

Personal alarm systems and telecare DLF

DLF Factsheet

This factsheet is available for sponsorship, email marketing@dlf.org.uk

Sponsorship has no influence on our impartial content

© Disabled Living Foundation -

Personal alarm systems and telecare

Factsheet contents

■ INTRODUCTION	3
■ PROVISION OF TELECARE EQUIPMENT	3
■ TELECARE PENDANT ALARM SYSTEMS	5
■ TELECARE SENSORS FOR THESE SYSTEMS	6
■ ACTIVITY MONITORING	10
■ PERSONAL LOCATORS	11
■ AUTODIALLER ALARMS	11
■ SHORT RANGE SENSOR AND RECEIVER SYSTEMS	12

■ KEYSAFES	14
■ ETHICAL IMPLICATIONS	15
■ USEFUL ORGANISATIONS	15
■ REFERENCES & FURTHER READING	16

Introduction

Many people who live alone, or who are alone for long periods, choose to have an alarm system so that they can summon assistance should they require it. These systems, once known as community alarms, are now generally referred to as telecare and have been developed to offer a range of options and choices. There is a large choice of systems available, ranging from simple pendants which trigger a pager in another part of a home to pendants which dial, via a telephone line, directly to a 24-hour



monitoring station, and even systems which will alert someone if you do not move around your home as you normally would.

The aim of this factsheet is to provide first stop information on the type of telecare systems available to help with specific difficulties, and details about the useful features of some of the technology. Relevant organisations are listed at the end of the factsheet followed by an option to view references / sources of further information. The print buttons (above to the right) let you choose whether to download and print with or without the references.

For up-to-date product and supplier information, please contact our equipment helpline, open Tuesday to Thursday 10am-4.30pm, tel: 0300 999 0004 (calls charged at local rate); or if you use a mobile it's cheaper to ring: (020) 7432 8018 (calls charged at standard rate).

Alternatively, you can write to our letter enquiry service or contact us via email at advice@dlf.org.uk To help us give you a concise and informative reply, please provide us with as much detail as possible including information on the difficulties you are having and any solutions you have considered, including equipment ideas.

Provision of telecare equipment

Eligibility for telecare varies depending on where you live. Many councils apply eligibility criteria for home care packages including assistive technology such as telecare. You will need to contact your local social services department and ask for information on their telecare services. They may arrange for you to receive an assessment to see if you meet their criteria to receive telecare. Some social services may only provide telecare to those with 'substantial' or 'critical' needs.

Alternatively, if you live in a housing association property, telecare alarms may be provided by housing authorities.

If your social services assess you as requiring telecare they will also complete a financial assessment to assess the level of any contribution you may be required to make. The charges and how they work vary in different areas, often the equipment is provided free of charge with a weekly charge for the service.

Use this GOV.UK link to find your local community alarm / telecare service 'www.gov.uk/apply-for-community-alarm

In some areas of the country a prescription scheme for equipment is in operation. There is a 'national catalogue' of equipment that may be provided by prescription although local areas can choose which of these items they will include in their local equipment prescription schemes. This is part of the Department of

Health's Transforming Community Equipment Services (TCES) programme. Telecare systems that connect to monitoring centres are not part of this scheme. However, there is a small range of the short range sensor and receiver telecare systems on the national catalogue that can be provided via prescriptions. If you receive a prescription for one of these items you take your prescription to a local accredited retailer who will provide you with the item. Alternatively you can 'top-up' paying extra for an item that does what the specific item prescribed would do but offers extra features or perhaps you prefer its appearance. Thus the scheme is designed to stimulate and encourage choice and control. The national catalogue website telecare listing can be viewed at https://www.londonconsortium.org.uk/index.php?option=com_content&view=ar... This factsheet will go through a range of telecare and mention when there is a relevant national catalogue specification for that kind of equipment as it may be provided by prescription.

Private purchase If you decide to buy equipment privately, it is best to try and compare the different ranges first. You may have an equipment demonstration centre near you where you can visit to view and try out ranges of equipment. You will receive impartial advice to help choose appropriately. However, not all centres display telecare systems. You will need to contact your nearest centre to find out what they have and to book an appointment. Contact details for your nearest Equipment Demonstration Centre can be found on the Disabled Living Foundation's web page Equipment Demonstration Centres in the UK.

Several companies sell telecare privately, charging an initial set up fee and a weekly, or monthly, monitoring fee. Ask you local social services, or the Telecare Services Association (see Useful organisations at the back of this guide), for details of companies who offer private telecare in your area. Some provide their own control centre or will advise you about local authority or commercial firms which can provide a control centre service for their alarms.

Charitable trusts may sometimes provide funding for equipment. A useful resource is www.turn2us.org.uk, a website that allows you to search for organisations that give grants, including for equipment and other services. You can refine / filter your search by specific health issues such as 'physical disability', 'ageing', 'Alzheimer's' or 'unable to look after themselves'. Charities will only give awards in accordance with a predetermined criteria, so it is important that you carefully select the trusts you apply to.

