



BARNSLEY
Metropolitan Borough Council

ASSISTED LIVING TECHNOLOGY

SERVICE

Telecare Catalogue & Referral Guide

**For Health, Social &
Emergency Care Services**



Contents

Introduction.....	3
Why use this service?	3
Telecare background.....	4
Risk Management	5
Who can ALT/Telecare help?	8
Solutions quick guide.....	9
Solution summary descriptions.....	13
Telecare referral process.....	19
Telecare service establishment document.....	20
Further information.....	23
Other useful resources.....	23

Introduction

- The provision of Assistive Living Technologies (ALT) is part of Barnsley Council's Place Health and Adult Social Care Directorate.
- Telecare is one of the key ALT solutions and is now widely available, making a significant contribution to the preventative agenda, as well as being a key delivery mechanism for People in Control.
- Awareness of Telecare is increasing. Its use has a significant part to play in managing the risks associated with helping vulnerable people to live independently
- Telecare applications are moving beyond just Older People's services to include Adult services such as Learning Disabilities, physical and sensory impairments, mental health, supporting carers and children's services
- There is an increasing evidence base suggesting that telecare substantially enhances service users and their carers quality of life and delivers organisational efficiency savings across both health and social care
- New applications are constantly emerging through the introduction of new equipment, which provide significant opportunities to the health and social care system in to increase people's ability to self-care
- The local ALT Monitoring Centre is accredited with the Telecare Services Associations Codes of Practice for Monitoring, operating 24/7, 365 days a year and monitors Telecare alerts, with a dedicated response team visiting service users who, for example have experienced falls
- We are constantly trying to develop new Assistive Living Technologies solutions in response to need. So, if there isn't a solution listed within this guide please contact us so that we can discuss and develop a solution together

Why use this service?

Pressure on health, social and emergency care is at an unprecedented level. ALT can provide a range of solutions to enable people to live as safely and independently as they are able, in their own home, within supported living or in a care home.

It can be used prior to, instead of or to compliment packages of care delaying the need to rely on scarce health and social care services.

It also enables people the choice to remain as independent as possible, without which they may have no choice in accepting external intervention which can be intrusive and negatively impact on their privacy and dignity. It also provides family with the reassurance that there is 24-hour monitoring and response, should an untoward event occur.

Telecare background

What is Telecare?

The **continuous, automatic, and remote** monitoring of **real time** emergencies and **lifestyle changes** over time in order to manage the risks associated with independent living.

How does it do this?

The Telecare system ensures that a minor event does not turn into a crisis by making sure that when something significant happens that an alarm is raised, and an appropriate response is provided promptly.

What does Telecare consist of?

There are four key elements to a Telecare service:

1. Telecare sensors that raise an alarm when required. These are generally battery powered and signal wirelessly.
2. An Alarm unit or in sheltered housing/extra care a Telecare overlay system or nurse-call overlay
3. Monitoring Centre to receive alarm calls and speak to the service user. In some cases a local paging system to alert a carer locally is also applicable.
4. Appropriate response to the alarm, may be provided via family and friends, emergency services or Telecare provider (via housing mobile warden services)

What are the main service user outcomes from using Telecare?

- Maintain/enhance independence
- Delay/avoid admission to residential care
- Reduce hospital admissions
- Reduce the duration of hospital admission
- Support carers by contributing to reducing anxiety and stress

Telecare should be considered in every holistic assessment as one of the possible solutions to meet service user (or carer) needs along with other practical Assistive Living Technologies and traditional services as part of an effective package of care to meet the Client's needs.

Risk Management

Telecare is an effective risk management resource for a range of people who want to:

- Increase their confidence/safety
- Manage the effect of memory loss
- Minimise the risk of falls
- Enable more independent living
- Self-manage medical conditions e.g., epilepsy, enuresis
- Protect themselves from fire and other safety risks
- Address challenges due to hearing and sight impairment
- Support carers

The data below provides a forecast of the potential increase in differing cohorts of people who could benefit from utilising technologies to delay input and reliance from health and social care services.

