



SOLUTION OVERVIEW

Introduction to Butlr Care

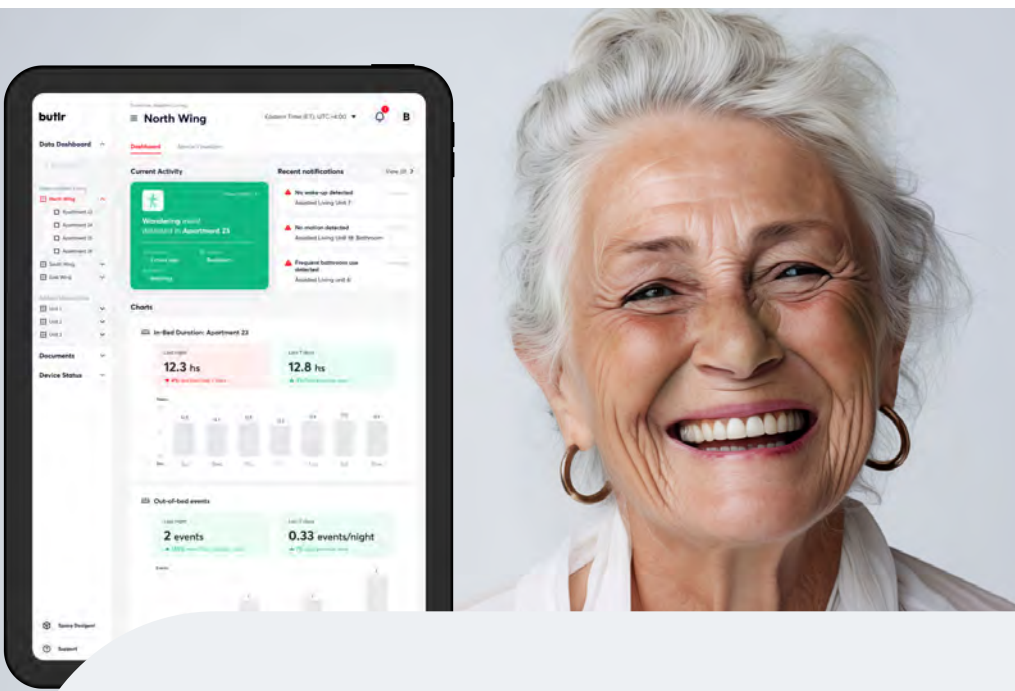
About

Welcome to the Butlr Care Solution Overview, designed to provide a comprehensive insight into Butlr’s approach to ambient monitoring and senior care technology. This document serves as a gateway for both newcomers and seasoned professionals to grasp the essence of the Butlr system. The first half delves into real-world applications, customer success stories, and the intrinsic value our solution brings to senior care communities.

In this brochure we also cover the technical underpinnings of our data system. At the end of this reading you will have a good grasp of Butlr’s data integration capabilities, and the spectrum of alerts that keep caregivers informed in real-time. Whether you're seeking use cases or technical insights, this document caters to you. Welcome to the future of senior care with Butlr.

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Ambient Monitoring for Modern Senior Living and Home Health

Butlr Care is the **world's first ambient monitoring platform** based on thermal sensing. Unlike other solutions, our unobtrusive ceiling-mounted sensors are accurate, easy to deploy, and preserve **individual privacy and independence**.



Deliver Better Care

Reduce hospitalizations with proactive care. Catch new health conditions often associated with changes in activity – like bathroom usage, gait speed, and restlessness. Respond faster and mitigate the impact of acute health risks.



Empower Your Staff

Lessen the need for routine check-ins and paperwork, while empowering your staff to maximize time and focus on delivering compassionate care – all by using the tools they already know.



Stand out with Award-Winning Tech

Attract residents who value individual privacy, independence, and technology that improves daily living. Butlr's award-winning technology is unobtrusive, 100% anonymous, and requires no change to daily routines.

TRUSTED BY EXPERTS



Use Cases

Activity-based Care

Activity-based Care via ambient monitoring, improves resident care by allowing caregivers to check in on residents only when truly needed. Passive sensing enables caregivers to assess residents' well-being without entering their rooms physically, disturbing their private time or night rest.

