention was to develop a menu of options that would provide flexibility for residents and their families while at the same time address the anxiety that some older people might have about the use of technology by introducing technology in a phased way. We heard it was proposed that the menu comprise of the following four levels of service:

1. **Level 1** – this is the standard service comprising of button and box, smoke detector and bogus caller alarm.
2. **Level 2** – the standard service but with access to a Mobile Response Service
3. **Level 3** - the standard service but access to a range of detectors and/or sensors appropriate to their assessed need, as well as the mobile response service where their responder was unavailable for any reason, e.g. they were on holiday.
4. **Level 4** – a full range of telecare sensors and detectors to address their needs, including safer wandering equipment, and also the Mobile Response Service.

Residents who did not satisfy the Council's eligibility criteria would have the option of purchasing telecare equipment over and above the standard package as well as having access to the Mobile Response Service. We thought this offer might prove attractive for families to purchase for their parents, especially if they lived away from the area.

### Charging Policy

We heard that at present there was a flat rate charge of £1.13 per week. To access telecare services it was proposed that:

- a) for clients in receipt of adult social care services the charge is subject to a financial assessment.
- b) for clients NOT in receipt of social care the full charge of £1.13, £5.00, £8.50 or £12.00 a week is applied according to the level of service provided

### Mobile Response Service

Officers explained that the mobile response service would be available 24/7 and would be provided jointly by the in-house Home Care Team and Careline. We heard that by including this function within the role of the in-house Homecare Team, would ensure access to personal care should this be required and would represent a part of its transition to become a reablement service. This proposal also reflected the increasing prominence of reablement as a means of maximising independence and reducing avoidable demands on community care and health services. We were encouraged at the prospect that Careline’s role in the provision of the response service would ensure that there were two officers able to attend out of hours call outs at residents’ homes in accordance with the council’s lone working policy.

### Telecare Service Costs

Table 1 identifies proposed budget for the new telecare service for 2011/12.

<b>Table 1: Telecare Proposed Budget</b>	
Installer	13,500
Home Carers On-Call	16,000
Home Carers Hours	23,300
Other Costs	3,000
Equipment	152,300
Gross Cost	208,100
Income	-93,600
Net Budget	114,500

### Funding Telecare

From the evidence the Committee had considered so far, it was clear that if assistive technology (telecare and telehealth) was implemented successfully there were clear benefits for residents. A significant point which needed to be addressed was how telecare could be funded. We learnt that at present, Careline was funded by a combination of Housing Revenue Account (HRA) and General Fund but from 2011/12 the intention would be to bring the Careline and telecare budgets together as part of a unified service. From the modelling work conducted so far, officers explained that *it was anticipated that*

*the telecare service would be funded from the avoidance of expensive residential or nursing placements, with the costs of the home care staff being funded from the current homecare budget. The telecare service would be incorporated into the wider reablement service within Adult Social Care, Health and Housing.*

Table 2 sets out the combined budget for the service.

<b>Table 2 - Telecare Service Proposed Budget</b>			
	<b>Careline Current Budget</b>	<b>Telecare Proposed Budget</b>	<b>Total Proposed Budget</b>
HRA	467,000	0	467,000
General Fund	254,000	208,100	462,100
<b>Gross Cost</b>	<b>721,000</b>	<b>208,100</b>	<b>929,100</b>
Client Contribution	-245,000	-93,600	-338,600
Supporting People	-75,000	0	-75,000
<b>Income</b>	<b>-320,000</b>	<b>-93,600</b>	<b>-413,600</b>
<b>Net Budget</b>	<b>401,000</b>	<b>114,500</b>	<b>515,500</b>

Table 3 sets out the anticipated savings from the telecare service:

<b>Table 3: Estimated Saving from Telecare Service</b>			
<b>Year</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
Cost Avoidance of Residential/Nursing Care			
Number of Service Users	22	32	45
Estimated Cost Reduction per client per annum	5,882	5,882	5,882
Annual Cost Avoidance	129,406	188,227	264,694
Existing Homecare Staff Budget	42,300	42,300	42,300
Total Budget Available	171,706	230,527	306,994
Cost of Proposed Service	114,500	114,500	114,500
Saving	57,206	116,027	192,494

## **Cost Avoidance**

Mindful of the current economic climate and the pressures on all service budgets, an important aspect of our review was to look at the business case / financial basis of telecare, how savings might be realised and how cost benefits could be illustrated. In broad terms, officers suggested that savings could be made in the following ways:

1. where the cost of supporting a resident at home was less than that of residential care after taking the cost of domiciliary care and any other community care service into consideration.
2. by reducing the scale of a domiciliary care package, e.g. through the provision of medicine dispensers.
3. saving money to the health economy through the prevention of a hospital admission or readmission.

However, officers pointed out that as assistive technology was a relatively recent development, this meant that empirical data relating to its impact was not readily available. However, we heard that there was a growing body of both qualitative and quantitative evidence which suggested telecare could make a valuable contribution to older people to live independently.

## **Service Options**

Officer explained that there were a range of options we could consider concerning the following aspects of the telecare service:

- a. equipment purchase, installation, collection and maintenance
- b. Careline monitoring service
- c. mobile response service

### **a) Equipment purchase, installation, collection and maintenance**

We heard that an alternative option available to the Council would be to join the telecare aspect of the community equipment framework agreement held with Medequip Assistive Technology Ltd following the collaborative commissioning exercise that took place in 2009. One of the reasons for the decision to bring this aspect of the telecare service in-house was that Careline provided the less expensive option. It was noted that if more councils joined the Medequip telecare service the increased bulk discount opportunities would reduce equipment costs. However, there would not be any changes to the installation, collection, maintenance and repair charges.

It was suggested that this was something that the Council would need to keep under review. However, there are other factors that would need to be taken into consideration, such as the potential loss of cohesion that spreading the different functions of the telecare service over more than one provider would have and also the technical difficulties that would arise with having different computer systems. Ensuring compatibility between the telecare technology and the Careline monitoring service would also be an important factor that would influence any decision about future provision arrangements.

**Recommendation:**

**The Committee requests that officers undertake regular reviews of service costs to ensure the Authority receives value for money from service providers.**

**b) Careline Monitoring Service**

The Committee heard that the current intention was to develop Careline as the Council's emergency out of hours service covering a range of needs including:

- *electronic call monitoring (ECMS)* - response service for those people identified as being at risk should they not receive a call from their domiciliary care agency. With this system where a call has not taken place Careline would receive an alert in the form of an email and Careline staff would receive an audible warning that an email had been received. The Careline monitoring function for this service is expected to become operational early in 2011;
- *out of hours repairs* – Council tenants experiencing emergency repairs can contact Careline who have access to on-call repairs staff;
- *emergency heaters* – Careline would make available heaters out of hours to vulnerable people during the winter where they have experienced a heating system breakdown.

And the following options were under consideration:

- *Emergency Housing call out* – this would entail Careline contacting the duty emergency housing officer to assist anyone seeking to make an application under the homelessness legislation out of office hours
- *Duty Social Worker call out* – Careline would seek to contact the duty Social Worker out of hours where there was a resident potentially in need of adult social care, including a safeguarding issue out of hours.
- *Combining all of these functions together in a local service* run by people with local knowledge offers both service efficiencies and potential improvements in customer care through improved responsiveness. It also helps to safeguard the interests of vulnerable residents which we thought was of the utmost importance.

