Care Staff Helpsheet

Dementia Support Australia

Funded by the Australian Government
A service led by HammondCare

The Use of Global Positioning System (GPS) location devices in dementia care



Background

A Global Positioning System (GPS) location device can be used to pinpoint or track the location of a person who is wearing the device in real-time. This device may be of use to assist in locating, or tracking the movement of a person wearing the device if they become lost, or if there is a concern about the person's whereabouts.

Why use GPS?

The possible goals of utilising a GPS location device include:

- as a safety measure, to help reduce the possibility of harm, to assist in helping to locate and monitor the whereabouts of a person wearing the device
- assist in searches when a person who is wearing the device goes missing
- it may allow the person who is wearing the device to go for walks independent of another person
- it may allow the person who is wearing the device to continue with their usual habit of walking
- maintain independence and self-confidence
- ensuring that a person living with dementia can maintain their freedom and dignity, continue to be respected, and so they can continue to engage in an activity that can help maintain their well-being.

Consent

There is always a danger that the people we serve are not consulted about the use of technology, nor are they sometimes even aware that it is in use. Consent is a crucial issue in the preservation of the Human Rights of people with dementia. This applies to the practical use of GPS devices and extends to collecting information via the device and the various uses to which that data is then put.

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What contributing factors can a GPS device address?

The following factors could be addressed using a GPS location device:

- **Impaired wayfinding:** The location of a person wearing the device can be tracked when they are walking or travelling (including via public transport) independently. Tracking the person in this way may help to assess the person's way finding skills.
- **Inability to maintain habits/routine and/or access to outdoors:** Reducing the person's options for meaningful engagement, exercise and interaction with their environment, by restricting their ability to walk and travel independently. For example where there is a risk that the person might get lost, the GPS device can be set to pre-select a perimeter of more local, well-known places. This can alert a carer if the person travels further and could then potentially be lost or distressed. This way the person can still engage in meaningful walking habits or travels to visit areas/places/family/neighbours or attend appointments with the least restrictions possible.

Who is likely to benefit?

A person living with a diagnosis of dementia who through cognitive disability may find wayfinding difficult, or a person who requires the security of a safety measures such as the knowing or monitoring their whereabouts.

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Introducing a GPS device:

- Discuss the device with the person with dementia and their family/friends, ensuring that both the person with dementia and their family/friends are involved with the decision to use the device.
- Discuss options so that the person with dementia and their family/friends are aware of the best type of GPS location device appropriate for their needs.
- Ensure that the person with dementia and their family/friends understand the benefits and limitations of the device.
- The person with dementia and their family/friends must have a good understanding of the device, including why this device may be of benefit to the person with dementia, when best for the person with dementia to wear the device, how the device works, who will be responsible for recharging, how it is to be maintained and where and when maintenance and repairs will be carried out.

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Special considerations and precautions

The use of GPS devices for safety and the continued independence and wellbeing of a person living with dementia requires thought and proper planning if the device is to be effective and appropriate.

The following is a list of considerations that may need to be addressed before a GPS device is recommended. This list is by no means exhaustive, and as always, the individual's unique needs and circumstances should be considered. This also includes the professional judgment of the consultant in conjunction with the person living with dementia, nominated Enduring Power Of Attorney (EPOA), family and carers as appropriate.

- Consent
- Legal recourse, if it is chosen to be used covertly
- Where is the movement data tracked by the GPS stored, and who has access to this?
- Would the person be happy and comfortable with wearing a GPS device?
- What type of GPS device is best for the person – wearing around the wrist, on a lanyard around the neck, secreted in a shoe, pocket etc.
- Ensuring the person has it on their person when walking or travelling, as it could be lost during movement, or discarded.
- Is geo-fencing required and does the type of GPS allow this. This means an alert would be sent if the person goes outside a 'safe zone' that has been previously defined, and who would be monitoring this?
- How would you keep a device's battery charged? Most cannot be charged while being worn, so charging needs to be planned. The battery may drain more quickly if someone goes out more, or if the mobile signal isn't strong.
- Is more than one device necessary for the person's needs?
- Who will finance updates/maintenance/repairs of the GPS device?
- Is the GPS signal strong enough in certain areas, are there 'blackspots' or areas or distances that are out of range of the system that need to be managed for in the areas of use? Also, mobile phone signals can vary between networks. So, this may mean that the use of a roaming SIM card is required. In this way the device can connect to the network that has the strongest signal instead of relying on just one network.
- If the GPS device is to enable independent walking or travelling by public transport, then an appropriate risk assessment needs to be completed, and any risk managed or mitigated.

The inherent limitation of the device is that it only can pinpoint location and track movement. This means that optimal use is dependent on management of various considerations, some of which have been presented above. If this is understood and these considerations managed, a GPS device can be beneficial.

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Additional consideration if the GPS device is provided through Dementia Support Australia (DSA)

If a GPS device is provided to a client through DSA an assessment should be undertaken that care partners will be able to manage the technical and functional aspects of the device, outlined above, before the Consultant ends involvement. Some considerations for care partners to keep in mind:

- Review the need, type and suitability of the GPS device on an ongoing basis as the needs of the person with dementia will change over time.
- The care partners will take the responsibility of updating/maintaining and repairing the GPS device as needed.
- Conduct ongoing risk assessment if the device is to enable independent walking or travelling by public transport, as the needs of the person with dementia will change over time. This will always allow appropriate risk management or mitigation to be in place.

Infection control and risk management

- Always follow the manufacturer's instructions for use, care and cleaning of the GPS device.
- Wash hands before and after handling the GPS device to avoid getting it dirty so as to help prevent infection.

Useful resources

GPS trackers can come in many forms, from pendants on key chains, to watches to inserts into the person's shoe.

The Independent Living Centres in each state and territory are available to help source the right product for the person. Independent living centres have a large number of devices listed on their website for different applications. All have varying features and knowing the particular client will help to determine the most appropriate device. The device needs to be considered in the context of its features and what the person's needs are.

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