Falls Reduction

Falls Reduction anticipates potential fall risks based on activity patterns, enabling early interventions to prevent falls. Whether a resident is leaving a zone of interest (e.g. bed) or entering specific rooms (e.g. bathroom), Butlr identifies a fall risk and notifies the team.

Unusual Activity

Unusual Activity detects deviations from normal behavior patterns. This includes alerts for when a resident is detected to be motionless in their room and outside specific areas (e.g. bed), exits from designated areas at specific times, frequent visits to certain rooms (e.g., bathroom), all aimed at identifying potential health issues or safety concerns.



Movement is a vital sign— let Butlr translate it into care.



Passive check-in
& night watch



Nurse call system
integrations



Sensor installs in
less than 3 mins*



Real-time alerting
and notifications



Activities for Daily
Living (ADLs) audits



100%
Anonymous



Keep existing
workflows



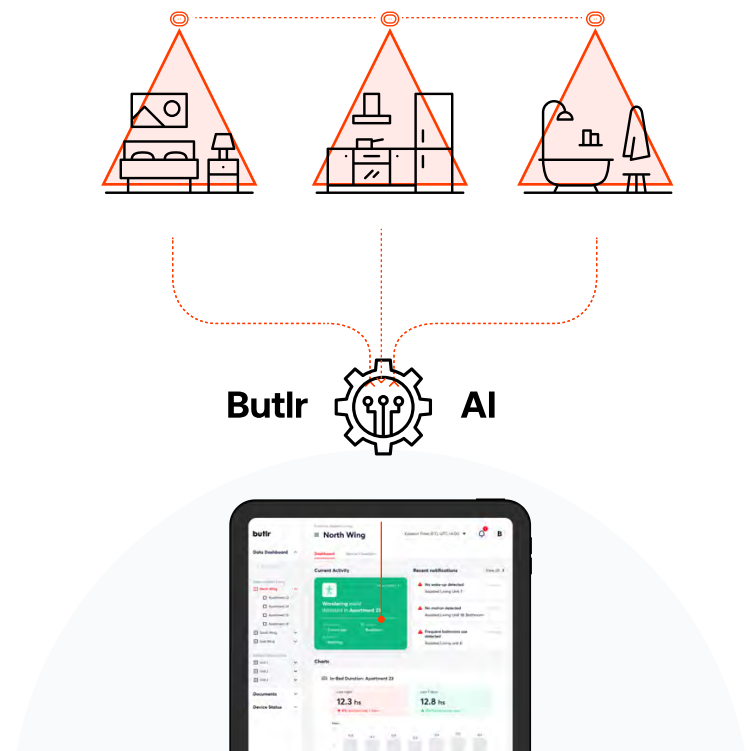
Wandering & out-of-
bed notifications.

Why Butlr

Butlr Care embodies a paradigm shift in senior care, where technology not only augments but also **enhances the presence of the people who offer care and safety**. Through its state-of-the-art thermal sensor technology, Butlr Care seamlessly integrates into residents' daily lives, fostering an ambient environment that prioritizes privacy and dignity.

With effortless installation and near real-time alerts, Butlr Care empowers care communities to optimize their resources, ensuring that caregivers can focus on delivering exceptional care. By enhancing the presence of care and safety, Butlr Care redefines the standard of senior living, creating a nurturing space where residents flourish and thrive.

**refers to battery-powered sensors*



Heatic Sensors

At the heart of the Butlr People Sensing Platform lies **Heatic technology** – cutting-edge thermal sensors designed to capture and interpret human presence within indoor spaces. Capturing only heat signals, our sensors are 100% private, not capturing any PII.

Integrates with existing workflows

The last thing your staff should do is learn yet another app, log in to yet another point solution. That's why Butlr Care is API-first. Our alerts will integrate into your existing systems and workflows, making sure that your staff can continue using the workflows they are familiar with.



Navigating Senior Care Technologies: The Role of Ambient Monitoring



Active vs Ambient Monitoring

Active monitoring solutions, such as pull cords and wearables with GPS tracking, respond reactively to emergencies, providing immediate assistance **after an incident occurs**. In contrast, ambient monitoring takes a proactive approach by analyzing movement and behavior patterns to anticipate potential issues before they escalate into emergencies, enhancing daily operations and promoting resident safety and well-being.