Falls

People aged 65 and over predicted have a fall in Barnsley (Forecast to 2030 (POPPI))

	2015	2020	2025	2030
People aged 65-69 predicted to have a fall	2,916	2,729	3,021	3,408
People aged 70-74 predicted to have a fall	2,619	3,089	2,921	3,257
People aged 75-79 predicted to have a fall	1,937	2,251	2,692	2,546
People aged 80-84 predicted to have a fall	1,996	2,188	2,609	3,163
People aged 85 and over predicted to have a fall	2,236	2,709	3,225	4,085
Totals	11,704	12,966	14,468	16,459

Dementia

Number of people with Dementia aged 65 and over in Barnsley (Forecast to 2030 (POPPI))

	2015	2020	2025	2030
People aged 65-69 predicted to have dementia	177	166	183	207
People aged 70-74 predicted to have dementia	304	359	340	378
People aged 75-79 predicted to have dementia	486	566	677	641
People aged 80-84 predicted to have dementia	731	798	949	1,151
People aged 85-89 predicted to have dementia	706	800	956	1,167
People aged 90 and over predicted to have dementia	539	628	834	1,069
Totals	2,942	3,317	3,940	4,612

Limiting long-term conditions

Number of people in Barnsley with a limiting long term condition (Forecast to 2030 (POPPI))

	2015	2020	2025	2030
People aged 65-74 whose day-to-day activities are limited a lot	6,849	7,176	7,393	8,290
People aged 75-84 whose day-to-day activities are limited a lot	5,512	6,322	7,556	8,018
People aged 85 and over whose day-to-day activities are limited a lot	2,679	3,194	3,916	4,894
Totals	15,041	16,692	18,864	21,203

Mobility

People aged 65 and over unable to manage at least one mobility activity on their own, by age and gender, projected to 2030. Activities include going out of doors and walking down the road; getting up and down stairs; getting around the house on the level; getting to the toilet; getting in and out of bed

	2015	2020	2025	2030
People aged 65-69 unable to manage at least one activity on their own	1,208	1,131	1,251	1,412
People aged 70-74 unable to manage at least one activity on their own	1,452	1,712	1,618	1,806
People aged 75-79 unable to manage at least one activity on their own	1,401	1,623	1,941	1,833
People aged 80-84 unable to manage at least one activity on their own	1,483	1,613	1,913	2,318
People aged 85 and over unable to manage at least one activity on their own	2,345	2,805	3,315	4,165
Totals	7,889	8,884	10,038	11,534

Who can ALT/Telecare help?

- **Patients recently discharged from hospital**
To integrate with existing services (e.g., Reablement and intermediate care) to avoid the need for rehospitalisation.
- **Older people living alone**
Risk management in their own homes, increased confidence relating to accidents & security
- **People with a dementia**
Reminders and sensors to detect dangerous situations
- **People with learning disability**
Opportunity to maximise independence through electronic aids & emergency detection
- **People with physical disabilities**
Remote control devices with risk management to provide easier access to emergency services in the event of accident
- **People with increased frailty**
Safety net of support and long-term monitoring of the progression of their condition
- **Chronic disease or long-term condition sufferers**
Supported self-care and expert patient programmes with easy access to 24-hour support services to avoid unscheduled use of hospital services
- **People with mental health problems**
Rapid support at times of crisis & help to achieve compliance with medication therapies
- **People with sensory impairments**
Sensors to help compensate for reduced senses, management of risk through improved user interfaces
- **Tenants in sheltered housing schemes**
Extends existing community alarms to include a range of automatic environmental sensors
- **Extracare housing tenants**
Supports independence by managing risks without the need for 24-hour care services
- **People with complex support needs**
Assessment of lifestyle and problems through activity monitoring
- **Informal carers of any of the above groups**
Continuous emergency monitoring to provide respite
- **People at risk of domestic violence**
Silent and rapid access to emergency services
- **People at risk of abuse from bogus callers**
Increase confidence by providing continuous access to support and emergency services

Solutions Quick Guide

The descriptions below relate to the most frequently used applications. The equipment can be used in other applications to meet individual service user needs. Solutions will not always be appropriate for every service user need.

