NHS Cambridgeshire

Cambridgeshire County Council


# Shaping *our* Future:

# Assistive Technology Strategy 2012 - 2014

## Contents



*'If a drug was discovered with a similar cost profile (as assistive technology) it would be hailed the wonder drug of the age'.*
(Audit Commission, 2000)

# Executive Summary

The Assistive Technology Strategy sets out the commissioning intentions for the next two years in relation to the development and provision of all aspects of Assistive Technology (AT) to the people of Cambridgeshire.

Within the Cambridgeshire Health and Social Care system, AT encompasses a range of health and social care equipment, devices and systems that are available to people to support them to remain as independent as possible in the community. These include:

- Telecare & telehealth equipment
- Wheelchairs and specialist seating
- Daily living equipment
- Housing adaptations
- Equipment for people with visual and hearing impairment
- Communication aids
- Environmental Control Systems
- Orthotics and Prosthetics
- Equipment for Continuing Health Care

AT excludes specialist medical and nursing equipment, for example, continence products, syringe drivers, oxygen equipment and any other equipment that requires a prescription.

The development of the strategy has involved representatives from Cambridgeshire County Council, NHS Cambridgeshire, Cambridgeshire Community Services, District Councils, service users and carers.

**The Vision**

That people are able to access assistive technology, alongside other aspects of health and social care to enable them to remain living as independently as possible within the home of their choice.

This means that AT should:

- Be inclusive of all ages
- Be embedded in every pathway of care
- Offer individual solutions for individual needs
- Include simple self management systems through to integrated multi-technologies
- Offer opportunities for avoided costs
- Be equitable in terms of criteria for provision
- Integrated and coordinated in the approach to provision

The provision of AT is seen as fundamental in contributing to the prevention agenda through:

- Avoiding unnecessary hospital admissions
- Avoiding delayed transfers of care

- Supporting early discharge from hospital
- Promoting self management, independence and living at home
- Supporting carers
- Postponing the need for care packages and placement in care homes

**The Strategic Framework**

Both national and local policy frameworks support and encourage developments in making AT more available to the wider population as a way of enabling people to stay in their own homes for as long as possible. As a result of recognized demographic changes, it is anticipated that the market for AT is likely to grow by around 40% over the next ten years.

A number of key national strategies identify the importance of the provision of AT and these include:

- National Service Frameworks
- Our Health Our Care Our Say
- Equity & Excellence: Liberating the NHS
- Putting People First
- Living Well with Dementia
- National Strategy for Carers at the Heart of 21st Century Families & Communities
- Lifetime Homes Lifetime Neighbourhoods
- Joint Strategic Needs Assessment for Cambridgeshire

In addition to national policies, a number of pieces of research have been conducted into the benefits of AT across the health, housing and social care sectors and these studies are summarized within the strategy.

Key messages from these studies indicate that:

- The greatest benefit comes from focusing on individuals with the most complex needs
- The effective sharing of information between telehealthcare monitoring, GP records, community health and social care services, monitoring call centres, out of hours services and ambulance services is fundamental to achieving benefits
- AT needs to be integral to all pathways of care
- The greatest savings are achieved where informal carers are enabled by AT to manage without the need for overnight professional carers
- Savings are achieved in costs of residential care where the investment in AT to facilitate independent living can pay for itself in twelve months
- The use of telehealth equipment can significantly reduce hospital admissions and promote better medicine management
- The use of AT is effective in reducing falls
- The most consistent outcome of housing interventions is improved mental health

Locally, a needs analysis undertaken within Adult Social Care found that:

- Older people's knowledge and understanding of sheltered housing and

telecare is limited
- A large number of queries received by Age UK are about equipment
- Users of Sense East requested more information on technology
- Cambs LINk reported that people want information about buying their own equipment but reported 'bad selling' by retailers.

**Commissioning AT Services Now and in the Future**

A visit to any one of the national disability equipment exhibitions clearly demonstrates the huge range of equipment that is now available for people of all ages, and the obvious technological advances will only continue to escalate. The challenge for health and social care commissioners is to understand these developments whilst being clear about where responsibilities lie for meeting needs with a "piece of kit" rather than a "package of care" . This requires fundamental commissioning decisions.
The following recommendations detail the commissioning issues that need to be addressed over the next three years and beyond.

- Ensure that high quality and accessible information is available to people through a range of formats to enable them to make informed choices in line with Cambridgeshire's strategic plan. This will need to include implementation of an on-line self help tool alongside telephone advice and assessment. There will also need to be information available regarding AT ratings and reviews by service users and carers.

- Undertake a review of all pathways of care to ensure that access to AT, particularly Telehealth, is embedded at all stages of care and support. This would be achieved through:
  - The Whole System working group led by NHS Cambridgeshire, including medical involvement from consultants / GPs established under the Sustainable Healthcare Partnerships Programme Board undertaking work streams to redesign LTC 's Pathway's and move care closer to home away from an Acute Hospital setting
  - High health & social care service users identified through risk stratification of the GP population
  - Focussing on pathways for older people, long term neurological conditions, dementia, diabetes, COPD and CHD
  - Ensuring all documentation for pathways includes prompts for AT (ie within assessments, reviews, goal plans and support plans).

- Ensure that the countywide Reablement Services utilise technology to increase service users' ability to self manage at home, introducing AT as part of the care package at an early stage so that service users and carers become conversant with the technology.

- Prioritise IT project to ensure that key information from telehealthcare monitoring is accessible to clinicians across emergency services, acute, community, primary care, social care and call centres and compatible with existing IT systems.

- Commission formal evaluation of the benefits of AT, particularly telehealthcare, working with academic partners. Evaluation needs to focus on functional and economic outcomes in order to inform and secure funding for AT future provision. Business Cases can then be built for each pathway building on the work of the Sustainable Health Partnerships. Consideration must be given to accessing a range of funding streams across all service areas.

- Establish prescription and eligibility criteria for all aspects of AT so that service users and care managers / clinicians are clear about statutory provision versus self funding.

- To review the legislative framework surrounding the possibility of charging for equipment, particularly in relation to equipment that is issued for 'prevention'. This will need to clarify responsibilities and procedures for Self Directed Support and personal health budgets in relation to the provision of AT.

- Undertake ongoing evaluation of cases presented to the Exceptional Equipment Panel and use learning to inform business cases. The potential for business cases for powered standing frames, communication aids for adults and Functional Electrical Stimulation equipment have already been identified.

- Consider possibilities for integrating different elements of AT provision where there are overlaps in the types of equipment provided or inequalities in provision between different service user groups - for example telecare and sensory equipment. This will need to consider mainstreaming the telehealthcare equipment (for example through ICES or self funding) to achieve efficiencies.

- Establish a county wide equitable wheelchair service following the Cambridgeshire and Peterborough wheelchair service review project.

- Establish an agreed hierarchy of AT qualifications for Cambridgeshire practitioners and commission the provision of that training. Predict numbers requiring training at each level. At Foundation level, this should include all disciplines working across hospital and community settings

- Work with commissioning partners and independent sector providers to ensure equitable access to integrated call centre support for telecare and telehealth.

- Work with Supporting People to review the current provision of response services and make recommendations for provision of equitable services county wide.

- Explore the options for specialist engineering support where there is a need for technologies to interface and to assist in purchasing decisions of high

tech specialist equipment.

- Explore, with health partners, the possibility of using telemedicine for remote diagnostics and accessing remote expertise for advanced clinical management.

- Work with district councils to develop county wide minimum standards for AT infrastructure for new housing developments and ensure that district councils use these standards when placing contracts with developers.

- Ensure telecare component is built into care home contracts

- Ensure that AT plays an increasing role in diagnosis and treatment of Prisoners, to reduce the need to provide escorted visits to acute hospitals and utilising telehealth technology to aid diagnosis and prescribing treatment options. Review the telecare options in prison to meet the needs of an ageing population who are loosing the physical functioning and require increased support. Build on the project being scoped to explore the use of telecare and telehealth in the local prisons to improve the outcomes for prisoners learning from the national pilots in Manchester and Wakefield Prison's

- Work with partners in the independent sector to develop retail facilities that are accessible to rural communities.

These recommendations will be taken forward by being formulated into an action plan (see full strategy document) which will be monitored by the Integrated Community Equipment Service Commissioning Group.

## 1.0 Introduction

1.1 This strategy sets out the commissioning intentions for the next two years in relation to the development and provision of all aspects of Assistive Technology (AT) to the people of Cambridgeshire.