A Holistic Approach to Care

Ambient monitoring and active monitoring solutions can complement each other seamlessly, offering a holistic approach to senior care. By incorporating various technologies into a single system, such as Butlr's API-first technology, communities can leverage existing infrastructure and software to enhance resident safety and well-being, ensuring comprehensive support and peace of mind for caregivers and residents alike.

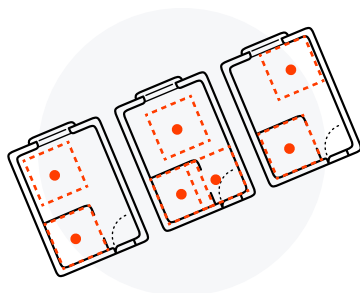


Meet Susan

Susan is the Executive Director of Serenity Senior Care Community in Ohio, which she joined in 2011. While the community flourished, the onset of the Covid-19 pandemic dealt a devastating blow to Susan's once-thriving enterprise.

The Problem

After the height of the pandemic, Susan witnessed a **sharp decline in her workforce**. Many employees, overwhelmed by the challenges and risks posed by the crisis, chose to leave. The exodus resulted in a **23% decrease in staff numbers three months later**, leaving the team severely understaffed and struggling to maintain its usual standard of care.



Introducing Butlr Care

To address operational shortages, Susan reached out to Butlr in April 2023. Susan wanted to enable alerts for unusual activity during the nightshift so that her existing caregivers could function in a targeted and efficient way, making the most of their limited time. By July 2023 Susan's system was up and running in 80% of their Memory Care and Assisted Living beds, strategically placing Heatic sensors in residents' apartments.

The results



Caregivers were proactively notified of important events, optimizing their time and reducing unnecessary rounds. This led to happier, less fatigued nurses and less disturbance to residents' sleep, resulting in improved overall satisfaction.



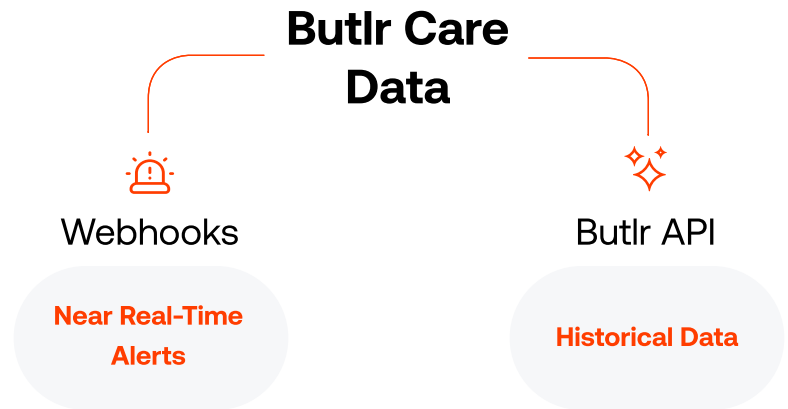
Introducing unusual activity detection as an additional service inspired trust among clients, demonstrating a commitment to their loved ones' well-being and enhancing the community's reputation for attentive care.



Nurses gained valuable insights into residents' nighttime behavior, allowing for tailored care plans and more targeted assistance. This personalized approach improved the quality of care and enhanced resident satisfaction.

The impact: **happier caregivers, healthier residents, increased revenue, and establishing their community as a trusted choice in senior care.**

Understand the types of Insights



Near Real-Time Alerts (NRT)

Embrace efficient responsiveness with Butlr Care's Near Real-Time Alerting System. Receive push notifications within **2 to 5 seconds**, ensuring swift awareness of time-sensitive events crucial for effective senior care. These insights include:

- 1. Room Entrance and Exit Alerts:** Enhance safety and efficiency by being promptly notified whenever a resident enters or exits their room.
- 2. Zone Entries and Exits Alerts:** Define specific zones within rooms to receive instant alerts when residents enter or leave these crucial areas (e.g. beds, rooms).
- 3. No Motion Alerts:** Prioritize resident well-being with alerts triggered when a resident shows little or no movement over a specific period. Detect potential health issues promptly and ensure immediate attention when needed.

