INTELLIGENT FALL PREVENTION SOLUTION

F689, Again.

The Hidden Double Cost of Falls That Keep Happening

2026 Edition

A Strategic Guide for Facility Directors and Clinical Leaders

Executive Summary

Every year, when annual CMS Recertification survey results come back, the same scene plays out in facilities across the country. The scores are worse or have not improved than hoped. The corrective action plans go up on the board. Staff get retrained. Fall risk assessments get audited. And then — twelve months later — the cycle starts again.

The problem is not effort. Facility directors and clinical teams work hard. The problem is that every facility is reaching for the same playbook — and that playbook was written before the tools changed.

Falls are the single most consequential clinical event in post-acute care. They are the leading cause of injury-related death among adults 65 and older. They drive hospital readmissions, Five-Star rating drops, survey citations, family complaints, and wrongful death litigation. And yet, in most facilities, the response to a fall is still reactive — a form completed after the event, not a pattern identified before it.

As reported by the CDC in its 2024 National Vital Statistics data, the age-adjusted fall death rate among older adults increased 21% between 2018 and 2024, rising from 64.7 to 78.4 deaths per 100,000 older adults. The problem is not stable — it is getting worse, faster.

The National Council on Aging (NCOA) projects that fall-related healthcare costs will exceed $101 billion annually by 2030 — up from $80 billion in 2020. According to Qsource, a typical skilled nursing facility already absorbs an estimated $380,000 per year in direct fall-related costs. Each individual fall that results in an inpatient hospital stay costs an average of $18,658, according to the NCOA, citing Haddad et al., Injury Prevention (2024).

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Beyond the dollars, falls now carry a direct reimbursement risk. Beginning in FY 2027, CMS will formally score Falls with Major Injury as part of the SNF Value-Based Purchasing (VBP) Program, linking fall outcomes to Medicare payment rates. Facilities that do not improve their fall performance will not just receive poor survey scores — they will lose money.

This whitepaper is written for facility directors who are staring down their latest survey results and asking: what do I do differently this time? The answer begins with understanding that falls are not a staffing problem alone, or a training problem alone, or an environment problem alone. They are a data problem — and the facilities that fix their fall outcomes are the ones that can see what is happening between staff check-ins, not just after the fact.



What Falls Are Actually Costing You

Falls in a post-acute setting are not just a clinical event. They are a business event with a direct line to your revenue, your star rating, your census, and your licensure. Let's be specific about what that means.

The Financial Cost Is Already on Your P&L

According to the CDC, a typical nursing home with 100 beds experiences between 100 and 200 documented falls per year. Between 10% and 20% of those falls result in serious injury — fractures, head trauma, hospitalizations. Each fall sending a resident to the hospital costs an average of $18,658 in inpatient care alone. That is before your staff time for incident documentation, root cause analysis, family notification, care plan revision, and potential litigation.

> *A 100-bed facility experiencing 150 falls per year, with 15% resulting in hospitalization, is generating approximately $420,000 in hospitalization costs from falls alone — every single year.*

Your Survey Score Is a Lagging Indicator

When annual survey results come back with fall-related deficiencies, what they are measuring is what happened in the past 12 months. The score is a lagging indicator. The events that drove it happened during night shifts, on weekends, in the hour before a resident's next scheduled check. By the time the citation is written, the harm has already been done.

Corrective action plans written after a bad survey address the symptoms — documentation gaps, staff retraining, environmental checklists. They rarely address the cause: a gap in real-time awareness of resident condition and behavior between care interactions.

Every facility doing the same corrective action plan will produce the same results next year. Something in the system has to change.

The Regulatory Stakes Are Rising — Fast

CMS updated its fall definitions under MDS 3.0 RAI Manual v1.20.1 (effective October 1, 2025). The new definition expands what counts as a Fall with Major Injury (FMI), adding joint dislocations, subluxations, and head injuries without loss of consciousness. Dual-source reporting now cross-references MDS assessment data (item J1900C) with claims-level diagnosis codes, making it harder for underreporting to go undetected.

> *As reported by McKnight's Long-Term Care News (October 2025), the new fall definitions mean that "our facilities may look worse just because of a change in definitions." Facilities that had borderline scores before the change may now find themselves in citation territory — with no change in actual clinical practice.*

Beginning in FY 2027, the Falls with Major Injury measure becomes a scored component of the SNF Value-Based Purchasing Program. This is not a hypothetical future risk — data collection has already begun. Poor performance on this measure will directly reduce Medicare reimbursement rates.

The Office of the Inspector General (OIG) has also noted that 43% of falls with major injury were not reported on required MDS assessments — a finding that increases surveyor scrutiny during audits and creates cascading citation risk across F689, F580, and care planning tags.

