# Choosing Technology Enabled Care (TEC)

## Disclaimer

***Disclaimer: This factsheet is for advice and guidance only. It is not intended to replace advice from a medical professional. Please ensure you follow manufacturer's instructions for use and that you carry out appropriate risk assessments.***

## Introduction

Information and communication technology is increasingly being used in the home and neighbourhood setting to provide remote monitoring and care for an individual. This use of automated systems to provide support to a person used to be called 'telecare' but is now also recognised as part of the broader category of Technology Enabled Care (TEC).

The systems that were first introduced into service in the 1970s were called social alarms, community alarms and personal alarms. Today there are a wide range of telecare systems currently in use, due to the gradual development and adoption of different technology approaches. TEC includes:

- Telehealth: Remote clinical monitoring (e.g. blood pressure, glucose levels)
- Telemedicine: Virtual consultations and diagnostics
- Digital Care Planning: Integrated records and care coordination tools
- Smart Home Adaptations: Environmental controls, voice-activated systems, and sensor-based automation.

TEC is now central to the UK's strategy for:

- Preventative care
- Home-first support
- Reducing hospital admissions
- Improving quality of life for vulnerable individuals.

TEC enables carers to support someone living in their own home, maintaining a safer environment, possibly reducing the risk of accidents and providing a way for them to get help if required.

These systems are useful for a wide range of people, including those:

- who may be experiencing frailty and/or fearing a fall
- with health conditions for whom it may be useful to monitor their well-being
- with cognitive or learning impairments who require prompting messages and monitoring of safety.

**There is a digital switchover occurring in January 2027, where analogue telephone services will transition to digital landline services. Legacy analogue telecare products (such as pendant alarms which are connected to base units on the landline telephone system) will need to be upgraded to digital alternatives. This means that older analogue devices may fail to alert emergency services if not upgraded.**

TEC providers should contact their users to guide them through this process, and to ensure that they have compatible products to use. You can contact your landline provider (named on your bill) for more information, and to inform them if you are a vulnerable user or have TEC devices connected to your telephone landline. They could be able to provide free engineer visits or back-up devices where needed.

Where to find information and support with the digital switchover:

- BT has a service called 'Connected Together' to help support people with the digital switchover
- AgeUK Norwich has information about how to prepare for the switch to digital landlines
- Carers UK is working in partnership with BT to offer advice about what changes are being made and the available support for the switch
- The government has guidance about the move from analogue to digital landlines.

# Points to consider before choosing to use a TEC product or service

A TEC service is made up of technology and care response elements. It is useful to understand the different elements of a TEC system so that you can decide on the right one for you.

The elements of a telecare system usually involve:

# A communication hub or base unit

Older systems connect to the phone system to transmit alerts and alarm messages through the phone system to responders. The base unit can enable responders to communicate with you in the home, if you are within reach of the unit, to establish if you needed help. Modern systems now use internet-based connections or mobile networks and smart phones, and GPS systems can be used outside of the home to determine locations.

# Sensors and switches

Examples of a switch used in a TEC system would be a pull-cord or gas cut-off switch. The kinds of sensors that may be used include push button alarms, movement sensors or door sensors. These sensors and switches gather a range of information about your activity or safety that can be communicated to the hub or phone line and then through to a response service. Modern systems may also include smart features such as mobile alerts to family members, integration with smart home technology, and automated appliance controls.

# A monitoring, maintenance and response service

The response service may be based in a call centre or provided by family, friends, or neighbours based close by. The types of information provided by TEC systems are highly varied and include alarm calls or alerts, a voice call from you, an SMS text, activity records or internet-enabled location mapping.

An important issue to consider is the method by which the alarm, alert or activity messages are transmitted around the system and out to the response service.