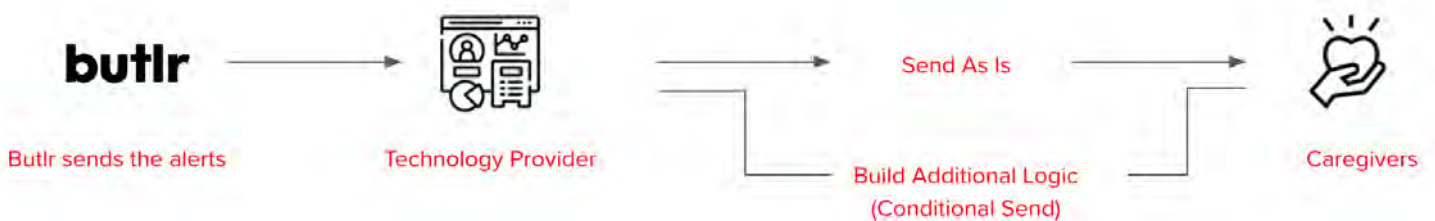
Historical Data via Butlr API

Butlr Care's Historical Data Analysis feature offers an in-depth exploration of spatial behavior patterns over time. Such insights include:

- 1. Behavioral Changes:** With historical data analysis, Butlr surfaces and flags outlier events and behavioral changes, allowing care teams to stay ahead of potential issues such as early signs of dementia or UTI infections.
- 2. Trend Analysis:** Gain a comprehensive understanding of long-term trends in your community. Identify patterns related to specific activities, movement frequencies, or behavioral shifts that warrant attention.
- 3. Personalized Care:** With historical data, Butlr surfaces consistent patterns that aid in personalizing care plans and the creation of comprehensive resident profiles, ensuring tailored support, consistent care provision by multiple caregivers and proactive adjustments based on evolving needs.

Near Real-Time Alerting System (NRT)

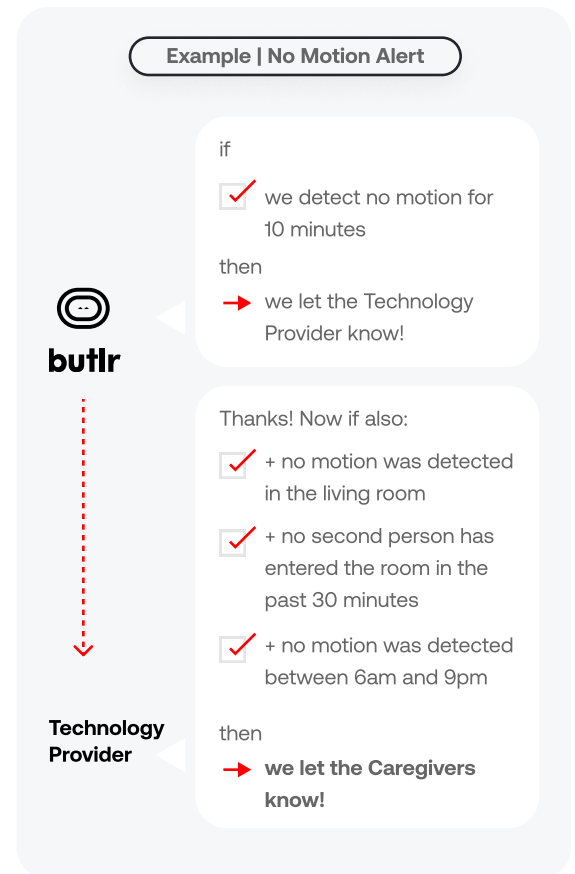
Customized Alerting Solutions



Our sensors serve as diligent observers, continuously monitoring for predefined events or activities flagged as significant. Take, for instance, our "no motion" alert feature. Should a resident remain inactive for a specified duration, our sensors promptly detect this and trigger an alert.

