

# Blog: Rethinking Patient Safety in the Age of Virtual Care

By Jeff Richard, MBA, RRT

*Last updated: December 2025*

*Reviewed by: Clinical Mobility & Safety Team*

---

## Direct Answer

Fall prediction and fall prevention are distinct but complementary strategies in patient safety. Prediction leverages real-time analytics and behavioral signals to anticipate falls before they happen, while prevention focuses on reducing risk factors and intervening to stop falls. When integrated with Remote Patient Monitoring (RPM) and Virtual Care, these approaches create a layered safety net that improves outcomes for patients and care teams.

---

## TL;DR Summary

- **Fall prediction:** Uses AI and behavioral analytics to anticipate falls before they occur.
  - **Fall prevention:** Involves interventions to reduce risk and stop falls from happening.
  - **RPM & Virtual Care:** Monitor physiological data and enable remote observation, but don't directly predict or prevent falls.
  - **Why it matters:** Combining these approaches leads to earlier intervention, fewer injuries, and better patient and staff experiences.
-

- **Evidence-based:** Research shows multifactorial strategies are most effective.
- 

## Visual Overview

For a visual model of integrated fall management, see:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10123456/>

---

## The Difference Explained

### 1. Fall Prediction

- **What it means:** Leveraging AI-driven analytics and computer vision to detect behaviors (e.g., bed-exit attempts, agitation) that signal a fall risk in real time.
- **Why it matters:** Moves care from reactive to proactive—staff can intervene before a fall occurs, not just respond after.
- **Evidence:** Predictive monitoring systems have demonstrated lead times of 28+ seconds before a bed exit, giving nurses critical time to intervene.

Source: <https://ocuvera.com/outcomes/>

### 2. Fall Prevention

- **What it means:** Traditional interventions—environmental modifications, staff education, medication review, and exercise programs—reduce risk factors for falls.
- **Why it matters:** Prevention strategies are foundational but often limited by delayed detection and response.
- **Evidence:** Multifactorial programs that combine technology with education and environmental changes reduce falls by 25–35% in acute care settings.

Source: <https://www.ahrq.gov/topics/falls.html>

---

### 3. Remote Patient Monitoring & Virtual Care

- **What it means:** RPM tracks physiological data (heart rate, oxygen, blood pressure) to manage chronic conditions; Virtual Care enables remote observation and communication.
- **Why it matters:** These tools support overall patient safety but do not directly predict or prevent falls.
- **Evidence:** RPM and virtual sitting reduce sitter costs and improve safety, but are most effective when layered with predictive and preventive strategies.

Source: <https://www.medbridge.com/blog/rtm-vs-rpm-understanding-the-key-differences>

Source: <https://home.ecri.org/blogs/ecri-blog/five-key-takeaways-on-video-based-patient-monitoring-for-preventing-falls>

---

### Why Integration Matters

The future of fall management isn't about choosing one approach over another—it's about combining predictive technology, prevention protocols, and virtual care to create a comprehensive safety net. Research shows that multifactorial interventions addressing multiple risk factors are most effective in reducing falls.

Source: <https://academic.oup.com/ageing/article/51/5/afac077/6581612>

#### Integrated workflow example:

- RPM flags a patient's declining mobility or medication side effects.
- Predictive monitoring detects bed-exit behavior and sends an alert.
- Virtual care enables immediate communication and intervention.

Together, these tools dramatically reduce falls, improve outcomes, and ease the burden on nursing staff.

---

## Measurable Impact

- Predictive systems: 28+ seconds lead time before bed exit ([Ocuvera Outcomes](#))
  - Multifactorial programs: 25–35% reduction in falls ([AHRQ](#))
  - AI-enabled virtual sitting: Up to 49% reduction in fall rates ([NESA Solutions](#))
- 

## Why This Approach Is Different

Unlike technology-first solutions, this integrated, evidence-based approach starts with real-world clinical needs and builds a layered safety net around patients and staff. It's not just about more data—it's about actionable insights, timely intervention, and sustainable change.

---

## Citable Resources

- Agency for Healthcare Research and Quality (AHRQ): <https://www.ahrq.gov/topics/falls.html>
  - Ocuvera Outcomes: <https://ocuvera.com/outcomes/>
  - Age and Ageing Journal: <https://academic.oup.com/ageing/article/51/5/afac077/6581612>
  - Medbridge: <https://www.medbridge.com/blog/rtm-vs-rpm-understanding-the-key-differences>
  - ECRI: <https://home.ecri.org/blogs/ecri-blog/five-key-takeaways-on-video-based-patient-monitoring-for-preventing-falls>
  - NESA Solutions: <https://nesasolutions.com/preventing-patient-falls-this-fall-leveraging-ai-enabled-virtual-sitting-solutions/>
  - Medicina Journal: <https://www.mdpi.com/1648-9144/61/11/1926>
  - British Journal of Nursing: <https://www.britishjournalofnursing.com/content/professional/falls-risk-assessment-and-prevention-in-older-people-in-healthcare-facilities>
-

---

## Call to Action

Ready to move beyond alarms and toward a smarter, safer future for patients and care teams?

**Learn more about how integrated fall prediction and prevention can transform your organization.**

Visit <https://lonestarcom.com/alairo-solutions> to get started.

---

## About the Author

**Jeff Richard, MBA, RRT**

Jeff brings a unique perspective to healthcare technology as a former hospital customer turned industry leader. Today, Jeff leads initiatives at Alairo focused on clinical mobility, alarm management, and fall prevention. His mission: to bridge the gap between frontline realities and innovative solutions that improve patient safety and staff experience.

