

## **AT Strategy Proposal – May 2010**

### **Summary**

- This is a proposal to introduce an Adult Social Care wide strategy to support the integration of assistive technology into support planning for vulnerable people.
- Assistive technology is (A.T.) is, “any item used to increase, maintain or improve the functional capabilities of individuals with cognitive, physical or communication disabilities” (Palmer, 2008). This includes telecare which is the use of monitors or sensors to alert a remote carer to an individual’s need. For further information on what this equipment is, please see the attached information sheets, “How can assistive technology help me?” and “Telecare Sensors”. A visit to a demonstration flat to see the equipment working can be arranged on request.
- Assistive technology has a prominent role in government agendas. Cheshire East has already developed some systems to support the use of some technologies. A recent procurement exercise has provided a substantial reduction in revenue costs and there are some options detailed regarding charging policy in respect of assistive technology including suspending charges to customers for telecare.
- Preventative agenda: assistive technology has the potential to raise the level at which some people need social care. Information for the general public is the key to assistive technology’s role in prevention and through development links with the third sector, this can be supported by the use of self-assessment and mediated assessments using internet based tools. This will link in to the Cheshire East Council’s Information Gateway.
- Reablement: technologies, such as the Just Checking lifestyle assessment system, can support effective assessment and prevent unnecessary admissions to care placements. Assistive technology can also support people to regain skills which can help them to remain in their own home and increase their independence. By providing telecare support before assessing for and allocating a budget for an individual’s personal support the council will reduce the amount spent on supporting vulnerable individuals. Assistive technology is already an integral part of reablement with benefits currently being realised by customers and commissioners.
- People requiring ongoing support can be assisted by technology, which reduces their dependence on physical support and can prevent the need for future support should their needs increase over time. For example, people requiring prompting to take their prescribed tablets may benefit from a medication dispenser. This would alert them at the exact time they need to take their medication, reduce the risk of

overdoses by limiting access to only the tablets that are due to be taken and alerts support staff if the dispenser is not used within a set period of medication being due.

- The main obstacle to integrating assistive technology into practice is knowledge and up to date information. Developing a dedicated assistive technology team, who would link into assessment teams directly, would help embed assistive technology into everyday practice. This approach, taken by a number of local authorities to date in the UK, would enable the council to maximise the benefits that assistive technology can bring to the local population and commissioners.
- The projected financial impact of the proposal is based on independently evaluated practice in the UK. Detailed figures are provided and a five year plan is provided which estimates that for an investment of £1,495,000 the savings realisation to local authority services would be £3,700,000. Cheshire East's own impact evaluation is underway.
- Joint working with health colleagues, other statutory services and the 3<sup>rd</sup> sector has the potential to bring a number of benefits to local people and the synergies for services as a whole are potentially significant. A good example of this is Telehealth, which has a growing evidence base with government currently supporting a number of pilot schemes in England. Rigorous evaluation by the Department of Health of 3 local authority wide pilot schemes is underway and due to be published later in the year. We will look to build upon initial discussions with health colleagues in the PCT and agree funding on an invest to save basis.

## Introduction

Across social services departments in the UK there has been a drive, (linked to a number of government agendas) towards the use of assistive technology to support people in their own homes. The basis of the agenda has been research in older people's services to suggest that the use of technology can enable people to stay outside of permanent care (Nursing or Residential Homes) for longer than if no equipment is used (for example; Woolham, 2006). There are three major positive aspects to such support for the use of assistive technology for older people:

- research suggests that people want to stay in their own home for as long as possible
- supporting people with technology is less costly than an admission into permanent care
- recruitment difficulties are managed as less staff-intensive support can be provided through the use of technology

To this end central government introduced the Preventative Technology Grant (PTG), which was rolled out to local authorities in 2006 (initially as a 2 year programme) to pump-prime the use of assistive technology and develop systems to support the provision of assistive technology for older and disabled people. This gave local authorities the opportunity to test the premise that assistive technology could improve services, support people in their desire to remain in their own homes, and save money, without having to remove resources from already overstretched budgets.

Cheshire County Council took up this challenge and used telecare in services for people aged 65 and older. As part of social care redesign in Cheshire East assistive technology is now available to all customers of the council aged over 18. The evaluation of the work in Cheshire supported the premise that assistive technology is effective at keeping people independent at home and has proved popular with carers (Cheshire County Council Telecare Newsletter February 2008). It was decided in 2006 that the PTG should be used solely for those over 65 years, due to the performance indicators that were associated with the use of the grant monies relating to 'older people'. The decision not to include under-65s was not universally made in other local authorities.