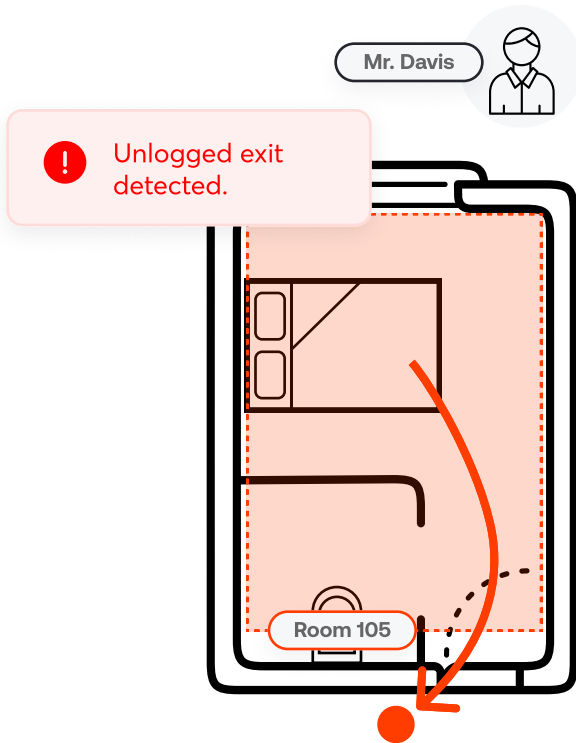
But here's where our system truly shines: **We empower you to customize these alerts to align seamlessly with your operational requirements.** Perhaps you seek to incorporate additional criteria beyond motion detection, such as time-sensitive parameters, the presence of other individuals, or specific spatial zones within your community.

With Butlr Care, you wield the authority to fine-tune these conditions, creating a network of alerts that mirrors the intricacies of your business operations. Whether it's delaying notifications until multiple criteria are met or establishing location-specific triggers, our system adapts to suit your precise needs.



Near Real-Time Alerting System (NRT)

Room Entries / Exits



Meet Mr. Davis, a resident who recently underwent a medical procedure and is recovering in Room 105. The nursing staff is aware that Mr. Davis needs assistance when moving in and out of his room due to his post-surgery condition. Butlr Care's precise room-level monitoring comes into play to enhance his care.

One evening, Butlr Care sends an immediate alert to the caregiving team **as it detects Mr. Davis exiting his room**. The nurse on duty receives the notification and quickly responds to check on him. It turns out that Mr. Davis, disoriented and feeling unsteady, attempted to leave his room without assistance.

This timely alert has **just prevented a potential fall or injury for Mr. Davis**. The caregiving team is alerted to the moment a resident needs assistance, ensuring a more responsive care environment in the senior living community.

Workflow



Payload Example

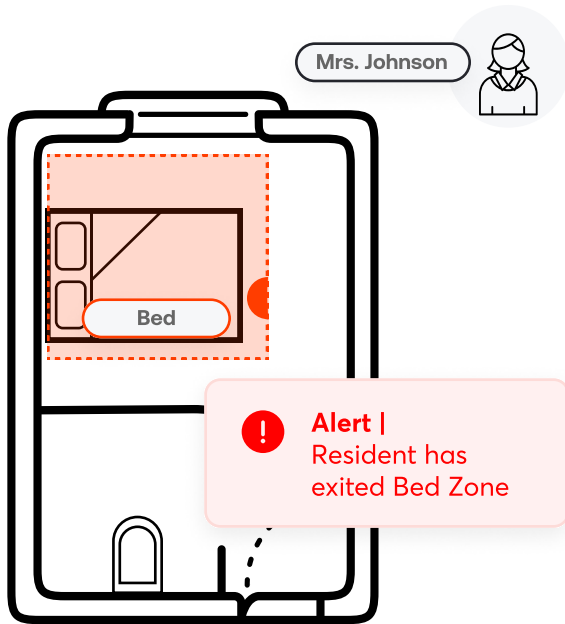
```

{
  "type": "exit_room",
  "event_timestamp": 1708641372162,
  "event_id": "event_2ck2hGbP4wQ1aCRjftilw78tZOW",
  "data": {
    "estimated_occupancy": 1,
    "room_ids": [
      "room_2WrC5Sk1pK6m5zfy0212ghjN1tK"
    ]
  }
}

```

Near Real-Time Alerting System (NRT)

Zones Entries / Exits

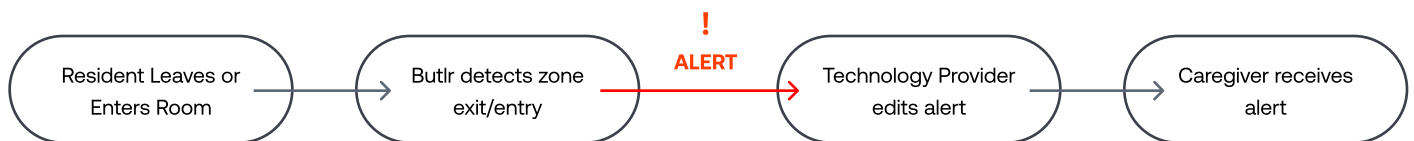


Mrs. Johnson, a resident with mobility challenges, resides in Room 203. The community designates specific zones within rooms, such as beds, to detect unusual exits for community members who are more vulnerable to potential fall incidents.