Most libraries hold directories of suitable funders in their reference section, such as the The Directory of Grant Making Trusts The Grants for Individuals website is run by the Directory of Social Change and lets subscribers search for grants but is intended for organisations searching for funding for individuals. http://www.grantsforindividuals.org.uk

Points to remember

Telecare may reduce the need for the number of home care visits. For example, you may be provided with a medication dispenser that reminds you when to take your medication and offers the correct doses. This may

be instead of home care workers coming to remind you or supervise you taking them. You may prefer this and consider it as enhancing your independence and removing interruptions to your daily routine, or you may find the reduction in your daily visits leaves you feeling lonely and isolated. If you do find yourself feeling more lonely you could ask your local AgeUK about local befriending schemes or social groups. The equipment should not be considered separately as 'the solution'. Equipment provision is most effective when it forms part of a package of care and support, is welcomed by you, your relatives and any carers and everyone is confident and familiar with how and why it works. When equipment connects to, or communicates with, a carer or service then appropriate individual response arrangements need to be in place and rehearsed. For example, who is going to visit you if you press your alarm button, how will they get to you, how long will it take them and how will they get into your house if you can't get to the door? Who will set up, check and maintain the equipment (e.g. replacing batteries)? Please remember and consider these issues as you read through the equipment below.

Although there is often a range of similar devices, if you are obtaining equipment through your social services they may have preferred manufacturers/suppliers and may not be willing to consider equipment from other manufacturer's. In addition, items of equipment are often not compatible with another manufacturers equipment. For example, do not expect one manufacturer's pendant call button to operate another manufacturer's pager.

Some of the equipment listed monitors you and your actions, raising issues about privacy and consent. This can be sensitive and should be fully explained and discussed before any decisions are made. Please refer to the 'Ethical Implications' section of this factsheet.

The factsheet now focuses on the ranges of equipment and is split into the following main sections:

- 1. Telecare alarm systems that connect to 24 hour monitoring centres. These have evolved from what you may have known as community alarm systems and are generally used by people who live on their own. This section includes:
- a. Pendant alarm packages
- b. Telecare sensors that may be required for the above systems to extend their capabilities
- 2. Activity monitoring systems and personal locators.
- 3. Autodialler alarms that phone preset contacts you have selected when you press an alarm button.
- 4. Short range telecare sensor and receiver systems that work within your home environment (also called standalone). These are more often used by people that live with a carer or relative.
- 5. Accessories that may be required for the above systems to work as intended such as key safes.

Telecare alarm systems

a) pendant alarm packages

Telecare alarm systems are a combination of equipment and services designed to enhance your safety and independence at home. There is a great variety in what can be added to the system both in terms of equipment and services. A 'simple' system could resemble the old community alarm systems with a pendant alarm button triggering an alarm call via a base unit to a 24 hour monitoring centre.

Once the pendant button has been pressed, the base unit will automatically contact a monitoring centre. The pendant can usually be worn around your neck or attached to a strap for wearing around your wrist. If you find it difficult to press the button on the pendant some manufacturers offer easy press adaptors which increase the area which can be pressed. If you are concerned about how the pendant looks or how conspicuous it is, some manufacturers have a range of very compact buttons and others combine the button with a watch. You can have more than one pendant with your alarm, perhaps for a partner.





The 'base unit' is the part of the telecare system which is connected to your phone line, and receives signals from your pendant/s and any sensors (sensors are covered later). Most base units have two cables attached, one cable connects to your phone line and another cable needs to be plugged into an electric socket. Consequently the base unit usually needs to be within reach (approximately 2 metres) of both a telephone and mains socket. If your sockets are not positioned close together then your social services, or the telecare company, may be

able to arrange for an extension for one of the sockets. If you do not have a landline telephone socket ask about telecare base units that work through the mobile phone network. These are not available from all providers so you may need to have a landline installed.

Your pendant and any sensors or alerting devices communicate with the base unit via radio signals and thus do not need to be connected with wires. The base unit contains a speaker and microphone so you can have a conversation with your monitoring centre if you press the alarm button. The microphone is quite sensitive so you can be some distance from the base unit, even in another room, and still be heard by the call centre

staff. Many base units have an alarm button on the front which also triggers the alarm (useful if you mislay the pendant but in most cases you're more likely to use your pendant alarm button) and a cancel button to cancel an accidental alarm call.



The monitoring centre is staffed 24 hours a day, every day of the year. If you do press the alarm



button the staff at the centre will automatically know where the alarm call came from and can bring up your details on their screen. They will talk to you to find out what the situation is, or whether you were just testing the system or pressed the button by accident.

If help is needed or the operator cannot get a reply then he/she will arrange for someone to visit.