- The most commonly used alarm and alerting system is one based on the use of wireless transmission within the home, from the switch or sensor through to the hub. This allows the use of a wider range of sensors and systems, and a broader range of information can be gathered (such as fall detectors, motion sensors, wander alarms and environmental monitors).
- From the hub to the response service the message is usually sent out of the home via a digital network such as broadband or mobile connections (this replacing the traditional landline systems).
- Mobile and GPS-based systems are essential for users who need support whilst outside of the home and can be in the form of wearable devices and smartphones.

Any telecare system presented onto the market as an alarm system must comply with the set of British Standards (BS) EN50134. These standards specify the minimum requirements for an alarm system.

The standard was designed to ensure a robust, fail-safe system that maximises the likelihood of an alarm message successfully being transmitted to a call centre and appropriately acted upon. Systems that comply with the alarm standards must comply with functional requirements relating to the power system, alarm processing and fault detection, as well as providing two-way communication and operation controls.

# Robust characteristics of TEC systems that conform to the British Standard for Alarm services (EN50134)

## 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

If the call to the alarm centre does not go through the first time, TEC alarm hubs are programmed to automatically try multiple times.

## Connectivity not working

TEC alarms hubs must be able to detect connectivity faults. Fault detection must also cover broadband and mobile network disruptions to ensure continued reliability.

Systems that use the internet or mobile phone network are valuable in providing information about movement and location. This information can inform carers and responders about your safety and activity. These can be designed to send a request for help or an alert about safety concerns.

A new generation of sensor systems, including for home automation such as Nest or Google's Alexa, are increasingly popular systems that unobtrusively monitor and support people in a more intuitive way. To use these safely, the UK has produced security regulations (the Product Security and Telecommunications Infrastructure (PSTI) Act 2022) to ensure that internet-connected products are used safely. British Standards serve as a benchmarks for the quality, safety and effectiveness of products or services, and relevant TEC standards include BS8521 (for social alarm systems/the interoperability of devices), BS8684 (the design, installation and maintenance of TEC services), BS5839-6 (for fire detection) and BS EN ISO 9001 (regarding general quality management).

# The communication hub and alarm/alert buttons

The communication hub that is chosen or provided will largely dictate the range of sensors and switches that can be used. Many systems that are on the market are programmed so that they work only with the hub, sensors and switches provided by a specific manufacturer or supplier.

There is currently limited communication and exchange of data between the different hubs, sensors and switches provided by different suppliers. For example, do not expect Manufacturer A's movement sensor to communicate with Manufacturer B's hub or base unit.

However, most manufacturers and suppliers provide a version of the generic sensors and switches described below. There are also a useful number of stand-alone devices that can be used without a communication hub.

# The communication hub base unit

A home hub base unit is connected to a mobile network or the internet router, and receives signals from any alarm buttons, sensors or switches placed around the home and worn on the body. The base unit usually needs to be within reach of the internet router and a mains socket.

The base unit will contain a speaker and microphone so that you can have a conversation with the monitoring centre if an alarm button is pressed. 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 the pendant is mislaid) and a cancel button to cancel an accidental alarm call. This can be used to stop the call being made if you have pressed the trigger by mistake. However, the control centres don't mind receiving accidental calls and some request that you regularly test the system by putting through a call.

Most hubs have a wireless range of about 100 metres, and newer models may extend further. The range at which the hub can reliably receive messages from wireless sensors around the home, including call buttons, is important to consider if you want to use it when in distant parts of the house or out in the garden. Other considerations may be the materials used to build the home, as thick walls and metal elements may act as barriers to wireless signals.

# Pull cords

These can be fitted around the home and, when pulled, they will create a signal which can either be sent to:

- a pager to alert a carer within the home of the need for assistance
- the hub and through to your call centre response service.

Pull cords were used extensively in older systems, but their limitation is that you would have to activate them. This means you must be conscious and able to move to the pull cord or button when needing help.

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 is not out of reach behind furniture.

# Fixed buttons

Fixed buttons can be placed around the home. When pressed these send messages to either a pager in order to alert a carer within the home of the need for assistance, or to the hub/base unit so that a message can be sent through to the call centre/response service.