One night, Butlr Care detects that Mrs. Johnson **has exited her bed**. The system triggers instant alerts, notifying the caregiving staff about this event. This timely information prompts the nurse on duty to check Mrs. Johnson's room promptly.

Upon investigation, the nurse discovers that **Mrs. Johnson is experiencing discomfort due to a medical issue and trying to access her bathroom**. The prompt response ensures that Mrs. Johnson receives the necessary care and assistance without delay.

Workflow



Payload Example

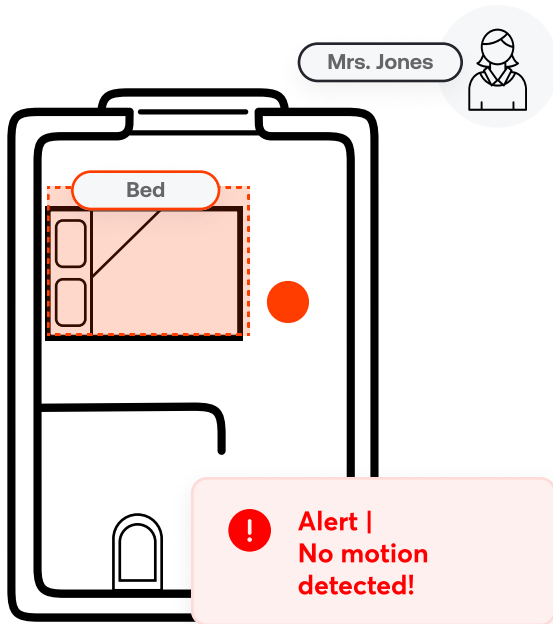
```

{
  "type": "exit_zone",
  "event_timestamp": 1708641372162,
  "event_id": "event_2ck2hGbP4wQ1aCRYoktilw78tZOW",
  "data": {
    "estimated_occupancy": 1,
    "room_ids": [
      "room_2Wrc5Sk1pK6m5zfy0212ghjN1tK"
    ],
    "zone_ids": [
      "zone_23f65tKVv790iyXI2sktSF0bcaPP"
    ]
  }
}

```

Near Real-Time Alerting System (NRT)

No Motion Alert

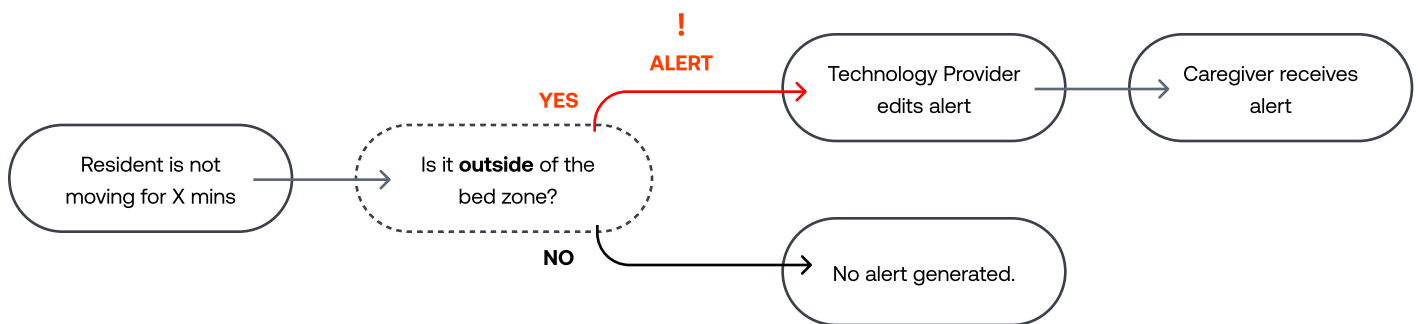


Meet Mrs. Jones, an elderly resident known for her regular walks in the communal areas. However, one day, the Butlr Care system triggers a "No Motion Alert" for Mrs. Jones. **The system recognizes an unusual lack of movement for an extended period.**

The caregiving team, prompted by the alert, promptly checks on Mrs. Jones. They find her in her room feeling unwell and unable to reach the assistance cord. Without the alert, Mrs. Jones's condition may have gone unnoticed for a longer duration, posing potential health risks.