**Recommendation:**

**The Committee recommends that the Authority pursue the development of a comprehensive in-house model, centred on a local call centre, (with a responder service operating 24/7) employing local knowledge and request officers to fully explore the cost implications of this option as part of the ongoing Medium Term Financial Forecast work.**

**Alternative Service Delivery options (to an in-house model)**

Officers explained that there were a number of options that the Committee could consider and these were:

***Tunstall call centre***

We heard that Tunstall is one of the main telecare equipment providers in the country and a subsidiary, Tunstall Response Ltd, ran a call centre based in Doncaster which had over 500,000 people linked to it. Officers suggested that the council could explore the option of Tunstall providing the call centre function. The most effective method of doing this would be through a market testing process.

The Committee heard that one of the key disadvantages of the externalised call centre option would be the loss of the cohesive approach to out of hours provision and the lack of local knowledge (which the Committee had already suggested was an important factor). For this option to be taken forward, the Committee was informed that installation, collection and maintenance arrangements would still need to be in place as well as its own mobile response service.

***Market testing***

An alternative option which the Committee considered was whether the Careline monitoring service and the mobile response service could be market tested. Officers explained that there had been some interest in the possibility of this being developed as a West London Alliance initiative with a view to achieving efficiencies. With this option, the submission of a tender by Careline *could be successful in securing additional income for the council*. However, if Careline was unsuccessful a key potential disadvantage of this approach for Hillingdon would be the potential loss of the coherent approach to out of hours services although this could be mitigated to some extent through the content of the service specification.

### ***Sell services to other boroughs, housing associations and health economies***

A further option we considered focused on whether the Careline monitoring centre and the mobile response service could be sold to other councils and housing associations. It was noted that Careline already received £35k a year income from 6 housing associations operating in the borough but there was scope for the service to be promoted more rigorously.

### ***Social enterprise option***

Careline could also be established as a social enterprise. This would enable it to offer services to a wider range of customers and for any profits to be reinvested for the benefit of Hillingdon residents.

### ***Multi-disciplinary service***

By integrating health professionals with Careline staff, we heard that this could enable it to provide support for people with long-term conditions utilising telehealth equipment. This would need the support of GPs, although the Health White Paper proposals could make participation in such a venture attractive to the Hospital, especially considering the loss of income that they are likely to experience as a result of the 30 day readmission rule which comes into effect in April 2011.

### **c) Mobile Response Service**

The scope of the mobile response service could be reduced so that it only operated from 7am to 10pm. This would reduce the operational cost by £42k; however, this was likely to have a detrimental effect on the confidence that residents, their families and professionals both in a health and adult social care environment would have on the effectiveness of telecare supporting vulnerable people to live in the community. As a result this could impact on the success of the drive to reduce the number of people living in institutional care.

Key points of the responses and the subsequent discussions included:

- Members asked whether the current premises for Careline were large enough bearing in mind the number of additional services Careline might provide in future. Officers explained that they were currently looking at the appropriateness of the site and investigating a number of options including possibly co-locating the service to the Civic Centre. With this in mind, the Committee recommended the following:

#### **Recommendation:**

**The Committee recommends that Careline be co-located to the Civic Centre. Moving the service will allow for future expansion as the ASCH&H emergency out of hours services are based with Careline.**

- To meet the anticipated demand for the responder service, officers suggested that more staff would be required (especially if a reablement service was provided free of charge for 6 weeks after a hospital discharge).
- Members asked about the Tunstall call centre option. In response, officers suggested that a locally managed, local provider was their preferred option.
- Members asked about how the service might respond to confused callers (i.e those suffering from dementia). Officers explained that any service the Authority provided ought to be able to accommodate these types of calls and local knowledge of the client base was an essential part of being able to manage these enquiries as sensitively as possible. Officers agreed that these types of calls would need to be monitored on a case by case basis but the service would need to be as responsive as possible.
- In response to a query about cost savings, Officers suggested that telecare could not replace personal contact and should be seen as a complementary service which was less intrusive (due to the ability of the user to self monitor and request services).
- With reference to cost savings, members agreed that periodic reviews of costs were required to ensure best value whoever the provider was.
- Members asked about which option offered the best long term security to ensure the continuity of the service. Officers explained that a combination of modelling and research would highlight the best way forward but that future income streams would not be restricted to those services provided to Adult Social Care clients only and providing services to other groups would provide a degree of stability.
- Officers explained that a built in evaluation process had an important role to play whereby positive feedback could be used to sustain the service and Hillingdon was in an advantageous position and could offer added value due to its housing stock.
- Members asked about whether a zero client contribution system could work. In response, officers explained that a universal offer was not affordable at least not in the short term and there would need to be an element of contribution. This, along with other charging options would be explored in more detail within the modelling being undertaken.
- With reference to the cost information provided the course of the review, officers explained that only one company had submitted a tender for the telecare service and these figures were set out in the report.
- From the evidence presented to the Committee, Members agreed that the best way forward lay in a comprehensive in-house model.

## **The Business Case for Assistive Technology**

Having agreed at an early stage that assistive technology was a positive way forward and there was scope for the Council to invest to save (reduced care costs through a combination of the preventative agenda and re-ablement), one of our primary concerns was to establish how assistive technology might be funded and what cost savings were likely to be achieved.

We are pleased that our lines of enquiry have informed the financial modelling work that has been taking place in respect of a new proposed offer for Hillingdon residents. The fact that the figures contained within our report have now been built upon, only serves to underline what a fast moving area of policy development this has been.

We welcome the work the Leader of the Council and Cabinet Member for Social Services, Health and Housing have been doing to drive Hillingdon's Assistive Technology agenda forward and the considerable progress the Authority has made since we started our review in the autumn. To ensure our review meets our terms of reference and contains the costed information requested, the latest information containing the budget proposals are included as **Appendix A**.

The Committee endorses the findings from the Business Case and makes the following recommendations:

### **Recommendation:**

**The Committee agrees that intervention at an early stage can act as a preventative investment and thereby reduce the number of hospital admissions and delay admissions into residential care. The Committee also notes the preventative benefits that telecare offers to residents who do not satisfy the council's Fair Access to Care Services (FACS) criteria.**

### **Recommendation:**

**The TeleCareLine (TCL) service to private clients is very important and will be a key to the success of the service. The Committee stressed that it is important that the service is marketed as proactively as possible to maximise the take up of self funders.**

### **Recommendation:**

**Part of the Project Planning has been to recognise the need to be able to respond to the effects of increased numbers requesting the TCL service. Officers assured the Committee that resources are in place to deal with the expected numbers and ensure a good service is provided**



# Closing Word

One of the common misconceptions about assistive technology is that technology can provide immediate solutions to all the issues faced by people confronted with long term health problems or disabilities. The reality is somewhat different. Although assistive technology is a powerful device to assist people to meet everyday challenges, used alone it can never completely overcome the burden of living with a disability. Instead, assistive technology should be considered as one of a series of options to complement, enhance or expand existing services or solutions.

Our review has shown that while Hillingdon's Assistive Technology Service provision is still in its infancy, our pilot studies, ongoing financial modelling work and the growing body of anecdotal evidence suggests that this has the potential to transform service provision in the future and help to address the growing needs of an ageing population in Hillingdon.

The review makes a series of recommendations which acknowledge the work on the ongoing pilot to improve the status and profile of assistive technology with all service users, carers and health care professionals and suggest ways in which improved partnership working can enhance service delivery.

Finally, the review identified that (at this early stage), there is scope for officers to improve access to information, advice and guidance to ensure that we, as an Authority, do all we can to promote assistive technology to support vulnerable residents. Good communication and signposting of services are therefore vital.