The use of fixed buttons is varied. Also referred to as ‘bogus caller buttons’ or 'panic buttons', these can be placed near the front door, allowing 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 for example.

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, who can listen to the situation and intervene - perhaps calling the police - if necessary.

# Body worn buttons

If you feel unwell, or have fallen but are conscious, you could press a button on a neck cord (pendant) or worn on your body (usually wrist-worn). This would send a message to a nearby carer, or an alarm message to the call centre response service. Some alarms can also notify chosen contacts directly via an app or SMS and can also allow them to track the user’s location if it has built in GPS.

Some manufacturers offer design options on the buttons, for example increasing the button area to make them easier to press, or making them compact so they are less conspicuous.

Alarm pull cords and buttons are generally provided to people who do not live with someone but would be able to manage an emergency situation, such as a fall. It is possible to have more than one pendant with the alarm, perhaps for a couple for example, within a home.

# Switches and sensors

A range of switches and sensors can be added in to the majority of alarm systems and most manufacturers provide a version of each of the switches and sensors described below within the range they offer.

# Smoke and heat sensors

If smoke is detected a TEC smoke sensor is designed to automatically sound an alarm in your home and send an alarm call to your monitoring centre who 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 is 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 - bear in mind a standard model will not automatically alert your help centre if smoke is detected.

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. Some of these systems can also integrate with telecare hubs to ensure remote alerts are sent.

Smoke alarms are not generally recommended for kitchens as some smoke can be expected from cooking and toasting. Consequently, a TEC temperature extremes alarm or heat alarm may be considered. They work by detecting extremely high temperatures and also monitor the rate of any rise in temperature.

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

# Gas sensors

Leaking gas is dangerous: it can build up to dangerous levels which can cause an explosion. 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.

TEC enabled gas detectors not only alert you with an audible alarm but also send an alarm to your monitoring centre. Some sensors will enable a switch to be activated that will automatically cut off the gas supply when gas is detected.

Switching the gas off like this can be potentially confusing for some people. When considering the use of such automatic switches to turn off the gas supply, it is necessary to identify a responder who can go into the house to switch the gas back on - this is particularly pertinent for those who may not be able to turn their gas on again.

These detectors should be considered if you have a history of leaving the gas on un-ignited.

As with telecare smoke and heat detectors you could consider purchasing a non-telecare gas detector, even if you don’t have a telecare system.

If you smell gas ring the gas emergency number on **0800 111 999** immediately, and do not use anything with a flame or that could ignite a spark (including light switches or mobile phones).

# Carbon monoxide TEC sensors

Carbon monoxide TEC sensors will not only sound an alarm in your home but will also send an alarm to your monitoring centre, if carbon monoxide is detected.

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.

A TEC carbon monoxide alarm may be recommended if you may or do not remember what a standard carbon monoxide alarm is for, or what action to take should it go off.

As with smoke and heat alarms, standard carbon monoxide alarms are readily available on the high street.

# Minimum room temperature sensors

Temperature sensors are available which can send an alert to your response service or call centre if the room temperature falls below a pre-set level.

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 a low temperature triggers the alarm, then the call centre may contact you and/or your friends and relatives to prompt you to check your heating.

These sensors may also be referred to as a hypothermia alarm.

# Water sensors

Sensors that detect water can be used to indicate a risk of flooding. These may be considered if you are at risk of leaving a tap running in the bathroom or kitchen. These are often sold as flood detectors.

# Fall sensors

Many of the alarm buttons that work on a pendant around your neck, on your wrist, or on a belt around your waist, also have the capability of automatically triggering a call to your call centre if the system detects you've fallen over.

TEC fall sensors work in different ways, most detect an impact or that you are not in a vertical position. 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 call centre. Call centre staff will 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.