Within local authority-run learning disability services in Cheshire, assistive technology was introduced early in 2006 in a pilot scheme and then rolled out countywide following positive outcomes and evaluation of the work. Although this work within learning disability services represents one of very few examples where assistive technology has been successfully implemented, there has been long standing government support for the idea: Ivan Lewis (Minister for Care Services) stated that assistive technology is important in "meeting the aspirations and demands of people with learning disabilities" when launching Advance Housing's (2007) Report, "Gadgets, Gizmos and Gaining Independence".

An evidence base for the use of assistive technology to support vulnerable people is evolving gradually, and the systems through which technology can be integrated into social care are beginning to develop in the light of the ongoing research and evaluations of pilot schemes.

The recent Department of Health publication [Use of Resources in Adult Social Care: A guide for local authorities](#) cited [North Yorkshire County Council](#) as an example of good practice in telecare; they estimate that where telecare is used there is a 38% reduction in the care package costs saving £1.1 million in social care costs among 330 people. A report, [Telecare: a crucial opportunity to help save our health and social care system](#) (published by the University of Leeds in August 2009) with a foreword by Andrew Lansley CBE MP the then Shadow Secretary of State for Health concluded there is a compelling case for further investment in telecare, “It (telecare) *can* be investment to save. It *can* eliminate common risks to health and wellbeing. It *can* enhance the quality of life. **It *should* be a simple decision**”.

The potential of this technology appears to be greater than the current level of commissioning. Only 7% of customers with a social care package, living in their own home have telecare installed at present. The barriers to further take up of technology amongst vulnerable people in Cheshire East are to do with knowledge amongst commissioning and provider staff, customers and carers. With increased awareness, information and assessment skill the impact and the benefits can be substantial to all stakeholders.

In contrast, Essex County Council has 16,000 telecare users (7% of the total population aged 65 and over) and its [evaluation](#) states that for every £1 spent on telecare £3.82 is saved on traditional support and where telecare can replace services the saving rises to £12.60 based on every £1 spent.

### Current Telecare Service in Cheshire East

The existing telecare service is available to all customers aged over 18. In line with equipment provision under the [Chronically Sick and Disabled Persons Act 1970](#) the telecare equipment itself is provided free of charge. There is a charge to customers receiving the telecare service which relates to the monitoring of the sensors by the call centre and the availability of responders to visit people in their homes within 60 minutes of an alert, 24 hours per day 365 days per year. The current charge is £9.81 per week which customers are financially assessed for.

Telecare monitoring and response is available at no charge to customers receiving intermediate care (this is a 6 week limited service).

There is a list of equipment that care managers and occupational therapists can select based on their assessment of an individual.

Assessors have a basic 2 hour training session in one of the demonstration flats and have some information to refer back to in their work. There is a telecare element to the training programme for reablement workers, raising their awareness of the issues and encouraging them to consider technological solutions to assessed needs.

Customers are set up with a lifeline unit which is connected to the telephone line, the appropriate sensors are installed and a keysafe unit is provided so that responders have access to the property in an emergency. There are approximately 260 telecare installations in Cheshire East at present.

Supporting People funding currently supplies telecare connections with a pendant alarm to around 1500 vulnerable people who pay rent to registered social landlords in Cheshire East. These units are not compatible with some of the additional telecare sensors and functions. Where a customer has one of these lifeline connections but requires additional sensors the system needs to be changed through assessment with a new lifeline unit and keysafe arrangement being put in place.

### Reprocurement

Cheshire East Council has recently undertaken a telecare procurement exercise. All telecare equipment is provided to those customers who have critical and substantial needs at no cost and there is no charge to that individual for the installation, maintenance or withdrawal of the equipment. This policy is under pinned by legislation (Chronically Sick and Disabled Person's Act, 1970). Under the current contract customers are financially assessed for a weekly charge (£9.71) which relates to the link from telecare equipment to the call centre and the availability of a worker to visit them (within an hour of an alert) in their home if this is required. Cheshire East pays this £9.71 per week to the contracted provider for each lifeline unit in a person's home, irrespective of the number of sensors linked up the lifeline unit. The only exception to this charging policy is people who have telecare support provided under intermediate care are not charged at all for as long as they are supported through intermediate care (up to six weeks) for this service.

