Learning Disabilities
Connected Care Solutions

Key information for health, housing and social care professionals and carers
Introduction

Connected Care and Health technology such as telecare, assistive technology and telehealth has a key role to play in supporting people with learning disabilities in a way that promotes independence as well as safeguarding them. Technology can make a difference to people with all kinds of learning disabilities, whether their difficulties are relatively mild or more profound and if they are living in formal care settings or more independently in the community.

From managing risks such as fires or falling, to aiding communication and helping to deliver greater privacy or dignity, technology can enable people to have more control over the way they live their lives. As well as enhancing more traditional care solutions by managing risk in the home environment, technology can also enable someone to be ‘connected’ with their wider community, friends and family and enjoy the wellbeing derived from activities such as going to the shops, to social events, to work and meeting friends and family.

As more is understood about learning disabilities it is clear that enabling technology has the potential to make a significant and positive difference to the lives of people with learning disabilities, and the ability of our health, housing and social care systems to manage their needs effectively. This document has been designed to demonstrate how the range of Connected Care solutions provided by Tunstall can enable people with a learning disability to live with greater independence, choice and control, both at home and in the community.

All statistics in this document sourced from mencap.org.uk

It’s estimated that 2% of the UK population have a learning disability

People with a learning disability are 58 times more likely to die aged under 50 than the general population, and 4 times as likely to die of preventable causes

>50

At least half of all adults with a learning disability live in the family home

Less than a third of people with a learning disability have some choice of who they live with, and less than half have some choice over where they live

UK learning disability statistics

29,000 adults with a learning disability live with parents aged 70 or over, many of whom are too old or frail to continue in their caring role

Just 1 in 3 people with a learning disability take part in some form of education or training

All statistics in this document sourced from mencap.org.uk
What is Connected Care?

Connected Care can be described as the way technology seamlessly interlinks with the wider package of care and support a person receives. Rather than the technology being seen as an ‘add-on’ to or replacement of the care provided by care staff, increasingly the technology is seen as integral to the holistic care plan. Connected Care ensures people receive the right type and right amount of care they need at the time and place they need it and in a way that is more efficient and cost effective for the provider and commissioner.

Tunstall offers a range of Connected Care and Connected Health solutions, which use advanced technology to provide enhanced care and support for people with learning disabilities. Solutions are tailored to the needs of the individual and their circumstances, and designed to evolve over time as the user’s requirements change.

Telecare, sometimes also called assistive technology, forms a key part of Tunstall’s Connected Care solutions, and is a system of devices which supports people in their own home by helping to manage risk. Appropriate, unobtrusive sensors are placed around the home, which, if triggered, send an alert via a Lifeline home unit to a specialist monitoring centre, where trained operators can alert a carer, keyholder or the emergency services. Telecare can also be used by carers in the home or in supported or residential care environments, with alerts from sensors being received on a pager.

Telecare can provide assistance to the person to help them do things (e.g. remind them to take their medication, or not to leave home alone), and give them the means to easily ask for help by pressing a button, which can be worn on the wrist or around the neck. Telecare can also alert others of dangerous situations (e.g. if they were to have a fall or leave the gas on).

Examples of technology in use and further details on the types of products developed by Tunstall are detailed in the following pages of this brochure.
Tunstall LifeCare™

Tunstall LifeCare has been designed to create a framework for transforming service delivery using technology as an enabler. As part of the approach, Tunstall has developed a number of modules tailored to particular end user needs. Our Learning Disability LifeCare programme is delivered by staff with specific experience in working with people with learning disabilities, helping organisations to provide tailored support which safeguards, and enables independence and the efficient delivery of care.

In addition to working through their chosen LifeCare Design, Delivery and Development modules, customers can include guidance and training on how technology can support people with learning disabilities, improving care outcomes and delivering significant care cost savings. Elements include:

**Awareness**
Courses for professionals who would benefit from understanding of person centred telecare solutions available, and how they can help to manage risk and promote independence, choice and control for the people you support.