1.2 The strategy describes the vision for the provision of AT putting in it the context of national policy drivers, local initiatives and set against a firm evidence base. The strategy also reviews current assistive technology provision through the statutory services across Cambridgeshire, including an analysis of gaps in provision, recommendations and an action plan to drive the future commissioning of AT. Since the first draft of this strategy, a number of actions are already underway or have been completed. These have been left in the action plan to ensure that any follow-up or monitoring work is not overlooked.

1.3 The strategy has been jointly written by commissioners from Cambridgeshire County Council and NHS Cambridgeshire and has involved stakeholders from other organisations including Cambridgeshire Community Services (CCS) and the District Councils. Service users have also been involved in the development of the strategy through various forums, including partnership boards and specific focus groups.

1.4 Definition of Assistive Technology

Within the UK's health & social care sector the term 'assistive technology' tends to refer to the sub-range of electronic telecommunications technology known as Telecare. However, the term is beginning to be used more broadly and it is Cambridgeshire commissioners' view that, whilst this strategy may need to focus on certain aspects of AT provision, this broader approach is the most appropriate when considering the future of AT within the whole system of health and social care. Therefore AT is defined as:

"An umbrella term for any device or system that allows individuals to perform tasks they would otherwise be unable to do or increases the ease and safety with which tasks can be performed". (World Health Organisation, 2004)

Locally, and in line with the above definition, AT is accepted as a range of health and social care equipment that is available to people to support them to remain as independent as possible in the community. Detailed definitions of the various and specific aspects of AT are continued in section 5 of this strategy.

AT excludes specialist medical and nursing equipment, for example, continence equipment; syringe drivers; oxygen equipment and any other equipment that requires a prescription.

## 2.0 The Vision for Assistive Technology in Cambridgeshire

2.1 Cambridgeshire's vision is to ensure that people are able to access assistive technology, alongside other aspects of health and social care to enable them to

remain living as independently as possible within the home of their choice.

This vision means that provision of AT should be:

- Inclusive of all ages
- Embedded in every pathway of care
- Individual solutions for individual needs
- Comprehensive from simple to complex: from self management to bespoke integrated multi-technologies
- Cost effective and financially sustainable and considered whenever costs in alternative health and social care services can be avoided or reduced
- Equitable in terms of processes and criteria for provision
- Able to respond and take advantage of new technological innovations
- Integrated and co-ordinated in the approach to provision
- Clear in its objectives
    - Avoiding unnecessary admissions to hospital, including those from the prison population
    - Promoting, self management, independence and living at home
    - Supporting early discharge from acute care
    - Avoiding delayed transfers of care
    - Supporting carers
    - Postponing the need for care packages and placements in care homes

## 3.0 National and Local Drivers

3.1 <u>The National Picture</u>

3.1.1 Government policy and guidance strongly encourages the development of AT provision as a way of enabling people to stay in their own homes for as long as possible, as well as contributing to other strategic objectives. This is against ever increasing financial challenges within the public sector.

3.1.2 That the UK will undergo a significant demographic shift towards a predominantly older population is well known and it is widely accepted that impairments and dependence increase with advancing age. The number of older disabled people has been forecast as likely to increase by 40% between 2002 and 2020 if age related disability rates remain constant. There will also be an increasing number of disabled children due to improving survival rates for pre-term and disabled infants. It is anticipated that, as a result of these changes, the market for AT and related information is likely to grow by around 40% over the next ten years (HM Govt, Office for Disability Issues).

3.1.3 The National Service Frameworks identified the importance of equipment provision alongside other elements of health and social care services. Quality requirement 7 in the **National Service Framework for Long-term Conditions** states that "Providing up-to-date and appropriate assistive technology / equipment and home adaptations can help people to live with their condition and promote social inclusion and independence" (DH, 2005). The **National Service Framework for Older People** also referred to the importance of equipment provision. It states that community equipment services should provide "assistive technologies, that play a

vital role in enabling disabled people of all ages to maintain their health and independence" (DH 2001). It also emphasises the importance of equipment provision as part of intermediate care which is now being reinforced by the Reablement programs; "Intermediate care can be particularly effective in breaking into the spiral of unnecessary hospital admission. This is especially so if the period of intermediate care is used as an opportunity to assess the older person's home situation, and take preventative measures such as short-term rehabilitation, provision of community equipment or adaptations, or simply linking an older person to social support networks... identifying the need for equipment provision should be an integral part of any assessment, treatment or care plan, whether in hospital or community settings." (DH 2001).

3.1.4 The NSFOP went on to reinforce the key principles to be considered in the delivery of assistive technologies:

- identifying the need for equipment provision should be an integral part of any assessment, treatment or care plan, whether in hospital or community settings
- accountability should be clear with relevant professionals having specified responsibilities for ensuring people and their carers know what is available and that they have a choice in the selection of equipment provided for them
- services should take a preventative approach
- services should be timely and resolve delays which inhibit people's discharge from hospital / care home, or their safety and confidence in coping at home

3.1.5 The White Paper **Our Health, our care, our say: a new direction for community services** identifies the importance of developing assistive technologies to support people in their own homes and the importance of the need for a "shift in resources from secondary to primary and community care" (DH, 2006).

3.1.6 Following the more recent publication of **Equity & Excellence: Liberating the NHS** (DH, 2010) the challenge will be in how best to deliver AT in a changing commissioning environment, where significant budgetary pressures will need to be addressed whilst maintaining the positive partnerships already developed.

3.1.7 **A New Ambition for Stroke** reinforces that providing the right environment for people can be key to helping them return home, "small adaptations or equipment provided quickly can mean that the individual is able to return home safely and can prevent delayed discharges". It goes on to reinforce the prevention agenda where telehealth equipment can clearly assist ongoing vital signs monitoring (DH, 2007) which is fundamental in the management of long term conditions.

3.1.8 In **Putting People First** the importance of a personalised approach to care is highlighted identifying that "person centred planning and self directed support will become mainstream and define individually tailored support packages" and that telecare must be viewed as "integral rather than marginal to this process". (DH, 2007)

3.1.9 The strategy **Living Well with Dementia** identifies that the needs of people with

dementia and their carers should be included in the development of housing options and assistive technologies (DH, 2009).

3.1.10 The **National Strategy for Carers at the Heart of 21st Century Families and Communities** identifies the role of telecare in enabling carers to have more peace of mind and a degree of freedom based on the knowledge that the people being cared for still have support in place when the carers are not there (DH, 2008).

3.1.11 The national strategy **Lifetime Homes Lifetime Neighbourhoods** reiterates the importance of incorporating appropriate specifications into the infrastructure of new builds that will allow assistive technology to be used in the future. The standards in the strategy focus on improving the joining up of services to work more effectively together to meet individual outcomes. (Communities and Local Government, 2008). This is particularly important in extra care housing where the following characteristics are necessary:

- 24hour care and support on site
- Living at home – not in a home.
- Having one's own front door.
- Flexible care delivery based on individual need – which can increase or diminish according to circumstance.
- The opportunity to preserve or rebuild independent living skills.
- The provision of accessible buildings with smart technology that make independent living possible for people with a range of abilities.
- Building a real community, including mixed tenures and mixed abilities. Extra care should be permeable to the wider community and offer the same benefits and services available to all older people.

3.1.12 Fundamental to the provision of AT by statutory services, is the need for comprehensive communications so that people are able to make modern day choices about the equipment that best meets their needs, whether this is through statutory provision or self help.

3.2 <u>The Local Picture</u>

3.2.1 Cambridgeshire partners are committed to ensuring that the national strategic priorities are implemented on a local basis.

3.2.2 The **Joint Strategic Needs Assessment (JSNA)** for Cambridgeshire identifies that "many people live in unsuitable accommodation" and that there are gaps in provision regarding maintenance of "access to adaptations and assistive technology to maintain and develop independence". The JSNA supports the development of assistive technology through commissioning that will deliver a greater range of technological options in a more flexible way. (Cambridgeshire JSNA Phase 3, December 2009).

3.2.3 Local initiatives, including Reablement, prevention strategies, including falls prevention and the personalisation agenda will all require assistive technologies to be a fundamental part of systems of support and will need to be integrated within pathways of care in order to achieve all the outcomes already referred to at 3.1.

3.2.4 In Cambridgeshire there are 13 extra care housing schemes and three in development and further plans to develop a scheme per year until 2016. As a result of advice from Cambridgeshire Community Services' Telehealthcare Team, these schemes already have a range of electronic technologies involved in providing support to residents, including an emergency call and response service where the care staff are on hand to provide the response. Additional equipment can be provided to ensure a personalised service such as motion or fall detectors or systems designed to help residents overcome physical limitations may include remote controls used to operate windows and curtains, lighting, hoists and other equipment. In terms of the provision of Telehealth equipment, an internal evaluation is already underway to determine the effectiveness of the vital signs monitoring equipment that was purchased a part of the Brookfields reconfiguration.

