

Assistive technology for dementia

Assistive technology for dementia enables an older person who is living with dementia to stay as independent as possible in their own home. Technology advances mean that equipment has been developed that can support physical challenges and memory difficulties for those with the condition.

Maybe you are looking after a loved one who is living with dementia, and you are worried about their safety. Or you yourself are living with the condition and are struggling to cope alone. Here we explain all you need to know about what dementia technology is available to you. We explain what assistive dementia technology is, the many benefits it can bring to day-to-day life and how to obtain and use assistive technology for dementia patients.

What is assistive technology?

Assistive technology or dementia technology refers to devices and systems that support a person living with dementia to complete tasks of daily living. These devices and equipment can help support a person with mobility and frailty challenges and issues with memory related to their dementia. Using technology in dementia care has been rapidly evolving in recent years. Assistive technology ranges from smart systems for your home, to alarms to remind you to do certain tasks, through to smart phone apps that can provide communication tools for dementia.

There are a variety of ways in which assistive technology can help a person with dementia get the most out of life. Assistive technology devices for dementia can help improve safety and independence but can also help with monitoring health and well-being. Specifically assistive technology can help with:

- Memory challenges
- Support to plan certain tasks of everyday life
- Mobility and movement
- Remaining safe both in and out of the home
- Communication (speech and hearing)
- Socialisation
- Improving self-confidence and independence

Different types of dementia assistive technology

Here we list the types of devices and alert systems that can support a person to live well with dementia.

Mobile smartphones

Mobile smartphone technology is increasingly being used by older people to manage their life and keep connected to loved ones. They allow you to not only make calls and send text messages but enable you to use email and 'apps. There are several ways they can be used as communication tools for dementia and help a person maintain independence:

Most mobile smartphones display a time and date, or the calendar function can be used. Alarms can be set on the phone to remind you to undertake a task at a certain time in the day. You can use it to access other assistive technology for dementia, for example in-home cameras, thermostats to set the heating at home and multimedia services such as television programme scheduling.

They can help your loved one keep track of hospital or GP appointments in the calendar function, so they are reminded in good time. Most organisations now use text reminders to notify patients of appointments on mobile.

Online shopping can be done on mobile smartphones and websites that they visit regularly can be saved in a 'favourites' file.

They can be used as safety devices for dementia patients ensuring they can always contact someone in an emergency, or they need your support.

Clocks and alarms

Not everyone will feel comfortable with smartphone technology. There are several radio-controlled and digital LCD clocks available. These have large digits so are easy to see. There are some clocks and devices that distinguish whether it is the morning, afternoon or evening through visual representation or the use of light. This is very helpful to those who are living with dementia as they sometimes struggle to understand times of day and may confuse day and night.

GPS tracking devices

Tracking devices are the perfect safety devices for dementia patients who may at times wander. The tracking device is worn by the person living with dementia and the alert system will raise an alarm to

a family member if they have moved out of a particular area, for example they have left the house. They give family members much-needed peace of mind that their loved one is safe.

Smart devices

Smart devices like Amazon Echo, Google Home, and Apple HomePod can support a person living with dementia who is experiencing problems with memory. These voice-activated devices can set reminders to notify your loved one when to complete certain tasks, for example taking medication. You can also ask them questions for example what the date and time is. If your loved one is comfortable with this technology, they can ask for a shopping list to be created, or for it to record a television programme using more advanced features. You would of course need to have Wi-Fi set up in the home to make use of these features.

Electrical appliance monitoring device

If you do not live with your loved one, knowing they are safe will be of paramount importance to you. A new piece of technology monitors the use of electrical appliances in the home, so you are alerted when an appliance is on and when it is off. So, if they have left the cooker on for a prolonged period you will be notified and can respond appropriately.

Cameras in the home

Installing cameras in your loved one's home is another great way to ensure their safety, whilst providing you with reassurance. Many devices can then be linked to an app on your smart phone so you can see exactly how your loved one is wherever you are.

Electronic medications management

There is a large range of digital pill dispensers and boxes on the market. They provide an alert to remind those living with dementia or the family carer that it is time to take medication. Some dispensers can be linked to a vibrating alarm on a watch. This technology means that medications can be managed safely and effectively for those living with dementia.

Large picture phones

Many people living with dementia struggle to remember phone numbers and may need to get in touch with someone quickly or in an emergency. These phones have large number buttons and are

programmed with frequently called numbers. Some phones have clear buttons where photos of their family members on a button that would then dial that person if they and when they are needed.

Choosing assistive technology for dementia

There are a few things you need to consider when choosing assistive technology for dementia patients. You may wish to consider consulting with an Occupational Therapist to get their advice on what equipment would best meet your loved one's needs. They will conduct a comprehensive assessment of their needs and how they wish to live their life, as well as discuss with the family their views on what would make life easier.

It is always important to ensure your loved one is engaged in what is being planned for them, so that their choices and wishes are respected. It might be that your loved one is not comfortable using innovative technology and will need help and support to bring it into their lives. No decision should be made that restricts a person's freedom or privacy.

Depending on where they are in their dementia journey, some technology may not be appropriate, and it can never replace one-to-one care provided by a family or professional carer if that is what your loved one needs. It is worth noting that dementia technology should never replace face-to-face contact to stay connected to loved one's.

This could have a detrimental impact on a person's overall well-being and may mean they feel socially isolated.

Here are some things you may wish to consider when choosing assistive technology for dementia:

- whether there is a need for it, or can you get the support another way

- what technology will best meet your needs

- your preferences and ability to use devices, and how these might change over time

- whether you have any other conditions that may affect how you use the technology (such as sight or hearing problems)

- how much support you have from other people and whether you will need this to be able to use the technology

- how well the technology will fit in with your usual routines

- whether the technology requires a phone line or internet access

- the cost of the technology