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Technology is here to help

There's a whole world of technology that could help make life as a carer easier. Simple devices and apps can help someone live independently for longer or give you peace of mind when you can't be around.

Many of us use technology in our everyday lives, but seven out of ten people don't think of technology when it comes to caring. Why not use it to help you take care of your loved one? You could set up one or two devices or applications, or even a larger system that is connected to you and other carers.

Whether you're worried about your mum getting lost or need help with your husband's medication management, there are tech solutions that could help take the stress out of caring.

Technology could help you:

- · Be more efficient
- Reduce unplanned visits or hospitalisation
- · Take some of the worry out of caring
- Give you and the person you care for more independence.





Technology allows me to keep working and gives Matthew some choices in a life where 99% of his day is out of his control.

- Niki



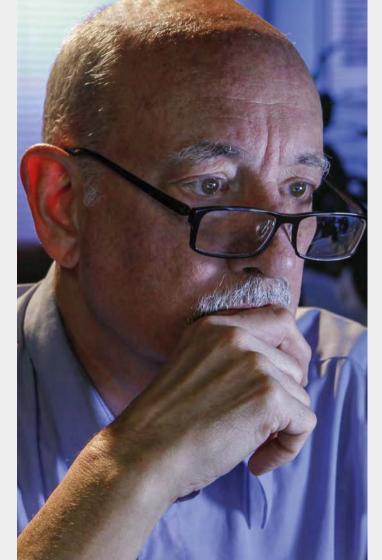


Chapter 1

Environmental monitoring and independent living

If the person you're caring for has difficulty controlling household appliances, reaching for curtains or using doors, there are plenty of tech solutions to help them live independently for longer. With these devices they can manage their home environment more easily using apps, centralised controls or with voice activation.





Environmental monitoring and independent living



Heating and lighting control

What are they?

These are smart switches and dimmers for lights that work alongside phone apps for flexible controls. You can also get wireless thermostat control or thermostats controlled through phone apps. There are also motion sensor lights that are activated when someone gets up or enters a room.

Who are they for?

For people with mobility restrictions, who live independently or spend time alone in the house. It can give the person you care for control of their surroundings.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- · Other online retailers/marketplaces
- Independent product providers
- · Home or electrical stores
- · Energy providers

Voice activated devices and systems

What are they?

These are systems that use voice commands to control appliances or electrical items in your house, such as your heating, lights, television or even to order a taxi.

Who are they for?

This can enable someone with restricted mobility or ability to control appliances to function independently around the home. It does require that their speech is not impaired.

Where to get them?

- · Online retailers/marketplaces
- · Independent product providers
- Home or electrical stores

Door/entry lock control

What are they?

Door control can help someone to leave and enter their house. Electronic door locks that require a code to open them can be used to keep someone safe in their home and can be used by trusted professionals as well.

Who are they for?

These can be used for people with restricted mobility or people who might wander. They can be used at night, if you need to leave the house for work or don't live with the person you care for.

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- · Other online retailers/marketplaces
- Independent product providers
- · Home or electrical stores
- · Security product providers

Environmental monitoring and independent living



Door video system

What is this?

This can enable someone to see who's calling without opening the door, so that they don't answer the door to unknown callers.

Who is it for?

People who may find it difficult to get to the door or for vulnerable people who may not want to answer to someone they don't know.

Where to get it?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- Independent product providers
- · Home or electrical stores
- Security product providers

Voice prompt systems

What are they?

These use motion sensors to play back recorded messages reminding someone of important things, for example to take keys as they leave the house.

Who are they for?

These can be used to encourage independent living if someone has trouble remembering essential things.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- · Independent product providers
- Home or electrical stores

Smart appliances

What are they?

These include smart ovens, fridges, washing machines and driers, even microwaves or a coffee maker. They can be controlled via an app on your phone or tablet.

Who are they for?

Anyone with restricted mobility or trouble using home appliances could benefit from smart controls.

- Online retailers/marketplaces
- · Independent product providers
- · Home or electrical stores

Environmental monitoring and independent living



Home automations

What are they?

Electric shutters, rollers and curtains can help someone with hard to complete everyday activities.