You need to be aware that these fall detectors can cause false alarm calls, for example if you lie down for a nap, or drop your trousers when the alarm is worn on a belt. These fall detectors may also not detect certain types of falls, such as a slow fall when sliding off a chair. It may be a good idea to have several different sensors, such as chair occupancy sensors and activity monitors (see below) - all working together to increase the chance that accurate information is transmitted to the call centre in the event of you falling.

The sensors 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, or if the house has thick walls.

# Pressure sensors

Pressure sensors measure weight directly placed on the sensor and can be positioned in a bed, chair or under a floor mat. These sensors can detect if you leave your bed or chair unexpectedly, or can be used to indicate your movement around the home.

For example, a bed occupancy pad contains sensors which, when placed under your mattress, can detect when you have got into or left your bed.

This information can be used to support you in a number of ways. For example:

- leaving the bed can automatically turn on a bedside light when you get out of bed. This helps reduce the risk of you falling over in the dark
- the signal could start a timer and then trigger an alert if you don’t get back into your bed within a pre-set time.

No alert would be triggered if you usually get out of bed for short periods to go to the toilet or for a quick snack, but if you do not get back into bed for a prolonged period this may indicate a fall. In this event an alert could be sent through to the call centre.

Chair occupancy sensors work like bed occupancy sensors but are placed on the seat of a chair or wheelchair. If you leave the chair and do not return after a pre-set period, an alert will be triggered notifying your response service or call centre, so they can check whether you have fallen and are lying on the floor.

Caution needs to be exercised when pressure mats are used on the floor as they may present a trip hazard.

# Movement sensors

Passive Infrared Movement sensors (PIRs) are based on the same technology as burglar alarms and will detect movement in the rooms in your home where they are placed. These sensors can be integrated with smart lighting, home automation or apps to allow carers or family members to monitor activity remotely.

This information can be used in a number of ways to monitor appropriate movement around the home.

They can also be used within a TEC alarm system to alert the call centre to unusually long periods when no movement is detected. This can prompt a call from the call centre or family responders to confirm your well-being.

Body worn or attached sensors use accelerometers and other ways to measure free movement to whatever they are attached to. These can be used to measure movement of the body, i.e. a fall, or movement of a device such as a pill box, to indicate that it has been tipped to extract medication.

A stand-alone use of movement sensors would be to use floor level strip lighting along a corridor to the bathroom that could be triggered on sensing movement. This could help to create a safer environment when you are moving around the home at night.

# Contact sensors (door sensors)

These sensors come in pairs and are commonly attached to a door and door frame, sending an alert when the door is opened.

Alternatively, a pair of sensors can be fitted to a door, and another can be worn on the body - an alert is transmitted only if you are wearing the device when you open the door.

The use of such sensors can be highly varied. The most common use is for those who may not be safe on their own when leaving the house - this may be due to confusion, leaving the house at night, going out in inappropriate clothing for the weather, or are unable to travel safely independently. The use of these sensors on cupboard doors can be used for people who are not able to limit their food intake and may search for food at night or for when supervision is not available.

These sensors can be used in combination with a prompting device which will be triggered by the opening of the door or cupboard to provide an audible message such as, ‘Don’t leave the house now Jane, it is night time’. Many systems integrate with smart platforms, allowing alerts and prompts to be managed via apps or voice assistants.

# Pre-packaged alarm and sensor sets

Most manufacturers and suppliers provide packages of sensors designed to manage some of the more common safety concerns. This leads to a situation where a similar range of sensors may be sold to address a number of safety concerns or to monitor particular activities. Some sets now include smart technology, including app-based dashboards for carers and family members.

# Activity monitoring in the home

It can often be useful to understand your activity patterns in the home to help spot any risk factors that may be or are arising. It is possible to gather this information using the range of sensors described above. For example, the system may use information from movement sensors to record that you visited the bathroom at a particular time and returned to bed. This information is transmitted to an activity monitoring service where it is automatically analysed so that it can be displayed in charts and graphs that can be used to understand your activity and risks.