This could be a relative or friend; a mobile warden is available with some systems; or the control centre may call a doctor or ambulance.

Control centre service

Most control centres are run by either local authorities, manufacturers, commercial firms, housing associations or charities. The centres are staffed 24 hours a day 365 days a year. The staff are trained in dealing with emergencies and will contact appropriate people and services quickly. They have different ways of getting help:



- Nominated responders the centre will hold details of a few people you have nominated, such as neighbours and relatives (often they have to be within a 20 minute drive). The centre will telephone one of these people if the alarm is raised. You may have given these individuals a set of keys to get into your house or you may let them know the code to your key safe (see below).
- Some areas may offer a mobile warden service the centre will send out a member of staff to help sort out the problem. This service is not available in all areas and may cost more than the standard nominated responder service.

b) Telecare sensors and alarm triggers

Pull cords and buttons

These can be fitted around the house in the form of wireless wall-fixed buttons or pull cords. When these triggers are pressed, or pulled, they will set off the alarm unit in the same way as your portable pendant.

Pull cords can be positioned in areas where you are unlikely to wear a personal alarm button. For example, they can be positioned next to your bed or in your bathroom. Ensure the cord is long enough so that you can reach it when lying on the floor and not out of reach behind furniture.

View our impartial list of Pull cords http://www.livingmadeeasy.org.uk/products.php?groupid=153

Buttons are sometimes placed near the front door, these may be called 'Bogus caller buttons' or 'panic buttons'. This allows you to simply press the button, automatically raising an alarm at your help centre, if you fear that a bogus caller is trying to trick you or break in to your property. The alarm call can be programmed to be silent so that the bogus caller is not aware they are being overheard by your call centre. The call centre can listen to the situation and intervene, perhaps calling the police, if necessary.

View our impartial list of Bogus caller buttons http://www.livingmadeeasy.org.uk/products.php?groupid=160

Smoke and heat alarms

Telecare smoke alarms will automatically sound an alarm in your home and send an alarm call to your monitoring centre if it detects smoke. The monitoring centre can then alert the fire brigade. These alarms may be appropriate if you would find it difficult to get out of your home promptly, or might not remember what the smoke alarm was for.

If a telecare smoke alarm is not installed as part of your telecare system you should still have at least one working standard smoke alarm in your home which will sound an alarm if it detects smoke but these WILL NOT automatically alert your help centre.

View our impartial list of Smoke alarms http://www.livingmadeeasy.org.uk/products.php?groupid=145 Smoke alarms are not generally recommended for kitchens as some smoke can be expected from cooking and toasting. Consequently a telecare temperature extremes alarm or heat alarm may be considered. They work by detecting extremely high temperatures and also monitoring the rate of any rise in temperature.

Price range: £125 - £130

View our impartial list of Temperature extremes

http://www.livingmadeeasy.org.uk/products.php?groupid=146

As with smoke alarms, even if you don't have a telecare heat detector consider purchasing a standard battery operated heat detector for use in your kitchen.

Minimum room temperature alarms

The above temperature extremes alarms can also be used to alert your monitoring centre if the room temperature falls below a preset level. This may be referred to as a hypothermia alarm. This may be considered, for example, if you have a history of turning your heating off and forgetting to turn it on again during cold spells. If low temperature triggers the alarm then the help centre may contact you and/or your friends and relatives to prompt you to check your heating.

Gas detectors



Telecare gas detectors detect natural gas and alert you, with an audible alarm, and call your monitoring centre. Some automatically cut off the gas supply when gas is detected. Natural gas may result from a left on hob, leaking pipe or unlit gas fire.

Leaking gas is dangerous. Ultimately, leaking gas can build up to dangerous levels which can result in explosions. Gas leaks can result from mistakes such as forgetting to light a gas ring or gas fire

and natural causes like a pilot light blowing out. Consequently these detectors may be considered when you have a history of leaving the gas on un-ignited.

View our impartial list of Natural gas detectors http://www.livingmadeeasy.org.uk/products.php?groupid=81

As with telecare smoke and heat detectors you could consider a purchasing a non telecare gas detector even if you don't have a telecare system. If you smell gas ring the gas emergency number, **0800 111 999**.

Carbon monoxide telecare alarms

Carbon monoxide telecare alarms will sound an alarm in your home, and your monitoring centre will be alerted, if they detect carbon monoxide. Carbon monoxide is a gas which has no smell, taste or colour. It is produced by the incomplete combustion of fuels including gas, oil, coal and wood used in boilers, gas fires, water heaters, solid fuel appliances and open fires. Exposure to above-recommended concentrations of carbon monoxide can cause headaches, dizziness, nausea, convulsions and death.

As with smoke and heat alarms, carbon monoxide alarms are readily available on the high street. A telecare enabled carbon monoxide alarm may be recommended if you may not remember what a standard carbon monoxide alarm is for, or what action to take if it goes off.