3.2.5 Much has already been achieved in Cambridgeshire through the implementation of new assistive technologies. The services are valued by service users, evidenced by the results of CCC's *Equipment quality and outcomes questionnaire* (2010).

3.2.6 Many aspects of AT provision are well established, such as the Integrated Community Equipment Service (ICES) and equipment for people with sensory impairment. The telehealthcare service has been established in recent years, provided by Cambridgeshire Community Services - see *Appendix A* for local case studies. Linked to this particular aspect of AT, there exist different arrangements for call centres in each part of the county. This results in some fragmentation but can also have benefits to service users and carers in that they can 'mix and match' the technology and support to meet their specific needs. There are also issues of fragmentation in relation to data capture by a range of different IT systems depending on the type of telehealth and telecare kit used by patients / service users. This leads to the challenging situation of having 'data silos' and is at risk of becoming more of an issue with the new commissioning framework within the NHS.

3.2.7 The provision of other aspects of AT across Cambridgeshire is extremely fragmented with some aspects of provision well commissioned with identifiable funding streams whilst other areas have been historically under funded with no clear commissioning intentions. These gaps in provision include such things as communication aids, NeuroPage (to support people as part of neuropsychological rehabilitation) and standing wheelchairs. Further information regarding gaps in provision is detailed in the table at Part 6 of this strategy.

3.2.8 The information strategy that is part of Cambridgeshire's transformation agenda is fundamental to ensuring that people receive the information they need to make informed choices about assistive technology.

## 4.0 Literature Review & The Evidence Base

4.1 This brief review of literature is aimed at identifying the key benefits of assistive technology across the health, housing and social care sectors. The successful deployment of assistive technology is often dependent on these three services working in effective partnerships with each other.

4.1.1 West Lothian took this approach at a very early stage and laid out a clear strategy across health, housing and social care that led to a successful deployment of assistive technology. Their work was evaluated by the University of Sterling over three years. This evaluation has particularly emphasised the impact of the new model of care on people's quality of life. The use of smart technology in new housing new developments demonstrated that they delivered choice and independence for the individual and reassurance for the family and informal carers. It was especially effective in dealing with delayed discharges from acute hospitals. West Lothian, when compared with other Scottish authorities, spends a relatively small amount on care services and produces high quality support and care at a low cost. (Bowes and McColgan, 2006)

4.1.2 In order to fully realise the benefits of assistive technology the following are seen as key principles for achieving success. These are taken from a comparative study of assistive technology in the UK and USA by Garside (2010).

- Assistive technology alongside case management and the pathway approach. The greatest benefit comes from focussing on patients with the most complex problems. Manage the risk not just the disease eg if the risk factor in a COPD patient is depression then that is what should be actively managed. Telehealth monitoring is one tool that should be considered alongside other interventions for the management of every long term condition including dementia, COPD and asthma, heart disease and hypertension, diabetes and depression.

- Effective sharing of electronic patient records: the ability to share information between telehealthcare monitoring, GP records, community health, social care, hospital, monitoring call centres, out of hours services and ambulance services.

- The patient as an active partner in their care: assistive technology needs to be combined with education programmes to promote greater self management and understanding of their long term conditions, be able to access their own records and to be able to use them interactively for monitoring vital signs, reporting symptoms and receiving management advice. For long term conditions this includes a single set of goals for each person that primary, secondary and community care services all work towards.

- Engagement of the medical professions for telehealth developments

- Use the minimal amount of technology to achieve the goals: Design the pathways of management first then review how technology can support it. Technology is dependent on universal response services. Make maximum use of the existing technologies such as mobile phones and touch screen TVs.

4.2 Assistive technology and housing

4.2.1 The provision of major adaptations and home improvements to housing can be

cost effective and deliver quality of life outcomes for individuals. One of the most important studies found was retrospective detailed case studies of 7 individuals who received the full range of assistive technologies: major home adaptations, wheelchairs and seating system, equipment, prosthetics, augmented communication aids and environmental control systems.(Andrich, 1998). This study demonstrated improvements in quality of life and outcomes for service users.

4.3 Assistive technology and social care

4.3.1 The cost effectiveness of assistive technology were found to be in three areas:

- The greatest savings are found where informal carers are enabled by assistive technology to manage without the need for night time professional carers (ODI, 2007)

- The most significant savings of home care costs are mainly found for younger disabled people compared with frail older people. For younger people the adaptations pay for themselves in reduced home care costs between a few months and three years and saving £1,200 – 29,000 per annum. For older people they were either not receiving care or they were so frail that the need for care continues.

- The other savings for social care are made in costs of residential care. Research and case studies show that investment in assistive technology where this makes independent living possible usually pays for itself in 12 months or less and saving £25,000 to £80,000 per year. (ODI, 2007).

4.4 Assistive technology and health

4.4.1 Much of the literature around assistive technology and health focuses on telehealth and telemedicine for people with long term conditions and the impact on acute unplanned visits, episodes of care, clinical contacts, cost effectiveness and quality of life for the person and their carer.

4.4.2 One of the earliest studies that showed the positive outcomes of telehealth was by Meyer (2002). The studies shows the results of eight projects with the Veterans Health Administration which tested disease management principles, the role of the Community Care Co-ordinator and the use of technology to maintain people in their own homes. Results showed a 40% reduction in emergency department visits, 63% reduction in hospital admissions, 60% reduction in hospital bed days, 63 % reduction in nursing home admissions and an 88% reduction in nursing home bed days of care.

4.4.3 *Chronic Obstructive Pulmonary Disease (COPD)*
Taylor (2005) redesigned the pathway of management due to the rising costs associated with COPD some 8013 emergency admissions from acute exacerbations. Telehealth units were deployed with individual parameters set plus a 24 hour team available to respond if interventions were needed. There was a 50% reduction in hospitalisation due to early diagnosis and prompt interventions that prevented further deterioration in the persons condition.

4.4.4 *Diabetes*

Chumbler (2005) looked at the difference in monitoring rates for veterans with diabetes between those monitored weekly compared with those monitored daily. During the 12 month study patients monitored daily, through the use of AT, showed a significant reduction in all hospital admissions for all causes as well as diabetes. The daily readings enabled the care co-ordinator to respond and make changes in their medication in a more timely way. It also lowered the number of unscheduled primary care clinic visits at statistical significance. By contrast those with weekly monitoring tended to increase hospitalisation

Chumbler followed this in 2009 with a study on mortality rates and found significantly more deaths in the control group.

4.4.5 Kent whole demonstrator site

Much of the research into telehealth is based in USA. However with the strong policy drive recommending the wide implementation of telecare and telehealth the Department of Health has supported four strands of research across three whole demonstrator sites, Kent, Newham and Cornwall.

An initial Kent study was based on a pre/post quasi experimental observational study including both qualitative and quantitative data. The pilot study has been a huge success and clearly indicated that telehealth:

- Brings peace of mind to patients and carers and some have experienced life changing positive experiences
- Supports independence and empowers people to take better control of their life and manage their conditions
- Patients and carers like and embrace the technology, value it highly and want to use it
- Leads to fewer hospital admissions and shorter stays, reduces GP contacts and in some cases fewer nurse visits
- Clinicians have more, regular and reliable information on a patient and can take appropriate action based on that information. Early intervention has prevented hospital admissions and exacerbations.
- Promotes better medicine management by clinicians and patients.
- Monetary savings may be made through reduced unplanned hospital admissions, A&E visits, and nurse/GP visits. It is estimated that over a six month period the telehealth intervention saved on average £1,878 per patient in 2006-7.
- An extrapolation of the savings to Kent across the three long term conditions of COPD, CHD and Diabetes was undertaken using the 2006-7 Hospital Episodes Statistics. The range of cost saving would be in the order of £4,180,000 and £10,941,000 at a 95% confidence level.

The qualitative evaluation includes themes from both patients and professionals. One of the most useful is from a Community Matron, *''…Importantly telehealth is a tool and what the clinician gets out of it is dependent on what they put into it. A confident practitioner is able to use telehealth to its full potential. If a clinician has a large number of people with co-morbidities, then telehealth is a proactive way to manage the caseload and triage the appointments and visits for the day. It changes the way a clinician works from being reactive to being proactive''*. (Coulton, 2010). This approach is vital in the case management of vulnerable people.

4.4.6 *Falls*

The ODI (2007) in its summary of the evidence on assistive technology and falls concluded it is a cost effective intervention. The average cost to the state of a fractured hip is £28,665. This is 4.7 times the average cost of a major housing adaptation (£6,000) and is 100 times the cost for fitting grab rails to prevent falls.