# ADULT SOCIAL CARE, HEALTH AND HOUSING

## Business Case – A New TeleCareLine Offer for Hillingdon



HILLINGDON  
LONDON

Author:	Sam Taylor, Interim Service Manager - Social Care Strategy & Development
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**ADULT SOCIAL CARE, HEALTH & HOUSING  
BUSINESS CASE – A NEW TELECARE OFFER FOR HILLINGDON**

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## 1. Introduction

Hillingdon has a strong track record in affording priority to vulnerable older people and adults through its social care, housing and community health provision. The council's offer for older people, with the Leader as Older People's Champion, has seen a range of successful schemes including a council tax freeze for the over 65s and the distribution of burglar alarms for older residents.

Telecare services are strongly in alignment with the council's existing offer to older and disabled people. The benefits of telecare as a means of securing the independence of older and disabled people has led to its implementation across the country. In November 2010, the Coalition Government published "*A vision for adult social care: Capable communities and active citizens*". Telecare and assistive technology are regarded as key planks of the Government's approach to social care: "*Assisted living is one of the most promising developments for ensuring the ageing population continues to be well served with high quality and affordable health and care services...Telecare enables people to live at home independently for longer by providing technologies that make their homes more safe and secure.*"

In the context of increasing demographic pressures, there is a clear imperative to embrace up to date, cost effective and evidence based technology interventions that have demonstrable financial benefits. Telecare fits squarely into these categories. This document sets out the business case for investing in this type of service delivery. It provides a proposed model for telecare in Hillingdon, alongside relevant contextual information for its implementation. Building on our current provision in the borough, these steps will ensure we put our residents first, support the independence of older and disabled people and make a major contribution to the delivery of our overall strategy for adult social care.

## **2. What is telecare?**

Telecare is the name given to a range of equipment (detectors and sensors) that will raise an alarm with another person in an emergency. The alarm might be raised with a carer who lives in the same home as the person with the telecare equipment or they may live nearby. More usually the alarm is picked up by a locally based monitoring centre, which in this borough is Careline. This allows vulnerable people to remain living independently at home to do so for as long as possible while increasing their safety levels and quality of life.

Telecare equipment consists of a range of detectors and sensors. Examples of detectors include fire, flood, gas, carbon monoxide, movement and falls. Telecare sensors include, bed, chair and door exit sensors. These are particularly helpful for people with dementia who are prone to wandering. Telecare equipment can be very sophisticated, e.g. safer wandering devices that are linked into the GPS system and enable a person who goes wandering to be located and systems that remind people to take medication. Additionally, telecare includes the use of bogus caller alarms and simple pendants so people have a means of getting in touch with the monitoring service at all times.

Any telecare service comprises of a series of processes and functions:

- enquiries and referrals about and for telecare;
- assessment for telecare;
- purchase of telecare equipment;
- equipment installation and collection (when no longer required);
- maintenance and recycling of equipment;
- monitoring for alerts; and
- responder service.

### **The objectives of telecare**

Telecare is part of an overall approach that prioritises individuals' ability to live in the community. The objectives of telecare are to:

- sustain independence and prevent hospital admissions;
- improve hospital discharge and the transfer of care;
- improve the quality of life for clients and their carers; and
- result in the delay and lower levels of admission to long-term residential or nursing home care.

### **Advantages of telecare**

As such, telecare:

- Improves the quality of life for vulnerable community members

- Is non-intrusive and increases security
- Reduces incidents such as falls.
- Provides reassurance and peace of mind to individuals, their relatives and friends
- Gives carers confidence and reassurance in their role
- Enables people to remain independent in their own homes.
- Includes systems and support that are tailored to the needs of the individual
- Provides rapid response in case of emergencies
- Reduces the number of preventable hospital admissions.
- Reduces emergency hospital admissions for people with chronic diseases/complex care packages.
- Reduces residential/nursing care placements

Telecare is often linked to telehealth, which is a parallel and complementary technology – although relatively underdeveloped and underused. Telehealth refers to a system which enables the management of an individual's health condition remotely or in their own home.

For example, technology can enable a person to monitor their own vital signs, such as blood pressure, pulse rate, or temperature or a remote monitoring centre can take readings of physiological data and warn a clinician, e.g. a GP, if the measurements fall outside the expected parameters.

Telehealth systems can provide an early alert system for people with conditions such as chronic pulmonary obstructive disorder (COPD), heart disease, diabetes and hypertension, etc. These are not currently developed in Hillingdon, but provide opportunities for the future in partnership with local health services.

There are important opportunities in linking telecare systems with telehealth, helping to deliver improved health and social care outcomes for the population.

### 3. Coalition Government policy

Telecare as a service has only begun to develop in recent years, and its potential in most places has not yet been fully realised.

The benefits of telecare as a means of securing the independence of older and disabled people was reflected in the health and social care White Paper *Our health, our care, our say: a new direction for community services* (2006) and in the Department of Health concordat that spearheaded the transformation of adult social care, *Putting People First* (2007).

More recently, the current Secretary of State for Health Andrew Lansley and the Prime Minister David Cameron also acknowledged the crucial role of telecare and telehealth in the future of care provision in speeches made on the 22<sup>nd</sup> October and 2<sup>nd</sup> November 2009 respectively.

The Coalition's *Vision for Adult Social Care*, published on 16<sup>th</sup> November 2010 puts telecare at the centre of its approach to productivity, quality and innovation: "Providing people's care and support in the most appropriate and cost-effective way is vital. Three councils indicate that adult social care departments could save at least 1.5 per cent per annum of their home and residential care spend by introducing integrated telecare support to people. North Yorkshire Council has led the way in embedding telecare services into its social care provision, saving around £1m per annum as a result."

In 2008 the two-year Whole Demonstrator programme was established with the intention of providing robust evidence of the effectiveness of telecare and telehealth technologies. It is the largest ever randomised control trial of these technologies. Over 6,000 people across Kent, Cornwall and Newham are involved in testing assisted living services, and the evaluation by six of the UK's leading academic bodies will report in spring 2011. It seeks to identify to what extent the integration between Health and Social Care when supported by these technologies can:

- promote people's long term health and independence
- improve quality of life for people and their carers
- improve the working lives of health and social care professionals
- provide an evidence base for more cost effective and clinically effective ways of managing long term conditions.

Informal reports ahead of the report's publication indicate a strong case in favour of telecare, supporting the argument that telecare enables people to live at home independently for longer by helping to make their homes more safe and secure.

Locally, the return of Hillingdon Homes to the council presents a clear opportunity to join up the Careline and telecare services into a compelling offer for residents.

## 4. The local context: Telecare in Hillingdon

### Demographic information

Hillingdon's changing demographics makes the application of assistive technology critical, both to support individuals to live independently in their homes and to manage the financial pressures from increasing numbers of high cost care packages.

The huge demographic pressures facing Adult Social Care budgets are well documented. Adult Social Care cost councils £16.1bn in 2008/9 - 5% more than the previous year despite efficiency savings of about £660 million<sup>1</sup>.

We have reached a demographic tipping point, as these national figures indicate:

- 300,000 more older people are expected to have potential care needs by 2014 and 1.4 million older people in the next 20 years.
- Over the course of their retirement, men aged 65 today have a 7 in 10 chance of needing some care before they die and women aged 65 have nearly a 9 in 10 chance.
- 70,000 more working age adults will have potential care needs by 2014 and 300,000 more over the next 20 years
- Analysis carried out by LG Futures for London Councils found that social care costs for younger adults could rise by 20 % between 2009/10 and 2016/17<sup>2</sup>
- There are some 6 million unpaid carers at any one time. Approximately two million people move in and out of the role each year. By 2037 a 60% increase in the number of carers will be needed to keep pace with demographic changes.