More information is available from the Carbon Monoxide and Gas Safety Society http://www.co-gassafety.co.uk/

Inactivity monitoring alarms

Some telecare alarms can be set up to trigger an alarm if you don't move around your home for a set time. For example, perhaps you would normally pass through your hallway regularly to go between rooms, if this wasn't detected an alarm could be raised. Sensor mats which can sense when you walk over them, or an infrared beam which 'detects' your body heat going past, can be set to detect these movements, or lack of them. Thus should you fall and not pass for a preset period of time, the alarm will automatically be triggered.

View our impartial list of Activity monitors http://www.livingmadeeasy.org.uk/products.php?groupid=157

Fall alarms

Telecare fall alarms can be preventative, warning that a fall could occur, or reactive warning that a fall has probably occurred.

Preventative fall risk alarms include bed and chair occupancy sensors. A bed occupancy sensor is a pad which when placed under your mattress can detect when you've left your bed and start a timer. If you don't get back into your bed within a preset time, your telecare system can trigger an alarm call to your monitoring centre. Thus if you go to the toilet or for a quick snack and return to bed your alarm will not be activated but if you fall and do not get back into bed the alarm will be raised.

Some of these bed occupancy sensors can be combined with a radio controlled electric socket to automatically turn on a bedside light when you get out of bed. This helps reduce the risk of you falling over in the dark.

Chair occupancy sensors work like bed occupancy sensors but are placed on a chair or wheelchair. If you leave the chair and do not return after a preset time period an alarm call will be triggered notifying your help centre, in case you have fallen and are lying on the floor.

View our impartial list of Fall risk sensors http://www.livingmadeeasy.org.uk/products.php?groupid=159

Worn fall detectors are worn like a pendant around your neck, on your wrist or on a belt around your waist, and automatically trigger a call to your help centre if they detect you've fallen over.

They will only work within your home and garden and need to be within the range of the telecare base unit. This may need checking if you have a large house, or garden, and if the house has thick walls.

Telecare fall detectors work in different ways but most will trigger an alarm if they detect an impact and that you are not in a vertical position, this is what occurs in the majority of falls. Some models will make a buzzing noise to let you know they are about to trigger your alarm so that you can cancel the alarm if necessary. If you do not cancel the alarm the fall sensor automatically alerts your monitoring centre. They will then attempt to talk to you and listen to your description of what has occurred before deciding the most appropriate action to take. For example, they may need to call an ambulance for you.

These fall detectors can cause false alarm calls, for example if you lie down for a nap or drop your trousers to go to the toilet. These fall detectors may also not detect certain types of falls such as a slow fall sliding off a chair. Thus it may be a good idea to have several different sensors, such as chair occupancy sensors and activity monitors all working together to protect you.

Property exit sensors

These are devices which attach to the door and door frame, designed to monitor when you leave the house. They may be considered if you regularly become disorientated to time of day and leave the house at night thinking it's daytime. They can alert the monitoring centre who can call you or a designated contact if necessary.

Additional telecare sensors covered in our 'Choosing equipment to help with memory loss' factsheet include flood detectors and medication dispensers.

Possible problems and remedies

Power cuts

All the alarm units work on mains electricity and have a battery back-up. The battery will automatically cut in if the power is disconnected or fails. The alarm unit warns you if there has been a power failure or if the battery back-up is low.

Alarm call not connecting

Most alarm units will dial again, at least five times, if the call does not get through. Should this still fail to connect you with the control centre, then you can press the trigger again.

Telephone line not working

Some alarm units will give a visual or audible signal if the telephone line is not working or if the unit has been unplugged from the telephone socket.

Pressing the trigger by mistake

Most units have a cancel button which you can press to stop the call being made if you have pressed the trigger by mistake. However, the control centres don't mind receiving accidental calls.



Activity monitoring

Activity monitoring systems are designed to automatically check your activities on a regular basis. Small, wireless sensors that detect body heat are triggered as you move around your home. They log your use of rooms in your home and when doors have been opened. Some provide a chart of this activity via the internet. A carer or relative can thereby log in to a secure website using an individual access code and") see if you have not gone into your kitchen all day, or have gone out and not returned. If they have any concerns after viewing this data they can ring you or visit you to check you are OK or offer assistance.

Some of these systems rely on a carer or relative checking the monitored person's activities via a website and noticing any worrying changes, such as no movement in the kitchen all day. These systems are not reactive but rely on someone checking and interpreting the data. Other systems can alert a carer, relative or



monitoring centre via text messages, emails or internet if unexpected changes to your daily routine are detected. For example, the system could alert someone if you did not leave your bedroom by 11.00am.

These systems usually require the payment of ongoing running costs or monitoring fees on top of the initial equipment cost. There may be rental options which include the monitoring fee.