The recent reprocurement exercise sought to consolidate the number of providers of telecare (from 3 currently) allowing that organisation to develop economies of scale and to ensure equity of service across the council area as the service develops further as well as ensuring best value for Cheshire East as a commissioner and for our customers. Under the proposed new contract (starting in July) there will be one provider for the Cheshire East area and the charge for the monitoring and response service will reduce significantly to £1.05 per week, a reduction of £8.66 per week, just under 90% of the current price.

This reduction in cost provides a number of options for charging in the future:

- Continue to charge out to customers the full cost of monitoring and response through telecare (the council currently raises approximately a third of this cost through its fairer charging policy). Given the amount involved the process of administering the charge will be close and may exceed the amount gained from charging.
- Suspend the charge for telecare monitoring and response. It is anticipated that this policy would lead to a greater uptake of telecare services (including cost of additional equipment and installation charges), but this would be affordable under the current yearly spend on telecare. Additionally, as investing in telecare use brings cost avoidance benefit to the council as a commissioner of social care, offering telecare at no charge would represent an investment in respect of social care services as a whole rather than just a cost. Suspending a charge for an emerging high profile service would also be a 'good news story' for citizens of Cheshire East; evidencing the council's commitment to supporting vulnerable people to remain in their own home and supporting citizens at a time of financial stress for many.
- Suspend the charge for telecare monitoring and response for specific time periods or services. Offering a free service through reablement would link into the offer of domiciliary support which is offered free of charge for up to 6 weeks. Telecare monitoring and response could be offered free of charge to all customers for a set period (for example, 6 weeks from the start of their service) irrespective of whether they are accessing reablement. This approach would encourage uptake of telecare (which brings its own benefits to customers and commissioners) and would be affordable within the current spending on telecare.

The new contract includes support for a number of new pieces of assistive technology equipment that will assist carers in particular.

Beyond the 3 year contract (July 2013 onwards) the costs of telecare provision may rise so any Cheshire East policy position would need to ensure that the council retained the option of charging for this service.

Equipment is procured through the national Buying Solutions framework agreement for telecare. This joint NHS and local authority organisation ensures best value pricing for telecare products.

## Prevention

Prevention has, over the last few years, become a major part of the government's agenda for social care. The Putting People First Concordat (2007) emphasised the move towards personalisation and asserted that, "telecare to be viewed as integral not marginal". 'Putting People First - the whole story' (DH, 2008) followed this up with an emphasis on universal services and prevention, moving away from the focus on eligibility criteria. The use of assistive technology (which includes, but is not limited to telecare) has been shown to prevent or delay the need for support and care from services (evidenced in evaluations of assistive technology initiatives in West Lothian, Northamptonshire, Northern Ireland, Aberdeenshire and others) and therefore is valuable as an integral part of services available to everyone.

The increasing number of older people is forecast to put serious pressures on care services in the future. In Cheshire, the number of people over 65 is set to increase by over 20% by 2015 and those over 85 is forecast to increase by more than 27% in the same period. Whilst the predicted increased need in learning and physical disabilities and mental health needs is less severe, numbers are projected to increase. Investing in preventative measures is one way of softening the impact of these demographic changes whilst raising the quality of life of people in the local area as a whole. Assistive technology can raise the level at which some people need physical support from others and will work as part of an integrated package of services to support individuals with greater needs.

The key to engaging people with technology that will help them maintain their independence is providing knowledge about what is available. There have been a number of initiatives in the UK looking to give the general public information about assistive technology and access to technology which may increase independence, reduce reliance on others and avoid the need for people to receive personal care services. For example, in Leicestershire the Signal project (a multi agency project led by the local authority and Age Concern) fitted a bus out with various assistive technologies, which then toured market places, shopping centres and community centres. By marketing these visits, the project gave people the opportunity to see equipment at first hand without specifically seeking it out or speaking to the social services department. People visiting the bus were given information about where they could buy the equipment and contact numbers for further information and advice. Within Leicester City Council, social services and libraries combined forces to sell a number of free standing pieces of assistive technology at the issue counter in the city council's libraries.