All of these changes are being reflected at a local level in Hillingdon<sup>3</sup>, where 34,000 of our population is over 65 years old, and the number of residents over 85 is expected to increase by 11% by 2015. The number of older people with dementia is projected to increase by 7% to 2,694 by 2015 to 5,500. The 2001 census did identify that there were 36,000 people in Hillingdon who considered that they had a limiting long-term illness and 45% of these were older people. Meanwhile, 23,000 people have identified themselves as unpaid carers.

Hillingdon has a population of approximately 253,000. It is estimated that there are currently 34,000 people aged over 65 in the Borough. This is projected to increase by 8.4% in five years to 37,100. The numbers of people aged 85 and over is expected to increase by 11% within this period

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<sup>1</sup> Data sourced from ADASS (L) - *Comprehensive Spending Review submission* – August 2010

<sup>2</sup> Local Government Futures' study – *Social Care in London and England – Expenditure and Needs* – February 2010

<sup>3</sup> *Hillingdon Profile* – January 2010

Stroke is one of the main causes of disability and is concentrated in the older population. In 2008/9 (the last year for which validated data is available) 3,209 people were reported by GPs as living with stroke. This is projected to increase to 4,351 by 2015.

Dementia is primarily a condition faced by older people and the ageing population in Hillingdon indicates that this is going to be a major cause of need in the future. Projections suggest that the number of older people with dementia is likely to increase by 7% to 2,694 in the five years to 2015. 67% of the increase can be attributed to the over 85s, which is expected to grow by 11% within this period. People with learning disabilities are more susceptible to dementias as they get older. Projections suggest that the number of people with learning disabilities living into old age is increasing and it is predicted that there will be an increase of 7.6% between 2010 and 2015.

In the context of the evolving demographic picture and the financial restraints currently on councils, it is clear that a significant shift in investment towards assistive technologies and preventative services will be required to put residents first by being fully focused on delivering efficiency and value for money, using preventative and reablement services that keep residents independent.

### **Telecare and careline services**

Careline has been established in Hillingdon for a number of years, with a button and box and responder service hardwired into sheltered housing properties that are part of the Hillingdon Housing Service stock. Telecare has until recently been run separately, and provides access to the enhanced range of sensors as well as the button and the box (lifeline).

Since the 1<sup>st</sup> April 2010 responsibility for the equipment purchase, installation, collection and maintenance functions, as well as that for monitoring alerts and the alert response has been placed with Careline. The responsibility for undertaking assessments has always sat with assessment and care management and it is intended that this will continue.

Overall figures for combined Careline and Telecare usage in the borough are below (October 2010 figures).

Current Telecare usage			
Category	Careline users	Telecare users	Total number
Sheltered Housing	940	11	951
Council Housing	951	18	969
RSLs	332	2	334
Private Housing Associations	63	1	64
Owner-Occupier	1,890	443	2,333
<b>Grand total</b>			<b>4,651</b>

As part of our approach up to this point, a yearly target of 400 new telecare users has been set for the period 2010-11. The tables below cover the financial year to date, April to December.

	Age			Total Number of Telecare Referrals	Referral Source				Total Number of Telecare Installations	Equipment Installed			Total Number of Careline Installations
	< 65	65 - 84	> 85		Self / 3rd Party	Hosp	CM	Other		Std Pkg	Lifeline & pendant only	Other Sensors	
Apr-10				9	3	6		0	9		3	6	34
May-10	5	20	20	45	7	13	22	3	35	6	23	6	34
Jun-10	2	30	14	46	6	19	20	0	30	3	20	7	28
Jul-10	5	27	13	45	10	18	15	2	35	3	21	11	20
Aug-10	4	16	17	37	8	15	13	1	25	6	14	5	36
Sep-10	2	29	15	46	4	19	22	1	35	5	22	8	39
Oct-10	5	24	17	46	6	16	24	0	33	8	12	13	21
Nov-10	4	28	19	52	5	22	22	3	33	11	14	8	25
Dec-10	1	42	19	65	4	29	25	4	32	7	12	10	20
<b>Total</b>	28	216	134	<b>391</b>	53	157	163	14	<b>267</b>	49	141	74	<b>257</b>

OVERALL CUMULATIVE TOTAL OF TELECARE INSTALLATIONS	524
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Anyone who is a Hillingdon resident, or someone acting on their behalf, can apply for telecare. The main route for this is through Hillingdon Social Care Direct (HSCD).

Currently, there are two levels of telecare service in Hillingdon:

*Bronze service* – This is the basic service consisting of lifeline, smoke detector and bogus caller alarm. It is a universal service available to any Hillingdon resident for a monthly charge of £4.91. The charge is for the monitoring service and not the equipment. Anyone just wanting the bronze service can approach Careline directly.

*Silver service* – This level of service is available to Hillingdon residents following a community care assessment. This enables residents to access more complex detectors and sensors to support independent living for a monthly charge of £4.91 per month. Assessments for the silver service are currently undertaken by the Critical, Substantial Teams, Review and Specialist Teams within Adult Social Care and also the Hospital.

Neither level of telecare offers a responder service. A Careline responder service is separately in place for Careline service users in sheltered or council housing.

Hillingdon Hospital is a key source of referrals. It accounted for 45% of referrals during 2009/10 and was responsible for 38% of referrals during the first quarter of 2010/11.

Under the proposed telecare offer for Hillingdon, the scope and scale of telecare would be greatly extended, resulting in a far greater number of people being able to benefit from telecare, and a commensurate increase in the financial benefit to the council.

The Department of Health's guide *Use of Resources in Adult Social Care* highlighted how the proportion of social care budgets spent on long term nursing and residential care varies dramatically across the country – from 12 per cent to 80 per cent of spend on services for people with learning disabilities, for example. Telecare would contribute to the ASCHH's core strategy of reducing its residential and nursing placements. This is further considered in the financial case for telecare in Hillingdon, below.

## 5. The financial case for telecare

Much work has now been completed nationally in order to establish the business case for telecare services. The outcomes of a number of these are summarised below and included in more detail in Appendix 1.

The most powerful case to date, North Yorkshire County Council, identifies a sustainable 38% reduction in care packages where these packages are supported and enhanced by telecare services. This study has been highlighted specifically by the Department of Health as thoroughly robust in its approach and findings,

### Summary of available case studies

Available case studies all indicate the financial benefit of investment in telecare. The table below contains a summary of the outcomes of a number of studies carried out throughout the UK.

Authority	Annualised Savings Identified
Scottish Executive	£11.15m
North Yorkshire County Council	£478,741.19
Essex County Council	Every £1 spent on Telecare saved £3.58
Gloucestershire County Council	£405,088
Stockton on Tees Borough Council	£600,000
Northamptonshire County Council	£859,870.29
<i>(Full details of each of these case studies are included in Appendix 1)</i>	

In building a case for Hillingdon, North Yorkshire has been used as the case which has the most detailed analysis available and which is regarded nationally as the most robust.

### North Yorkshire County Council Business Case

The implementation of telecare in North Yorkshire resulted in an average saving of £3,654 per adult social care service user, or a 38% reduction in costs. This was identified by comparing new care package costs (including a telecare component) with the cost of the package as it would have been constituted without the inclusion of telecare sensors.