Alternatively, a few systems have no ongoing costs apart from the cost of text messages sent to carers.

Alternatively, sometimes a health professional from a hospital or social services may suggest that these systems are temporarily installed in your home (with your agreement). This will give them a detailed picture of your lifestyle, preferences and routines which may help them personalise, prioritise and target support and care arrangements.

Price range: £75 - £165

View our impartial list of Activity monitoring systems

http://www.livingmadeeasy.org.uk/products.php?groupid=255

The use of these systems can be sensitive and should be fully explained and discussed before any decisions are made. Although these systems do not take photographs or video images of you they are monitoring you by detecting movement in specific rooms, or actions such as a door being opened. Please refer to the 'Ethical Implications' section of this factsheet.

Personal locators for use outside the home



Personal locators are portable products designed to be carried by you when you go out. They enable authorised individuals, such as relatives or carers, to find out your location by logging onto the internet from a computer. Most work via GPS (a satellite based global positioning system) and will allow individuals you have authorised to find your location (if you are carrying the device) to approximately 10 metres. They may not be able to find you if you are indoors unless they also contain GSM mobile phone technology.

Several personal locators offer the option of Geo-Fences. This is the possibility of entering a predefined area into the unit. If you leave this area with the unit then an alarm/alert is raised. Depending on the model this may involve a monitoring centre being notified or designated contacts such as a friend or relative being informed by a text message. These devices will require an ongoing subscription for the service.

Price range: £6 - £666

View our impartial list of Personal locators

http://www.livingmadeeasy.org.uk/products.php?groupid=3020

You could use a mobile telecare alarm which allows you to contact/alert a monitoring centre at the touch of a button. They can then find your location using satellite or mobile phone technology and contact someone you have nominated or the emergency services. These devices will also require an ongoing subscription for the service.

Price range: £10 - £199

View our impartial list of mobile telecare alarms

http://www.livingmadeeasy.org.uk/products.php?groupid=116

Autodialler alarms

Autodialler alarms ring a preset series of numbers to friends or relatives when you press a button on a pendant.

Autodial systems are unlikely to be provided by social services as they will probably prefer the safety features and guaranteed response of a telecare system. They may suit your needs if you live alone, or spend time alone, and would like to be able to get in touch with friends/relatives who live locally with one push of a button, but don't anticipate emergencies where an immediate response is critical.

Most autodialler alarms have a portable pendant transmitter that is worn around the user's neck or wrist. When the pendant button is pressed it sends a radio signal to a table top alarm unit placed near your phone socket. The unit will automatically dial several numbers in turn (which you have preset), until it receives a response. These numbers could be for relatives or friends and a combination of mobiles and landlines. Programming to dial more than one number increases the chances of the call being answered.

Mobile phones with an emergency or 'panic' button that works in the same way are also available. Pressing the button will call a series of preset numbers until it receives a response. These systems have the advantage that they may work outside of the home but they have the additional limitations that they will not work if the mobile does not have reception, or has a flat battery.

If you choose an autodialler system, choose people who:

- live very close to you or nearby with their own transport;
- are strong enough to be able to help;
- you trust with your house keys;
- are often at home or are at home at different times of day so that it is unlikely that everyone will be out when you need them;
- live in a household where everyone who is likely to answer the phone knows what to do.

You should not programme the unit to call the police, a doctor or anyone else without their prior permission.

Limitations of autodialler alarms

The individual relatives and friends whom the autodialler rings are unlikely to be able to answer their phone 24 hours a day, they may not always have mobile phone reception, and they may not be available to act immediately.

These are significant limitations compared to telecare systems that connect to a 24 hour monitoring centre and can guarantee a response 24 hours a day, every day.

Autodialler systems also tend to have fewer automatic checks to alert you, or someone else, if something goes wrong. For example, they may not warn anyone if they are disconnected from the phone line, if the phone is left off the hook, if the device has been disconnected from the mains electric, or if the battery in the pendant starts getting flat. These are standard safety features in telecare systems.



Advantages; If the system does get through to one of your contacts you know they will be a familiar person who knows your situation. You do not need to pay an ongoing weekly or monthly charge for the service (you do need to pay your standard line rental charges to keep your telephone line).

Price range: £19 - £180

Mobile phones are now available with an emergency/panic button that will call and/or text a series of numbers. Some of these mobiles can automatically include your location in the text messages they send when you press the emergency button. As with the autodiallers these have significant limitations as there is no guaranteed response and the button will not work if the mobile battery is flat or it has no reception.

Price range: £28 - £199

View our impartial list of mobiles with autodial alarm buttons http://www.livingmadeeasy.org.uk/products.php?groupid=1352

Short range telecare sensor and receiver systems

a) Pendant transmitter to receiver systems

A range of systems are available with a transmitter, such as a pendant alarm button, and a receiver, such as a pager. These are designed so that the user of the transmitter can signal to the person with the receiver e.g. that they would like assistance.