In Cheshire East the roll out of Independent Living Centres provides an opportunity to showcase, assess for, and through the linked retail outlets sell assistive technology, sitting alongside their role in exhibiting more equipment that may increase independence and mobility. Exhibiting assistive technology products, with expertise available on site, will increase knowledge and uptake of products that meet preventative goals with a small investment from the

social care budget. People will pay for the equipment themselves and remain outside of the authority's community services department, whilst having a route into further support and assessment if this is required.

An extension of this work would be a web-based assessment, which would be able to recommend assistive technology as well as other equipment aimed at making everyday living easier. One such product is ADL Smartcare: this has a self assessment module enabling people to go online, assess themselves with regard to particular activities, and follow links to purchase equipment that has been recommended. Cheshire Peaks and Plains Housing Trust have developed a self assessment computer programme for assistive technology which is available in a number of languages and has a touch screen option.

A number of local authorities use the ADL Smartcare product with positive results. For example, Birmingham City Council have purchased a licence agreement following a trial and evaluation that found, compared to an Occupational Therapist's assessment, that the tool produced an exact match outcome in 39% of cases and a partial match in 10% of cases. In a further 21% of cases there was a recommendation that the user seeks a professional assessment, and of the remaining 30% none of the recommendations put users at risk and provide generally appropriate outcomes. There is currently a larger scale evaluation of the tool being undertaken at Manchester University.

A web-based tool could be made available from a link on the local authority website, and for people without access to the internet at home, ILCs and library and other council internet access points could be used to access an assessment. For those people who do not have friends or relatives to assist them with an assessment and are not able to access a computer in their locality, a link with a third sector organisation could develop a mobile assessment service using a laptop for a modest financial outlay.

Working in partnership with other statutory agencies as well as the third sector may have preventative value. For example, Cheshire's Fire Service provides free smoke alarms to any property (calling door to door) and identify people who are over 65 and at risk of falls or needing social care intervention to Age Concern 'Safe at Home' scheme. They are able to provide leaflets and limited services as part of their Supporting You service. However, they would be able to refer people for an online assessment. There are many other agencies (acute and primary care trusts, police, housing services, etc.) that come into contact with members of the public, some of whom may benefit from the opportunity to complete a self assessment and discover products which could improve their daily lives. Such a consortium approach is underway in Staffordshire, where a number of agencies are able to pass on basic referrals to each other, with a focus on prevention of future health and social care needs. Staffordshire County Council are investigating a tool developed by the Kings College London which is able to identify those most at risk of intensive health and social care interventions, enabling services to focus their efforts where they will be most effective.



The potentially rich information from any online assessments would be available to community services, and represents something of much greater depth and value than the information currently used as the basis for the prediction of need. The data could be used to inform future planning and commissioning decisions, enabling longer term planning with increased confidence.

Links are planned with representatives from third sector organisations and customers. With information and training provided to these groups, they will be in a position to inform others and advocate for the increased use assistive technology. New accessible information is being produced for customers, carers and other professionals which will tie in with the new contract provider.

The impact of such a preventative approach would be shared by health colleagues as well as community services. An approach in tandem with health services would result in reductions in admissions to A&E, non-elective surgery, as well as reduced pressure on GPs' and district nurses' time. Falls and health conditions generally have an impact on social care services too and prevention would be positive for community services as well, not to mention the population as a whole. Telecare has been identified as a priority for the NHS as part of fall prevention strategies in the NHS Operating Framework Prevention Package for Older People, so there may be potential to share some of the costs associated with this approach with health colleagues.

Measuring the impact of a preventative approach is difficult and putting a cost saving along side this is even more complex. A long term evaluation consisting of an analysis of the rate of referrals to social care services, adjusted for the changing demography would be revealing. A 'Social Return on Investment' model may be a more sophisticated approach to evaluating the costs and benefits of such an approach. Examples of some outcome measures might be the number of people over 65 presenting at A&E or having unplanned surgery as a result of a fall would be another appropriate measure. Both of these outcomes can be measured in terms of service impact as well as in terms of their impact on individual lives.

Bradford Metropolitan District Council's investment in the ADL Smartcare product has resulted in a 60% saving on the costs of Occupational Therapy assessment by using Social Care Advisors, who have used the product (under the guidance of an Occupational Therapist) to assess individuals and, where appropriate, provide equipment. Lincolnshire County Council have taken a similar path using the ADL Smartcare product and their waiting list for assessment and equipment has been considerably reduced following this implementation.

