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020 7566 7602 membership@carersuk.org

#### CarersLine

0808 808 7777 (freephone) (free and confidential advice from 10am-12pm and 2pm-4pm Wednesday and Thursday)

## **About Carers UK**

Carers UK is the voice of carers. Carers provide unpaid care by looking after an ill, frail or disabled family member, friend or partner. Carers give so much to society yet as a consequence of caring, they experience ill health, poverty and discrimination. Carers UK is an organisation of carers fighting to end this injustice.

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# Support for Carers a guide to telecare



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#### Introduction to telecare

Telecare is technology that can support carers, providing peace of mind and helping to restore independence for both the carer and the person they are caring for.

#### What is telecare?

Telecare consists of various sensors placed around the home which are linked to a control unit which is connected to a telephone line. If any of the sensors detect something unusual it will trigger an alarm and send an emergency call through the telephone line to the carer or a response centre which is staffed 24 hours a day. Trained operators will then find out what the problem is and if necessary send out appropriate help. This could involve contacting the emergency services, the mobile response service or a friend or relative which the person has nominated.

## Telecare in the community

One of the simplest telecare products is the community alarm scheme. This is used by a lot of older and vulnerable people. They have a button in their homes which they can press to summon help. Some councils are starting to link these type of alarm schemes with emergency support for carers. In Greenwich telecare staff support the emergency scheme by providing support for the person if carers are unavailable. Telecare is only an extension of these kinds of schemes - accompanied by the appropriate controls and accreditation it offers people and carers the chance to live more active and fulfilling lives.

## Transforming care

Telecare isn't intended to replace people but it can support carers in many different ways. For example a bed occupancy sensor can allow a carer to have a good night's sleep, by alerting them if the person they are caring for gets out of bed in the night.

Telecare should be an asset for carers and the people they care for and enable them to lead more fulfilling lives. There are rightly concerns over how and when technology is used and complicated moral and ethical issues relating to the concern that cameras and alarms can take away privacy. However, telecare can help carers to manage difficult situations in an effective and reasonable way and can make spending time away from the house a possibility. Tailored, flexible telecare solutions are being used to develop new models of care, which are transforming the lives of carers and the people they care for by supporting and enhancing their health, independence and well-being.

# Caring for different situations

Telecare can help some people who are physically frail and/or have a cognitive impairment (including dementia), learning disabilities, or those at risk of harm and identified as needing telecare (as a preventative measure) following hospital discharge or a fall.

# Case Study 1

Mr D who has hearing and visual impairments, cares for his wife who has moderate dementia. Mr D was worried as his wife had a tendency to walk about at night, set the microwave going for long periods of time and open the washing machine mid-cycle. A telecare solution has been installed to call Mr and Mrs D's daughter if Mrs D leaves the house between 10pm and 9am, and also monitors for floods, extremes of temperature and gas leaks. Mr D said: "It has given us back part of our lives we wouldn't have had otherwise."

# **Case Study 2**

Sarah, like 50% of people with learning disabilities, also has epilepsy. Sarah's mother, Joan used to sleep in the same room as her daughter due to the risk of tonic clonic seizures, which could sometimes occur up to five times in one night. Joan couldn't get a good night's sleep due to the constant worry of what would happen if she didn't wake up. Joan had an epilepsy sensor fitted in Sarah's bed, allowing her to return to her own room for the first time in 15 years, reassured that she would be alerted if Sarah needed her help.







#### Benefits to carers

The pressure of caring for someone else can be very demanding, physically and mentally. Amongst the stresses and strains of looking after someone, carers often forget to concentrate on their own health and well-being. According to Carers UK research, people who provide high levels of care are twice as likely to be permanently sick or disabled.

"I do not go out a lot – if I do, I get back early to allow for traffic. I do not sleep very well and constantly worry about what would happen to my husband if I was ill."

According to Carers UK research 96% of carers worry about something unexpected happening to the person they care for when they are not around. Providing constant care for someone can have a huge impact on a person's time, energy and independence. Carers often don't have time for themselves, to socialise, to take part in a hobby or go out for the day, and equally the person who is being cared for can have their independence and privacy reduced by constantly being looked after by someone else.

The challenges are complex and differ greatly with each individual.