Who are they for?

These simple electronic solutions could help anyone with restricted mobility or difficulty with reaching curtains or blinds.

Where to get them?

- Online retailers/marketplaces
- Independent product providers
- · Home or electrical stores

Special phones

What are they?

Smartphones or specially designed telephones that can be programmed only with essential numbers or photographs of known people instead of numbers.

Who are they for?

People who have problems using small telephone buttons, trouble remembering numbers or people's names.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- · Independent product providers
- · Home or electrical stores



"

The phone was easy to set up and now Mum can contact me using the telephone which she was unable to do using her old conventional phone.

- Carer



When you can't be with the person you care for, it can be stressful worrying whether they are OK. Remote monitoring technology can reassure you that they are safe in their own home. If something does go wrong, systems can send alerts to carers or to 24-hour monitoring and response centres. 60% of carers surveyed said telecare/telehealth gave them peace of mind.

These devices may be singular units or a system that incorporates two or more of the following functions, which may include:







Passive infra-red (PIR) detectors

What are they?

These devices are mounted to the wall of the home and monitor activity. They can tell you whether someone is up and active, what room they are in and if someone else has entered the property.

Who are they for?

For carers who work outside the home or those who don't live with the person they are caring for. It can be used to monitor people who live independently.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- · Independent product providers
- · Home or electrical stores
- · Energy providers
- · Security product providers

Fall detectors

What are they?

A sensor that the person wears and notifies you with an alert if the person has taken a fall. You or a 24-hour monitoring and response centre could be notified if someone has fallen as soon as it happens.

Who are they for?

These work for people who are living independently or if you spend periods of time away from them. They notify you with an alert as soon as the fall takes place, so that they can get help immediately.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- · Independent product providers

Property exit sensors and GPS trackers

What are they?

Property exit sensors are mounted to doors and alert you if someone passes the sensor and has left the property. GPS trackers are a guidance device that the person wears all the time enabling you to track their movements on an app.

Who are they for?

People who may be confused or have memory problems, which may cause them to wander from their home and get lost. It can give carers reassurance to know they can find their loved one when they go missing.

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- · Other online retailers/marketplaces
- · Independent product providers
- · Home or electrical stores
- · Security product providers



Carbon monoxide, natural gas, smoke and flood detectors

What are they?

These devices can alert a carer or neighbour if there is a fire, gas leak or flood in the home of a vulnerable person.

Who are they for?

People who may not otherwise be able to react to an emergency alarm and are living independently or spending long periods of time alone in the home.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- · Independent product providers
- · Home or electrical stores
- Energy providers

Panic buttons/bogus caller alarm

What are they?

Alarm buttons placed near the front door or beside the bed to be used in the event of a break-in or if someone threatening approaches the front door.

Who are they for?

People who spend long periods alone in the home or live independently. They can give carers and those being cared for reassurance that help is only the press of a button away.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- Independent product providers
- · Home or electrical stores
- Security product providers

Activity of daily (ADL) monitoring

What are they?

These usually use passive infra-red detectors (PIRs), plus smart plugs that can monitor the use of household appliances and send an alert when for example the kettle has not been used at the usual time.

Who are they for?

For carers spending periods of time away from the person they are caring for. It can give reassurance to be notified of someone's activities and if they are not following their usual routine you can check they are OK.

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- · Other online retailers/marketplaces
- · Independent product providers
- · Home or electrical stores
- Energy providers
- · Security product providers



Pressure, proximity and other sensors

What are they?

Pressure and proximity sensors indicate bed/chair occupancy, presence (floor/carpet sensors), incidence of incontinence (enuresis) or medical emergency (epilepsy).

Who are they for?

People vulnerable to wandering, people for whom incontinence is an issue or people at risk of medical emergencies.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- · Independent product providers
- · Home or electrical stores

Personal alarm, pendant or pull cord

What are they?

Using a pendant button, broach, watch or mobile phone app the user can press for help if they need assistance. These can contact a response centre or a carer directly.

Who are they for?

People who spend long periods in the home or live independently. Or for people who may have trouble getting around or be likely to fall and need assistance or experience a health emergency.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- Independent product providers

Door and window sensors

What are they?