The **potential annual costs** of this approach for Cheshire East would be:

Subscription to ADL Smartcare	<b>£10,000</b> (per year)
Training for third sector partners to assist with assessment	<b>£1,000</b>
0.5 WTE assessment facilitator (?employed by third sector)	<b>£10,000</b> (per year)
Computer equipment to support on line assessment	<b>£3,000</b>
0.1 WTE (1/2 day 'surgery' every week at alternate venues) assistive technology assessor for surgeries based in ILCs	<b>£4,000</b> (per year)
Total	<b>£28,000</b>

The potential impact on OT assessments has not been factored in: there have been initial discussions with the OT service about how the integration of such a product into their own assessment system might work.

## **Reablement**

The reablement approach is defined by the Department of Health as “re-abling people so that they achieve their potential in terms of a stable level of independence with the lowest appropriate level of ongoing support or care.” The plan to expand the reablement approach alongside intermediate care services in Cheshire East to all adult care is an opportunity to draw further benefit from the use of assistive technology. A period of reablement provides an opportunity to further assess the needs that an individual has, support him or her to regain abilities and develop a robust plan of care that will provide the ongoing support that that person really needs. Technology supports all three of these aims and can reduce the need for direct support to be provided for specific tasks or for a ‘just in case’ risk management approach.

## **Assessment**

Lifestyle monitoring systems (such as the Just Checking system) inform an in depth assessment of an individual’s needs; identifying issues or risks over a 24 hour period, enabling support plans to target care where and when it is needed, and providing a baseline of activity for review in the future.

Staffordshire County Council looked at the increasing number of people with dementia who were keen to stay in their own home. Alongside this aim they saw that new solutions would be needed to take the pressure off home care budgets, residential placements, carers, and to prevent hospital admissions. They invested in 12 Just Checking systems for assessment purposes and a Department of Health evaluation of their set-up in 2008 found positive outcomes. 21 cases were evaluated that were Critical and Substantial (generally they were referred for residential care) and following assessment from the monitoring system, 8 were more accurately reassessed within a lower category of risk than had been initially identified. 13 were able to remain at home: this carries notional savings from the proposed Residential Care placement. Each Just Checking system costs just under £800 per year to purchase and run.

An alternative package to a permanent care placement, following a Just Checking assessment might be:

3 daily calls at £12 an hour

7 days a week costing £252

2 days at day services approximately £25 a day

Total £302 (£148 a week notional saving over a £450 per week placement)

When multiplied by the 70% (13 of 21) of the total group then the impact could be hugely significant. The other 8 had their admission to registered care delayed by 8 weeks with associated savings. Mapping this experience into Cheshire East, of those 21 people the savings would be upwards of £100,000 per year after charging is taken into account. 21 assessments is a conservative estimate of what 2 Just Checking systems could do in a year. The following link provides a Local Gov TV presentation regarding this initiative: <http://www.justchecking.co.uk/media/tv/staffordshire.asp>

A number of local authorities (for example; Birmingham and Manchester City Councils) use the equipment systematically in their authorisation process; people who have been assessed as needing a permanent 24 hour placement are expected to have had a Just Checking assessment prior to requesting authorisation.

### **Support to regain abilities**

Technology can enable people to regain control over aspects of life that they had lost. For example, with the support of a lifeline based bogus caller system, someone with reduced confidence or cognition can take charge of opening their front door, making their own decisions about who they let in. A video doorbell can give people with reduced mobility similar control over who they let into their home, rather than leaving the door on the latch or giving other people keys. Medication reminders and dispensers can give people back control over their own medication.

A review and evaluation of the use of medication dispensers undertaken by the University of Birmingham evidenced a number of positive outcomes associated with the use of dispensers, suggesting that the benefits are greatest for people with dementia. Based on data collected in Worcestershire, the review was able to forecast net savings of between £236 and £4,592 in care costs per service user. The work reports slightly less robust data for Sandwell, which gave a notional saving of £142,950 per year, based on 82 service users avoiding home care visits and care home admission. There are advanced meetings taking place with the Co-op Pharmacy chain to develop a robust medication dispenser service which is open to all customers of the council via social care assessment. A Cheshire East wide pilot scheme is currently proposed with a view to rolling out the service in 2011.