These charts can be made available to be viewed online. Some services, including some that are commercially available, offer the option for nominated carers or relatives to login to a secure website to view this pattern of activity. If they have any concerns after viewing this data, they can ring you or visit you to check you are okay or offer assistance.

Sometimes a health professional from a hospital or social services may suggest that these systems are temporarily installed in your home (with your agreement) when they are considering what is an appropriate level of care for you. Viewing the charts on the secure website will give them details of your lifestyle, preferences and routines to help them personalise and target support and care arrangements, helping to inform and update a digital care plan.

These activity monitoring systems do not enable alarm messages to be sent and do not conform to the telecare alarm standards. They rely on someone checking and interpreting the data, so an immediate response in the case of emergency is not usually possible. However, it is possible for the care network to receive a text or email alert about unusual activity that may indicate a risk to your safety - for example the system could send an alert message if you did not leave your bedroom a short period after your usual time.

These systems usually require the payment of on-going 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 on-going costs apart from the charge for any text messages sent to carers.

The use of these systems should be fully explained and discussed with you. 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. Some platforms now use AI to detect subtle behavioural changes, such as reduced mobility or sleep disturbances. Some may also integrate with virtual assistants such as Alexa or Google Home to offer verbal prompts, reminders or allow users to request help.

# Using TEC to stay active outside the home

While TEC alarm systems that are based on the use of a hub/base unit are designed to support independence and safety in the home and close environment, there are a number of related systems that can support you to stay independent and safe when out and about.

These systems depend on the use of mobile phone and GPS communication systems and so cannot comply with British Standard EN50134, they are not ‘alarm’ systems as such, and the messages and the transmission of this information is not as robust and reliable as an alarm system. However, they can make an important contribution towards enabling you to remain active in your community. Despite not meeting the standard, they provide location tracking, geo-fencing alerts, and SOS functions, which are useful for people with dementia, learning disabilities, or those at risk of wandering.

Personal locators are portable products designed to be carried by you when you go out. They enable authorised people, such as relatives or carers, to find out where you are by logging in from a computer or smartphone. Most work via GPS (a satellite based global positioning system) and will allow people 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 wifi and GSM mobile phone technology and the system may still not be able to identify where someone may be within a large building, such as a shopping centre for instance.

Several personal locators offer the option of Geo-Fences. Predefined areas, boundaries or multiple zones are entered into the unit. If you leave these areas with the unit then an alarm/alert is raised. Depending on the model this may involve designated contacts such as a friend or relative being informed by text message, app or call.

For any device that uses GPS, consideration needs to be given to the requirement for re-charging and data allowance as GPS uses significant levels of power and data. These devices will require an on-going subscription for the service.

Some units also have a falls detector.

Mobile phones with an emergency or ‘panic’ button work in the same way.

Pressing the emergency button will trigger a call or text a series of pre-set numbers until it receives a response.

Some of these mobiles can automatically include your location in the text messages sent after the emergency button is pressed.

These systems have the advantage that they may work outside of the home - but they have limitations: they will not work if the mobile is not receiving a signal, or if the battery is flat, etc.

# Response Service

Whether you choose to use a TEC alarm system that links to a 24 hour control service, or have a number of sensors installed that can trigger a recorded message, it is important to be clear about what response will be triggered by the alarm or alert message and whether this suits your needs now and in the future.

There are a range of ways that messages from sensors and switches can be used, including:

- sending an alert to a call centre if there is no-one to respond within the home and a risk assessment has indicated that this is required
- triggering a prompt message through a paired device near to the sensor. This can result in a recorded message being played to you to support your safety, but no other action or recording of this activity may be triggered
- either the call or the prompt message may be recorded using an activity monitoring system to build up a picture of your activity in the home. This picture of activity can be viewed by the family or care service
- sensors or push buttons can also trigger an alert on a pager that can be 100-300 metres away, although some simpler units sound an alert on the sensor unit itself. A carer or relative could keep a pager by their bed and, if it goes off, come and assist you. Alternatively, alerts can be routed to apps, SMS, or wearable devices used by carers.