Service type	Traditional package			Actual package of care used including Telecare				Ave efficiency £
	Count of users	Annualised cost £	Traditional Ave cost £	annualised cost £	Telecare enhanced package Ave cost £	Variance £	% reduction in traditional package £	
Residential care	60	784775.16	13079.59	417511.19	6958.52	355053.06	45%	5917.55
Community Support	71	480024.46	6760.91	356336.33	5018.82	123688.13	26%	1742.09
<b>All packages</b>	<b>131</b>	<b>1264799.6</b>	<b>9654.96</b>	<b>773847.52</b>	<b>5907.23</b>	<b>478741.19</b>	<b>38%</b>	<b>3654.51</b>

(Source: Adrienne Lucas, Commissioning and Change Officer & Countywide Telecare Project Manager, North Yorkshire County Council)

The following methodology was employed to establish these findings:

- The last 138 people assessed for telecare during the period of Sept 2008 were analysed. Some people were new to the social care department and some were pre-existing service users with traditional support
- 7 cases were disregarded as outliers, as it was felt these skewed the data too favourably – hence a final total of 131 people analysed under the study
- For pre-existing cases, the “traditional package” (that would have been put in place in the absence of telecare) was counted as the support that had previously been received. For new cases, the quantification of the traditional package was based on the relevant care manager’s professional assessment of need if telecare had not been available.
- The NHS Pasa band 8 rate was used to calculate equipment costs
- NYCC average service costs were applied to the calculation of traditional and actual telecare enhanced packages
- Separate analysis was undertaken for each area in the County; these costs were consolidated into a county profile

This exercise was repeated early in 2009, in order to validate the results of the research. The follow up exercise confirmed the outcomes achieved were in the normal range – on this occasion, a 33% reduction in average care package costs was calculated.

All figures have been fully endorsed by North Yorkshire County Council’s own financial department. The anticipated savings have been built into the Council’s future plans, as has the necessary additional investment in telecare services.

### Relating these figures to Hillingdon

Using basic comparators as a means of comparing North Yorkshire with Hillingdon, this permits some “broad brush” comparisons that will indicate the potential impact of telecare services on Hillingdon’s finances.

For the purposes of this comparison, POPPI data has been employed.

<b>Comparator</b>	<b>NYCC (POPPI data 2010)</b>	<b>Hillingdon (POPPI data 2010)</b>
Population 65+	121,700	34,400
Population 75+	57,200	16,900
Population 85+	16,800	4,700
Number of people admitted to permanent residential/nursing care	777	186
Number supported in residential/nursing care	3,568	940

These figures indicate that Hillingdon is approximately 28% of the size of North Yorkshire in population terms. Both local authorities are broadly proportionately even in the numbers of people admitted to, and supported in residential/nursing care – although these are high and in need of reduction.

Best practice standards indicate that residential and nursing care should account for 40% of an authority's total spend on social care support overall. According to CIPFA 2008/9 data, Hillingdon's spend on residential and nursing care for older people stood at 50%, while it stood at 61% of total spend for the learning disabilities client group. The best authorities in the country have succeeded in limiting their residential/nursing spend for this latter client group to approximately 10%.

As such, both Hillingdon and North Yorkshire share a strong imperative to implement and continue embedding a wide-ranging telecare service offer, respectively.

Using figures included in the table above, **Hillingdon could expect to achieve 28% total savings** based on the North Yorkshire model, when population sizes and current rates of residential/nursing placements are taken into consideration.

#### Further benefits achievable through Careline/Telecare

This sits alongside a range of additional benefits from investment. For instance, telecare has a key role to play in culture change, supporting social care and health staff to cease their over reliance on residential and nursing care.

A range of other advantages were identified in North Yorkshire. In 2008 and 2009 postal surveys carried out amongst Adult and Community Services telecare users demonstrated positive outcomes.

In 2009, respondents said the following:

- 87% - Telecare has helped me to carry on living at home
- 95% - Telecare equipment has given me more confidence/peace of mind
- 95% - Telecare equipment has helped me to feel safer

Further measures are included in Appendix 1. These key indicators are further evidence that the implementation of telecare would put residents first and be a major contributor to helping residents to live independent lives in their own homes.

## **6. Proposal: A New TeleCareLine Offer for Hillingdon**

In the context of a clear financial case for telecare, as evidenced across the United Kingdom (Appendix 1) and as part of the core offer for Adult Social Care, Health & Housing it has been recognised that further investment in assistive technology would significantly benefit outcomes for service users needing support and play a key role in the department's service delivery model and financial strategy.

Following discussions with the Leader in December 2010, scenario modelling was undertaken to establish both the costs and likely outcomes of a significant investment in a new enhanced service.

As part of this process, ASCHH SMT considered the name of the service as there were several descriptions now being used to describe the strategy being developed – including telecare, careline, and assistive technology. ASCHH SMT proposes to combine the more common names into one, which both describes the service being offered and which also indicates that the new service is greater than the individual parts: hence, TeleCareLine (TCL).

### **The TeleCareLine Offer**

The proposed offer includes:

1. A free TCL service to the 85+ age group
2. A free TCL service to service users meeting 'substantial and critical' FACS criteria, subject to financial assessment
3. The first 6 weeks of TCL service to be free of charge as part of a reablement package
4. All referrals to the department for TCL to be seen / assessed / supported by Reablement team; this includes direct referrals via Careline, Hillingdon Social Care Direct (HSCD), hospital etc. The exception would be where the client is requiring a level 1 and level 2 service only, which would have been organised via HSCD
5. A projected growth in the number of current Adult Social Care users by 3,000 over the 4 year period to 31/03/2015 (Straight line growth 'curve' used for modelling purposes)
6. The marketing of the TCL service to private clients

## **Proposed levels of Service and Weekly Charge**

As part of the TCL offer, the existing “bronze” and “silver” service levels would be remodelled into a four level service offer:

### Level 1

This standard service reflects the pre-existing Careline service and comprises a button and box, smoke detector and bogus caller alarm. This would be a universal service available to all residents who wish to receive it on condition that they have a responder who is a key holder. Careline staff would respond to calls by seeking to contact an identified responder, who may be a family member or a neighbour. This service would be available at the current rate of £1.13 per week.

### Level 2

This would be the same as the standard service but would include access to a mobile response service available to visit the resident in the event of a non-response to an alert or it being clear to the Careline operative that a visit was required. This would be available to any resident for a suggested charge of £5.00 per week. However for ASC clients who meet ‘substantial and critical’ FACS criteria this service will be free of charge subject to financial assessment.

### Level 3

In addition to the standard service the resident would have access to a range of detectors and/or sensors appropriate to their assessed need. The service would be available to all residents at a suggested charge of £8.50 per week and as with level 2 clients who meet ‘substantial and critical’ FACS criteria, will be free of charge subject to financial assessment.

### Level 4

This level of service would include access to the full range of telecare sensors and detectors to address their needs, including safer wandering equipment, and also the Mobile Response Service. It would be available to those residents who did not have a responder or where their responder was not available for a period of time, e.g. where they were on holiday. The suggested charge would be £12 per week and as with level 2 and 3 clients who meet ‘substantial and critical’ FACS criteria, will be free of charge subject to financial assessment.

As part of this offer, service users currently receiving the “silver” service level would continue to be charged at current rates. It is anticipated that the very large majority of these service users are already FACS eligible and would therefore be able to access the new level 2 or above free of charge, dependent on need.

## **Financial Analysis**

**The assumptions set out below have been applied to the model and would indicate that the investment necessary to deliver the service envisaged would require an investment in year one of £645k.** This should result in a reduction of 77 people being placed in new residential placements (above that already planned) by 31<sup>st</sup> March 2012. The breakeven reduction in bed weeks is 2,014 on the basis of the net difference in the average cost between residential and non-residential care.

On the basis that the assumptions made are not significantly different from actuals then the full year investment would need to rise from the £645k for the 2011/12 baseline budget required to £1m for 2014/15. The summary page from the model is attached below.