If you cannot identify what is required to meet your client/patients need, please contact the ALT service so that we can work with you to develop a bespoke solution to meet their needs:

- Phone: (01226) 775671
- Email assistiveliving@barnsley.gov.uk

Telecare Package examples

Package 1 – Safe & Secure at Home

Low, Moderate, Substantial & Critical – Ideal for use at the early stages of the care pathway particularly where the FACS criteria has not been met

Equipment	Application	Service Users Weekly Monitoring & Response Charge
A. Lifeline Alarm Unit	For service users who feel vulnerable as a result of an accident or due to the fact that they live alone.	£4.41 A
B. Smoke Detector	Offering additional support where service users worry about being able to hear their smoke alarm or where mobility and memory support issues might impair their ability to take the appropriate action.	£4.99 A + B
C. Bogus Caller Button	Offering further peace of mind, the button is fixed by the main access door to the property where fear of crime is an issue. If concerned about a caller at the door the service user can simply press the button and the ALT Monitoring Centre can hear the conversation and take appropriate action.	£4.99 A + B + C
D. Carbon Monoxide Detector	Early indication of Carbon Monoxide. To be installed in properties that have old heating systems & appliances which may be at risk of emitting Carbon Monoxide.	£4.99 A+B+C+D

Package 2 - Safe & Well at Home with Medication Support (Substantial and Critical)

Equipment	Application	Service Users Weekly Monitoring & Response Charge
Alarm Unit +	For service users who are not socially isolated where their well-being requires monitoring. The Lifeline provides additional support in helping to remind service users to take their medication as it has the ability to play pre-recorded messages, which can be input by a member of family etc., the message facility can also be used to remind service users of day centre visits, hospital appointments etc.	£5.51

Package 3 – Service users who are at risk of falling (Moderate, Substantial, Critical)

Equipment	Application	Service Users Weekly Monitoring & Response Charge
Lifeline Alarm Unit	Used to communicate with the ALT Monitoring Centre to promote the service user's well-being.	£5.51
Smoke Detectors	The smoke detector will alert ALT should smoke be detected in the service user's home. ALT will attempt to contact the service user to ensure the alert was not triggered due to an incident such as burning toast prior to contacting the fire and rescue service. Particularly useful where mobility or memory support issues might impair the service users ability to take appropriate action.	
Bed Sensor	The bed sensor is placed under the mattress and timed parameters are set between normal going to bed at night and getting up in the morning. If the service user gets out of bed during this period and does not return within a set time, then an alert is received at the ALT Monitoring Centre. The service user will be contacted to check on their wellbeing. A device attached to the sensor will also switch on a bedside lamp if required to reduce the risk of falls.	
Person centred optional extras:		
Fall Detector	Fall detectors are worn on the person and will be activated by impact followed by inactivity. During this time the unit will bleep, giving the service user a chance to cancel the alarm call. If the call is not cancelled within the given time, an alarm alerts the ALT Monitoring Centre. This is particularly useful for people who fall regularly or with some conditions where falls might occur without prior warning due to certain conditions, e.g., because of previous head injuries or epilepsy and can give the service user greater confidence.	No additional charge

Motion Sensor	Can be used to detect lack of activity as part of the overall package or deployed as virtual sensor to meet specific needs.	No additional charge
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The peripherals within this package may not be required or additional equipment may be required. Please discuss options available with the ALT service to meet the service user's needs.