There are a number of options for response arrangements or services:

- an in-home carer
- nearby care network responders
- call centre responders.

Whether equipment connects to, or communicates with a family care network or paid-for service, appropriate response arrangements need to be in place and rehearsed. For example:

- who is going to visit if an alarm button is pressed?
- how will they get to you and how long will it take them?
- how will they get into the house if you can't get to the door?

You may want to consider making the responder a keyholder or alternatively install a key safe.

Many call centres offer different levels of service and while a response such as a call into the home may be immediate, a service to send someone out to pick you up off the floor may not be available and, if it is, is likely to be charged at a higher rate.

# Response from an in-home carer

A number of systems can be set up to alert an in-home carer of a risk to you or activity that needs supervision. Common reasons for using a pager are to allow a carer to sleep with the assurance that the pager will buzz or sound an alert if the person they are caring for gets out of bed at night or approaches an outside door.

Using a pendent or body-worn button allows you to signal to the person with the pager that you would like assistance. Alternatively, if your actions trigger a sensor - such as a movement, pressure or door sensor - this information can also trigger a signal to the pager. The pager can buzz, vibrate or play a tune when it receives a signal. The maximum range between the alarm button or sensor and the pager varies between models and successful transmission of the signal 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. Some pager systems now integrate with smart home platforms, enabling alerts to be sent to mobile apps, smartwatches, or voice assistants.

# Response from a nearby care network

You may choose for alarm messages or alerts to be sent to a network of family and friends who live close enough to respond in the case of an emergency, or who can visit you to check on your safety.

Family and friends can choose to provide the response service if you have a monitoring service provided by a call centre. In the event of an alarm the monitoring service will call pre-set friends and family.

Family and friends can also provide the response service directly to you if they use an auto-dialler device or activity monitoring system. Many systems now send alerts via mobile apps, SMS or email, allowing family members to respond even if they’re not at home. Also, some platforms offer real-time dashboards showing activity patterns and sensor status.

When you press a pendant or body worn button, the auto-dialler is programmed to ring a pre-set series of numbers (landline or mobile) to transmit an alert message to friends or relatives. The calls are made one after another, until a response is gained.

Autodial systems are unlikely to be provided by social services as they will probably prefer the safety features and guaranteed response of a TEC alarm system.

Auto-dialler alert systems may suit your needs if you live or spend time alone, and would like to be able to get in touch with friends and relatives who live locally with one push of a button. These are only suitable if you don’t anticipate emergencies where an immediate response is critical.

If you choose an auto-dialler system, choose people as your responders who:

- live close to you, or are nearby and have their own transport
- are strong enough to be able to help you in the event of a fall
- 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 consent.

# Limitations and advantages of auto-dialler devices

These have significant limitations compared to a telecare system that connects to a 24 hour monitoring centre and can guarantee a response 24 hours a day, every day.

Auto-dialler devices also tend to have fewer automatic checks to alert you, or someone else, if something goes wrong with the system. For example, they may not provide a warning if the device has been disconnected from the mains power source, or if the battery in a pendant button starts getting flat. These are standard safety features required for TEC alarm systems.

Auto-dialler systems do have the advantage that 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. Traditional ‘analogue’ auto-diallers will no longer be used in January 2027, and will need to be replaced with digital auto-diallers.

# Response from a control or monitoring centre

Most monitoring or control centres are run by a number of organisations, including local authorities, manufacturers, commercial firms, housing associations or charities. They are staffed 24 hours a day, every day of the year. Staff are trained in dealing with emergencies and will contact appropriate people and services quickly.

If an alarm button is pressed, the staff at the centre should automatically know where the alarm call came from and can access your details. They will use any communication facility on an alarm system to talk to you to find out what the situation is, or to clarify whether you were testing the system or pressed the button by accident.

If help is needed, or the operator cannot get a reply, then they may arrange for someone to visit. Depending on the response service offered, this could be a relative or friend who has been nominated by you, an emergency response unit from the centre or, if indicated, a doctor or ambulance.