The NICE and Cochrane reviews reached the consensus that interventions to prevent falls should be individually tailored and multifactorial, and that these are the most effective. This includes home hazard assessment with provision of equipment and adaptations along with individual strength and balance training, vision assessment and medication review. The annual cost of hip fractures in the UK in 2000 was £726 million which was six times the central government expenditure on all Disabled Facilities Grants (which assist in funding major housing adaptations). (ODI, 2007)

4.4.7 *Physical and mental health*

The lack of timely provision of equipment and housing adaptations leads to costly long term physical health problems for disabled people. Effects of non provision include contractures, pressure sores, ulcers, infections, burns and pain. Interventions of assistive technology are highly effective in preventing these physical problems. Measured effects include 50% reduction in pain and 100% reduction in burns. The most consistent health outcome of housing interventions in small studies and in systematic reviews is improved mental health. Findings include 70% increased feelings of safety and an increase in 6.2 points in SF36 scores for mental health (ODI, 2007)

4.5 Whilst this review of evidence focuses on the key messages, there is more literature available through the whole demonstrator sites and rehabilitation journals. Given the current economic climate the focus has been on the relative costs effectiveness of the investment in assistive technology. The Audit Commission's report, *Fully Equipped*, published in 2000 became the blueprint for establishing integrated community equipment services across most of the UK and concluded that 'if a drug was discovered with a similar cost profile (as assistive technology) it would be hailed the wonder drug of the age'.

4.6 See *Appendix B* for further examples of good practice

## 5.0 Communications & Engaging Service Users

5.1 There is a generally accepted consensus that the more technologically confident and assertive, "baby boomers" will be required to work longer into their older age, and will not tolerate barriers to employment and delays in receiving equipment. Additionally, there is consensus that attitudes towards health care purchases will become more consumer-oriented, with many people being less willing to accept basic-level state services. The rise of the use of special interest online forums and social networking groups focused on information sharing around impairment and health conditions indicates the potential development of a more information-savvy customer base for assistive technology (AT Alliance, 2010).

5.2 As service users across Cambridgeshire continue to become more aware of the different options available to them, including AT, they need to continue to be

engaged through various communication networks. This includes the various partnership Boards across Learning Disability, Physical & Sensory Impairment, Older People and Children. AT is an area of provision that has also been raised at the Carer's board and at a recent Carers Conference organised by CCC's Adult Social Care and Crossroads Care (September 2010), carers raised a number of concerns around access to AT, particularly in relation to wheelchair services. It will be important for commissioning organisations to also engage with the User Led Organisation (ULO) in order to access as wide a community of users as possible.

5.3 Easily accessible and accurate information and advice is a pre-requisite for good decision-making, and so is at the heart of the personalisation of adult social care. Cambridgeshire's strategic plan, **Shaping our Future: Universal Information and Advice Services in Cambridgeshire** (2010) provides the detail as to what actions are required in order to achieve this across the county.

5.4 A recent needs analysis undertaken by members of the Transformation team within Adult Social Care found that:

- Older people have limited knowledge or understanding in relation to sheltered housing and telecare
- A large number of the queries received by Age UK Cambs are about equipment services
- Sense East reported that their service users requested more information on technology products
- Cambs LINk reported that people want information about buying their own equipment and AT but reported 'bad selling' by trades people and retailers.

5.5 Service users and carers have been involved in the development of this strategy through a number of forums including specific focus groups as well as through sharing across the Partnership Boards and ULO. Key points from the feedback from these forums is summarised below:

- Information for service users must be clear and easy to understand
- People would welcome advice on how they can support themselves in obtaining their own assistive technology
- People tend to rely on their OT to tell them what is available
- People generally welcome the newer technologies available, for example telecare monitoring devices
- Some people are unable to access retail outlets if they live in rural areas
- A mobile assessment and retail unit might help people who are isolated in rural communities
- There should be more flexibility in the use of self directed support and personal budgets so that people can use these funds to purchase equipment
- Some people are concerned over wastage and recycling rates
- Provision of AT should be proactive and preventative not reactive
- Libraries and GP surgeries need to contain more information on AT
- Consider open days / exhibitions that promote AT
- Could care homes / sheltered housing schemes act as hubs for AT
- Ensure provision of AT does not remove social interaction

Where possible, these points have been incorporated into the recommendations at Section 8 and Action Plan at Section 9.

## 6.0 Current Range & Provision of Assistive Technology Across Cambridgeshire

6.1 Below are specific definitions of all the areas of AT provision covered by this strategy followed by a table which summarises their current commissioning framework, funding streams, eligibility criteria and provision.

6.1.1 Telecare: Telecare is the use of sensor and communication technologies to monitor the safety and well being of vulnerable people in their normal place of residence and alert appropriate people (family, carers, monitoring centre, the person themselves, or others) when help or action is required.

These technologies include 'stand alone' equipment that is not connected to tele-communication systems. Examples include falls sensors, bed/chair occupancy sensors & medication reminder systems (similar to the one shown here).

**Pivotell medication dispenser**

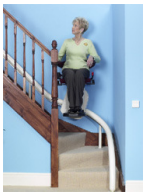
6.1.2 Telehealth: Telehealth monitoring is the remote exchange of physiological data between a patient at home and healthcare professionals and other staff to assist in diagnosis and monitoring (this could include support for people with lung function problems, diabetes and other long term conditions). It may include a home unit to measure and monitor temperature, blood pressure and other vital signs for clinical review at a remote location using phone lines or wireless technology. Examples include blood glucose monitoring, blood pressure monitoring and activity / sleep monitoring.

6.1.3 Wheelchairs & specialist seating: Wheelchairs are provided through NHS wheelchair services to people who have long term mobility problems and need a wheelchair on a permanent basis. Chairs provided include simple 'transit' type chairs, self-propelling manual chairs and powered indoor / outdoor chairs. Special seating is provided by wheelchair services for people who need postural and / or pressure relieving support.

6.1.4 General health and social care equipment:
This equipment encompasses all equipment provided via the Integrated Community Equipment Service (ICES) contract and includes such things as hoists, bathing and toileting equipment, pressure relieving mattresses and profiling beds. Special non-stock equipment can be ordered via a strict authorisation process. The provision of equipment for disabled children is also included in this.

**The Oxford Stand Aid**

6.1.5 Major Housing Adaptations:



These are adaptations over £1000 and include such things as through floor lifts, ceiling track hoists, stair lifts (left) and level access showers. For private tenure properties they are available following OT assessment and application to the district councils for Disabled Facilities Grants. Some housing associations will also install these adaptations.

6.1.6 Minor Housing Adaptations:

These are home adaptations under £1000 and include such things as small ramps to properties, additional banister rails and grab rails. They are either provided by private landlords, registered social landlords (RSLs) or, for private properties, through the ICES contract.

6.1.7 Visual Impairment Equipment:

This range of equipment is available to specifically support people with visual impairment and includes such things as bump-ons and canes. The VI Rehab Workers, employed by Sensory Services, work with individuals to develop their skills and, when necessary, direct service users to local and national voluntary organisations to privately purchase equipment.

6.1.8 Hearing Impairment Equipment:

Equipment is provided to minimise risk for people with a hearing impairment enabling people to be independently alerted to such things as smoke detector, door bell, alarm clock and, for people with caring responsibilities, equipment is available to alert them for example when a child is crying or a relative is calling out.

6.1.9 Communication Aids:


A communication aid helps a person, with little or no speech to communicate more effectively with those around them. These aids range from simple letter boards to sophisticated pieces of computer equipment.

6.1.10 Environmental Control Systems:

Environmental Control Systems are pieces of advanced electronic technology which link home appliances and specialist electrical products to a single personal control switch. They enable a person with severe physical impairment to independently open doors, control lighting and curtains and operate their TV amongst a range of other functions. They are often used by people who need access to multiple technologies where interface issues are critical.

**Possum Freeway**

6.1.11 Orthotics & prosthetics:

Orthoses and prostheses are clinical devices that help replace or improve body parts. They include flexor electrical stimulators, braces, inserts and artificial limbs.

6.1.12 Equipment for Continuing Health Care

This can include a range of equipment which might encompass some of the items already defined above but which are specifically supplied to support people who have been assessed as having continuing healthcare needs, often 'end of life'. Provision may also include specialist clinical equipment such as syringe drivers.

