Comparing GPS Trackers and Medical Alarms for Older Adults

When thinking about safety for an older relative, two types of devices often come to mind: the classic medical alarm and the newer GPS tracker. Both can summon help, but they work in quite different ways. Choosing the right one depends on where the person spends most of their time, how active they are, and what kind of risks you are trying to guard against. This article compares the two approaches and explains when each makes more sense.

What Each Device Does

A traditional medical alarm, sometimes called a personal emergency response system (PERS), is designed for use inside the home. It typically consists of a base unit connected to a landline or mobile network, plus a wearable button. When the button is pressed, the base unit connects the wearer to a monitoring centre where an operator can speak to them and call a family member or emergency services. The system relies on the wearer being within range of the base unit, usually around 200 to 300 metres.

A GPS tracker, by contrast, is built to work anywhere. It uses satellite signals to determine its location and can send that position to a caregiver or monitoring service. Many GPS trackers also include a fall detection sensor and an SOS button, so they function like a medical alarm that can be used outside the home. Some models add Wi-Fi location for better accuracy in built-up areas and to help conserve battery life when the device is indoors.

Coverage and Range

The biggest difference between the two devices is where they work. A home-based medical alarm is limited to the range of its base station. This is fine for someone who rarely leaves the house and has good mobile coverage at home. But if the wearer goes into the garden, visits a neighbour, or takes a walk to the shops, the alarm may not reach the base unit and becomes useless outdoors.



A GPS tracker does not have that limitation. As long as the wearer is within mobile network coverage, the tracker can send its location and trigger an alert. This makes it suitable for people who are still active, who travel, or who might wander due to dementia. The trade-off is that GPS trackers rely on satellite signals, which can be weaker in dense urban areas or deep inside buildings. Some models combine GPS with Wi-Fi location to improve accuracy indoors, giving a more reliable fix when the wearer is at home or in a shopping centre.

Fall Detection and SOS Alerts

Both types of device can offer fall detection and an SOS button, but they do it in different ways. A medical alarm usually has a button on the pendant or wristband that the wearer presses to call for help. Fall detection is an optional extra that uses accelerometers to detect a sudden

impact and a change in posture. If a fall is detected, the device can trigger an alert automatically.

GPS trackers increasingly include the same sensors. Many models now have automatic fall detection and an SOS button that works anywhere. Some also allow two-way communication, so a caregiver can speak to the wearer through the device. This feature is particularly useful when the wearer is confused or unable to explain what happened. A medical alarm with GPS combines the best of both worlds: it can work as a home-based alarm when the wearer is near the base unit and switch to GPS tracking when they go out.

Battery Life and Wearing Options

Battery life is a practical concern that often gets overlooked. A medical alarm that sits on a table or plugs into the wall does not need charging. The wearable pendant usually has a battery that lasts several months because it only communicates with the base unit when the button is pressed. GPS trackers, on the other hand, need to keep a connection to satellites and the mobile network, which drains the battery faster. Most GPS trackers need charging every one to three days, depending on how often they transmit location. Some models have a standby mode that saves power when the wearer is at home, but it is still something to remember.

Wearing options also differ. Medical alarm pendants are often designed to be worn around the neck or on a wristband. GPS trackers come in similar form factors but may also be clipped to a belt or carried in a pocket. Some older adults find a pendant uncomfortable or embarrassing, while others forget to wear it. A tracker that can be worn as a watch or clipped to clothing discreetly might be more acceptable. The right choice often comes down to what the person is willing to wear consistently.



Monthly Fees and Contracts

Most medical alarms require a monthly subscription to cover the monitoring service and the mobile or landline connection. The cost can add up over time, and some contracts lock you in for a year or more. GPS trackers often have a similar fee structure, though some newer models offer a pay-as-you-go option or no monthly fee at all. If you are comparing devices, it is worth looking at the total cost over a few years, not just the upfront price. A device with no monthly fee may work out cheaper in the long run, but it is important to check what services are included. A medical alarm with GPS that has no ongoing charges can simplify budgeting and remove the risk of the service being cut off if a payment is missed.

When a Medical Alarm Suits Best

A home-based medical alarm is a good choice for someone who:

- Spends most of their time inside the house or garden
- Has good mobile coverage at home
- Is comfortable wearing a pendant or wristband
- Does not wander or travel alone
- Prefers a device that does not need frequent charging

For these users, a medical alarm is simple, reliable, and does the job without extra complexity. The limited range is not a problem because the person rarely goes beyond it.

When a GPS Tracker Suits Better

A GPS tracker is a better fit for someone who:

- Leaves the house regularly or travels
- Has a tendency to wander or get confused about directions
- Wants to maintain an active, independent lifestyle
- Lives in an area with good mobile coverage but may go out of range of a home base unit
- Does not mind charging the device every day or two

For these users, the ability to track location anywhere provides peace of mind that a home alarm cannot offer. The fall detection and SOS features work the same way, but the device is not tied to a specific place.



Making the Choice

There is no single right answer. The decision depends on the person's daily routine, their health, and what they are comfortable wearing. Some families choose to start with a home alarm and later switch to a GPS tracker if the person becomes more active or starts wandering. Others prefer a combination device that works both indoors and out, so they do not have to manage two separate systems.

Whichever route you take, the most important factor is that the device is worn and used. A sophisticated tracker left in a drawer is no help at all. Talk to the person who will wear it about what they prefer, and look for a device that fits their lifestyle. The right choice is the one that keeps them safe and gives you peace of mind without getting in the way of their independence.