**Assessment and co-assessment**
Supporting organisational staff to learn how to assess and prescribe Connected Care solutions to create the best outcomes for the people you support and your organisation. Face to face and/or desktop reviews can take place to help identify circumstances where telecare can have a positive impact on care packages and carers.

**Installation and programming**
Courses to enable staff to install and programme individual products and systems including Lifeline home units (using PC Connect Software), telecare sensors, NurseCall, CareAssist, and Canary Care. These courses can also be tailored to suit the different levels of competency required.

**Travel**
Training for providers, carers or family members to enable them to understand the application GPS solutions to support people who may be vulnerable when out in the community.

**Bespoke courses**
Developed to suit the needs and requirements of an individual organisation, focused on the Connected Care solutions in use and including specifically designed documentation and training materials.
Kathryn’s story

Increasing independence while managing risks

The situation
Kathryn has a learning disability and lives in her own flat with support from a local carer and support provider. During a recent review of her support she expressed a wish to be more independent. Her care manager supported this and examined the options to help Kathryn achieve her goal and still remain safe.

The solution
Kathryn now uses a range of equipment including:

- **CareClip (GPS mobile device with built in SOS button)** – Kathryn can go out on her own knowing that she can press her SOS button to get help at any time and the GPS in the CareClip will locate where she is.

- **Lifeline home unit / MyAmie pendant** – pressing the red button on the Lifeline home unit or on the bodily-worn pendant enables Kathryn to get help at the touch of button 24 hours a day when she is in her flat. The system connects her to a monitoring centre where specially trained operators can help her with any problems, contacting other services as necessary.

- **Heat detector** – located in the kitchen and wirelessly connected to the Lifeline unit, this will alert both Kathryn and the monitoring centre that there has been a rise in temperature, which could indicate a fire risk.

- **Flood detectors** – located in Kathryn’s kitchen and bathroom and wirelessly to the Lifeline unit, these provide an audible alert and simultaneously notifies the monitoring centre of a potential flood situation.

The outcome
Kathryn is enjoying her independence. She still receives support but this is balanced with some time on her own including being able to go into town independently to meet friends.
Janet’s story

Supporting older carers

The situation
Janet is an older carer looking after her adult son who has a learning disability. Janet fell and her son left her lying for 12 hours before he got help and she needed several weeks in hospital to recover. Janet’s son was also left alone at home for two days before his care manager was informed and was found trying to grill food wrapped in cellophane. Janet needed a way to get help quickly should she fall or become unwell and put an emergency care plan in place for her son.

The solution
Janet and her son have been given:

Lifeline home unit / MyAmie pendant – pressing the red button on the Lifeline home unit or on the bodily-worn pendant enables Janet to get help at the touch of button 24 hours a day if she feels unwell. Operators at the monitoring centre can then get the relevant help for both Janet and her son, and inform the appropriate contacts of the situation.

The outcome
The solution has given Janet great reassurance that she will be able to easily ask for help should she fall again or experience any other difficulty. She is also confident that her son will have support should she be away from home as a result of an emergency. Janet now feels able to continue caring for her son at home.
Kara’s story

Improving family life

The situation
Kara has a learning disability and is electively mute. She lives with her mother and younger sister. Kara is fed via a peg into her stomach as she refuses to eat. The family were using a doorbell which Kara would press to alert her mother if she wanted help especially during the night when she was being fed. The noise was disturbing her sister and having a detrimental effect on family life.

The solution
A telecare system has been installed which enables Kara to ask for help from her mum without disturbing her sister.

Lifeline home unit / MyAmie pendant – Kara wears a MyAmie pendant on her wrist and presses it any time she wants help from her mum, day or night.

Pager – the MyAmie sends a wireless signal via the Lifeline home unit to a small pager. During the day, Kara’s mum wears the pager on her belt or carries it in her pocket and it vibrates to let her know Kara needs assistance. During the night the pager is placed in a charger, which links to a small device under the pillow which will vibrate and wake Kara’s mum.

