



**Choose the right
location system**

The School of Dementia ®



Choose the right location system





It is good to have your own location system. It provides a sense of security and freedom for people with dementia and their relatives to know that the person will be found if they should wander at some point.

In Denmark, more than 50% of people with dementia wander during the course of their illness. Some people with dementia wander more than once. Good reason for many relatives to worry about their family member when that person has dementia.

A location or tracking system is able to provide reassurance for the person with dementia, so that he or she feels encouraged to do more things independently and continues to do so for longer. This helps quality of life and self-esteem, and has a positive effect on the relatives.

Many relatives spend a lot of time and effort worrying about and caring for loved ones who have dementia. A location device in a pocket may give the person with dementia a sense of freedom and reassurance so they can maintain friendships, activities and perhaps the daily walk on their own. It gives their partner or relatives the time and opportunity to have time to themselves and their interests without having to worry that the person with dementia is wandering.

There are many different kinds of location systems and many location technologies. In this article, you can:

- Read about what you should consider before choosing a location system
- Find an overview of some of the most common types of location systems

The overview includes the advantages and disadvantages of the different kinds of location systems, making it easier to decide which location device works best in your daily life.

How is your daily life?

There is no location system that suits everyone. Your needs and wishes may be different from other families who are also experiencing dementia.

Before you start investigating what kinds of location systems and technologies are on the market, it is a good idea to think about what is important to you in your daily life. Is there a need for the person with dementia to continue playing tennis, doing the shopping or visiting a neighbour? Is there a greater risk of the person with dementia wandering at night rather than during the day? Should your children, grandchildren or neighbour be notified if the location system sends an alarm? What are your attitudes to tracking and monitoring? Many people feel their privacy is being invaded if they are monitored 24/7 and if the information about their whereabouts is stored in the cloud or on a company's computers. If the person with dementia is not comfortable with the system, there is a risk that he or she will stop using it.

Your habits, routines and attitudes also have an influence on the type of location system that suits you best. The best choice is the system that can be adapted to your daily life instead of vice versa.

Once you have found some location systems that look interesting, you can look into what each system is capable of. For example, you can look into the following:

- How often does the location device need charging?
- Is the system easy to operate?
- What does the location device look like? Dimensions, weight, material, colour...
- Does the location system work both indoors and outdoors?
- How much does the location system register and save?
- Who helps if the alarm goes off?

Choose the location system that is the easiest fit for your daily life. If the system involves changing many of your habits and routines, it is not the right choice. For example, choosing a GPS transmitter designed for shoes is no good if the person with dementia has the habit of taking their shoes off. Similarly, it is no good hoping to be able to trace a person via a mobile phone, if they never take their phone with them. The location device's battery also makes demands on you. Will you remember to charge the device once a day, or should you choose a model that remains charged for longer? Remember that charging the location device can be tiresome if it is sewn into a garment or the sole of a shoe. In this case, you could choose a location system that can be charged wirelessly.

Location systems

There are many different kinds of location systems with many different names. Locations systems are, among other things, called:

Trackers, transmitters, locator systems, tracking devices, location devices, tracking tags and GPS units.

The technology in the different location systems is not necessarily the same, and this may have a big influence on what the system is capable of, its design and how it is used.

Regardless of the technology used by the different kinds of location systems, what they have in common is they can save lives.

Below you can read about the most commonly used systems.



Dementia watch

A dementia watch is most often a wristwatch with a built-in GPS transmitter. There are also larger, more complicated versions that are used in the home. You can talk to some of the watches and they can reply with information about the time, day of the week and date.

Advantages

- If the person with dementia is used to wearing a wristwatch, it can often be replaced with the new one without too many problems.
- Watches that you can talk to and that answer are dementia-friendly, as the disorder can often make it impossible for the person to tell the time on a normal watch. NB! Some people with dementia can become scared if they cannot see who is talking.
- If the person wears the watch all the time, there is a good probability that they will have it with them if they wander.

Disadvantages

- If the person with dementia is not accustomed to using a wristwatch, there is a high risk of the watch not being used or taken off.
- GPS technology uses a lot of battery power. This means the watch will typically need charging once a day.
- The GPS signal rarely works indoors.

The person with dementia will be monitored around the clock – perhaps against his or her will.

GPS units

GPS units in shoe soles, jackets and key rings

Small GPS transmitters (GPS tags) can be concealed in shoe soles, jackets and key rings. Concealed transmitters are particularly good for people with dementia who may be a little uncomfortable with the transmitter or who often empty the contents of jackets and bags.

Advantages

- The transmitter can be concealed.
- The transmitter is small.
- Some GPS transmitters have a built-in speaker, so you can ring to the unit and talk to the person to reassure them. However, you should be aware that some people with dementia may become very scared when the device starts talking to them without them being able to see who is talking.

Disadvantages

- Multiple transmitters are needed if the person has several pairs of shoes or jackets and changes outfit regularly.
- If the person does not take the key ring with GPS with them, there is no way to track them.
- The GPS signal uses a lot of battery power. This means the GPS transmitter will typically need charging once a day.
- The GPS signal rarely works indoors.
- Charging can be cumbersome if the GPS is sewn into a jacket or needs to be removed from the sole of a shoe.
- If the GPS is just lying in a jacket or coat pocket, there is a risk of the person removing the transmitter.
- The person with dementia is monitored 24/7 – perhaps against his or her will.

GPS in a telephone

Virtually all smartphones have built-in GPS transmitters. Before you can use your telephone as a location device, you need to install a program or an app so that your relatives can access the GPS information in the telephone of the person with dementia.

Advantages

- If the person with dementia is used to having the smartphone with them then they do not need to get used to it.
- Once the telephone is bought and the mobile subscription paid, there are no additional costs.

Disadvantages

- If the person with dementia has not been used to having a telephone, it is not certain that he or she will agree to have one
- The person with dementia must take the telephone with them so it can function as a location device
- The telephone will normally need charging every day
- Relatives must actively keep an eye on their part of the location program – which may be very stressful
- GPS technology uses a lot of battery power. There is therefore a risk of the telephone running out of power while you are trying to track the person
- The GPS signal rarely works indoors.
- The person is monitored 24/7.

Otiom

Otiom is a brand new type of location system which uses a combination of technologies. The system makes it possible to maintain a high level of privacy, because Otiom does not save more than the last five places someone has been. No one can see where the person has otherwise been. If the alarm goes off, the helpers you have selected will also receive directions so they can quickly reach the person who has wandered.

Advantages

- Otiom has different safety zones, so you can adjust the system as your needs change.
- The battery has power for up to three months. Otiom also has a reserve battery so there is always enough power to find someone. Therefore, you do not need to charge the location device as often. You receive a message when it is time to charge the location device.
- Otiom can be charged wirelessly. Wireless charging makes it easy to charge the transmitter even if it is sewn into a jacket or coat.
- Otiom provides very accurate localisation and also works indoors.
- The device is hardy and can withstand being dropped and being washed.
- You can configure Otiom to suit your needs. For example, you can choose to configure Otiom so it only registers if the person with dementia leaves their home at night, or so Otiom does not register when the person is inside their home or on safe routes. The transmitter will therefore only notify you when necessary.

Disadvantages

- There may be a risk of the person with dementia removing the Otiom Tag from a pocket if it is not sewn into the jacket or coat.
- If the transmitter has to be sewn into clothing, several transmitters may be required.

Contact Pentland Medical for more information

www.pentlandmedical.co.uk

T: 01314675764

E: mail@pentlandmedical.co.uk