The additional funding necessary (although subject to negotiation and s256 agreement with the PCT), is available from the £2.7m allocated to the PCT for Adult Social Care. The proposed enhanced service fully meets the DH criteria.

### **Assumptions underpinning the financial model**

1. HRA contribution is stepped up at a rate of £50k per annum
2. 80% of level 3 and 4 clients are FACS clients free of charge; remaining 20% are charged due to being private and / or FACS clients assessed to pay
3. 10% of level 1 and 2 clients are FACS clients free of charge
4. Turnover is assumed to be 7.5% leaving service; and 33% of brought forward (existing) clients change level of service each year and therefore incur an increased charge
5. Equipment charges for each level are based on the expected average cost per installation.



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## **7. Implementation planning**

The benefits of telecare are achievable primarily through a long-term process, investing to save by ensuring older and more vulnerable adults have access to basic telecare services as early as possible, before they require complex packages of care and so they are enabled to live independently for as long as possible.

**North Yorkshire have indicated that the following elements must be in place to deliver the savings they have achieved:**

- Significant upfront investment – North Yorkshire invested £2 million in telecare in the first three years of implementation (2005-8)
- Dedicated telecare coordinators – NYCC had four coordinators in place to raise awareness, train and embed the new practices among staff
- Continuing to invest in telecare coordinators and equipment as a priority over the life of implementation
- Staff considering telecare in the first instance, as part of the initial package of care
- Performance management – with consideration of telecare issues a core part of supervision and appraisal
- Training – during 2008/9 in NYCC 4,595 multi-agency attendees received telecare training
- Good partnerships - with housing, police, fire & rescue and telecare providers

Telecare must form part of an effective, overall system in order to achieve cost savings for the council and to reduce residential and nursing placements. The right environment must be in place, including a range of commissioned alternatives to residential and nursing care.

The development of a new Telecare Strategy and establishment of TeleCareLine should therefore take full consideration of the following 5 elements.

### **1) Local leadership**

- Communicating a consistent message that Reablement and telecare “are a given” to stakeholders
- Designing and establishing an appropriate performance management regime and embedding it into “normal procedure”. This should include measurement of the positive impact of telecare
- Simplifying existing business processes so that telecare is integrated and easy to include in care packages

## **2) Gearing up for expansion**

- Projecting likely future numbers of applications and referrals for the telecare service
- Ensuring sufficient capacity is in place to meet demand

## **3) Embedding practices in the front line**

- Ensuring social care staff buy in to the benefits of telecare and are the greatest advocates for it, promoting it to service users and their families
- Develop an appropriate training course to introduce and enthuse staff to the capabilities and potential of the new services as well as cover the relevant processes for getting a service delivered
- Developing appropriate training and promotional collateral to support the training courses and the business processes that will be in place to deliver a service to a client

## **4) Working in partnership**

- Ensuring all organisations that work with older people and vulnerable people are knowledgeable and confident about telecare services so as to be able to recommend and endorse their use as part of an appropriate individual care package.
- Delivering specific management and front line training for partner organisations in the application of telecare on a day-to-day basis.

## **5) Increasing the number of self-funders accessing telecare**

- Building up awareness and demand for telecare through the development and execution of a comprehensive marketing and communications plan

## **8. Next steps**

The balance of evidence is strongly weighted in favour of expanding the telecare service, and there is a strong beneficial impact for residents that could be achieved through a free “offer”. Establishing a free offer through TeleCareLine would be in strong alignment with previous support offered to older and vulnerable residents through the Older and Disabled People’s Plans and the Leader’s Initiative. It is also aligned with the mission at the heart of the ASCHH BID Transformation Plan for residents to be able to live healthy, safe, independent lives in home of their choice through a fundamental shift in service provision away from institutional care and towards prevention and early intervention. This represents a very important opportunity, at a time of tightening budgets and of increasing demographic pressures.

Following agreement of the offer for TeleCareLine, a full implementation plan will be drawn up and project arrangements put in place to oversee the delivery of this wide-ranging programme of work. Monitoring and benefits realisation would be overseen via the Reablement BID MTFF project to deliver £3.5m in reduced spending on the commissioned social care services in the Private & Voluntary sector.

## Appendix 1 – British Telecare Case Studies

### Scottish Executive

The following slides summarise the findings of the Final Evaluation Report for the Scottish Executive of their Joint Improvement Team, (JIT), Telecare programme. The study was carried out by the York Health Economics Consortium. It can be accessed on the Scottish Executive website.

<http://www.jitscotland.org.uk/action-areas/telecare-in-scotland/telecare-publications/>

## Telecare in Scotland gives a 5 times return




Outcome	Minimum target for 2007-2010	Actual achieved Apr 07-Sep 07	Actual savings achieved Apr 07-Mar 08	
			Est monetary saving	
Hospital bed days saved by facilitating speedier hospital discharge	46,500	1,800	5,668 days 517 discharges	£1.7m 15.5%
Reduced unplanned hospital admissions - bed days saved	Info not avail	Info not avail	13,870 days 1220 admis	£3.34m 30%
Care home bed days saved by delaying people to enter care homes	225,000	6,900	61,993 days 518 admis	£3.42m 30.7%
Nights of sleepover care saved	46,000	1,250	Info not avail	£0.55m 5%
Home check visits saved	905,000	107,000	Info not avail	£1.79m 6.1%
Locally identified savings eg reduced waking nights	Info not avail	Info not avail		£0.30m 2.7%
<b>No. of TDP funded telecare users</b>	<b>13,505</b>	<b>6,005</b>	<b>7,902</b>	
<b>Estimated verifiable savings as a result of Scotland Telecare Dev Prog</b>	<b>£43m</b>	<b>£2.9m</b>	<b>£11.15m</b>	

York Health Economics Consortium at York University/Scottish Government Final Evaluation Report, Jan 09  
<http://www.jitscotland.org.uk/action-areas/telecare-in-scotland/telecare-publications/>



## Quality of life of users of telecare services



In terms of telecare's impact on specific aspects likely to affect users' quality of life:

- Over half (55.2%) of the respondents felt that their health had not changed, whilst slightly more than half of the other respondents (comprising 27.1% of the total) thought that their health had improved;
- Almost all (93.3%) respondents felt safer;
- Over two-thirds (69.7%) felt more independent;
- Very few (3.5%) felt lonelier;
- Four-fifths (82.3%) either "disagreed" or "strongly disagreed" that they felt more anxious and stressed;
- Most (87.2%) thought that their families now worried less about them;
- About two-fifths (40.8%) felt that their equipment had not affected the amount of help they needed from their family, whilst about one-third (32.8%) felt that they needed less help.

York Health Economics Consortium at York University/Scottish Government Final Evaluation Report, Jan 09  
<http://www.jitscotland.org.uk/action-areas/telecare-in-scotland/telecare-publications/>



## Reduced pressure on informal carers



- Three-quarters (74.3%) of the respondents felt that telecare equipment has reduced the pressures on them by reducing their stress levels
- Fewer than one-in-twenty (4.3%) felt that their stress levels had increased;
- Carers generally felt that the equipment gave them peace of mind as they worried less (e.g. about falls);
- They felt that people with learning disabilities could enjoy greater independence and that the equipment could enable people with dementia to remain living in the community for longer;
- Even if stress levels had fallen, several respondents highlighted that caring can still be very demanding and stressful (especially if the client will not use their equipment);
- However, many carers were very positive about the telecare service and also very grateful for it.