6.1.13 The table starting on page 21, summarises the various elements of assistive technology referred to in this section and indicates how these are currently commissioned and provided.

| | Type of AT | Commissioned by (including funding arrangements based on 2010/11 where figures are available) | Provided by | Eligibility criteria in place? | Comments & issues |
|---|---|---|---|---|---|
| 1. | Personal Community Alarm Systems (often known as Lifelines) | Five District Councils | District Councils | Open access | Multiple agency provision re equipment, call centres and response services. Small rental charge to service users. There may be economies of scale if these were more integrated across the county. |
| 2 | Telecare | NHSC & CCC through OP/OT Sec75 Agreement. Annual budget approx £250K. | CCS | Yes | Initially funded by Mental Health Trust & Social Services then Preventative Technology Grant. Provision is across all age ranges and SU groups but funded entirely through the OP pool. Issues with data silos |
| 3. | Telehealth | NHSC.<br>Annual budget approx £110K | CCS | Yes | Initial investment through reconfiguration of Brookfields services. Long term commissioning uncertain. Issues with data silos as above. |
| 4. | Wheelchairs and specialist seating | NHS Cambs commissions the assessment services then each service commissions an approved repairer contract.<br>Annual budget £1.7m | CUHFT, P&SHFT,QEH CCS<br>(Central Essex Community Services from 1/10/11) | Yes but inequity across different providers | Service retendered and new, countywide provider awarded new contract to commence 1/10/11. |
| 5. | Health & social care equipment | CCC & NHSC<br>Integrated Community Equipment Service Section 75 Agreement. Annual pooled budget £4m | NRS | Yes | 5 year contract recently extended for the maximum 2 years. Specialist equipment available only where the standard stock item will not meet assessed need.<br>Specialist equipment outside the 'norm' is considered at bi-monthly Exceptional Equipment Panel. |
| 5. | Major housing adaptations | District Councils through direct provision for council housing stock, or via DFG for private sector housing. | District Councils / HIAs | Yes | Some variation in provision by RSLs, dependent on agreements with DCs. Three of the HIAs are now planning to work together as one provider (Hunts, City & SC) |

| | Type of AT | Commissioned by (including funding arrangements based on 2010/11 where figures are available) | Provided by | Eligibility criteria in place? | Comments & issues |
|---|---|---|---|---|---|
| 6. | Minor housing adaptations | Multiple agencies, depending on housing tenure. | NRS (ICES)<br>Districts<br>RSLs<br>Handy Persons schemes | Yes | Some variation in provision by RSLs but generally good provision across the tenures and via Handy Person Schemes.<br>SUs directed to self help where possible and appropriate. *Ask Sara* within *Your Life Your Choice* website will assist with this. |
| 7. | Equipment for visual impairment | CCC<br>Budget is £79,500 across VI & Deaf Services Equipment | Sensory Services | Yes | VI equipment is limited to a small select list of items linked to risk issues. All other VI equipment is self funded. Deaf services equipment is higher value and a larger range is available but still linked to risk issues. Some similarities to Telecare equipment.<br>. |
| 8. | Equipment for hearing impairment | | CCC (Sensory team) | Yes | |
| 9. | Electronic Communication aids | NHSC | CCS | No | Commissioned for children only. No funding available for adult services. Cases may be considered at Exceptional Equipment Panel |
| 10. | Environmental Control Systems | NHSC<br>Budget – TBC | Assessed by CCS - provided by range of suppliers | Yes | Unmet need. Waiting list for funding of people who meet the criteria.<br>Interface issues and lack of medical physics and rehab engineering support. |
| 11 | NeuroPage | Commissioned on a case by case basis, usually through NHSC Complex Needs. | Oliver Zangwill Unit | Yes | This is a nationally available service but with limited commissioning in Cambridgeshire. |
| 12. | Orthotics & prosthetics | NHSC | Acute sector | Yes | Fragmented service. Limited availability - does not take account of advances in technology. |
| 13. | Equipment for NHS Continuing Care | NHSC | Via ICES or spot purchases | Yes | Some equipment is similar to that provided at (3) |

## 7.0 Commissioning Services for the Future

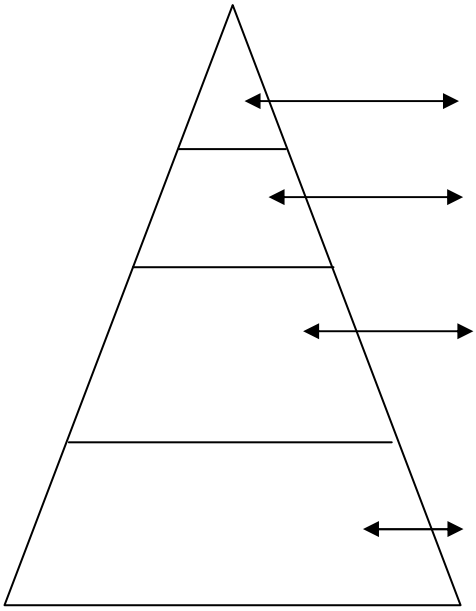
7.1 There have been significant technological advances in all aspects of AT over the last few years. One only has to visit any of the national disability equipment exhibitions such as *Naidex* to see what equipment is now available for people to assist them in their daily lives from childhood through to old age. These advances will only continue to escalate as new and emerging technologies are developed, including robotics and virtual reality programmes, currently being researched. The challenge for commissioners will be to understand these developments whilst being clear about where responsibilities lie for meeting needs with a "piece of kit" rather than a "package of care", where service users should be self funding or how to build flexibility into self directed support plans, and personal budgets, so that AT is considered at all stages of assessment.

7.2 As indicated in the table at section 6, for some aspects of AT provision, there are clear guidelines for assessment with associated criteria, for example the equipment provided through the ICES contract and Continuing Health Care equipment. For other areas, there is no such criteria, and limited guidance on self help / self funding and there are risks that service users' needs will go unmet whilst clinicians and commissioners argue over how these technologies are made available to service users. This situation has been eased recently through the formation of the Exceptional Equipment Panel which meets bimonthly and whose members are senior commissioners from CCC and NHSC. The panel considers requests for equipment for which there is currently no clear commissioned provision and no easily identifiable funding stream. The terms of reference for this panel are attached at *Appendix C.*

7.3 An increased commitment to spending on prevention should be part of the shift in resources from secondary to primary and community care. The UK spend on prevention and public health is relatively low compared to that of other advanced economies. At present, the definition and measurement of spend on prevention are not easy to apply, but spend on prevention and spend on public health should be separated more clearly (Our Health our Care our Say, DH, 2006). Whilst the evidence tells us that expenditure on AT can bring savings in other areas this has yet to be quantified in any detail within the Cambridgeshire system, but it is likely that challenging decisions will need to be made about where to dis-invest in order to develop the provision of AT within a preventative framework and demanding financial pressures.

7.4 <u>Model of Service Delivery</u>

A model of service delivery needs to reflect the full spectrum of complexity outlined in the Kaiser Permanente triangle below taking into account assessment, procurement and delivery. Commissioners will need to recognise the importance of high quality communications so that service users have the necessary information required to make choices about how their needs can best be met. This also needs to take into account options for self assessment, self management, and ultimately how to provide AT services to those people with the most complex needs.



**To meet highly complex needs**: requires effective partnerships between clinicians, engineers and suppliers and involves and element of bespoke customisation

**To meet complex needs**: unidisciplinary or multidisciplinary

**To meet moderate needs**: options include considering web based self assessment such as Sara, Quickheart or SmartADL, expanded telephone assessment, clinics at demonstration centres/mobile buses, or prevention through re-enablement programmes

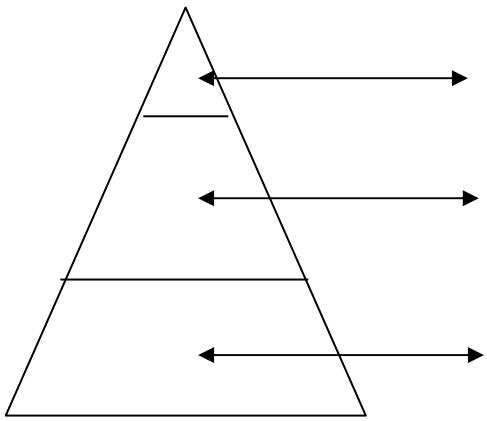
**To meet low level needs**: High quality accessible information and advice

7.5 Training & Skills development

Staff across both health and social care will need ongoing training to ensure that they consider AT solutions when drawing up support plans with service users. Over the years, an historical culture has developed whereby the identification of a need for a piece of equipment is immediately signposted to traditional service provisions, such as OT. The benefits of AT needs to be embedded within the thinking of all staff whether they be Care Managers, Occupational Therapists, Clinical Psychologists, Speech Therapists and others.

Staff will need to be able to access both simple end vocational qualifications such as NVQs and Trusted Assessor programmes through to complex training such as Masters Degrees in Accessible Environments.

However, alongside this, it is important to ensure that the key roles and expertise of the professional staff working with service users is not overlooked, and that AT is utilised to enhance rehabilitative skills and not to replace them.