Package 4 – Service users who require memory support (Substantial and Critical)

Equipment	Application	Service Users Weekly Monitoring & Response Charge
Lifeline Alarm Unit	Used to communicate with the ALT Monitoring Centre to promote the service users well-being.	£5.51
Smoke Detectors	The smoke detector will alert ALT should smoke be detected in the service user's home. ALT will attempt to contact the service user to ensure the alert was not triggered due to an incident such as burning toast prior to contacting the fire and rescue service. Particularly useful where mobility or memory support issues might impair the service users ability to take appropriate action.	
Bed Sensor	The bed sensor is placed under the mattress and timed parameters are set between normal going to bed at night and getting up in the morning. If the service user gets out of bed during this period and does not return within a set time then an alert is received at the ALT Monitoring Centre. The service user will be contacted to check on their wellbeing. A device attached to the sensor will also switch on a bedside lamp if required to reduce the risk of falls.	
Person centred optional extras:		
Property Exit Sensor	The property exit sensor will alert ALT if the service user exits their property at an inappropriate time of the day.	No additional charge
Temperature extremes sensor	The sensor will alert ALT if high or low temperatures are detected or if there is a rapid rise in temperature. This sensor is normally fitted in the kitchen.	No additional charge
Flood Detector	Provides early warning of potential floods this is very useful when forgetfulness is becoming an issue. It is often placed under the sink in the bathroom and alerts ALT if it detects flood water.	No additional charge
Carbon Monoxide Detector	Provides an alert to ALT if the sensor detects Carbon Monoxide. This detector detects Carbon Monoxide at relatively low levels. It is usually placed in the vicinity of gas appliances to give early indication of the presence of Carbon Monoxide.	No additional charge
User Reminders	This is where the user needs a prompt e.g., reminder to take their medication, lock their doors etc. Messages will need to be recorded preferably by the users family. The Lifeline will announce "reminder" and bleeps. The user will then need to press the green key to play the reminder message.	No additional charge

Motion Sensor	Can be used to detect lack of activity as part of the overall package or deployed as virtual sensor to meet specific needs.	No additional charge
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<p>Natural Gas Detector</p>	<p>This is a mains powered natural gas detector which provides early warning of dangerous levels of gas and alerts ALT if it detects a gas leak. The sensor is normally sited on a wall not more than 30 cm from the ceiling and not more than 5 metres from the gas appliance.</p> <p>This sensor needs to be installed by a qualified tradesman so is subject to an additional charge and longer installation time. If the Natural Gas detector is fitted this should also include a Carbon Monoxide detector as part of the installation.</p> <p>This type of detector given the costs would be installed as a last resort. Development work is underway to introduce a pathway which will include preventative interventions such as solutions that do not involve Gas where appropriate, with the aim of minimising circumstances where this type of equipment would be deployed.</p>	<p>Please call for the cost and other options</p>
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The peripherals within this package may not be required or additional equipment may be required. Please discuss options available with the ALT service to meet the service user's needs.

Solution Summary Descriptions

Bed occupancy sensor



Raises a call if service user is out of bed longer than a reasonable time period. Can also be set to raise an alarm if not in bed by or out of bed by a defined time. Switches on a bedside light when getting up during the night and switches off when return to bed.

Utilised as part of the Falls and Memory Support Packages where service users have a substantial or critical need.

Assessment tips

- Note start and end times e.g., 10pm to 7am
- Note reasonable time period to be out of bed e.g., 15 minutes
- Note type of bed (e.g., double beds)
- Will not work with all mattress types e.g., profile

Bogus caller button



Application – when users are concerned about bogus callers or have already been a bogus caller victim

- Usually mounted on the inside of the front door or door frame.
- Can generate either silent or noisy alarm calls
- The ALT Monitoring Centre reminds service users to check visitor's ID

Utilised as part of the ALT Safe & Secure at Home Package targeted at service users with low, moderate, substantial, or critical need. Operates as part of a wider safeguarding partnership with the Community Safety Team and South Yorkshire Police.