The outcome
As the telecare system is silent, it doesn’t wake Kara’s sister, who is able to sleep undisturbed. It also means Kara can have a shower without support as she can press her pendant if she needs help. Kara’s Mum is reassured that she will be alerted if Kara needs help, wherever she is in the house or garden. Quality of life for the whole family has been improved.
Reducing waking night provision

The situation
Waking night provision at several registered and group living services in Sheffield had increased over time due to various factors, and in some cases three waking staff were being deployed to support 12 people. The third member of staff was sometimes deployed as a ‘floating’ support who could be called upon should the need arise. This level of support was costly and unnecessary.

The solution
A pilot project was introduced with Dimensions and Tunstall working together to assess the individual needs of six services and identify solutions to meet these needs. Staff, families and the people being supported were consulted to ensure they understood the reasons for change and to address any concerns.

Epilepsy sensor – one of the major reasons for waking night staff was to monitor the wellbeing of people with epilepsy, undertaking regular routine checks during the night in case of seizures. Using epilepsy sensors provides continuous monitoring throughout the night.

Pager – if a seizure is detected sleep-in staff will be alerted immediately by a pager which links to a small device under the pillow which vibrates.

The outcome
Telecare has greatly improved the safety of the people Dimensions supports by providing constant monitoring. Removing the need for intrusive physical checks has increased privacy and improved the quality of sleep that people experience, and this has had a positive impact on their wellbeing and happiness. The project has also generated significant savings. Overall investment in technology across all six services was approximately £33,000. Reconfiguring services to withdraw five waking nights has reduced costs by £3,800 per week.
Leonie’s story

Telecare supports independent living by managing environmental risks

The situation
Leonie is a 30 year-old mum from Coventry who has a learning disability. Leonie receives 12 hours of support each week from Real Life Options, a national voluntary organisation dedicated to providing person-centred support for people with learning disabilities. Leonie’s package of support includes help to attend appointments and events as well as help with shopping and managing finances. Leonie wanted to move into her own flat with her young son Regan.

The solution
Following an assessment by her social worker, Leonie moved into a flat that was fitted with telecare. Real Life Options support staff are based within the same building as Leonie’s flat and use telecare to support Leonie and Regan’s wellbeing 24-hours a day, seven days a week.

Lifeline home unit / MyAmie pendant – pressing the red button on the Lifeline home unit or on the pendant enables Leonie to get help 24 hours a day whilst in her flat. The system connects her to a monitoring centre where specially trained operators can help her, contacting other services as necessary.

Property exit sensor – will alert Leonie if Regan decides to leave the flat without her.

Bogus caller button – situated near the front door, Leonie can press the button to quickly contact staff if she is unsure about a visitor.

Heat detector – located in the kitchen this will alert staff on the pager if it detects a possible fire, such as a pan boiling dry.

Flood detectors – located in Leonie’s kitchen and bathroom they will notify staff if taps are accidentally left on.

The outcome
Telecare helps maintain Leonie’s independence and means Leonie and Regan can live safer lives, with added privacy, and safe from risks such as fire, flood, falls or intruders. It also helps staff to provide high quality, non-intrusive support. Knowing that her flat is fully equipped to support her needs gives Leonie the freedom and peace of mind to live the life she has chosen. Leonie says “I feel very safe living in my flat knowing that I have telecare helping me to live a better life. I know me and Regan are safe and there are other people around to help me.”
Emma’s story

Using movement sensors to safeguard and enable privacy

The situation
Emma lives at Hatton Grove, a registered residential care home supporting up to 20 adults with a range of learning and physical disabilities with 24 hour care and support. Emma is 69, and has severe learning disabilities, along with Crohn’s disease and has periods of hyper-mania. She walks and spins in circles constantly and can be awake for 24-36 hours at a time. When she does go to bed, she may get up three or four times during the night. Staff were checking on Emma regularly when she was asleep to ensure her safety, but this often woke her and was having a detrimental effect on her mental health.