Telecare solutions go some way towards relieving stress and providing support, peace of mind, independence and dignity to carers and those they care for.



carers

Benefits to

# **Telecare Solutions**

#### Lifeline Home unit



Solutions

Telecare

The home unit is the heart of the telecare system which is connected to the phone line and electric socket. The sensors around the home communicate with the home unit via radio signals and don't need to be connected with wires. The home unit also has a microphone and speaker enabling

the user to have a conversation with the 24 hour monitoring centre or carer. All phone calls from the home unit are free and it can also be configured to work with infra-red movement sensors to create an intruder alarm to protect the user's property.

#### **Home Alert Pager**



The pager enables carers to be immediately notified when an alert is raised from a telecare sensor so that they can respond instead of the alert going to a monitoring centre.

#### **Bed/ Chair Occupancy Sensor**



This unobtrusive pressure pad fits under the mattress and is for people who leave their bed at night and are unable to return within a pre-set period of time. It can also be used to raise an alert if the user has not gone to bed at night, or did not get up in the morning.

The sensor helps to minimise the risk of someone spending a long time on the floor after experiencing a fall. When an alert is triggered the bed sensor will immediately raise an alarm with either the carer or 24 hour monitoring centre who will make contact with the user and arrange suitable help. To avoid falling or tripping over obstacles at night, the bed sensor can be programmed to work with other sensors that automatically turn on lights when a person gets out of bed.

## **Epilepsy Sensor**



Placed under the mattress this sensor monitors for tonic clonic seizures. When it detects tonic clonic shakings, an alert will be raised to the carer or the monitoring centre who will ensure the user receives appropriate help.

#### Telecare Solutions

#### **Enuresis Sensor**



This sensor mat is positioned under the top sheet and when moisture is detected it will raise an audible alarm and inform either the carer or 24 hour monitoring centre. This eliminates the need for carers to make physical checks during the night, allowing the user to remain independent.

#### **Flood Detector**



These small wireless sensors are placed under a sink, bath or toilet, or near other likely sources of a flood, such as the washing machine or fridge. When it detects a possible flood, the sensor will raise an audible alarm for the user as well as sending an alert to warn the carer or monitoring centre.

#### **Temperature Extremes Sensor**



This sensor protects the user and their property by monitoring for excessively high and low temperatures. It can be used in the kitchen to detect for potential fires where a smoke alarm would not be suitable as it would create false alarms, for example from burnt toast. The sensor will also

raise an alert when the temperature is too low, which could be because of cold weather, to protect the user from hypothermia.

#### **Gas Shut Off Valve Solution**



This is a combination of a Gas Detector with a Gas Shut Off Valve. When a gas leak is detected the gas supply will be automatically switched off. As soon as a leak is detected the user will be alerted with an audible alarm. The gas detector will also alert a carer or monitoring centre to the potential danger.

#### **Pillow Alert Solution**



The vibrating pad is placed under the pillow and it is linked to a dedicated smoke detector. If dangerous levels of smoke are detected, it will vibrate to wake up the user and warn them of the danger. It also features a strobe light for when the user is out of bed.

#### **Telecare Solutions**

#### **Smoke Detector**



Solutions

**Telecare** 

This detector provides added reassurance by raising an alarm with the carer or monitoring centre as well as an audible alarm in the home to warn the user.

## **Carbon Monoxide Detector**



Carbon Monoxide gas is odourless and colourless which makes it difficult to detect. A build of the gas may be the result of a blocked flue or because of a fault with a fire. If dangerous levels of the gas are detected the sensor will sound an alarm to warn the user and raise an alert with the

carer or monitoring centre.

#### **Movement Sensors**



These sensors use infra red to monitor for movement in a room. If they do not sense movement for a prolonged period of time, which could be the result of a fall, then they will raise an alert with a carer.

#### **Fall Detector**



The Fall Detector can be clipped to the user's clothing or worn around the waist in a pouch. If the person wearing it experiences a fall in the home and then remains lying down for 15 seconds it will register an emergency and raise an alarm with the carer or monitoring centre.

## **Property Exit Sensor**



These sensors are placed on front or back doors and they monitor for people leaving the home at inappropriate times of day, for example very late at night or early in the morning. It can also be used to detect if a door is left open for a long time which may suggest there is a problem. With either

scenario an alert will be raised with the carer or monitoring centre if the user does not return home within a preset period of time which could suggest a problem.