Some systems have a fixed transmitter, like the nurse call buttons by hospital beds that are fixed to the wall. Some have a non portable receiver such as a box that plugs into the mains with an alarm and/or flashing light. However the majority of systems now have a portable transmitter and a portable receiver like a pager that beeps and/or vibrates when the pendant alarm button is pressed.

The maximum range between the pendant and the pager varies between models and will depend on how your home is constructed (e.g. how solid and thick the walls are) but most systems have a range of between 100 and 400 metres. The pendant can usually be worn around the neck or on the wrist. The pager signal is usually a buzzer, vibration or tune. There are specifications relevant to these pendant alarms on the national catalogue which operates equipment prescriptions in certain parts of the country (see Introduction), with the codes TE10 and TE11.

Check that you are able to operate the alarm button easily, that the signal reaches as far as the likely locations of the receiver (e.g. the garden or an upstairs room) and that your carer can hear the alarm signal.

b) Systems to give an alert if an individual enters a certain area

This range of equipment is designed to raise an alert if an individual enters a specific room or area of the home. This may alert a carer that the person has moved from, or to, a specific location. Perhaps this would be because the individual needs supervision on the stairs or in the kitchen.

The sensor may consist of a pressure mat for use on the floor or a sensor beam/detector. Pressure mats may present a trip hazard. The sensors may use passive infrared movement detectors which detect body heat or use two sensors with a beam between them. If the beam is broken, for example by someone walking past, then the alarm sounds. There are specifications relevant to these sensors on the national catalogue which operates equipment prescriptions in certain parts of the country (see Introduction), with the codes TE03 and TE13.

Some sensors sound an alarm, or tone, on the sensor itself, others can trigger a pager that can be 100-300 metres away.

Price range: £20 - £325

View our impartial list of Area entry alarms

http://www.livingmadeeasy.org.uk/products.php?groupid=805

c) Fall risk sensors detecting movement from a bed or chair

These work like the telecare bed and chair occupancy sensors mentioned in 1)b above. The pads are placed under your mattress or chair cushion and can detect when you've left your bed or chair. They can either trigger an alarm immediately or start a timer. If you don't get back into your bed within a preset time, the alarm sounds. Thus if you go to the toilet or for a quick snack and return to bed your alarm will not be activated but if you fall and do not get back into bed the alarm will be raised. The pads usually trigger a pager that can be 100-300 metres away although some simpler units sound an alert on the sensor unit itself. There are specifications relevant to these sensors on the national catalogue which operates equipment prescriptions in certain parts of the country (see Introduction), with the codes TE07 and TE09.

Price range: £10 - £744

View our impartial list of from bed or chair alarms

http://www.livingmadeeasy.org.uk/products.php?groupid=819

d) Sensors detecting door opening

These work like the telecare property exit sensors mentioned in 1)b above. The sensors trigger an alarm, or tone, when a door is opened. For example, this may be considered if you regularly become disorientated to time of day and leave the house at night thinking it's daytime. The sensor usually triggers a pager that can be 100-300 metres away (although some simpler units sound an alert on the sensor unit itself). Thus a carer or relative could keep the pager by their bed and, if it goes off, come and assist you.

Some sensors attach to the door and door frame, often requiring a couple of screws. There is a specification relevant to these sensors on the national catalogue which operates equipment prescriptions in certain parts of the country (see Introduction), with the code TE12. Alternatively some sensors are fitted beside the door frame and the user wears a wrist worn device. The alarm only sounds if the individual/s with the wrist worn device goes through the door.

Price range: £6 - £600

View our impartial list of Exit from property alarms

http://www.livingmadeeasy.org.uk/products.php?groupid=1376

Price range: £6 - £600

View our impartial list of Wandering alarms - exit from property http://www.livingmadeeasy.org.uk/products.php?groupid=1376#

Smoke/fire detectors

Smoke alarms are legally required in all new buildings and standard smoke alarms are available through many high street retailers.

People with a hearing impairment may have difficulty in hearing a smoke alarm. Smoke alarms are available that flash a strobe or light. At night some systems can trigger a vibrating alarm designed to be placed underneath a pillow. There is a specification relevant to these smoke alarms on the national catalogue which operates equipment prescriptions in certain parts of the country (see Introduction) with the code SAH06.



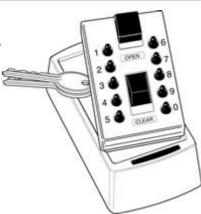
Price range: £22 - £1,400

View our impartial list of Smoke detectors

http://www.livingmadeeasy.org.uk/products.php?groupid=1379

Accessories - Key safes

A key safe is a secure metal box which can be secured next to your door. A single copy of your key/s are placed inside but can only be retrieved by someone who knows the correct code to open the box. It is up to you who you give the code to and you can change the code as often as you like. Units can be wall-mounted or have a locking shackle. Installing a key safe may be an alternative to having multiple copies of your house keys cut. For example, even if you have three carers visiting each day and daily visits from two relatives you still only need one extra set of keys, which you place in the key safe and let the relatives and care agency know the code. If your needs change and you cancel or change the carers you could change the code and let your relatives know the new code.