Motion sensors fixed to doors and windows can send an alert if someone enters/exits doors and/or windows. They can be attached to cupboards, a fridge door or interior doors to monitor daily use and send an alert when motion is not detected during a certain time period or throughout the day.

Who are they for?

People who spend periods of time alone or live independently, to detect if someone has broken into the property or to keep track if the person is likely to wander and get lost or to ensure that someone has returned home safely.

- Specialist health and care product providers (incl. online retailers/marketplaces)
- Other online retailers/marketplaces
- Independent product providers
- · Home or electrical stores
- Energy providers
- · Security product providers

Case Study



Cameras

What are they?

Cameras around the home to help you keep an eye on the person you care for. They can be used in systems alongside motion sensors.

Who are they for?

People who spend periods of time alone in the home or those with restricted mobility who may need assistance even if you are in the house.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- Independent product providers
- · Home or electrical stores
- Security product providers

Niki's story

Before I got the monitoring system, I never knew if I would come home and find my husband on the floor covered in blood. Matthew, has a progressive genetic disorder called myotonic dystrophy. He started to present symptoms in his mid twenties, but in the last couple of years things have deteriorated. I am his sole carer and he can't be left on his own or leave the house very easily.

This situation wasn't part of the life plan, but technology allows me to keep working from home and gives Matthew some choice in his day.

We use a monitoring system of cameras and motion sensors that alerts me of his movement on my phone. I can have a look and see if he's just turning over or if he needs something. It allows me to be downstairs and work in the kitchen knowing that he's ok upstairs. I can also pop out for a pint of milk now without worrying.

The system helps to manage my stress levels and enables me to stay in work, which would be very difficult if we didn't have it.

We also have a video door system that goes to our phones. This allows Matthew to see who's at the door, but also talk to them if it's someone he knows and tell them to come in around the back. If he doesn't want to see someone, it gives him some autonomy and choice, which means a lot to him as most of his day is out of his control.

The internet allows Matthew to keep up with his interests. Before he might have spent a few hours in a book shop, now he can look for books online. He also loves history and used to go to museums, but as it is almost a military operation to leave the house, he now goes to online forums where he can still engage about things that interest him and express an opinion. Otherwise his whole life becomes about the condition and he is so much more than that.



Chapter 3

Vital signs monitoring

There are monitoring devices that can help you to keep track of someone's health more effectively. This benefits both you and the person you care for by helping manage a condition, cutting down doctor's visits and avoiding hospital stays. It also helps you to monitor their health more continuously, which can stop health problems from getting worse or needing hospitalisation.

These solutions can include stand-alone devices, things the cared-for person wears or implantable devices. These can also be connected to control units (hubs) or apps that store health data.





Vital signs monitoring

There are devices to measure:

- blood pressure (sphygmomanometers)
- blood oxygen levels (pulse oximeters)
- · blood glucose
- lung capacity or flexibility (spirometers)
- heart rate
- sleep patterns.

There are also implantable devices to measure heart function and blood glucose. As well as specialised home scales for keeping weight on target.

Who are they for?

People with ongoing health problems that would benefit from regular monitoring

How do you get them?

You may be able to get some of these through your local authority or NHS, but they are also available to buy privately from:

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- Independent product providers
- · Home or electrical stores
- Pharmacies

Case Study



Andrew's story

I have been caring for my wife, Sue, for 20 years. She has final stage secondary progressive Multiple Sclerosis.

Sue's blood pressure goes up and down like a yo-yo. I use a blood pressure monitor to keep track of it, and get her treatment when she needs it.

I started using the blood pressure monitor a few years ago when she was given a trial for a blood pressure medication. I wanted to monitor whether it was working and after the trial I proved it wasn't making a difference, so using the monitor has helped reduce the amount of medication Sue takes.

I also use a SAT monitor routinely three or four times a day to measure her oxygen levels. Low oxygen can be an indicator of congestion in the lungs. When this happens I can give her a chest massage to encourage the lungs to expand to help her breathe more easily and make her more comfortable.

Using technology to keep track of her health means that we can manage Sue's condition at home, and get her treated more quickly without necessarily having to visit a GP.