Application tip

- Can also be used as a fixed point panic button.

Carbon Monoxide (CO) detector



Application – where there is a risk of a carbon monoxide e.g. blocked flue or fault in a fuel burning appliance

- Detects carbon monoxide at relatively low levels.
- Particularly useful for when service users are sleeping downstairs.

Utilised as part of the Safe & Secure at Home Package targeted at service users with low, moderate, substantial or critical need.

Assessment tip

- Need to be particularly aware of response mechanism

Easy press adapter



Application – for service users who have limited dexterity and who find it difficult to press a conventional pendant.

- Available for either Amie+ or Gem+ pendants.

Enuresis sensor



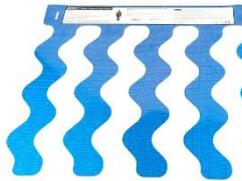
Application – detects incontinence in bed

- Consists of sensor mat located under the sheet and a control unit.

Assessment tip

- Care needed defining response mechanism.

Epilepsy sensor



Application - generates an alarm when tonic-clonic seizures are detected in bed.

- Consists of a sensor under the sheet and a controller

Fall detector



Application – automatically raises an alarm call when a fall is detected. Also has a manual activation button.

- Detects falls using a two stage detection process based on orientation and impact.
- Wrist worn.

Utilised when required as part of the ALT Falls Package where service users have a substantial or critical need.

Flood detector



Application – provides early warning of potential floods, useful where forgetfulness is becoming an issue

- Often placed under sink in bathroom

Can be utilised as part of the ALT Memory Support Package where service users have a substantial or critical need.

Assessment tips

- Please let the ALT know where you want it installed.

Gas detector



Application – where there is concern that gas may be left on and not lit e.g. gas cooker.

- Mains powered detector detects gas and raises an alarm call.

Assessment tips

- Need to be particularly aware of response mechanisms
- May take slightly longer to install due to need for a qualified tradesman

Gas shut off solution



Application – where there is risk of gas being left on, unlit and the need for the gas supply to be turned off.

- The solution detects gas, shuts off the supply (usually to the cooker) and raises an alarm call.

Solution consists of control unit with key switch, shut off valve, natural gas detector and a radio transmitter. Particularly of benefit for those with cognitive impairments and as a solution works best when can be provided early, so maximising the benefits to the service user.

Assessment tips

- Need to be particularly aware of response mechanisms.
- Installers will need to identify gas pipe size prior to installation in order to supply the correct size valve.
- May take slightly longer to install due to need for an electrician and a Gas Safe registered fitter and is expensive when compared to the other solutions.

Heat detector



Application – often used in kitchens to detect fire

- Generates an alarm call when high temperature (54C- 62C) is detected.
- May be a requirement for some landlords.

Motion sensor



Application – either as part of an inactivity system, as part of an intruder system, as part of a virtual sensor, or as part of an Activities of Daily Living assessment tool

Utilised where required as part of the Falls and Memory Support Packages where service users have a substantial or critical need.

Assessment tips

- Need to define the inactivity time period(s) to be set up e.g. 7am to 9am
- For intruder applications usually provide more than one sensor, may also require arm/disarm trigger and/or zoning button.
- ADLife and Virtual sensors require fast PIR's and a Lifeline Connect+/V+

MyLife X10



Application – provides the Lifeline Connect+ with ability to switch devices on/off such as lights using the X10 main and secondary controllers.

Utilised when required as part of the ALT Falls Package where service users have a substantial or critical need, or where the on-site carer needs to identify different activation.

Paging solutions



Application – where there is a carer in the same property who will be able to respond to the alarm. Also for the service user where usual forms of alarm indication are not suitable.

- Consists of a pager with charger and vibrating pillow pad and an optional flashing beacon.

If the call is not answered by the carer the call may be automatically sent to the ALT Monitoring Centre.