#### **Telecare Solutions**

### **Bogus Caller Button**



Fixed near the door, this button will provide reassurance in the event of an unexpected caller. It can be used to summon assistance from a carer or monitoring centre or verbal prompts can be given from the Lifeline home unit. Such incidents will also be automatically recorded and may

be used in evidence.

## **Door Entry System**



This works in conjunction with a standard television, telephone and Lifeline home unit in order to provide both visual and audible identification of a caller. It allows the user to remotely open the door only when they feel comfortable about the identity of the caller. Alerts can be raised to a

carer or monitoring centre if the user feels uncomfortable without giving the caller access to the property.

## **Telehealth monitoring**

## Honeywell HomMed Genesis DM<sup>™</sup>



The monitor allows the user to record their vital signs from the comfort of their own home. It can be supplied with a range of medical devices to monitor blood pressure, heart rate, weight, oxygen saturation level and blood glucose levels. The monitor asks the user a series of clinical

questions each day, it also provides self care advice and reminders to further determine their current condition.











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#### **Telecare Solutions**

## **Solutions for Physical and Sensory Impairments**

The Disability Discrimination Act (DDA) solution is the combination of a pager, transmitter, under the pillow pad and there is an optional flashing beacon to provide hearing impaired people with additional protection. This solution helps promote independence for the user as well as providing reassurance for the carer.

## **Vibrating Pager**



Worn around the waist, the vibrating pager is suitable for hearing impaired users. When an alarm is raised from a telecare sensor in the home, the unit will vibrate to warn the user of the potential danger. It will also illuminate one of the LEDs on the pager to indicate which telecare sensor has

been triggered giving them more information about the possible hazard.

#### **DDA Pager Charger Including Pillow Alert**



At night the vibrating pager needs to be charged in a cradle beside the bed. The cradle is connected to a vibrating pad which is placed under the pillow. If a telecare alarm is raised during the night, the pad will begin to vibrate to wake up the person in bed.

## **DDA Flashing Beacon**



The flashing beacon is for people who are hearing impaired and it works with the vibrating pager for added reassurance. When a telecare alarm is raised the beacon will flash repeatedly to gain the user's attention and warn them of the danger.

## **Environmental Control Solutions**



This enables people with limited dexterity and mobility to easily perform a wide range of everyday activities including opening and closing of windows, curtains and doors, operation of domestic appliances and the control of lighting within the home.

### Telehealth

Telehealth solutions offer a way of delivering tailored care for patients with long-term conditions in their own homes, improving quality of life and preventing avoidable hospital admissions. Telehealth solutions can be of benefit to carers as they can reduce the need for hospital visits, and provide peace of mind and reassurance that the person they are caring for is being monitored daily, and any exacerbations in their condition will be picked up and dealt with accordingly.

Telehealth monitors enable patients to measure their vital signs such as heart rate, blood pressure, blood glucose levels, oxygen saturation and weight, in their own homes. The monitor records the results and securely transmits the data via the telephone to the patient's clinician, who can view the data and take action if a potential problem is detected.

## **Case Study: Sheffield**

In Sheffield people with long-term health problems including chronic obstructive pulmonary disease (COPD) are measuring their vital signs at home and the outcome has been very positive.

- COPD hospital admissions decreased by 50%.
- With remote monitoring of their condition on a daily basis patients were more independent and did not need to stay at home for visits from healthcare staff to check on them.
- Patients were discharged earlier from hospital and their confidence improved as they knew their condition was being closely monitored.
- Patients were more aware of their own symptoms and were able to proactively manage them.







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**Felehealth** 

# **Obtaining Telecare**

Carers and the person they care for can be referred to telecare by:

Social Services.

Obtaining Telecare

- Health staff such as community nurses.
- Housing officers from district councils and housing associations.

The person being cared for will then be assessed by either Social Services staff or an Occupational Therapist, and if their needs meet Social Services criteria they could receive the telecare service as part of their care package.

# **Funding Telecare**

The technology is very cost effective and can range from  $\mathfrak{L}4$  to  $\mathfrak{L}20$  per week. The Government is very committed to making telecare available. It has previously given English local authorities  $\mathfrak{L}80$  million as part of the Preventative Technology Grant to help them develop an infrastructure. Similar funds have been provided in Scotland and Wales.

Local authorities can use additional funding to deliver telecare such as the Disabled Facilities Grant, 'extra care' housing, and/or joint fund with local health, housing and third sector organisations.