### **Ongoing support**

People with a diagnosis of dementia can continue to live at home where the risk of them leaving the property without support has been identified, using memo minders (to remind them not to leave the house without support) or door sensors (to alert a nominated carer to respond). People at risk of falls can continue to choose to live alone, with risks being managed by sensors that will produce emergency alerts should someone fall.

Research from the University of Reading looked at the costs of substituting care with assistive technology for older people and found that this is a cost effective approach. Whilst the replacement of care with technology is controversial and has ethical aspects which need strong consideration based on individual circumstances, the research found that savings associated with this approach, "can often fund the provision of a maximum AT package that includes non-essential AT to enhance quality of life." This indicates that genuine notional savings can be achieved using AT to support vulnerable people in Cheshire. Aberdeenshire's (2008) evaluation (which was completed by Robert Gordon University) reported a 14 month saving of £301,600 on reduced use of home care, based on an investment of £172,263.46 (£85,198.46 equipment and installation & £97,065 project management costs).

## **Links with Supporting People funded Telecare Support**

Cheshire East's Supporting People team is, in line with recent government policy, in the process of requesting the disaggregation of community alarm costs from its total allocation to housing providers. This will provide an opportunity in the future to link these connections with the provision of assistive technology in health and social care within Cheshire East. In the intervening time staff working on assistive technology will share information with Supporting People staff to ensure our strategies develop in tandem.

## **The assistive technology strategy has strong links with and is integral to a number of other strategies in Cheshire East:**

**Dementia Strategy** – The project manager for assistive technology has been heavily involved in the development of the Dementia Strategy facilitated by CSED at the Department of Health. There are a number of strands of assistive technology that are particularly appropriate for people with a diagnosis of dementia.

Money has been secured to provide equipment for a demonstration lounge at the new dementia respite facility in Crewe. People with a diagnosis of dementia and their carers will be able to have a demonstration of the equipment as well as being able to try it out, the aim being to encourage them to use equipment in their own homes.

A recent development is that pager systems are now an option for carers supporting people in their own home. For example; a man with dementia who is at risk of falls due to disorientation at night time has a sensor alerting his carer who sleeps in the room next door that he is out of bed. This has enabled the carer to improve the amount and quality of their sleep as they do not have to have 'one eye open' in case the cared for person gets out of bed.

A lifestyle monitoring system is available for any customer where there are concerns about the levels of activity (particularly at night time) in their home. Care managers have online access to the charts produced and the result has often been that the vulnerable person is safe to remain in their own home and does therefore not need to move out into more expensive residential or nursing care.

**Carers Strategy** – a recent evaluation of the impact of telecare installations on carers in Scotland '[A Weight off my Mind](#)', found that all the carers found that telecare had a positive effect on their lives in respect of their caring role and had even enabled some carers to remain in employment. Within Cheshire East any customer living in the community can have telecare which is linked into a 24 hour, 365 day a year response service. This enables some carers to step back from their caring role in the knowledge that a

service is in place which will address any emergencies promptly (within 1 hour currently, this will shortly be reduced to within 45 minutes), day or night. When a customer is provided with a lifestyle monitoring system carers are generally given online access to the charts produced and the result has often been a reduction in their stress levels, with people being reassured that their family member or friend is safe and they are able to focus their visits on spending quality time with their loved one rather than needing to frequently check that they are ok.

**Palliative Strategy** – at present palliative social workers need to refer to the council to access assistive technology support for the people they are supporting. With suitable training and set protocols this process can be changed so that palliative social workers can have direct access to assistive technologies; reducing the workload for community teams and providing more responsive services to customers.

**Learning Disability Strategy** – Cheshire East has successfully introduced assistive technology into its own support services for people with learning disabilities and a number of individual support packages. Through an integrated approach to assessment and support planning Cheshire East has been able to support the outcomes an individual wishes to achieve through a combination of assistive technology and staff support, with an appropriate response to an alert, triggered by the technology, being a crucial aspect of measuring success. A proposal has been developed for a worker to support the further assistive technology developments in learning disability services, linking in to the current project team working on learning disability packages under Jacqui Evans.

**Domestic Violence Strategy** – there is potential for assistive technology to provide improved risk management for people supported through Cheshire East's Domestic Violence Strategy which is under discussion at present. This [paper](#) from the Journal of Assistive Technologies highlights some of the possibilities.

