TeleHealthCare Equipment

For independence and safety at home:

- Personal Health and Wellbeing
- Environmental Monitoring
- Sensory Impairments
- Medication Management
- Support Devices and ECS

NHS Grampian
Aberdeenshire Council

Occupational Therapy • Joint Equipment Centre Service
What is Telecare?

Telecare is a term that covers a range of devices and services that harness developing technology to enable people to live with greater independence and safety in their own homes.

Examples include devices that trigger a response from a call centre, such as falls monitors and motion sensors.

The responses may range from a phone call to the person, to alerting a family member, local responder, neighbour or social service, to alerting emergency services if appropriate.

Other examples include devices that directly alert the person in the home to a particular hazard.
IT developments are continually extending the range of devices and services available and, as a result, the scope for telecare to support people with particular health and social care needs – such as older people and people with disabilities – to remain in their own homes and optimise their independence and quality of life.

In this brochure are a range of examples of alarms, sensors and monitors with relevant information for practitioners, service users and their families. Also included are details of GPS devices and Environmental Control Systems.

*Illustration courtesy of Tunstall Healthcare (UK) Ltd.*
Epilepsy Sensor
This state of the art sensor monitors the user’s vital signs including heart rate and breathing patterns to detect a range of epileptic seizures. The sensor eliminates the need for carers to make physical checks, promoting independence and dignity.

VitalBase Fall Detector
A wrist worn fall detector designed to identify a serious fall that leads to a state of unconsciousness and immobility of the user and upon detection of such a fall, raises and automatic call to the monitoring centre.

Tunstall Waist Worn Fall Detector
8,000 older people fall every day in the UK. Tunstall’s fall detector can provide valuable peace of mind by automatically detecting a serious fall and raising an alert to the monitoring centre or designated carer.
**Lifeline Connect+**

Base unit from which alarm calls are made to the regional communications centre and Telecare sensors are linked. The reminder functionality of the Lifeline Connect+ informs the user about key information, for example a family member can record a message to remind the user to take their medication at a particular time. If the user has not confirmed receipt of the message, an alert will be raised.

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**GSM Module**

Specifically designed to connect to Lifeline home units or Communicall Vision warden call systems, allowing calls to be raised using the GSM cellular mobile phone network.

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**Bed/Chair Occupancy Sensor**

Provides an early warning by alerting that the user has left their bed or chair and not returned within a preset time period, indicating a potential fall. The sensor can also be programmed to switch on lights, helping people find their way to and from bed easily.
**Minuet Watch**
This has been developed to help encourage telecare users to wear their personal triggers throughout the day. By combining an alarm button with a high quality watch, users are more likely to wear it and as a result will be provided with additional protection as their ability to raise an alarm is increased.

**Gem**
Worn round the neck, on the wrist or attached to an item of clothing, personal triggers enable a call for help to be raised anywhere in the home or garden within a 50m range of the Lifeline home unit.

**MyAmie Pendant (Radio)**
The MyAmie is a small and discreet pendant designed to provide more comfortable wearing options for the user. Operating on the 869MHz dedicated social alarm frequency, the MyAmie pendant enables the user to raise a call for help in their home or garden, within a 50m range of the Lifeline home unit, simply by pressing the large red button.
**Fast PIR (Movement Detector)**
A wireless movement detector that has been enhanced to enable its use as part of the new features of the Lifeline Connect+, including Virtual Sensors and ADLife. It can also be used as part of an intruder alarm and for both activity and inactivity monitoring.

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**Property Exit Sensor**
As 40% of people with dementia are prone to wandering, this sensor specifically monitors for people leaving a building at various times of day or 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.

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**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, promoting dignity and independence.

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**Pressure Mat - Specific Floor**
Monitors movement in a specific area, for example to monitor if someone has got of bed or left the house.

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**Pull Cord (Radio)**
To raise alerts in areas where personal triggers are unlikely to be worn e.g. positioned next to the bed. A wired version is also available.
Environmental Monitoring

**Carbon Monoxide Detector (Wireless)**
Warns of dangerous CO2 levels which otherwise could go undetected, providing unrivalled levels of accuracy and reliability.

**Flood Detector**
Provides an early warning of flood situations, such as taps being left on.

**Temperature Extremes Sensor**
Monitors for low and high temperature extremes in addition to rate of rise of temperature. Helps minimise the risks associated with changes in temperature including the build up of heat in a kitchen and the risk of sustained periods of cold weather.
Smoke Detector (Wireless)
Enhanced with new features such as auto low battery reporting, only one battery for ease of management and accreditation to the very latest standard for smoke detectors.

Gas Shut Off Valve
When combined with the natural gas detector, this solution automatically cuts off the gas supply to an appliance when a leak is detected.

Natural Gas Detector
Provides an early warning of dangerous levels of gas. Can be linked to the Gas Shut Off Valve to automatically cut the gas supply off, if a leak is detected.

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

X-10 Controllers
Can be used in conjunction with the Bed/Chair Occupancy and Property Exit Sensors in order to switch on lights when a sensor is activated.
**Care Assist**

Enables carers to be notified of alarm calls when they are at home or in the garden. Can also be programmed to vibrate to provide alerts to people who have hearing impairments.

**DDA Solution**

The DDA pager solutions immediately alert telecare users or their own carers when a telecare alarm is generated. They are particularly useful for telecare users with hearing impairments or for live-in carers or family members who need to be notified quickly if the person they are caring for needs help.

**DDA Vibrating Pager**

When a telecare sensor is activated, the Lifeline sends a signal to the DDA transmitter, which alerts the wearer by vibrating an LED.
**DDA Wrist Pager**
The wrist pager is a small, discreet paging device that is designed to be worn like a watch. Like the standard pager, the wrist pager vibrates and lights coloured LEDs when a telecare event is generated.