Used in Learning Disability Supported Living Schemes.

Property exit sensor



Application – where there is a risk that the user may exit the property at an inappropriate time of day.

- Raises a call if the user exits the property and doesn't return within a relatively short time period.
- Consists of controller wired to motion sensor and magnetic contacts.

Utilised as part of the ALT Memory Support Package where service users have a substantial or critical need.

Assessment tips

- Note start and end times e.g. 10pm to 7am
- Note reasonable time period.
- Note which door requires the sensor (front, back, both)
- Need to be clear who responds
- Optional carer key switch
- Option to raise an alarm if the door is left open for a preset time even if the user is at home
- Nominated responder required to attend any no voice contacts

Reminders pack



Application – where a user just needs a prompt e.g. to be reminded to take their medication, lock their doors etc.

- Requires a Lifeline Connect+/V+ and messages to be recorded, usually by family.
- Lifeline Connect says “reminder” and bleeps, the service user presses the green key to play the message.

Assessment tip

- Need to define how long before the unit rises an alarm if the reminder is not acknowledged
- Specific times required as part of professionals referral for medication reminders

Smoke detector



Application – where additional assistance is required when smoke is detected. It provides both a local audible alert and raises an alarm call.

- Particularly suited for service users with issues over mobility and cognitive impairment.

Utilised as part of the ALT Safe & Secure at Home Package and Falls and Memory Support Packages. Operates as part of a wider safeguarding partnership with South Yorkshire Fire & Rescue Service.

Temperature extremes sensor



Application – where there are concerns over the user's ability to maintain an adequate temperature in their dwelling.

- Raises alarms for excessively high and low temperatures and a rapid rate of rise in temperature. Often installed in a kitchen.

Utilised as part of the ALT Memory Support Package where service users have a substantial or critical need.

Additional Assistive Living Technology Solutions - Please call us for more information.

Mobile GSM Alarm Units

Application – can be installed to provide service where there is no traditional telephone landline it works across the mobile telephone network.
Requires an active SIM card.

MobileCare

This is a simple add on service which complements the service. It operates using the service users own existing mobile telephone when out an about and away from the home and on the move.

Further information

For further information please contact the ALT via:

Telephone: 01226 775671

Email: assistiveliving@barnsley.gov.uk

Other Useful Resources

Ask Sara

<http://www.dlf.org.uk/living-made-easy>

AcTo Dementia

<http://www.actodementia.com/>.

Website run by a group of academics and provides recommendations and guidance on **accessible touchscreen** apps for people living with dementia.

Dementia Citizens project

<http://dementiacitizens.org/>

A research project that allows people with dementia and their carers to 'test' out two different apps. They are hoping to use the data to come up with some recommendations etc. The apps they are trialling are: Book of You and Playlist for life.

Alive! Activities

<http://aliveactivities.org/>

They do a lot of work around the use of iPads with people with dementia (especially in the later stages).

Mindmate

<http://www.mindmate-app.com/>

Designed to support independence in dementia and consists of three different Apps. One for the individual living with dementia, one for (family) caregivers and one especially designed for residential care.

BrainyApp

<http://www.bupa.co.uk/health-information/tools-calculators/brainy-app>

Aims to help people improve their brain-heart health and reduce cardiovascular risks.

Memory apps for dementia

<http://memoryappsfordementia.org.uk/>

Details apps that may be beneficial for people living with dementia

QCare

<http://www.qcare.co.uk/top-5-apps-for-people-living-with-dementia.html>

The Nominet Trust has a useful (although a few years old now) article on how digital technology can support people with dementia

<http://www.nominettrust.org.uk/knowledge-centre/blogs/how-digital-technology-supporting-people-living-dementia>

We-engage

<http://we-engage.blogspot.co.uk/p/support.html>

Work on digital creativity with older people have details of apps they have found useful.

Young Dementia UK

<https://www.youngdementiauk.org/helpful-technology>

Notes