

SAFETY, COMMUNICATIONS, AND EFFICIENCY FOR TODAY'S HEALTH CARE CHALLENGES

Offering a powerful and practical tool to support clinical teams in the prevention of patient falls

Delivering Fast, Reliable Bed Exit Detection

Alairo AFP provides the earliest possible warning of imminent bed or chair exits, giving nurses time to call or reach the patient and successfully reducing bed and chair- originated falls to near-zero.

The AFP solution takes a focused approach, leveraging human judgement captured in the AI software to determine if the patient is starting to exit the bed.

To quickly detect early exits and avoid false alarms, the AI system was trained using 300,000 hours of patient video. The footage captured over 10,000 bed exit attempts which were tagged and analyzed by 26 specialists.



Portable and Easy to Use

When the patient is classified as a fall risk the nurse can quickly drop a sensor into the dock on the patient's foot wall. The system powers-up, reads its location, and is ready to go.


Set the mode – In most cases the “predictive”, mode is used. The nurse selects 1 or 2 beds in the room and hits a button to start the session

The system doesn't need to be disarmed or re-armed when a nurse is there to assist. It starts monitoring again when the nurse leaves the room (automatically).





When the nurse gets an alert on their mobile phone, they see a video of the room.

They have an option to accept or escalate, And can talk to the patient through a speaker in the room.



 *The primary objective of the system is to support nurses in their ability to reduce patient falls by providing the maximum amount of time to react.*

The AFP system minimizes response time by shortening each critical phase:

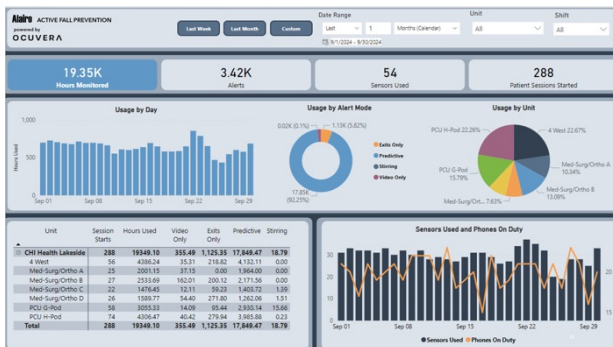
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|  <p>Time to detect a bed exit</p> <p>Computer-vision and AI rapidly ID signature movements</p> |  <p>Time to alert nurse</p> <p>Zero delay in alerting nurse on identifying a bed exit</p> |  <p>Time to determine the course of action</p> <p>Nurse gets video with position and activity of patient</p> |  <p>Time to intercept the bed exit</p> <p>One-button calls into patient's room to stall the fall or buy time</p> |
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The Monitoring Station



At the nursing station, the nursing team can watch up to 80 patient rooms at once. If a fall-alert is triggered, a nurse at the station can call into the room to hold-off a bed exit. Six months of video is stored online for viewing if forensic research is required. All patient video is altered to maintain patient privacy.

The Analytics Portal



A portal is available online with information to drive continuous improvement. There are three dashboards:

- Current and trending usage models
- Alarm behaviors and response information
- Return on Investment and savings.

To review recent incidents for training or forensic purposes, video of all fall notifications is available through the portal for 90 days.

Privacy is Paramount

By using computer vision and AI to monitor patients, the system eliminates the common issues around people watching people. Yet, it offers of an image that enables nurses to determine the position and activity of the patient to determine how to handle any situation.

System Modes

To add more value for the nursing team, the system supports multiple usage models:

Predictive mode is used most often. It provides the earliest possible warning that a patient will attempt a bed exit.

Stirring mode allows the nursing staff to let patients sleep and alerts them when the patient wakes-up (for meds or other duties).

Bed Exit Only mode is less sensitive than Predictive mode and can be used for patients where the fall risk is less, but the nurse wants to be aware when they're up and around.

Video mode provides a blurred-out view of the patient to determine their position and motion.

The "Virtual Curtain"

To eliminate alarms triggered by visitors, the system can "wall-off" areas of the room, which will be ignored by the system.

Improvement that lasts

The AFP system can be taught in 20 minutes from a nursing perspective. It has shown to be easy to use, and is tightly incorporated in fall prevention in many hospitals.

Our team stays involved to the extent nursing management desires. Hospitals have had success in keeping the fall-rate at, or near zero from regular meetings between hospital staff and our clinical specialists.