The Human Cost Is the One That Cannot Be Undone

Approximately 1,800 nursing home residents die each year from fall-related injuries, according to the CDC. Within one year of sustaining a hip fracture, a nursing home resident faces a 40% risk of death. More than a quarter of adults who were living independently before a hip fracture will spend at least a year in a nursing home afterward.

Fear of falling is itself a clinical condition. Residents who have fallen — or who fear falling — reduce their mobility, become socially withdrawn, and experience increased rates of depression and functional decline. Falls beget more falls. Breaking that cycle requires intervention before the first event, not after the second.

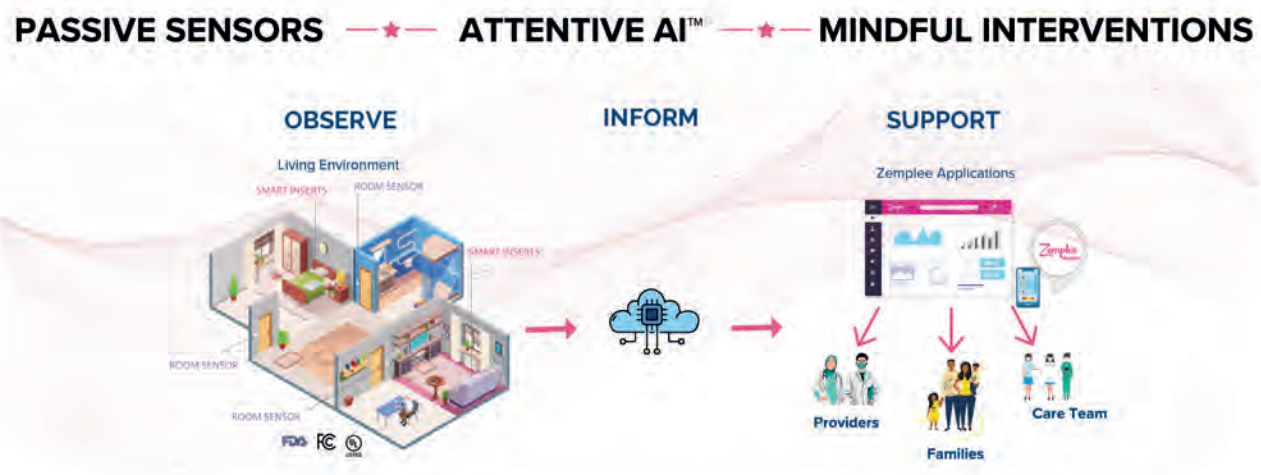
From Reactive Documentation to Proactive Intelligence

Zemplee is a passive monitoring platform built for post-acute care environments. It uses non-wearable, non-intrusive sensors installed in resident rooms to track movement, sleep patterns, nighttime behavior, and changes in daily routine — continuously, around the clock, without requiring residents to press a button or wear a device.

The core insight behind Zemplee is simple: most falls are not random. They are preceded by patterns. A resident who is getting up three times per night is at higher fall risk than one who sleeps through. A resident whose gait pattern has slowed or whose bathroom trips have increased may be showing early signs of a urinary tract infection or medication side effect — both known fall risk factors. A resident who has been restless for 72 hours is telling you something before they tell you with a fall.

Zemplee surfaces those patterns to clinical staff in real time, before the event occurs. It allows care teams to intervene on risk, not on injury.

What Zemplee Does



Monitors resident movement, restlessness, sleep quality, and nighttime activity continuously — without cameras or wearables.

- Alerts nursing staff in real time when behavioral patterns suggest elevated fall risk, such as multiple nighttime rising events or unusual movement at high-risk hours.
- Tracks trends over time, flagging residents whose patterns are deteriorating — even when no acute event has occurred.
- Generates documentation-ready data that supports MDS coding, care plan updates, QAPI reviews, and post-fall root cause analysis.
- Provides facility-level analytics so directors can see which units, shifts, and resident populations carry the highest fall risk — enabling smarter staffing and resource allocation.

What Zemplee Is Not

Zemplee does not replace nursing judgment. It amplifies it. The platform does not make clinical decisions — it gives clinicians the information they need to make better ones, faster. It works alongside existing fall prevention protocols, not as a replacement for them. And because it is passive, it does not create additional work for residents or staff — it runs quietly in the background so your team can focus on care.

Compliance Mapping
How Zemplee Supports F-Tag and MDS Requirements

Compliance is not just about avoiding citations. It is about demonstrating that your facility has systems in place that reduce risk — and that those systems are working. Zemplee directly supports your compliance posture across the most commonly cited F-Tags related to falls, as well as key MDS items that drive your quality measure scores.