**Falls Strategy** – falls are a major issue for both health and social care services, which is increasing as demography of Cheshire east evolves. The number of people who are predicted to attend Accident and Emergency departments in Cheshire East as a result of a fall in the next 15 years is due to rise by 56% (POPPI data; [www.dh.gov.uk](http://www.dh.gov.uk)). Assistive technology has a role in falls management and there are discussions taking place around targeting people with packages of assistive technology (falls detectors, bed sensors, and movement detectors) who are evaluated as being at risk of falls and associated complications through the Wilmslow Group, led by the PCT.

**Children's Service & Transition Strategy** – assistive technology is not currently used in children's services, and this group is missing out on some positive outcomes for people and commissioners of services. As children with disabilities come through transition the package handed over to adult services should be more cost effective if assistive technology has been introduced at an earlier stage.

## **Operational Assistive Technology Strategy**

A strategy that systematically provides ready access to these (and other) technologies can bring benefits to service users, carers and local authority budget holders. Therefore RAS allocations and individual budgets need to take account of assistive technology, with strong efforts being made to assert the value of such technology to service users, carers and care managers/brokers who can be initially sceptical.

There is a policy decision to be made if individual budgets are allocated based on the assessed use of assistive technology; should customers be allocated funds to buy the equipment themselves or should equipment be purchased for them separately, with a budget allocated alongside the provision of technology. The latter option may be most effective initially, given the lack of knowledge amongst many stakeholders, with a longer term aim of informing customers so that in the future they are able to purchase equipment from their allocations themselves.

The assessment for assistive technology is crucial in obtaining the best outcomes from the use of technology. Within older people's services care managers and occupational therapists have received some training on the specific telecare equipment (limited to one manufacturer) offered through the existing Cheshire Telecare contract and will refer service users to the housing trusts (who fit the equipment) with recommendations for equipment required. The housing trust workers then visit the service user (sometimes with the care manager) and assess them and their property with regard to the equipment available (for which Cheshire East pays them a fee). This can result in telecare existing alongside the care plan rather than as an integral part of it, people being assessed for equipment (by people with no specific social care training) rather than having their needs met and risks managed, and there is potential for over-provision as the payment structure for the housing trusts is based on how much equipment they fit.

In the learning disability service, before the reorganisation of Cheshire's local authorities, a project officer (who is a qualified social worker) assessed people, linking with the care manager, for assistive technology. The project officer had a broad range of equipment that he was able to draw on to offer bespoke solutions for individuals. Connections to call centres were arranged where necessary and connections could be set up to link to other phone numbers (e.g. mobile phones, pagers, etc). This style of approach has proved to be successful both in terms of benefits to people with learning disabilities and budget savings. A Department of Health evaluation of the work in learning disability services in Cheshire (which is about to be published) identified positive outcomes of this model, both in terms of outcomes for service users and savings. Annual revenue savings of £404,000 resulted from an annual investment of £100,800. The savings include cashable savings resulting from a review of current provision, although this level of cashable savings is not expected to continue once reviews have been completed.

Many other local authorities and PCTs (Cambridgeshire, Coventry, Norfolk, Leicester City, Leicestershire, Northamptonshire and Aberdeenshire) have a specific Assistive Technology Team which assesses and provides equipment to service users in the area. This approach encourages assessors to develop their knowledge of available technology in a rapidly changing marketplace as there is no need to provide a menu of equipment which the local authority is prepared to fund. Decisions can be made on a case by case basis, depending on the benefits to the user and cost effectiveness of the solution. This expertise is developed within the authority and can be spread to care managers through ongoing information and training, improving their practice and knowledge. Tighter control can be kept on the budget for assistive technology, and the costs and administration involved in paying outside agencies for this work is reduced. The assessors also have a responsibility to keep up to date with the rapidly evolving technology (and evidence associated with it) to ensure the best outcomes for service users and commissioners. This arrangement encourages innovation in a developing field, rather than setting limits to the technology that can be used by outside agencies.

Having workers within individual commissioning teams with a specific assistive technology focus may be more flexible and bring benefits when compared with the current arrangements. However, the long term aim should be to embed consideration of assistive technology into care managers' practice. Kent County Council have adopted this strategy, using project officers within care management teams to inform and develop practice around assistive technology, whilst maintaining the long term aim of care managers being able to effectively assess people with regard to assistive technology in the future. Internet access to the ADL Smartcare tool for care managers would also support this aim, bringing together preventative and active strategies to support vulnerable people.