Key safes should be installed covertly (e.g on the wall, near the door they hold a key for, but obscured from view by a bin or shrub) to avoid attracting unnecessary attention to your property. Tests have shown that some key safes are more secure than others which may determine whether they are approved by home insurance providers. One relevant standard that some key safes meet is LPS, a specification for testing and classifying the burglary resistance of building components, strong points and security enclosures.

Price range: £36 - £62

View our impartial list of key safes

http://www.livingmadeeasy.org.uk/products.php?groupid=2195

Ethical Implications

There may be concerns about the ethical implications of installing telecare equipment, and how it may affect the privacy of the individual. Telecare can have substantial benefits, and enhance your safety, dignity and independence. However, like any technology there is the potential for it to be misused. There will be pros and cons regarding any potential solution. The requirements and wishes of everyone involved, particularly you, the service user, need to be respected and every effort needs to be made to ensure all parties understand how the equipment and service will work. Particular concerns can include:

1) Concerns about the general impact of telecare on care services and how it may be used to cut back care services and reduce carers personal contact with service users.

- 2) Concerns that technological solutions may be installed without fully involving or obtaining the informed consent of the individual/s involved. This can be particularly relevant when the equipment is used to support individuals with mental health difficulties such as dementia.
- 3) Concerns about particular types of telecare device especially those used for monitoring individuals' movements, and how they may affect the privacy of the individual. Privacy and freedom of movement in our own homes and in public areas are human rights. Thus there are concerns about the balance between risk and protection and about telecare being used to impose conventional lifestyles on people e.g. regular bed times.
- 4) Concerns that assistive technologies, including telecare, may be used to do tasks an individual is still able to do for themselves which may contribute to them losing these skills sooner than would otherwise have been the case.
- 5) Concerns about the use of computer technologies that rely on sharing and storing information and the need to ensure such information remains confidential, is not misused or negligently passed into the wrong hands.
- 6) That the devices may make daily activities more complicated or increase the anxieties of an individual that they may unintentionally activate the alarm or damage the equipment.
- 7) Concerns that the use of telecare equipment may tend to encourage a one-sided focus on a individual's problems and not on their existing strengths.

There are no uniform 'answers', 'rights' or 'wrongs'. However, it may help to consider the following issues:

- A) Your personal motivations, perspective and preferences and your involvement in planning the introduction of equipment or changes to existing equipment. Do you understand what the telecare is supposed to do and the options available? Have you agreed that they would like to try the equipment/service?
- B) The nature of your disability, for example is it progressive, or do your needs fluctuate with 'good' and 'bad' days.
- C) Your living arrangements, family support and the needs of any carer/s. Their perspectives, personal fears, anxieties and agendas may need resolving as may those of any professionals involved.
- D) The reliability and safety of the telecare equipment.
- E) Does the situation really call for an equipment or telecare solution? Is there an overreaction to an incident that has only occurred once? Are there alternatives to equipment? Ideally the focus will be on reducing risk, not the freedom to make decisions which may involve risks. For example, if an individual is going out and

perhaps getting lost or disorientated then one approach may be a telecare door sensor, another approach may be to provide someone to walk with them. If they are going out because they are looking for social contact then this will not be resolved by technological solutions.

F) How will the usefulness of the telecare equipment and service be reviewed and evaluated? If you change your mind about having the equipment what will happen?

Please see further reading below for further discussions of the ethics of telecare equipment provision.

Further guidance and information

Dont forget you can ring our helpline on 0300 999 0004 for further information on any of the equipment covered in this factsheet. Please refer to the organisations listed below. For example for information and advice on memory loss or mental health you could ring the helplines of the Alzheimer's society or Mind or visit the website of DementiaUK. Carers can find more information and advice from Carers UK or the Carers Trust. The ATdementia website gives comprehensive advice on assistive technology and dementia including lists of relevant technology. Rica have produced a guide to Community Alarms explaining how alarms work and who will be receiving your calls. http://www.rica.org.uk/content/community-alarms To keep up to date on the latest telecare equipment and service developments visit Telecare Aware.

AskSARA

If you would like further advice regarding choosing daily living equipment you could try relevant sections of AskSARA. AskSARA is our free online guided advice tool. AskSARA will ask you questions about yourself and your environment and then offer relevant advice, product suggestions and supplier details.

Useful organisations



Alzheimers Society

Devon House 58 St Katharine's Way London E1W 1LB Tel: 020 7423 3500

Fax: 020 7423 3501

Helpline: 0300 222 1122

Email: enquiries@alzheimers.org.uk Website: www.alzheimers.org.uk

Alzheimer's Society is the support and research charity for people with dementia, their families and carers.