Advanced technical rehabilitation engineering skills in combination with advanced clinical skills.

Professionally qualified staff who provide mentorship and training for people holding the trusted assessor.

Trusted assessor or equivalent qualification for none professional staff including independent and voluntary sector and retail.

7.6 Technical & Clinical Engineering Support

Commissioners and senior clinical managers will need to continue to build on the relationships already in place with colleagues in the acute sector, particularly

Addenbrookes' Medical Physics and Clinical Engineering Department. This partnership working will also mean that there will be a link to the regional work that is looking at specialist commissioning of neurological rehab services. This will be fundamental to building on the technical expertise required to provide bespoke solutions and integrate different technologies for people in the community with the most profound disabilities. Support in terms of technical evaluation will also be important in relation to the procurement of evolving and advanced technologies.

## 8.0 Recommendations

8.1 The following recommendations provide a summary of the issues that will need to be addressed to ensure that the availability of AT is embedded in practice across health and social care and will form the basis of an action plan:

8.1.1 Ensure that high quality and accessible information is available to people through a range of formats to enable them to make informed choices in line with Cambridgeshire's strategic plan. This will need to include implementation of an on-line self help tool alongside telephone advice and assessment. There will also need to be information available regarding AT ratings and reviews by service users and carers.

8.1.2 Undertake a review of all pathways of care to ensure that access to AT, particularly Telehealth, is embedded at all stages of care and support. This would be achieved through:

- The Whole System working group led by NHS Cambridgeshire, including medical involvement from consultants / GPs established under the Sustainable Healthcare Partnerships Programme Board undertaking work streams to redesign LTC 's Pathway's and move care closer to home away from an Acute Hospital setting with more preventative focus
- High health & social care service users identified through risk stratification of the GP population
- Focussing on pathways for older people, long term neurological conditions, dementia, diabetes, COPD and CHD
- Ensuring all documentation for pathways includes prompts for AT (ie within assessments, reviews, goal plans and support plans).

8.1.3 Ensure that the countywide Reablement Services utilise technology to increase service users' ability to self manage at home, introducing AT as part of the care package at an early stage so that service users and carers become conversant with the technology.

8.1.4 Prioritise IT project to ensure that key information from telehealthcare monitoring is accessible to clinicians across emergency services, acute, community, primary care, social care and call centres and compatible with existing IT systems.

8.1.5 Make use of the results from the Whole Demonstrator sites due to be available from November 2011.

8.1.5 Establish prescription and eligibility criteria for all aspects of AT so that service users and care managers / clinicians are clear about statutory provision versus self funding.

8.1.6 To review the legislative framework surrounding the possibility of charging for equipment, particularly in relation to equipment that is issued for 'prevention'. This will need to clarify responsibilities and procedures for Self Directed Support and personal health budgets in relation to the provision of AT.

8.1.7 Undertake ongoing evaluation of cases presented to the Exceptional Equipment Panel and use learning to inform business cases. The potential for business cases for powered standing frames, communication aids for adults and Functional Electrical Stimulation equipment have already been identified.

8.1.8 Consider possibilities for integrating different elements of AT provision where there are overlaps in the types of equipment provided or inequalities in provision between different service user groups - for example telecare and sensory equipment. This will need to consider mainstreaming the telehealthcare equipment (for example through ICES or self funding) to achieve efficiencies.

8.1.9 Establish a county wide equitable wheelchair service following the Cambridgeshire and Peterborough wheelchair service review project.

8.1.10 Establish an agreed hierarchy of AT qualifications for Cambridgeshire practitioners and commission the provision of that training. Predict numbers requiring training at each level. At Foundation level, this should include all disciplines working across hospital and community settings

8.1.11 Work with commissioning partners and independent sector providers to ensure equitable access to integrated call centre support for telecare and telehealth.

8.1.12 Work with Supporting People to review the current provision of response services and make recommendations for provision of equitable services county wide.

8.1.13 Explore the options for specialist engineering support where there is a need for technologies to interface and to assist in purchasing decisions of high tech specialist equipment.

8.1.14 Explore, with partners, the possibility of using telemedicine for remote diagnostics and accessing remote expertise for advanced clinical management.

8.1.15 Work with district councils to develop county wide minimum standards for AT infrastructure for new housing developments and ensure that district councils use these standards when placing contracts with developers.

8.1.16 Ensure telecare component is built into care home contracts

8.1.17 Ensure that AT plays an increasing role in diagnosis and treatment of Prisoners, to reduce the need to provide escorted visits to acute hospitals and utilising telehealth technology to aid diagnosis and prescribing treatment options. Review the telecare options in prison to meet the needs of an ageing population who are loosing the physical functioning and require increased support
Build on the project being scoped to explore the use of telecare and telehealth in the local prisons to improve the outcomes for prisoners learning from the national pilots in Manchester and Wakefield Prison's

8.1.18 Work with partners in the voluntary and independent sector to establish demonstration and retail facilities that are accessible to all communities, particularly those in areas of rural isolation.

## Cambridgeshire Assistive Technology Strategy Action Plan 2011-2014

***Note:*** *Since the first draft of this strategy, a number of actions have been commenced and/or completed. These have been left in the action plan to ensure that any follow-up or monitoring work is not overlooked.*

| No | Overarching Objective | Lead Organisation | Actions | Resources | Outcomes | Timeline | RAG Status |
|---|---|---|---|---|---|---|---|
| 1. | Improve the quality of information available to people to enable them to self help & make informed choices regarding equipment provision | 1a: CCC Commissioning Manager<br><br>1b: CCC Commissioning Manager | 1a: Procure AskSARA web based tool accessible via Your Life Your Choice to offer localised Cambs specific information and advice<br><br>1b: Develop business case for full on line self assessment that is compatible with professional assessments and electronic health & social care records | 1a: £18K agreed by Adult Programme Board<br><br>1b: TBC | 1a: Enhancing quality of life for people with long term conditions and delaying & reducing the need for care and support<br><br>1b: Ensuring that people have a positive experience of care | 1a Jan 2012<br><br>1b: 2013 | 1a Amber<br><br>1b: Action not yet started |
| 2. | Improve service users' access to telehealth technology | 2a: NHSC Director of Integrated Commissioning<br><br>2b: NHSC Director of Integrated Commissioning | 2a: Telehealth technology element is included in all pathways of care<br><br>2b: Explore ways to secure additional and sustainable funding to expand telehealth provision. | 2a: Start-up funding was made available from Brookfields reprovision<br><br>2b: Pursuing DALLAS* funding in partnership with other EoE orgs (*Delivering Assisted Living Lifestyles at Scale) | 2a: Enhancing the quality of life for people with long terms conditions<br><br>2b: Delaying & reducing the need for care and support | 2a: Ongoing<br><br>2b: February 2012 | 2a: Amber<br><br>2b: Amber |
| 3. | To make telecare technology available to people going through Reablement | CCS Community Rehab Services Manager | Ensure Telecare technology is included in the Reablement pathway and considered in all assessments | Baseline funding sits within OP pooled budget | Delaying the need for care and support | September 2010 | Green (completed) |

| No | Overarching Objective | Lead Organisation | Actions | Resources | Outcomes | Timeline | RAG Status |
|---|---|---|---|---|---|---|---|
| 4. | To maximise the use of telecare technology for people with a learning disability | LDP<br>Day Services Modernisation Manager | Develop business case for LDP to appoint a dedicated AT assessor to review people with large packages of care & those in supported living | Transformation funding agreed | Enhancing the quality of life for people with long terms conditions .<br>Safeguarding people whose circumstances make them vulnerable & protecting them from harm | April 2012 | Amber |
| 5. | To improve the compatibility of remote monitoring devices with mainstream health and social care IT systems | NHSC<br>Director of Integrated Commissioning | Explore possibility of this being addressed as part of the DALLAS project (see 2 above) | TBC | Ensuring that people have a positive experience of care and support | Nov 2012 | Action not yet started |
| 6. | To develop Telehealthcare services that are evidenced based | CCC & NHSC in partnership with CCS<br>Rehab Service Manager | Undertake an analysis of the Whole Demonstrator Sites | No additional resource required | Ensuring people have a positive experience of care and support | March 2012 | Amber |
| 7. | To streamline eligibility criteria for the full range of telehealthcare technology so that people understand statutory provision vs self funding | CCC<br>Commissioning Manager | Review eligibility criteria at On-line Equipment Information Working Group and revise where necessary to ensure consistency across services | No additional resource required | Enhancing quality of life for people with care and support needs & ensuring they have a positive experience of care and support. | September 2011 | Green (completed) |
| 8. | To improve people's awareness and understanding of when they might be charged for some elements of AT provision | CCC<br>Commissioning Manager | 8a: Consult with Legal Services<br><br>8b: Draw up proposal for charging service users for 'failed deliveries' relating to the Integrated Community Equipment Service | 8a: No additional resource required<br><br>8b: No additional resource required | 8a & b: Delaying and reducing the need for care and support | 8a: November 2011<br><br>8b: April 2012 | Green (completed)<br><br>Amber |