York Health Economics Consortium at York University/Scottish Government Final Evaluation Report, Jan 09  
<http://www.jitscotland.org.uk/action-areas/telecare-in-scotland/telecare-publications/>



## Evidence ensures mainstreaming of service



### BACKGROUND

- By 2020 there will be 50% more people over 65, 54% more people with dementia
- If the general model of social care service provision remains the same, by 2020 NYCC will need 3420 more domiciliary care packages and 1817 additional places in care homes at a cost increase of **£43m per annum** in real terms by 2020.

### OUTCOMES

- Two pilot projects in Selby district and Harrogate ran in 2005–2006.
- **From 42 clients on the pilot the cost comparison between a traditional package of care as compared with the package including telecare, produced a gross saving of £6,800 per person or a net saving £4,300 per person.**
- 21 people were diverted from residential care (including EMI placements) and were enabled to live independently in the community.
- Today, telecare is available for all individuals needing Adult and Community Services support as part of the range of mainstream personalised solutions to suit their individual circumstances.



## Cost Benefit Analysis – 2008 38% saving in care packages

- The last 138 people assessed for telecare during the period of Sept 2008 were analysed. Some people were new to ACS and some were pre-existing with traditional support
- 7 cases were disregarded as outliers as it was felt they skewed the data too favourably thus final total is 131 people analysed
- Traditional packages were either the support that had previously been received (if pre-existing case) or for support to new people was based on care manager's professional assessment of need if Telecare had not been available.

Service type	Traditional package			Actual package of care used including Telecare				Ave efficiency £
	Count of users	Annualised cost £	Traditional Ave cost £	annualised cost £	Telecare enhanced package Ave cost £	Variance £	% reduction in traditional package £	
Residential care	60	784775.16	13079.59	417511.19	6958.52	355053.06	45%	5917.55
Community Support	71	480024.46	6760.91	356336.33	5018.82	123688.13	26%	1742.09
<b>All packages</b>	<b>131</b>	<b>1264799.6</b>	<b>9654.96</b>	<b>773847.52</b>	<b>5907.23</b>	<b>478741.19</b>	<b>38%</b>	<b>3654.51</b>



## Telecare in NYCC at 30 June 08

- In NYCC PTG was £325k in year one and £546k in year 2, **totalling £871,000.**

### Telecare PTG Targets

- 1092 Older People to benefit from the use of Telecare by 31 March 08.
  - **1349 Actual achieved**
- 357 people aged 16+ who are helped to live independently at home for a period of at least 12 months and prevented from admission to residential care through assistive technology equipment (equates to 119 each year) to 2010.
  - **259 Actual achieved @ 30 June 08, above target set for 2008/09 of 238.**
- 11,683 expected users with Telecare Technology, Self Assessment Survey by 2010, (this includes Housing Provider Lifeline users)
  - **11,264 Actual achieved at 30 June 08**

## Satisfaction survey

- A Directorate survey carried out in Spring 2008 which had 96 respondents indicated the following outcomes.
  - 86% - Telecare has helped me to carry on living at home
  - 90% - Telecare equipment has given me more confidence/peace of mind
  - 95% - Telecare equipment has helped me to feel safer
  - 92% - Rated Telecare excellent or very good overall
  - 86% - Rated the assessment excellent or very good
  - 92% - Were happy with the installation
- Of the respondents, 80% lived alone and 45% were owner occupiers.

### Essex investment in telecare – offered free to everyone 85+

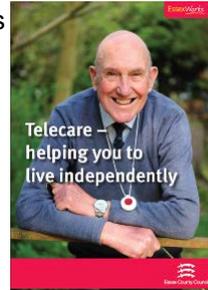


#### BACKGROUND

- The demographic trend is acute in Essex (Tendring area has **highest level of over 65s per capita** in Europe)
- This demand will require spend budgets to **rise by a factor of three** over next 10 yrs just to maintain services at current level. This is obviously not sustainable

#### OUTCOMES

- £87m worth of Public Pledges 2009-10 of which **£4m** is dedicated to telecare equipment and support.
- Ambitious Essex strategy offers **telecare free to everyone 85+** (33k people 85+)
- Currently 16,000 service users (@ Jun 09) across 9 Carelines
- Telecare supplement in Essex Works magazine promoting the offer, sent to 650,000 homes w/e 12.6.09



<http://www.essexcc.gov.uk/vip8/eccc/ECCWebsite/dis/guc.jsp?channelOid=71101&guideOid=93301&guideContentOid=71379>

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### Evaluation in Essex demonstrates significant savings



- An evaluation in Essex based on 240 users showed significant cost savings in care support services:
  - For all 240 sample users
    - For every £1 spent on telecare **£3.58** was saved in traditional care
  - For those users where telecare was a direct replacement for traditional care
    - For every £1 spent on telecare **£12.60** was saved in traditional care

\*real costs at time of commissioning



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### Evidence ensures mainstreaming of service



#### BACKGROUND

- 52% rise in 75+ and 76% rise in 85+ by 2025
- Dependency ratio set to fall to 3:1 by 2025 from 4:1
- Significant shortfall in both financial and human resources needed to provide support

#### OUTCOMES

- In May 2006 TeleG (Gloucestershire telecare project) was launched (PTG)
- Analysis of the two year project has revealed actual nett savings of
  - **£405,088** across 55 users
- Extrapolating these average savings, the external evaluator shows potential health and social care nett savings of
  - **£4.27 million** across 368 users
  - **£11.6 million** across 2000 users
- Initial contributions to mainstream the service (£810k) could be allocated pro rata 79% to Community adult care and 21% to health sector

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### Case study highlights

- Recommendation based on the evaluation report is for the Council and PCT to mainstream telecare
- 94% of service users feel telecare maintained/improved independence
- Telecare acts as triage for health, housing and social care
- Admissions to residential care prevented/delayed
- Home care and intermediate care costs reduced
- CSCI recommend greater use to be made of telecare

“The staff really believe in telecare because they’ve seen the benefits it brings to clients and their families. This means they work really hard to make the right equipment is provided at the right time.” Holly Gittings, Telecare Project Manager

CSCI = Commission for Social Care Inspection  
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# Background

- Telecare is seen as pivotal to achieving the goals of the Corporate Strategy and Local Public Service Agreement for Older People
  - Increasing number of older people being helped to live independently at home
  - Avoiding hospital admission and facilitating early discharge from hospital
  - Closer working between H&SC in order to deliver integrated care (eg Intermediate care, out of hours)
  - Increasing Extra Care Housing facilities

The Community & Adult Care Directorate views telecare as an efficient and flexible way to support and enhance the way of caring for local people.

## Outcomes:

### 1. Health Psychology Report

- 55 service users and carers were interviewed/surveyed
- The report concluded that telecare can provide cost effective interventions which are
  - Client centred
  - Supporting the delivery of strategic goals for both health and social care
  - Telecare has increased the independence, peace of mind and well-being for both users and families

**96%** - rated telecare as important or very important

**94%** - felt telecare service had maintained or improve their independence

**86%** - found the telecare improved their confidence

**73%** - of staff saw an increase in user's quality of life

## Outcomes: 2. External Evaluators Report

### Community care in Gloucestershire

- Gloucestershire sees an average of 550 new assessments every month, of which 240 eligible for domiciliary care
- Approx 50 new telecare users per month, 20% of which receive domiciliary care
- Therefore 9% of all new assessments receive telecare

### Evaluators conclusions

- It was necessary to mainstream the telecare service post PTG to 2000 users in 18 months
- Annual predicted costs - **£800k** approx
- Annual predicted savings - **£11,613,168.37**

“Telecare has succeeded in providing processes which are logical and have proved to be effective in offering a service to hundreds of vulnerable older people in Gloucestershire.”