Some local authorities have been quick to see the benefits of telecare and have invested heavily in making it available free of charge to all residents who need it.

## Costs for the individual

The cost of telecare varies across the UK. In some areas local authorities are subsidising telecare packages for people who are assessed and meet the eligibility criteria. Other local authorities charge for this service - a typical council in the North West charges £8.86 per week for telecare. For individuals wanting to buy telecare packages and equipment, there is a vast range of information and products available on the Internet. The Disabled Living Foundation provides free, impartial advice about all types of disability products and equipment for older and disabled people and their carers.

In addition, Tunstall, the leading provider of telecare products, can provide details of the local telecare contact in your area. Both organisations' contact details and other helpful sources of information are included in the 'Signposting' section.

#### Telecare Fyidence

There is a lot of evidence that telecare works and the majority of local authorities have implemented a service. The range differs across the UK but the Government has shown its commitment to innovative technology like telecare by investing millions of pounds to support those with complex health and social care needs. Telecare promotes independence, choice and control for both those being looked after and carers. Carers UK believes that the case for telecare is overwhelming and that it carries real benefits for older and disabled people, as well as giving their carers peace of mind and confidence to have a life outside caring.

# **Case Study: Newham**

In Newham, every household over 75 can now get a free telecare package. The original pilot study showed real benefits for individuals and their carers. One carer said: "I think it helps me more than my mum, I feel I can relax a bit more, and I am not so worried when the 'phone rings in the evening, that I might have to dash out to see my mum."



## **Case Study: West Lothian**

West Lothian has supplied 3,000 households with a package of six sensors consisting of a home alarm unit, smoke detectors, movement sensors, temperature extreme sensors and a flood detectors. Additional equipment is available such as property exit sensor and bed sensor. The results have been extremely positive:

- The numbers of people awaiting hospital discharge has fallen from 67 in April 2000 to 0 to date.
- The average stay in a care home has fallen from 36 months in 2002 to less than a year for recent admissions.



Evidence

**Telecare** 

Northamptonshire County Council provided over 50 devices to people with dementia and their carers over two years and monitored their progress:

- The reliability and effectiveness of the devices were checked every three months, and over 90% worked perfectly after six checks.
- Fewer people spent less time in hospital, residential or nursing care, resulting in a saving of £1.5m.
- Carers were asked about the various problems of caring such as interrupted sleep, difficulties coping, inability to have a holiday and feeling frustrated. At the end of the project they reported significant improvements in most of these areas.



Mike is 14 years old and he cares for his mum who has mental health and cardiac issues. When her health took a turn for the worst, Mike had to stay at home all day and she didn't want to let him out of her sight. As a result Mike was missing out on his education and friendships.

A telecare alarm and pendant were provided, allowing Mike to go back to school. When his mum needs her son she uses her pendant and the 24 hour monitoring centre calls the headmaster who asks Mike to return home.

His mum feels much more secure and her condition has improved.

"It's changed my life and I've been able to go to school and not feel distracted or guilty about leaving mum," said Mike.

The Regional Carelink Co-ordinator also noticed a big difference after only two weeks as the atmosphere in the house was calmer and everyone in the family has benefited.



# Signposting

**Tunstall** brochures provide comprehensive information about telecare sensors and telehealth solutions. They can be downloaded from their website or for a hard copy write to:

Tunstall, Whitley Lodge, Whitley Bridge, Yorkshire DN14 0HR or call 01977 660206.

www.tunstall.co.uk

The Disabled Living Foundation factsheets provide general advice on a range of equipment. www.telecaremadeeasy.com

**Ricability** is a national charity which provides consumer reports and test products used by disabled and older people www.ricability.org.uk

The Telecare Services Association is the representative body for the telecare industry within the UK. Its website contains details of telecare products on the market and services in local areas www.asap-uk.org

# Terminology

unpicking the jargon

**Telecare** is 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.

Examples: Equipment to assist in reducing accidents and incidents in the home, community (social) alarms.

**Telehealth** is the consistent, reliable and accurate remote monitoring of a patients vital signs through the use of easy to use equipment that healthcare professionals can customise to each patient, enabling day to day individual care according to need and the self management of one's condition.

Examples: Blood pressure monitoring, Asthma monitoring.

**Assistive technology -** any product or service designed to enable independence for disabled people and older people.

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