F-Tag Alignment

F-Tag	Requirement	The Gap It Creates	How Zemplee Helps
F689	Free of Accident Hazards / Supervision / Devices	Manual rounding cannot cover all hours. Falls happen most often during night shifts and low-staffing windows — exactly when supervision gaps are widest.	Continuous passive monitoring fills supervision gaps. Nighttime movement alerts allow proactive staff response before a fall occurs.
F580	Notify of Changes (Injury / Decline / Room)	Without real-time behavioral data, staff may not detect a decline in condition until after a fall has already occurred — triggering a late or missed notification.	Behavioral trend alerts prompt timely clinical review and physician notification before an adverse event, supporting timely and defensible documentation.
F684	Quality of Care	Fall prevention plans without supporting data are difficult to individualize. Generic protocols applied to all residents do not reduce fall rates.	Resident-level behavioral data supports individualized, evidence-based care planning — demonstrating that interventions are tailored to each resident's actual risk pattern.
F657	Care Plan Timing and Revision	Care plans are often updated reactively — after a fall — rather than proactively as a resident's condition changes.	Trend data from Zemplee triggers care plan updates when behavioral changes indicate increasing risk, before a fall is documented.
F867	QAPI / Quality Assurance and Performance Improvement	QAPI processes without data are limited to reviewing falls after they happen. Pattern identification requires longitudinal behavioral data.	Zemplee's facility-level analytics provide the trend data needed for QAPI root cause analysis, shift-level risk review, and performance tracking over time.

MDS Item and Quality Measure Alignment

MDS Item / QM	What It Measures	Documentation Challenge	How Zemplee Supports Accuracy
J1900A / B / C — Fall History	Falls with no injury, with injury, with major injury during the look-back period	OIG found that 43% of falls with major injury were not coded on required MDS assessments, exposing facilities to under-reporting risk and survey citations.	Zemplee event logs provide timestamped documentation of nighttime rising and movement events that support accurate, complete fall history coding.
QM: Falls with Major Injury (Long-Stay)	Percent of long-stay residents with one or more falls with major injury — publicly reported on Care Compare and scored in SNF VBP beginning FY 2027	This QM now uses dual-source reporting (MDS + claims data). Facilities with weak fall prevention systems will see this measure worsen before the recertification survey visit.	By reducing actual fall events, Zemplee directly improves the numerator of this measure, protecting Five-Star rating and VBP scoring.
Section J — Health Conditions	Pain, shortness of breath, and other conditions that influence fall risk and care planning	Without behavioral monitoring, deterioration in condition between assessments often goes undetected until it results in an acute event.	Zemplee's pattern alerts prompt interim clinical assessments, ensuring Section J data reflects current resident status rather than last quarter's snapshot.
Section G — Functional Status	Mobility, transfer ability, and self-care — all directly tied to fall risk stratification	Functional decline between scheduled MDS assessments is common and often undocumented, leading to stale risk classifications.	Changes in nighttime mobility patterns detected by Zemplee support interim functional reassessment and updated fall risk stratification.

How to Start: Three Steps to a Different Outcome

Three steps from reactive documentation to proactive intelligence

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STEP 1 Week 1

Identify Highest-Risk Units

- Pull 12 months of fall incident data
- Analyze by unit, shift, and repeat fallers
- Target the 20% of residents driving 70–80% of falls
- Select highest-acuity pilot unit

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STEP 2 Weeks 2–4

Deploy and Calibrate

- Install passive sensors — no resident wearables
- Calibrate alerts and threshold parameters
- Integrate with existing care planning workflow
- Wire data into QAPI safety huddles
- Real-time behavioral data live by week 4

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STEP 3 Days 30–90

Measure, Report, and Expand

- Day 30: trend line vs. prior-year baseline
- Day 60: outcomes logged in QAPI record (evidence for F689 and F867)
- Day 90: present to leadership, build expansion case
- Convert pilot into facility-wide model

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Proof point — ready for facility-wide rollout

The goal of the first 90 days is not perfection — it is proof.

Step 1: Identify Your Highest-Risk Units (Week 1)

Before deploying any technology, get specific about where your falls are happening. Pull your fall incident data from the past 12 months and look at three things: which units have the most falls, which shifts have the most falls, and which residents have fallen more than once. Most facilities will find that 20% of their residents account for 70-80% of their falls. Zemplee is deployed in those units first — where the ROI is immediate and measurable.