| No | Overarching Objective | Lead Organisation | Actions | Resources | Outcomes | Timeline | RAG Status |
|---|---|---|---|---|---|---|---|
| 9. | To improve people's access to specialist equipment | CCC Commissioning Manager | Undertake Evaluation of the Exceptional Equipment Panel to inform future business cases | No additional resource required | Enhancing quality of life for people with care and support needs | September 2011 | Green (completed) |
| 10. | Improve the procurement of statutory telecare and sensory equipment | CCC Commissioning Manager | Build in to re-tender for Integrated Community Equipment Service | To be identified | Enhancing quality of life for people with care and support needs | 2013 - 2014 | Action not yet started |
| 11. | Improve people's access to and experience of NHS wheelchair services and ensure that services are equitable across the county | NHSC Director of Integrated Commissioning | Tender for new Wheelchair Services and award contract | | Ensuring that people have a positive experience of care and support | Oct 2011 | Green (completed) |
| 12. | Improve the skill mix across frontline staff to ensure that consideration of AT is mainstreamed across all assessments | NHSC & CCC in partnership with CCS Rehab Service Manager | 12a: Develop Accredited Assessor Modules<br><br>12b: Roll out programme on an ongoing basis to include domiciliary care agencies and embed requirement in Independent Sector Provider Contracts | 12a: No additional resource required<br><br>12b: To be identified | 12a & b: Ensuring that people have a positive experience of care and support | 12a: September 2011<br><br>12b: 2012 | Green (completed)<br><br>Action not yet started |
| 13. | Improve people's experience of accessing telecare call centre support | ESPO / CCC Commissioning Manager | Engage with regional project to review the variety of call centre support available with a view to streamlining across the County / Region (First meeting 29/11/11) | No additional resource required | Ensuring that people have a positive experience of care and support | Sept 2012 | Amber |

| No | Overarching Objective | Lead Organisation | Actions | Resources | Outcomes | Timeline | RAG Status |
|---|---|---|---|---|---|---|---|
| 14. | Telehealthcare services have access to specialist engineering expertise, as required, to facilitate interface of multiple specialist technologies | CCC Commissioning Manager | Engage with Clinical Engineering Department within CUFHT | To be identified but may be assisted by DALLAS bid, if successful | Enhancing quality of life for people with care and support needs | Nov 2012 | Action not yet started |
| 15. | Service users access to telemedicine (remote diagnostics) | NHSC Director of Integrated Commissioning | Business case drawn up for commencement within prison system<br>Roll out to other areas | Capital funding for equipment agreed. Business case needed for revenue | Delaying & reducing the need for care and support | Sept 2012 | Amber |
| 16. | People moving into new housing developments are able to access integrated assistive technologies | CCC Commissioning Manager | Work with District Councils the Sheltered Housing Commissioning Group to ensure that their housing strategies include the appropriate infrastructure to support integrated technologies | No additional resource required | Enhancing quality of life for people with care and support needs<br>Safeguarding people whose circumstances make them vulnerable & protecting them from harm | Sept 2012 | Amber |
| 17. | People have access to demonstration and retail facilities, particularly in isolated rural communities | CCC Commissioning Manager | Work with community equipment service provider to develop a mobile assessment vehicle that can be used in rural locations and at public events | Being fully funded by equipment service provider | Enhancing quality of life for people with care and support needs<br>Safeguarding people whose circumstances make them vulnerable & protecting them from harm | July 2012 | Amber |

## *Appendix A*

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***Appendix B***

## Cambridgeshire Community Services
## Telehealthcare Team - Case Studies

### *Mrs A. Medication Management – Avoiding a care package/Carer support*

Mrs A takes medication for Diabetes and Alzheimers three times a day and is supported by her daughter who lives close by. She was referred to the CCS Telehealthcare Team following concerns that she was mismanaging her medication causing her to become unwell and causing stress to her daughter as main carer. Mrs A was loaned an automated dossett box (Pivotell), which her daughter now fills with medication.

Mrs A is now able to manage her medication independently and her daughter is not so stressed she is managing her conditions better and has maintained her independence. The alternative would have been a care package to prompt with medication and alleviate the daughter's anxiety.

Mrs A and her daughter are very happy with the technology that they have received.

### *Mrs B. Falls Solutions – Avoiding Residential Care / facilitating discharge.*

Mrs B has dementia and was admitted to hospital following a fall in her property in which she sustained a head injury. She had not pressed her pendant alarm and was found by the carers in the morning. There were significant concerns about her returning to the property and being safe during long periods when left alone especially at night. However Mrs B expressed a wish to return home and the family were keen to support this, as residential care was the likely alternative.

Mrs B was discharged home with a care package and some telecare technology. Due to Mrs B's dementia she has very erratic sleep patterns and the traditional technology of a bed sensor on its own would not provide accurate alerts as she spends much of the night awake and moving around the house. To provide accurate alerts the Telehealthcare Team provided a telecare bed sensor with motion sensors around the property to raise an alert only if there is no activity in the property and therefore signalling a fall. She was also loaned a telecare smoke detector and extreme temperature sensor to ensure environmental safety.

Since discharge from hospital, carers report that Mrs B often chooses not to go to bed and instead spends time in the rest of the house but there have been no alarms activated and the family and carers are confident with this system. Mrs B has the freedom to live at home and spend her time as she pleases without the need for night time care or residential care.

The telecare equipment provided in conjunction with the care package has enabled Mrs B to continue living at home.

### *Mr T- Telehealth technology to support admission avoidance and self management*

Mr T has a history of Chronic Obstructive Pulmonary Disease and has been using a Telehealth monitor supplied by the Telehealthcare Team for one year and during that time his monitoring clinician reports that she has reduced her visits significantly from weekly scheduled appointments to targeted visits when he is unwell. Furthermore she reports that he has had no unplanned admissions during this period and his overall ability to manage his condition and not over exert himself is much improved.

Mr T himself thinks the telehealth unit is very good and it has given him increased confidence in managing his condition. Mr T is a keen fisherman and he is able to plan this around his readings and continue to go out and enjoy this without over exerting himself and becoming unwell as had previously been the case.

### *Mr H - Using Telecare to reduce a Care Package*

Mr H has a learning disability and lives in supported housing. At the time of referral he was suffering from frequent and severe epilepsy seizures, which resulted in hospital admissions. Following discharge he had to be supported with a waking night carer to monitor him whilst asleep, Mr H was referred to the Telehealthcare Team to see if equipment could be used to reduce this level of support.

Mr H was loaned an epilepsy alarm to alert the staff if he is having a seizure and by using this alarm they have been able to halve the amount of care that he is receiving. Mr H now shares a waking night carer with another resident due to the monitoring and alerting system put in place.

### *Mr & Mrs S - Using Telecare to remain living at home*

Mr and Mrs S live together at home and both have dementia. They receive care four times a day. At the point of referral to the Telehealthcare Team there were concerns that this level of support was insufficient, as the couple had been going out during the night causing considerable concern to the family and putting them at risk. The increased care being considered at this time was 24hr live in carers at the property to support the couple and maintain safety during the night.

The Telehealthcare Team provided a property exit sensor to alert the family if the couple go out during the night. This has meant that the couple have been able to maintain their independence in living at home. The family's concerns have been alleviated and the couple have continued to manage with the existing care package.

***Appendix C***

## Telehealthcare - Examples of good practice

Leicestershire - The Signal Project (a multiagency 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 events. By marketing these visits, the project gave people the opportunity to see equipment at first hand. 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 joined forces to sell free standing items of equipment at the issue counter in the city's libraries.

A number of local authorities have utilised the ADL Smartcare web based product with positive results. A trial in Birmingham found that, compared to an Occupational Therapist's assessment, 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 professional assessment and of the remaining 30% none of the recommendations put users at risk and provided generally appropriate outcomes.

Bradford Metropolitan District Council's investment in the same ADL Smartcare product has resulted in a 60% saving on the costs of OT assessment. Lincolnshire County Council have taken a similar path using the same product and their waiting lists have also reduced considerably.

***Appendix D***

# Exceptional Equipment Panel

Terms of Reference

**Purpose of the Panel**

To consider requests for the funding of assistive technology where service users have been deemed ineligible for provision through mainstream budgets. The mainstream equipment services, for which there are identified budgets, include ICES (includes funding for Direct Payments for Equipment), telehealthcare, wheelchair services, Access to Work, orthotics and Continuing Health Care / Special Needs.