Using technology to keep track of her health means that we can manage Sue's condition at home.

Chapter 4

Remote healthcare and advice

There are certain clinical and rehabilitation services that can be conducted remotely. This means that some treatments or advice can be given via telephone, email or Skype sessions online from the comfort of home. This has benefits for the patient as well as saving time for you.

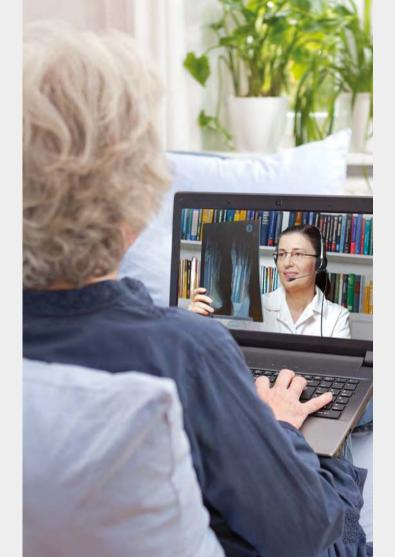
Benefits for patients:

- · Fewer visits to clinicians
- Reduced travel times
- More intensive rehabilitation, with potentially better outcomes

 Access to treatment that might not otherwise be available, for example speech and language therapists for stroke patients, which might not be available for the full length of recovery.

Benefits for carers:

- Fewer clinician visits
- · Less time taken out of work.



Remote healthcare and advice

Online/remote GP advice

What is this?

Your GP may offer advice through an online consultation cutting down on visits to the surgery. You can now also access online medical advice and some pharmacies offer a service with online doctors to access a prescription.

Who is it for?

Anyone with a health condition or for those who find it difficult to leave the house.

How do you get it?

Some NHS practices offer this, and there are other private providers such as Babylon.

Online mental health treatment

What is this?

For some mental health problems, such as anxiety or depression, there is now online support and counselling available delivered by trained professionals. Some of this support can be accessed 24-hours a day. There are also programmes that take you through an online therapy course.

Who is it for?

People with mental health problems, who don't have access to face-to-face therapies or who may refuse accessing face-to-face support.

How do you get it?

Some NHS practices or local authorities may offer services such as the Big White Wall or you can subscribe to these privately. There are also qualified counsellors offering online support.

Computer-based SALT (speech and language therapy) routines



What are they?

There are online programmes that can support speech rehabilitation.

Who are they for?

People trying to regain their language skills, who may have had some face-to-face speech and language therapy but may not have completed their recovery or for those where the service is unavailable in their local area.

How do you get them?

Via a referral from a health professional.

Remote healthcare and advice



Physical therapy

What is it?

This uses special therapeutic equipment in your own home that sends signals to the therapist who runs a class remotely from another location.

Who is it for?

Anyone who needs to do specialised fitness work to strengthen their muscles but perhaps can't easily attend an external session or they are not available.

How do you get it?

Offered through some NHS localities but there are also private providers.

Telecoaching

What is it?

This is remote advice and guidance that can be used to secure a desired behaviour change, for example help to stop smoking. It can also be used to help deal with the impact of having a long-term condition or a new diagnosis.

Who is it for?

Anyone who needs help to bring about changes in their behaviour or who may need some additional support dealing with their condition.

How do you get it?

Offered through some NHS localities but there are also private providers.

Apps

What are they?

Mobile apps can help manage health and care. There are apps that can train users to get rid of physical symptoms, such as severe pain. There are also pain management apps that help users track their pain and other symptoms, such as stress and fatigue. There are apps that can help individuals with conditions such as autism, anxiety, mild or moderate mental illness, or recovering from brain injuries. There are also apps that can help families and carers share and coordinate the care around someone more easily.

Who are they for?

People who want to manage their physical or mental health or who need help with managing care or caring.

How do you get them?

These are downloadable to your smartphone or tablet and are also available as web apps.



Olga's story

When I first heard about Carers UK's Jointly app, I was juggling full-time work with caring for my parents. I was living in London – 170 miles away from their home in Staffordshire. It was a complicated and stressful situation.