> *Start with your highest-acuity unit. If you can move the needle there in 90 days, you have your proof point — and your model for the rest of the facility.*

Step 2: Deploy and Calibrate (Weeks 2–4)

Zemplee's passive sensors are installed in resident rooms without disrupting care routines. No resident wearables. No new workflows for nursing staff during installation. Your Zemplee clinical success team works alongside your staff to calibrate alerts, set threshold parameters, and connect the platform to your existing documentation and care planning workflow. By the end of week four, your team is seeing real-time behavioral data for every resident in the deployed units.

During this phase, your team will also begin building the QAPI integration — so that Zemplee data feeds directly into your weekly safety huddles and fall review meetings. This is where the behavior change happens: staff stop asking "what happened?" and start asking "what do we see coming?"

Step 3: Measure, Report, and Expand (Days 30–90)

At 30 days, pull your fall numbers and compare them to the same period last year. In facilities that have deployed Zemplee, the trend line is visible within the first month. At 60 days, document the outcomes in your QAPI record — this becomes your evidence of an effective system-level intervention, which is exactly what surveyors are looking for under F689 and F867. At 90 days, bring the data to your leadership team and make the case for facility-wide deployment.

The goal of the first 90 days is not perfection. It is proof. Proof that you have a system that works, data that backs it up, and a model you can scale

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What Changes When Falls Go Down

Reducing falls is not just about preventing injuries. It touches every dimension of a facility's performance — clinical, financial, regulatory, and reputational.

Benefit Area	What It Means in Practice
Financial	Fewer falls mean fewer hospital transfers, lower liability exposure, and reduced nursing time spent on incident documentation. Facilities averaging 150 falls/year with 15% hospitalization rate spend an estimated $420,000 annually on fall-related hospital costs alone — a figure that falls directly with fall prevention performance.
Regulatory / Survey	Reduced F689 and F580 citation risk. Improved Falls with Major Injury quality measure — which directly influences Five-Star rating on Care Compare and, starting in FY 2027, SNF VBP Medicare reimbursement rates.
Census / Occupancy	Families research facilities on Care Compare before choosing. A better Five-Star quality score — driven in part by lower fall rates — directly influences census decisions. One additional occupied bed per month at an average SNF daily rate generates meaningful annual revenue improvement.
Staff Experience	Nursing staff working in a reactive environment — responding to falls after they happen — experience higher stress and burnout. Proactive monitoring shifts the dynamic: staff feel equipped to prevent harm, not just document it. This supports retention in a high-turnover industry.
Resident Outcomes	Every fall prevented is a potential hip fracture, hospitalization, or death avoided. Residents who are not falling maintain their mobility, independence, and quality of life longer — which is the reason the facility exists.
QAPI and Documentation	Zemplee generates the longitudinal behavioral data that QAPI programs require but rarely have. Root cause analysis moves from anecdote to evidence. Care plans become individualized and defensible. Survey readiness becomes a state of operation, not a sprint.

What Facilities Have Experienced with Zemplee

The data below reflects outcomes from post-acute facilities that have deployed Zemplee's passive monitoring platform over a 12-month period. Facility names are anonymized per standard data sharing agreements.

- 9X Reduction in Falls
- 42% Reduction in Hospital Days
- 3X reduction in fear of falling
- 60% reduction in anxiety about remaining at home
- 7X More UTIs identified
- 33% increase in peace of mind among staff and families

Next Year's Survey Starts Today

> ***Right now, every facility director in your market is writing the same corrective action plan. They will retrain their staff, update their rounding sheets, and audit their fall assessments. And in twelve months, they will look at the same survey results and wonder why nothing changed.***

The difference between a facility that gets different results and one that doesn't is not intention. It is infrastructure. The facilities that reduce their falls — and keep them reduced — have a system that sees risk before it becomes harm.

Every day you delay Zemplee deployment is a day of preventable falls, preventable hospitalizations, and preventable citations. It is a month of data your QAPI program does not have. It is a month of Five-Star quality measure data — now feeding directly into your FY 2027 VBP reimbursement calculation — that is working against you instead of for you.

The residents in your care cannot wait for next year's corrective action plan. And with CMS now tying fall outcomes to Medicare payment rates, neither can your business.

Three questions to ask yourself today:

Where did my falls happen last year — and do I have real-time visibility into those units tonight?
What will my Falls with Major Injury quality measure look like under the new dual-source reporting rules?
What is the cost — in dollars, citations, and resident harm — of waiting another 90 days to act?

Take the first step.

Ask your Zemplee account team for a 30-minute facility risk review. We will look at your current fall data, identify your highest-risk units, and show you exactly what a deployment would look like for your facility — including projected impact on your quality measures and VBP exposure.

You did not go into this work to document falls.
You went into it to prevent them.



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