The solution
Because Emma often sleeps curled up in different parts of her bed, a bed occupancy sensor was not appropriate.

PIR (movement sensor) — a PIR has been fitted at bed level in Emma’s room and configured to alert staff if she leaves her bed. An override switch was fitted to enable the PIR to be turned on and off during the hours the telecare system is usually operational (9pm to 6am) to accommodate Emma’s irregular sleeping patterns. Should Emma leave her bed during this time period, staff can switch off the PIR and switch it on again when she returns to bed.

The outcome
Emma is no longer woken up by care staff checking on her wellbeing whilst she is asleep, and seems more content. She enjoys company and because telecare has freed staff time, Emma is able to enjoy more one-to-one social interaction, improving her quality of life.

Jenna Cowling, Registered Care Manager at Hatton Grove said, “To me, supporting the people that live here is as much about encouraging their passions and developing their abilities as it is about ensuring their personal care needs are met. Telecare has been fantastic for us. Not only does it help to manage risk and preserve dignity, it also frees up staff, enabling them to spend more personal time with the people they work with.”
Andrew and Gillian’s story

Enabling independent living by managing risks and medication management

The situation
Andrew and Gillian were living together in a small bungalow attached to a supported living environment, but wanted to increase their independence by having their own front door. They wanted to have their own home together, with a private garden, and to have space to enjoy each other’s company, without a support worker living with them.

The solution
Andrew and Gillian spoke to their Hft support worker, who worked closely with the couple to find a suitable flat for them to live privately, and supported them throughout the move. The Hft Personalised Technology (PT) team undertook assessments to explore how PT could assist in supporting their needs and enable them to live independently.

- **Lifeline home unit** – the Lifeline home unit allows the monitoring centre to ring the flat and alert support workers if Andrew or Gillian fail to answer.
- **Bogus caller button** – situated near the front door enables Andrew and Gillian to quickly alert staff if they need help or if they are unsure about a caller at the door.
- **Property exit sensor** – will let staff know if the door is opened or closed.
- **Medication dispenser** – reminds Andrew to take his pills without the need for a support worker to visit him, providing Andrew with more independence.

The outcome
Andrew and Gillian have achieved their goal of having their own front door and now live together in their two bedroom flat. They have more opportunities to gain confidence, develop new skills such as gardening and cooking, and can build their life together, with technology ensuring they are safe and have access to support when they need it.
Solutions - Safety

Lifeline Vi and MyAmie
The Lifeline Vi home unit receives alerts from telecare sensors placed around the home and automatically raises an alarm with a carer or monitoring centre. The MyAmie pendant can be worn on the wrist or around the neck and allows the user to call for help simply by pressing the red button.

Bogus caller/panic button
Fitted near the door, the discreet bogus caller button can be used to call for assistance at a 24 hour monitoring centre if a stranger requests entry into the home. Operators can advise the user, and all calls are recorded and can provide evidence admissible in court.

iVi intelligent pendant
The iVi intelligent pendant is a small, lightweight device which allows the wearer to press a help button to generate an alarm call, and will also automatically generate a call for assistance if it detects a fall.*

CareAssist
CareAssist is an extremely easy to use, portable device that provides onsite carers with a means to receive instant alerts from a range of telecare sensors. This means that carers can be quickly made aware of any incidents allowing them to respond, but removes the need for them to continually observe the person they care for.

Vibby
The Vibby is a sleek, contemporary and technologically advanced fall detector which can be worn on the wrist. The Vibby will automatically raise an alert if it senses the user has fallen, and also enables the wearer to easily call for help manually.*

Pager Receiver
Notifies the user with vibrations and illuminated symbols when a transmitter is activated, e.g. a telecare sensor or phone call. Can be carried in a pocket or attached to a belt.

*Due to the wide variety of types of falls, some falls may not be detected. In the event of a fall, the service user should always be advised to try and press the help button on the iVi or Vibby.
Solutions - Safety

Smoke detector

Tunstall smoke detectors provide increased reassurance by raising an alarm call at the monitoring centre while also activating a local audible alarm, if they detect smoke.