The "No Motion Alert" feature acts as a proactive safety measure, ensuring that residents' well-being is monitored continuously. In this case, **it facilitated a timely response** to Mrs. Jones's needs, **at a time when the resident was physically and mentally unable to notify the staff on time.**

Workflow



Payload Example

```

{
  "type": "no_motion",
  "event_timestamp": 1708635967934,
  "event_id": "event_2cjrk0v89I672POD9uvldff6895A",
  "data": {
    "duration_ms": 180000,
    "room_ids": [
      "room_2WrC5SfuoK667zfy02fjVD33581gK"
    ]
  }
}

```


Butlr Data

On Accuracy

✓

Recall: 90%
Latency: 2-5sec

Comprehensive Alerts

Through ambient monitoring our system ensures that care staff are notified almost every time an elderly resident leaves their bed. This is what we call our system's ability to provide Comprehensive Alerts. It's about making sure that no significant moment goes unnoticed, so every time a resident might need help or could be at risk, your nurses know right away.

Our promise:

90% of all events are properly captured (Recall) and notifications are sent within 5 seconds of the event occurring (Latency). This means that for every 10 times a resident has a supported event, we will send an alert for **at least** 9 of them.

Reliable Alerts

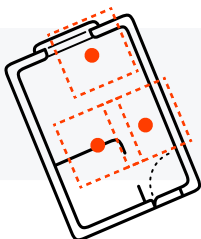
While it's crucial to catch every important moment, it's also important that the alerts our system sends are meaningful—minimizing false alarms that take valuable time and effort from staff. We refer to this as **Reliable Alerts**. This means that when a nurse receives an alert, they can trust it's a true need for assistance, allowing them to respond promptly and effectively without wasting time on false alarms.

Our promise:

No more than 5% of alerts sent are false alarms. For every 20 alerts received, at most 1 is a false alarm

✓

Precision:
<5% False Alarms



- Depending on the use case and coverage desired, a typical senior living unit of 750sqf would need 1-4 sensors for full coverage.

Butlr Data

Frequently Asked Questions

How many sensors are needed for a typical apartment?

Depending on the use case and desired coverage, studios and 1 BR units can require 1 - 4 sensors.

Does Butlr Care work for people in wheelchairs?

Most of Butlr Care features work for people in wheelchairs or with mobility issues.

Do your sensors come with wearables?

No. One of the advantages of Butlr Care is that our sensors are installed on the ceiling of each unit. No additional wearables that might obscure the validity of the data are needed with Butlr.

Are Butlr sensors cameras?

No. At Butlr one of our core values is the right to privacy. Butlr sensors do not have any cameras or other PII gathering component in them.

What are my options when it comes to powering up the sensors?

Our sensors support two power options: **battery** and **wired add-on***, a plug-in that transforms the standard Heatic 2 wireless sensor into a wired device. Ask our team for more information on your power options!

* Specs: 3.3V DC connector specifications | Voltage: 3.3V +/- 0.3V | Current: 20 mA | Barrel Connector: 5.5mm x 2.1mm x 10mm

What are some known constraints?

Butlr Care is optimized for single resident environments without pets. Please refer to our Datasheet for details on how ceiling height impacts coverage. Note that **portable** heaters may also lead to false detections.

Can I mount the Butlr sensors in bathrooms?

Yes, our sensors can be mounted in bathrooms, providing crucial insights for falls reduction. Our team will assist you in determining the optimal layout for maximum effectiveness.

Provide exquisite care.



With its groundbreaking thermal sensor technology, Butlr Care redefines the landscape of care, safety and wellness, seamlessly integrating into the lives of residents while preserving their dignity and privacy.

By optimizing community operations and empowering caregivers to allocate resources efficiently, Butlr Care ensures that every individual receives the attention and support they deserve, enhancing the quality of life. Most importantly, Butlr Care is not just about technology; it's about honoring the rights of aging populations to **live with security, dignity, and enhanced care.**

Thank you.

Contact us

Have questions about the Butlr People Sensing Platform?

Please contact us at support@butlr.io or
submit a form via our website www.butlr.com or
visit our Learning Center at <https://support.butlr.io>

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