My mum has a range of conditions, including osteoporosis and arthritis. My dad had been caring for her, until 2015 when he was diagnosed with lymphoma and needed care himself. My siblings and I tried to coordinate it between us, taking turns to travel to their home to help around the house, cook meals and take them to appointments.

Jointly was an excellent way of making sure we had all the information we needed in one place. We only had to enter the information once and all of us had access to it. Up until then we'd been trying to coordinate everything through email, phone calls and trying to share calendars.

Each time one of us took mum or dad to an appointment we would make notes in Jointly. The medication list meant we all had up-to-date information to share with the GP – which was essential when dad was prescribed aspirin, which he wasn't allowed to have whilst on his cancer drugs.

Being able to look after my parents has been really important to me. I wanted to return the care and love they gave me during my childhood. After dad passed away in 2016, my siblings and I have continued to share the care for mum, and Jointly helps us do that.



Jointly was an excellent way of making sure we had all the information we needed in one place. We only had to enter the information once and all of us had access to it.

Remote healthcare and advice



Electronic games

What are they?

These types of games can help people to stop smoking, treat depression or lose weight.

Who are they for?

People who would like to change their behaviour or who need help to manage mental health problems.

How do you get them?

These are downloadable to your smartphone or tablet and are also available as web apps.

Online advice

What is this?

Advice from specialist websites, such as NHS choices, online patient information services or symptom checkers

Who is it for?

For people who do not necessarily need a doctor's appointment, are unsure if their symptoms are cause for concern or find it difficult to get to a doctor's appointment.

How do you get it?

The NHS has online health information and symptoms checkers, but there are a growing number of private providers offering this service for free (Babylon Health, Boots, Patient Information Forum).



"

It can be so hard to get a doctor's appointment at a time that suits an very often the question you want to ask turns out to be really simple. NHS Choices was brilliant at helping to understand whether Mum's symptoms needed following up.

- Carer



Chapter 5

Medication management

If you're caring for someone who takes medication, managing what they take can be stressful, especially if you're not always around to make sure they take it and take the right dose at the right time. There are devices that can help you and give you reassurance when you can't be there.





Medication management

Medication management devices

What are they?

These devices remind the person to take their medication. They can also issue the correct dosage at the right time. Many modern devices have safety locks to prevent overmedicating. Alerts can be sent to you (and other contacts) when the medication has not been taken.

Who are they for?

People who take medication regularly and especially for those who may forget to take their medication at the right time.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- · Other online retailers/marketplaces
- Independent product providers
- Pharmacies

Case Study



Graham's story

Last year my wife and I wanted to take a big trip, but it presented a huge problem. Our 30-year-old son Philippe lives with us at home so we can make sure that he takes his medication. He was diagnosed with epilepsy when he was 16 and even with us living under the same roof it's not always easy to know that he has taken his medication

Technology has given us peace of mind and he doesn't get annoyed with us constantly asking.

Due to his epilepsy and the side effects of the medication, Philippe has trouble remembering things. He has missed doses of his medication frequently over the years. If he misses a dose the consequences are serious - he will almost certainly have a major seizure. But for 24 hours after this he isn't really himself and can miss other doses causing more seizures and he can get himself into a bit of a mess for a few days.

I found this automated pill dispenser, which alerts us via text message or email if Philippe has taken his medication.

If the message doesn't come through, we can ring him up and remind him.

In 2016 we wanted to see our daughter in Australia, but we worried about leaving him on his own. I found this automated pill dispenser, which alerts us via text message or email if Philippe has taken his medication. If the message doesn't come through, we can ring him up and remind him.

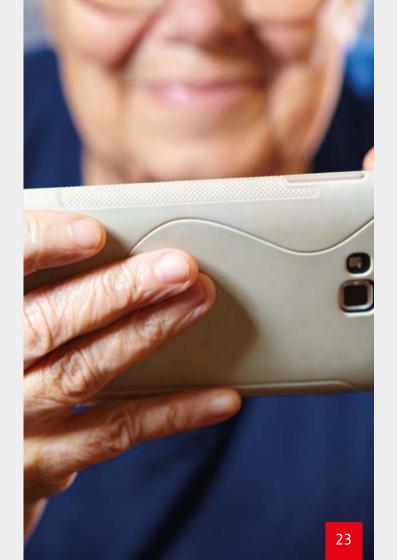
It gave us a huge amount of reassurance and allowed us to go on holiday for a month. We use the medication dispenser all the time now and, to be honest, I wish we'd found it years ago.