The centre will hold the details of the 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 home or you may let them know the code to your key safe. In the case of repeated inability to raise a response from your network of responders, the call centre may ask you to consider paying for an emergency response service to ensure your safety.

Some areas may offer an emergency response service. If this is the case, 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. It is important that you understand what level of service you can expect.

# Key safes

Any response service, whether provided by a paid emergency response service or family or friends, may require them to enter the house if you are not conscious or able to get to the door. They will therefore require a key to enter your home. A key safe provides a useful way of giving access to the home to regular callers, such as carers and relatives, and also provides a ‘spare’ should the homeowner leave the house without the key.

A key safe is a secure metal box that stores a key, and is designed to be mounted outside by the front door. The safe is opened by a numeric code entered by push buttons or rotating dials. 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. Choosing a code made up of familiar numbers, such as a birth date, can help someone with memory difficulties to remember it.

If your key safe is provided by your local council, they will often arrange for it to be fitted. However they may not provide you with the code, restricting this to their own workers to maximise the chance that a key has been returned to the box if required in an emergency. If you buy your own and you do not know someone who could fit it for you, you may find that your local authority has a handyperson service which can help for a small fee.

Key safe units are usually wall-mounted into brick or concrete, although there are some that have a locking shackle, like a padlock, or that slip over the top of the door and are kept in place by closing the door.

Key safes should be installed out of easy line of sight. 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 (Loss Prevention Standard), a specification for testing and classifying the burglary resistance of building components, strong points and security enclosures. There is a wealth of information online about key safes and their installation. Smart key safes with app-based access and remote unlocking are becoming common. It is important to ensure that users understand and consent to who has access to their home, especially in formal care arrangements.

# Assessing your needs

Some of the issues that should be considered when you are assessed for a telecare alarm or activity monitoring system are the technologies that would best suit you, your carer and your care network, the activities you wish to undertake or concerns you want to manage, as well as the home or neighbourhood environment in which you will use these systems.

If you are concerned about your own safety at home, or that of another person, you are strongly advised to seek an assessment of the situation from community health or local social services team. If you are being discharged after a stay in hospital, raise your concerns with the occupational therapist or social worker.

Since the Care Act 2014 came into power in April 2015, anyone who appears to need care and support can request an assessment from their local council, irrespective of their income or savings. The Act also places a statutory duty on local authorities and the NHS to support individuals to take steps to prevent their ill health or care requirements from getting worse. These strategies for prevention can include the early provision of equipment and services to help prevent, delay or reduce the development of further need for care and support.

The assessment aims to identify any difficulties a person may be having in caring for themselves and how this impacts upon their well-being. A carer is entitled to a carers' assessment to see if support is needed to continue in the caring role.

# Ethical concerns in the use of TEC

The introduction of TEC into your home, or the home of the person you care for, requires consideration. Both face-to-face and technology-enabled care can be perceived as an intrusion on your daily routine and privacy, but can increase safety and independence for you.

If you have the capacity to understand and be involved in any decision-making, it is important that you fully understand how TEC would work and how it can help you. Any decision needs to be made in your best interests, for example you may decide that the safety gained through the use of the equipment outweighs the possible intrusion into your life.

When TEC is installed it can provide you and your family or carers with peace of mind, but it has the potential to reduce the number of people who would otherwise visit to check-up on you, leading to increased isolation.

However, your social life should not depend on care visits that are designed to check on your well-being. TEC needs to be seen as part of your whole lifestyle, where getting out, belonging to a social group and receiving visitors is also seen as part of your wellbeing.

# Data collection and privacy

All TEC require the provider company to keep a certain amount of personal data about you - the more sophisticated monitoring systems also gather ongoing data about your movements throughout the day.

Under UK GDPR and the Data Protection Act 2018, organisations must:

- Collect only necessary data for a specific, lawful purpose
- Store it securely to prevent unauthorised access or loss
- Keep it only as long as necessary, then dispose of it safely
- Respect individual rights, including access, correction, and erasure of data.