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**DDA Pager Charger Including Pillow Alert**
The DDA pager charger is required to charge the pager. The cradle also links to a vibrating under pillow alert and when the pager is in the cradle, it automatically vibrates when an alarm is raised.

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**DDA Flashing Beacon**
The beacon works with the pager and flashes to indicate when a telecare alarm has been raised.

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**Inductive Loop System**
The system has been designed to connect to a Lifeline Connect+ or Communicall Connect speech module to enable the user to clearly hear the operator/caller during alarm calls through the Tunstall units.

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**Visual Call Beacon**
Provides visual confirmation when a sensor or trigger is activated.

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**Sounder Beacon**
Available in blue or red, it provides audio and visual confirmation of alarm call. Provides additional reassurance for hearing impaired people.
Medication Dispenser

Provides an effective solution to support medication compliance by automatically dispensing medication and providing audible and visual alerts to the user each time medication should be taken. If the user fails to access the medication, an alert is raised to the monitoring centre or designated carer.

Tab Timer

Up to 5 daily alarms, easy to set and programme – 3 buttons to control all functions – a reminder for medication or doing something at a certain time e.g. Day Centre bus time of arrival.
**Voice Cue**
Provides verbal reminders at the time needed. Record up to 5 messages and set the clock to play them, at the pre-set times. For example, ‘Time to take your medication’ and hear it played back at 7am and 6pm.

**Time Cue**
Record a message then set the clock to play it back at the pre-set time. A single speech output device that links to a digital clock and reminds users that it is ‘time to take your medication’.

**Cadex Medication Reminder Watch**
Has up to 12 daily alarms with auto-reset, repeats every day at the same time: normal time and date function.
Just Checking

Just Checking helps people with dementia or poor memory to live independently in their own home. It monitors the movement of a person in their home and generates a chart of activity, on-line.

Care professionals use the system for assessment and planning care. Just Checking highlights what a person is able to do for themselves in the familiarity of their own home, and the effect of care services.

Families use it to ‘just check’ that a family member is following their usual pattern of life, without intruding or undermining their independence. It provides a real insight, so that you understand how best to offer support, and when to make social rather than ‘checking’ visits.

Just Checking is simple to install. There are no video cameras. The system uses wireless movement sensors and the mobile phone network. You don’t need broadband, just a single power socket.
What is Buddi?
Buddi is a mobile personal alarm system that provides assistance wherever and whenever it’s needed. Key features include a push button emergency alarm, automatic full alert, location finder and 24/7 emergency monitoring centre.

Using the very best of GPS and mobile technology, Buddi provides greater independence and freedom to those that you care about, while providing the reassurance and peace of mind that help is not far away if you need it.

Radio Output Module (ROM)
Allows other compatible devices, to transmit a signal to a Lifeline home unit and other Tunstall telecare enabled systems, eliminating the need to hard wire a sensor or detector to the Lifeline home unit.

Safe Socket
Ensures that alarm calls are raised even though the telephone line is in use. It allows the Lifeline home unit to seize the phone line from other connected devices on the same line (i.e. extension phone, computer, fax machine, satellite receiver etc).

Universal Sensor
Provides additional benefits to the Radio Output Module by enabling wired devices and other equipment to raise an alarm call wirelessly using Plug and Play functionality.
# Environmental Control System (ECS)

## Description

This is a system that enables severely disabled individuals who would otherwise be unable to do so to exercise control over their housing environment.

‘Possum Controls’ provide, install and maintain ECS supplied by Aberdeenshire Council following an Occupational Therapy assessment.

### ECS can operate a range of devices for various purposes including:

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<th>Access</th>
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<td>Door release intercom</td>
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<td>Comfort</td>
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<td>Curtain and window openers</td>
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<td>Community alarms</td>
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Criteria

a) Provision of an ECS will only be considered for service users who are permanently disabled, or likely to become permanently disabled, by disease, injury or congenital condition;

b) The service user experiences great difficulty or is unable to operate essential appliances within the home;

c) The service user lives alone or is left alone for long periods of time;

d) Supply of an ECS would provide respite for an informal carer.
Factors to Consider

Ownership of property:

• Permission of the home owner should be sought for the installation of the ECS and any preparatory work required.

• Installation of the ECS may require minor alterations to the property ie. additional sockets, fixtures and fittings to doors/windows etc. Aberdeenshire Council’s Housing service carry out minor adaptations in its own properties. Minor adaptations for private housing are arranged via the Joint Equipment Centre.

• The ECS remains the property of Aberdeenshire Council and the Council may pursue the recovery of costs for loss or damage to the equipment through negligence.

Removal of equipment:

When a piece of equipment is no longer required by a service user and is being removed, the following level of reinstatement will be undertaken:

The Service will make good the walls and ceiling to plaster level but is unable to undertake any decoration. The Service is unable to take responsibility for making good the floor covering.

Limitations:

• Only one external door can be fitted with a door opener;

• A maximum of 2 rooms can be fitted with curtain openers;

• Automatic blinds will not be purchased but curtains will be considered.

On occasion, cases which do not meet the criteria may still be considered. For example, where there are Adult Support and Protection or Child Protection concerns.
How to refer for TeleHealthCare

Online:
Self-assessment forms are available from the Community Alarm and Telecare section on Aberdeenshire Council’s website: www.aberdeenshire.gov.uk

Please complete and return these forms to:
Joint Equipment Centre
Burghmuir Place
Inverurie
AB51 4FW

or email: jointequipmentcentre@aberdeenshire.gov.uk

or
refer via Health and Social Care professionals in your local area.

or
call the Customer Contact Centre on 0845 608 1206 – first point of contact referral details accepted.

ECS enables freedom and independence at home.