The current situation where only a project and performance manager is in post, limits the impact that assistive technology can have. Additional staff will be able to cascade information and new technological developments to individual commissioning staff, take on assessments for technology with colleagues in provider services (including reablement) as well as in individual commissioning and develop links with colleagues outside Cheshire East (for example, health and the third sector).

The **potential annual costs** of this approach for the council would be:

1 FTE Project & Performance Manager	<b>£45,000</b>
2 FTE Assistive Technology assessors @ Grade 8 ( <b>additional</b> )	<b>£73,000</b>
1 FTE Administrative Support @ grade 3 ( <b>additional</b> )	<b>£18,000</b>
Training budget for AT	<b>£5,000</b>
Computer equipment to support assessment & programming	<b>£3,000</b>
5 Just Checking systems & web subscription	<b>£7,000</b>
100 medication dispensers	<b>£20,000</b>



Assistive technology equipment	<b>£100,000</b>
Preventative Strategy Total <b>(additional)</b>	<b>£28,000</b>
Total (of which <b>£119,000 is additional funding</b> )	<b>£299,000</b>

**Potential revenue savings** would be (total year 1 benefits accrued in year 2):

Just Checking use (based on Dept of Health Staffs evaluation data)	<b>£250,000</b>
Med Dispenser use(based on 100 service users saving £500 per person; conservative estimate based on University of Birmingham evaluation)	<b>£50,000</b>
Assistive technology equipment use in older people's services (based on £60,000 spent & Aberdeenshire evaluation data)	<b>£105,000</b>
Assistive technology equipment use in learning disability services (based on £40,000 spent & Cheshire's Dept of Health evaluation)	<b>£108,000</b>
Unknown potential value of a preventative approach (to be evaluated)	<b>£?</b>
<b>TOTAL</b>	<b>£513,000+</b>

Projecting these figures over a 5 year period and taking a conservative approximation that savings associated with older people will end, on average, after a full financial year, the **total spend will be £1,495,000** and the **savings realisation would be £3,700,000**.

## Evaluation

The evaluation of the impact that assistive technology has had within Cheshire East to date has been positive. The majority of carers surveyed in 2008 reported that they valued the service, felt that telecare had helped keep the person they were caring for at home for longer and believed that it provided independence. A number of case studies have been compiled which illustrate both the value to individuals in terms of independence and to the authority as a commissioner, in terms of money committed to support vulnerable people.

A more systematic approach to measuring the benefits has been adopted as part of the reablement evaluation. This system is currently being refined to take account of the financial impact of assistive technology only by using the resource allocation system as a base. Additionally, in the future referrers will be asked what the impact on the individual and the support package would be if assistive technology was not available. The aim of this work is to enable commissioners to put a value on technology in the context of support to inform future commissioning decisions. For example; Essex County Council believes that for every £1 they spend on telecare they save at least £3.82.

## **Telehealth**

Telehealth is the delivery of health-related services and information via telecommunications technologies. Practically this involves patients having equipment in their home which they (or a carer) use to take readings (such as blood sugars, oxygen saturation and blood pressure) which are then transmitted via a phone line to a call centre. The call centre has preset acceptable parameters for each reading (arranged for individuals by their health professional) and will produce an alert when the readings fall outside of the preset limits. The nominated health professional (normally a community nurse) is then contacted and will make the appropriate intervention.

Kent County Council have invested heavily in Telehealth equipment and systems; they have taken the view that the investment benefits social care as well as health services – strong links between health and social care agencies was found to be essential and led to positive outcomes for both service users and commissioners. There were substantial savings for health; there was more than a 75% reduction in acute care costs over a 6 month period. There are three Whole System Demonstrator Projects funded through the Department of Health in Kent, Newham and Cornwall which will provide robust evidence on all the outcomes associated with the use of Telehealth technologies. The Department of Health is piloting individual health budgets in a number of sites across the country and this could in the future be compatible with local authority individual allocations and be spent jointly on services such as Telehealth. There have been small scale pilots to date in Cheshire (Chester and Vale Royal areas) which have been broadly positive and set the scene for what is possible given an ongoing commitment to Telehealth.