If you are concerned about the data that is collected and how it is kept, contact the service provider.

# Provision of TEC

# Social care provision

Alarm and TEC are usually provided by independent companies, but are also accessible through the local authority. If you are assessed as needing the systems as part of your care requirement, the local authority will complete a financial assessment to determine the level of any contribution you may be required to make. Your local council may pay all or part of the installation costs.

Once installed, there will be ongoing weekly or monthly service costs for the maintenance and monitoring of the system, this may also cover the costs of responding to calls.

You will need to contact your local council to find out what charges are made for TEC in your area. You may be able to find a link from your council website to their chosen local alarm and telecare service provider, or visit the GOV.UK website.

If you live in a housing association or council property, TEC alarms may already be provided. If you feel that the alarm or monitoring system in the housing block is insufficient for your safety and well being, talk to the housing association or council and seek an assessment of your needs from the local authority.

Alternatively, if you are eligible for NHS Continuing Healthcare (NHS CHC) funding your local NHS trust may pay for TEC as part of a continuing healthcare or intermediate care package.

# Private purchase

The companies that provide TEC products and systems may also provide assessment, installation services and call centre options.

Ask your local authority or the Telecare Services Association (TSA) for details of companies who offer TEC in your area. Look for retailers who are members of the Telecare Services Association, as this requires them to adhere to standards for service provision and if they don’t the Association will consider complaints. You can also look for TSA-accredited members via the member directory on the TSA website.

TEC must carry the UKCA (UK Conformity Assessed) mark to be legally marketed in Great Britain (England, Scotland and Wales). The mark ensures products comply with current UK regulation, that it’s safe and reliable for use in care settings, it’s legally supported for installation and funding by local authorities or NHS services.

The UKCA mark is required for devices such as:

- Personal alarms
- Fall detectors
- Telecare hubs
- Sensor-based monitoring systems.

# Installation and maintenance

You may need to arrange for someone to set up, check and maintain the equipment e.g. replacing batteries. Whether your system is being provided by your local authority or you are purchasing privately, check whether installation and maintenance of the system is included, or is an option you can choose at additional cost.

# References


Age UK Norwich (2025). ‘How to prepare for the switch to digital landlines’. Available at: https://www.ageuk.org.uk/norwich/about-us/news/2025/how-to-prepare-for-the-switch-to-digital-landlines/ (Accessed: 28.09.2025)

BT. ‘Connected together. How to support friends and family with the digital landline switchover’. Available at: https://www.bt.com/about/all-ip/connected-together (Accessed: 28.09.2025)

Carers UK. ‘Landlines in the UK are going digital. Are you ready?’. Available at: https://www.carersuk.org/get-involved/partner-with-us/corporate-and-strategic-partners/bt/ (Accessed: 28.09.2025)

Council Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (United Kingdom General Data Protection Regulation). Available at: https://www.legislation.gov.uk/eur/2016/679/contents (Accessed: 28.09.2025)

Data Protection Act 2018. Available at: https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted (Accessed: 28.09.2025)

HM Government. ‘Data protection’ Available at: https://www.gov.uk/data-protection (Accessed: 28.09.2025)

HM Government (Department for Science, Innovation and Technology) (2025). ‘Guidance: Moving landlines to digital technologies’. Available at: https://www.gov.uk/guidance/moving-landlines-to-digital-technologies (Accessed: 28.09.2025)

TEC Services Association (TSA). Available at: https://www.tsa-voice.org.uk/ (Accessed: 28.09.2025)

The Care Act 2014. Available at: https://www.legislation.gov.uk/ukpga/2014/23/contents (Accessed: 28.09.2025)

Product Security and Telecommunications Infrastructure (PSTI) Act 2022. Available at: https://www.legislation.gov.uk/ukpga/2022/46/contents (Accessed: 28.09.2025)