Heat detector

The heat detector provides additional protection against the risk of fires in rooms where smoke detectors are unsuitable e.g. kitchen.

Natural gas detector/shut off valve

The natural gas detector provides an early warning of dangerous levels of gas.

When combined with the shut off valve, this solution automatically cuts off the gas supply to an appliance when a leak is detected.

Carbon monoxide alarm

The carbon monoxide alarm provides an immediate alert when dangerous CO emissions have been detected due to a blocked flue or fault in a fuel burning appliance.

Flood detector

The flood detector will raise an alarm if sinks or baths overflow, or if a washing machine door is opened mid-cycle, protecting both people and property.

Passive Infra Red (PIR)

PIRs are wireless movement detectors that can be used to detect both movement (intruder monitoring) and lack of movement (inactivity monitoring).
Solutions - Safety

**Property exit sensor**
This sensor specifically monitors for people leaving a property at unusual times of day and night. It can also detect if a main exit door has been left open and can be linked to external lighting to provide added protection.

**Bed occupancy sensor**
This specially designed pressure pad fits under the mattress and provides an early warning by alerting that the user has left their bed and not returned within a pre-set time period. The sensor can also be programmed to switch on lights, helping people find their way to and from bed easily.

**Enuresis sensor**
Placed between the mattress and sheet, this sensor provides immediate warning on detection of moisture, allowing effective action to be taken. The sensor eliminates the need for carers to make physical checks during the night, promoting dignity and independence.

**Epilepsy sensors**
Epilepsy sensors are used to monitor people with epilepsy while they sleep. Patented sensor technology detects a person’s movement in bed and is able to differentiate normal movements from epileptic seizures.

**DDA flashing beacon**
The DDA flashing beacon links to a carer pager and flashes to indicate when different types of alarms have been activated.

**Bed shaker**
The bed shaker generates powerful vibrations to wake the sleeping user. Placed under the pillow and linked to a carer pager it can alert the user to events such as a smoke alarm or bed occupancy sensor being triggered.
Solutions - Health

mymedic and myclinic
Telehealth systems (mymedic for single users and myclinic for multiple users, e.g. in residential homes) which enable vital signs and symptoms to be monitored. Readings outside of parameters set for the patient will raise an alert with a clinician, enabling early intervention. Can be particularly helpful for people with learning disabilities who may not be able to communicate their symptoms.

Medication dispenser
Automatically provides access to medication over a 28 day period, providing audio and visual alerts to the user and/or their carer each time medication should be taken, and raising an alert if the user fails to access their medicines.

Solutions - Activity monitoring

Canary
Canary is a discreet, easy to install system which discreetly monitors activities of daily living using sensors to monitor movement and temperature. The system can detect, for example, whether someone is in or out of bed at their usual time and kitchen useage. Unusual events raise an immediate alert via text or email, and patterns of behaviour can be viewed using an online portal.

Solutions - Mobile alarm

CareClip™
The CareClip is a wearable, mobile device ensuring the user can easily access help when away from home. Features such as location monitoring, fall detection, boundary alerts and two-way speech ensure formal or informal carers can respond quickly. Location information is updated every three minutes and a true global roaming SIM is included, ensuring accuracy and reliability.
About Tunstall

Over the last sixty years, Tunstall has pioneered the use of technology to enable independent living, creating the Connected Healthcare industry as we know it today, and supporting more than five million people and their families across the world. Tunstall was the first to develop alarm systems for older people, and has continued to lead the market ever since, remaining at the forefront of developments such as telecare and telehealth, right up to the present day where we are harnessing the power of digital technology.

We blend British design and manufacturing with externally sourced innovation to create a cost effective portfolio of services, underpinned by our global experience of enhancing care in the home for people in more than fifty countries. As the digital opportunity accelerates the speed of change, we continue to work in partnership with our customers to develop more ground-breaking, life-changing solutions.