Atdementia

Trent Dementia Services Development Centre
9 Newarke Street
Leicester
Leicestershire
LE1 5SN

Tel: 0116 257 5017 Fax: 0116 254 3983

Website: www.atdementia.org.uk

AT Dementia is managed by Trent Dementia Services Development Centre, a charity that works to promote high quality care and services for people with dementia through consultancy, project work, education and information and advice on assistive technologies.



British Healthcare Trades Association (BHTA)

New Loom House Suite 4.06 101 Back Church Lane London, E1 1LU Tel: 020 7702 2141

Fax: 020 7680 4048

Email: bhta@bhta.com (and bhta@bhta.net)

Website: www.bhta.net

The British Healthcare Trades Association (BHTA) is the UK's largest healthcare association. Members of the BHTA sign up to a code of practice designed to ensure the public can trust that members will give a good service, and a high standard of behaviour.



Carers UK

20 Great Dover Street London SE1 4LX Tel 020 7378 4999

Helpline: 0808 808 7777 Email: info@carersuk.org Website: www.carersuk.org

Carers UK provides information, advice and support for carers.

Logo of Princess

Royal Trust for

Carers

Carers Trust

32-36 Loman Street London SE1 0EH Tel: 0844 800 4361 Fax: 0844 800 4362 Email: info@carers.org

Website: www.carers.org

Working to ensure that information, advice and practical support is available to all carers across the UK



Dementia UK

6 Camden High Street London, NW1 0JH Tel: 020 7874 7200

Helpline: 0845 257 9406

Fax: 0845 519 2560

E-mail: info@dementiauk.org Website: www.dementiauk.org

Dementia UK is a national charity, committed to improving quality of life for all people affected by dementia

MIND

15-19 Broadway Stratford



London E15 4BQ Tel: 020 8519 2122

Fax: 020 8522 1725

linformation line: 0300 123 3393

Website: www.mind.org.uk

Mind are a national mental health charity in England and Wales, campaigning for change, offering information and support, working in local communities and providing professional training.



Rica

G03, The Wenlock 50-52 Wharf Road London N1 7EU

Telephone: 020 7427 2460 Fax: 020 7427 2468

Email: mail@rica.org.uk Website: www.rica.org.uk

Rica (formerly Ricability), the Research Institute for Consumer Affairs, are a national research charity dedicated to providing independent information of value to disabled and older consumers. Their reports are based on rigorous research and provide practical information needed by disabled and older consumers. They have published a report on Community alarms: www.rica.org.uk/content/community-alarms



Telecare Aware

Tel: (020) 8144 1643

Email: steve.hards@telecareaware.com

Website: http://telecareaware.com

Telecare Aware provides specialised, free news and information to people interested in telecare and telehealth. Its purpose is to help suppliers and service providers around the world keep up to date with what each other are doing.



Wilmslow House Grove Way, Wilmslow Cheshire, SK9 5AG

Telephone: 01625 520 320 Fax: 01625 533 021

Email: admin@telecare.org.uk

Website: www.telecare.org.uk

Telecare Services Association (TSA) is the industry body for telecare and telehealth. TSA promotes and supports the telecare and telehealth industry, highlighting the benefits of telecare and telehealth for commissioners across health and social care, service users, their family and carers.

November 2013, to be reviewed by November 2016, Version 2

References and further reading

Capezuti, E., Brush, B., Lane, S., Rabinowitz, H., and Secic, M. (2009) Bed-exit alarm effectiveness. Archives of Gerontology and Geriatrics Vol.49 p27-31 - (Type 3)

Kerr, B., Cunningham, C., Martin, S. and Dick, M. (2009) Telecare and Sensory Impairment. Using telecare effectively with people who have a sensory impairment

University of Stirling, Dementia Services Development Centre - (Type 3)

Kerr, B., Cunningham, C., Martin, S. and Alison, A. (2009) Telecare and Physical Disability: Using telecare effectively in the support of people with severe physical disability and long term conditions. University of Stirling, Dementia Services Development Centre - (Type 3)

Social care institute for excellence (2010) SCIE Report 30: Ethical issues in the use of telecare. Available from www.scie.org.uk/publications/reports/report30.pdf - (Type 2)

Ward, G., Holliday, N., Fielden, S. and Williams, S. (2012) Fall detectors: a review of the literature. Journal of Assistive Technologies Vol.6 (3) p202-215 - (Type 3)

Wey, S. (2007) The ethical use of assistive technology. Available from: http://www.atdementia.org.uk/editorial.asp?page_id=47 - (Type 2)

Williams, G. & King, P. (2010) Comparing the features of key-safe access solutions to support community care Journal of Assistive Technologies 4 (3) p13-19 - (Type 3)