## Outcomes: 3. Cost saving analysis

- GCC undertook its own review of cost savings generated over 2 yrs, based on data collected at initial assessment and again after 12 months
- 55 clients analysed so far
- Average nett savings to health per user = **£7871.79**
- Average nett savings to social care per users = **£13,292.37**

Breakdown of cost savings from 55 users	%	£ saving
<b>Social Care</b>		
Residential care	71	£198,189
Meals on Wheels	5	£ 13,957
Home Care	19	£ 53,036
Intermediate Care	5	£ 13,957
Total social care	100	£279,139
<b>Health</b>		
Ambulance Call Outs & Hospital Admissions	100	£125,949
<b>Total</b>		<b>£405,088</b>

## Evidence ensures mainstreaming of service



### BACKGROUND

- number of over 65s will increase by 46% by 2021
- 20% of the population report having a limiting long term condition

### OUTCOMES

- A draft evaluation was taken to the Adult Care Partnership Board which showed that total saving for 300 clients would be an estimated **£600k pa** from an investment of £258,980 over 2 yrs
- The 13 month pilot directly supported the mainstreaming of telecare services in Stockton
- 270 telecare users (defined as 2 or more pieces of equipment). In addition there are 4500 community alarm service users

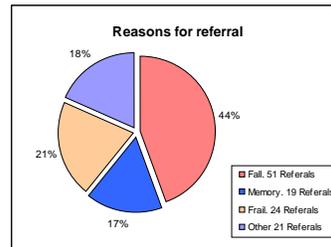


## Evaluation findings

### 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 client **wandered** with staff finding 30 of the clients. The other client was taken in by a neighbour and police contacted.



## 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 A&E attendance avoided/bed days saved

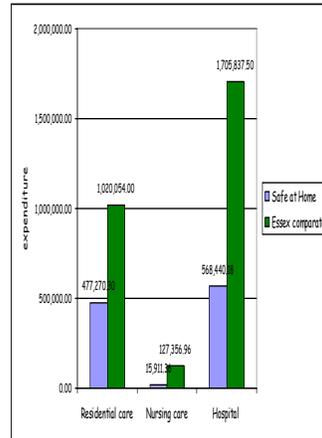
The key statistics when looking at this is the sensors detecting incidents early and making the service aware that there may be a problem.

- This is highlighted by the main key incidents of sensor activity.
  - 64 Clients found on the floor.
  - 31 Client Wandered 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 has occurred it could be assumed 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 call out. £158 is average cost of an ambulance call out.
  - £6,424 saving in A&E admission 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).

## Northamptonshire Safe at Home Dementia Project



- The project explores the use of telecare in the homes of people with dementia in Northamptonshire
- A published study compared results from the project in Northamptonshire with a control group from Essex. 6,100 older people with dementia
- The technology was found to be very reliable
- In all but one of the scored items carer stress scale score was lower (i.e. **the relative or carer was less stressed**)
- People in control group **4 times** more likely to leave community
- Net equivalent saving over 21 months was **£1,504,773**



<http://www.tunstall.co.uk/assets/literature/512-Dementia%20-%20Safe%20at%20Home%20-%20-%20Northamptonshire.pdf>



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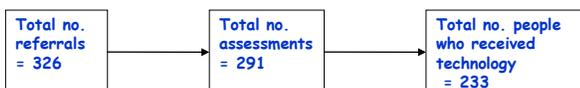
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### Safe at Home: methods



- Longitudinal design – 21 months
- Criteria for inclusion in evaluation:
  - met criteria for referral to project
  - permission given to use data for research purposes
- Control group from Essex social services to collect some outcome and cost data

## Safe at Home: methods



- Safe at Home service users and the control group were very well matched

	SAH User group (n= 233)	Comparator group (n= 173)
Mean age	80.2 (SD=7.97)	79.4 (SD=7.41)
Gender	M = 62 (27%)	M=48 (27%)
Ethnicity	White = 97% Asian/Asian British = 1% Black or Black British = 1% Chinese = <1%	White = 100%
Living alone	Y= 66%	Y= 40%
Diagnosis of dementia	Y= 90%	Y = 100%
Presence of unpaid carer	Y = 87%	Y = 94%
Mean MMSE	19.9 (SD= 6.07) (n=87)	18.9 (SD= 5.05)(n=93)

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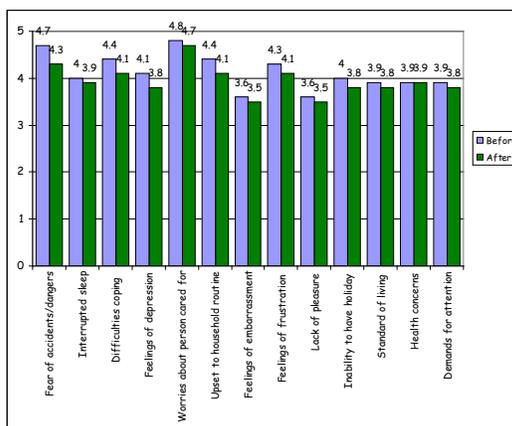
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## Safe at Home: Objective 2: The impact of the project on relatives and unpaid carers



- 123 relatives and carers were surveyed and 70% replied.
- A carer stress scale was used to measure the impact of the project.
- In all but one of the scored items the scale score was lower (i.e. the relative or carer was less stressed) after the project had provided technology.
- These changes in score were statistically significant in 9 of the 13 items on the scale ( $w=0.001$ )



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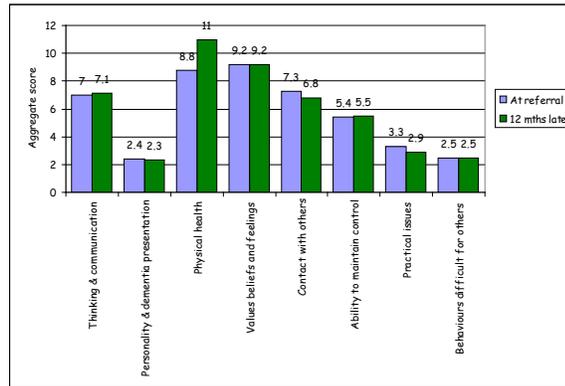


## Safe at Home

Objective 3: Extent to which project supported independent living



- Assessment score profiles for people at referral and 12 months later declined (i.e. showed evidence of slight improvement) in functioning on three of the eight sub-scales.
- All sub-scale scores were statistically significant ( $x^2 < 0.001$ )



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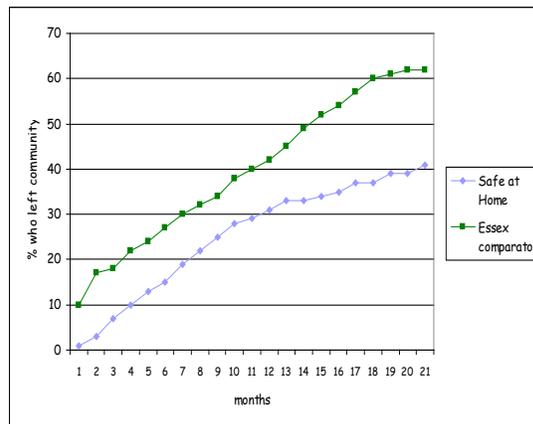


## Safe at Home

Objective 3: Extent to which project supported independent living



- A control group was used to compare the rates at which people left the community.
- People from the control group left the community sooner and in greater numbers: they were **four times more likely** to leave the community than Safe at Home users.



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