**Specific Objectives**

1. The Panel will meet bi-monthly commencing September 2010

2. To receive Panel requests from Community Rehabilitation Manager (CCS) via agreed Request Form.

3. To ensure best use is made of ICES returned specials.

4. To discuss and consider requests for funding taking into account best value and avoided costs.

5. To agree if and how requests will be funded - eg shared funding, personal budgets

6. To feed back outcome of Panel discussion to Community Rehabilitation Manager.

7. To keep a log of Panel requests and outcomes.

8. To consider the need for specific business cases to be prepared, particularly where a number of requests have been received for the same item of equipment, and drive forward associated commissioning / procurement processes.

**Membership**

The Panel will comprise of senior commissioners from both Cambridgeshire County Council and NHS Cambridgeshire:

- Claire Bruin, Service Director Adult Social Care, Strategy & Commissioning, Cambridgeshire County Council
- Catherine Mitchell, Director of Integrated Commissioning, NHS Cambs
- Sue Jestice, Head of Complex Case Management, NHS Cambs
- Diana Mackay, Commissioning Manager, Adult Services, Cambridgeshire County Council

Other members will be co-opted to join the panel as required.

**Review**

The Panel will be reviewed on a six-monthly basis.

# COMMUNITY IMPACT ASSESSMENT Appendix E

## Cambridgeshire's Assistive Technology Strategy

The following template has been put together to record the results of your impact assessment.

*For each of these questions, take account of the following equality strands:*

- *Age*
- *Sex*
- *Gender reassignment*
- *Marriage and civil partnership*
- *Disability*
- *Ethnicity, race and culture*
- *Sexual orientation*
- *Religion or belief*
- *Pregnancy and Maternity*

*You may also want to consider these characteristics, which can be significant in areas of Cambridgeshire:*

- *Rural isolation*
- *Deprivation*

| | **Key Sections** | Your Answer |
|---|---|---|
| **1.** | **Scope**: | |
| | • What is the existing service, document or action being impact assessed? | The document being assessed is Cambridgeshire's Assistive Technology Strategy which sets out the commissioning intentions in relation to the development and provision of all aspects of assistive technology (AT) to service users across all service user and age groups. |
| | • What are the aims and objectives of the service, document or action? | The strategy seeks to bring together the various strands of current provision, identify areas of good practice, identify gaps in provision and improve information, and accessibility for service users with an assessed need against clear eligibility criteria. |

| | Key Sections | Your Answer |
|---|---|---|
| | • **What is the proposed change? What will be different?** | The strategy contains seventeen recommendations for how the provision of assistive technology needs to be developed over the next three years focussing on:<br>• Better quality information for service users<br>• Ensuring AT is integral to all pathways of care<br>• The wider use of telecare and telehealth technology<br>• Establishing clearer and consistent eligibility criteria |
| **2.** | **Who should be involved:**<br><br>• **Who is involved in this impact assessment?**<br><br>**e.g. Council officers, stakeholders from partner organisations, service users and community experts** | A number of stakeholders have already been involved in the development of the strategy and will continue to be involved in its development. These include:<br>• Service users and carers via focus group sessions, the ULO and partnership boards<br>• District Councils<br>• NHS Cambs (Cathy Mitchell)<br>• Cambs Community Services (Jane Crawford-White)<br>• Supporting People (Melanie Gray & Lynne O'Brien)<br>• LDP (Paul Davies)<br>• Adult Social Care Commissioning Managers<br>• Transformation Team (Mike Hay) |
| **3 a)** | **What will the impact be?**<br><br>• **What groups will be affected by this?**<br><br>**What will be the impacts on these groups?** | Service users; potential service users; self funders; family carers; prisoners; staff working within adult services, older people's services, physical disability and sensory services, learning disability services and children's services.<br><br>All of the above will have a clearer understanding of the commissioners' plans and intentions relating to assistive technology so that people will be supported with appropriate assistive technology to remain living as independently as possible within the home of their choice. |

| | Key Sections | Your Answer |
|---|---|---|
| | • **What evidence has been used to inform this view?** | The strategy includes a comprehensive section on the review of national research literature and the evidence base for the use of assistive technology. This was undertaken in liaison with Public Health. Feedback from service user forums was also used to inform the strategy. A number of local case studies are included as appendices in order to demonstrate the value in the provision of AT. |
| | • **What plans are in place to mitigate any negative impacts identified?** | There is a potential for the very existence of the strategy to raise unrealistic expectations amongst service users and others as to what equipment is going to be available through statutory provision. Presentations of the draft strategy have focussed on the importance of good quality information so that service users are encouraged to self help where possible. The development of clearer eligibility criteria will mitigate the potential issue over raising expectations. These will be communicated to service users as they are developed. |

**4. Making a judgement:**

- Your final judgement – will your service, document or action have a positive, negative or neutral equality impact?
- If it will have a positive impact on some groups and a neutral impact on others, is this justified?
- Are there any existing or potential equality issues with your service, document or action that need to be addressed?

| **Equality strand** | ***Judgement based on evidence cited above (positive, negative, neutral*** | ***Issues or opportunities that need to be addressed*** |
|---|---|---|
| Age | Positive (all age groups are covered by the strategy) | Streamlining eligibility between adult and children's services |
| Sex | Neutral | - |
| Disability | Positive (improving disabled people's access to AT) | Engagement with the various partnership boards. |
| Ethnicity, race and culture | Positive (improving accessibility regardless of ethnicity) | Information about AT will need to be available in a range of formats / languages |
| Sexual orientation | Positive (improving accessibility regardless of sexual orientation) | - |
| Religion or belief | Positive (improving accessibility regardless of religion or beliefs) | Engaging with appropriate networks – eg Voices for Change |
| Pregnancy & Maternity | Neutral | - |
| Marriage and Civil Partnership | Neutral | - |
| Gender reassignment | Positive (improving accessibility regardless of gender) | - |
| *You may also want to make a judgement on:* | | |
| Rural isolation | Positive (improving access regardless of where a person lives) | Ability to access information on retail outlets in local areas. |
| Deprivation | Positive | |

**4. Making a judgement:**

- Your final judgement – will your service, document or action have a positive, negative or neutral equality impact?
- If it will have a positive impact on some groups and a neutral impact on others, is this justified?
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| Pregnancy & Maternity | Neutral | - |
| Marriage and Civil Partnership | Neutral | - |
| Gender reassignment | Positive (improving accessibility regardless of gender) | - |
| *You may also want to make a judgement on:* | | |
| Rural isolation | Positive (improving access regardless of where a person lives) | Ability to access information on retail outlets in local areas. |
| Deprivation | Positive | |

**5. Action planning:**

- Are there any actions that you have identified to address any potentially unjustifiable differences in impact on different equality groups
- Are there any actions you have identified to take advantage of an opportunity you have identified to promote equality and diversity
- Where will these actions be recorded (i.e. which service plan, strategy action plan etc.)?

| **Issue/ opportunity** | **Action** | **Lead officer** | ***Timescale*** | **Action plan recorded in** |
|---|---|---|---|---|
| Differences in eligibility criteria | Clear eligibility criteria are revised and developed so that all service users are clear what can be provided | Diana Mackay | May 2011 &ongoing | AT Strategy Action Plan |
| Providing good quality information to all service users | Information will be provided in agreed and alternate formats and communicated through service user forums. Information will be available via an on-line self help tool. | Diana Mackay | November 2011 | AT Strategy Action Plan |
| Engaging with diverse communities regarding access to equipment | Utilise existing networks for example faith based forums and traveller groups | Diana Mackay Marian Sycamore | Ongoing | Communications Plan & AT Strategy Action Plan |
| Training in the provision of AT, particularly Telecare and Telehealth monitoring equipment takes account of the needs of diverse community | Develop training strategy for AT. | Jane Crawford-White and Margi Fosh (CCS) | January 2012 | AT Strategy Action Plan |

| | | |
|---|---|---|
| **6.** | **Monitoring and Review:** | |
| | • If the actions identified in stage 5 are not incorporated into an existing action plan, how will you monitor them? | The Assistive Technology Strategy includes a comprehensive Action Plan detailing sixteen separate action points addressing seventeen separate recommendations and include those above at Section 5. The monitoring of the action plan will be undertaken via the monthly Integrated Community Equipment Service Commissioning Group. |
| | • When will you review this impact assessment? Who will be responsible? | The monitoring of the full Action Plan and the impact assessment will be reviewed six monthly and will primarily be the responsibility of Diana Mackay, Commissioning Manager, Adult Social Care. |