Chapter 6

Enhancement technology

This type of technology can help someone stay independent for longer by helping them to strengthen their skills or physical health.





Enhancement technology



Hearing aids

What are they?

Devices that fit to the ear to increase the ability to hear.

Who are they for?

People with impaired hearing.

Where to get them?

- Specialist health and care product providers (incl. online retailers/ marketplaces)
- Other online retailers/marketplaces
- · Independent product providers
- · Home or electrical stores
- Pharmacies

Brain training apps

What are they?

Downloadable applications that you can run on a phone or tablet. You can play games and complete puzzles to test various mental skills with the aim of improving memory and maintaining mental agility.

Who are they for?

Anyone can play these, but they may be especially beneficial for older people with dementia.

How do you get them?

They can be downloaded to a smartphone or tablet and are also available as web apps.

Fitness apps

What are they?

These applications can give someone exercise routines and keep track of their progress. They can help someone build strength, durability and improve muscle tone.

Who are they for?

People who can find it difficult to get regular exercise and who would benefit from a fitness structure and routine.

How do you get them?

Download to a smartphone or tablet and are also available as web apps.

How to fund products

Many local authority social care departments offer technology solutions (they may call them telecare and telehealth), to older and disabled people receiving them as part of their package of care and support. Depending on their financial circumstances some people will have to pay a charge for this, as social care services are means tested.

Access to local authority provided – or funded – technology solutions will normally require a needs assessment and will be subject to you meeting the national eligibility criteria and agreeing with the local authority that these technology solutions are the best way to meet your needs.

Some local authorities also offer technology solutions without the need for a formal assessment, seeing them as a preventative service - in this case the funding would depend on the policy of a local authority.

Technology solutions for monitoring health conditions (often referred to as telehealth) are most often provided through the NHS and, if it is available in their area, people with long-term conditions access it via their GP, community health team or hospital specialists.

However, families can also buy telecare and telehealth products and services directly.

Some of these products qualify for VAT relief, which means that someone with a chronic disability does not have to pay VAT on these products.





Dad's pendant was funded by his local authority but we looked at other stuff like a blood pressure monitor and remote heating control which were not funded by the council so my sister and I shared the cost together.

Carer



Where to find products

There are website and online retailers/marketplaces that give information, advertise and sell a range of technology products and services relating to a wide number of everyday challenges and health conditions.

Specific products and services can also be found through individual providers.

Online platforms offering advice, information and useful product reviews and comparisons include:



provides impartial information and advice on a huge range of products and services for disabled and older people on its website.

The website provides links through to national suppliers so that people can go through to make a purchase. To enable people to try before they buy, the website lists centres around the country where families, carers and those they support can have hands-on experience of equipment.

The DLF also have factsheets that highlight the issues to consider before purchase.

AskSara

www.asksara.dlf.org.uk

For those who don't know what is available, the free online questionnaire enables the public to create a personalised report including signposting, equipment information and specific product advice.

Everyday Life everday-life.co.uk

is an online assessment tool aimed at helping families, carers and those they support to find health and care technology products and services that can assist them.



At Home

www.athome.uk.com

is a collaboration campaign between Local Authorities that aims to encourage people to think about how independent living and mobility equipment can help you people continue to live independently in a healthy and safe environment at home. The website offers useful information and advice.

Rica

www.rica.org.uk

is the national Research Institute for Consumer Affairs offering practical information on products and services for older and disabled consumers.

Where to find products

Online marketplaces where you can buy products and services include:

Unforgettable www.unforgettable.org

provides advice and technology for people suffering from dementia.

Spring Chicken www.springchicken.co.uk

has great information and many products for sale to help people struggling with activities of daily living.

Which? www.which.co.uk

has regular reviews of telecare and assisted living options to help families and carers explore the growing number of assistive technology products and services.





carersuk.org/tech