

# AI and Digital Care in Hospitals: VSTOne in Action



## AI + Digital Care = The New Hospital

With hospitals absorbing rising costs after a difficult year, many organizations are searching for ways to avoid error, increase efficiency, and reduce expenses. Utilizing artificial intelligence (AI) solutions offers ways to reduce FTE while maintaining patient safety and staff efficiency. Digital care tools like telehealth and virtual nursing are also getting attention in acute settings, especially from those that are struggling to find in-person staff to cover full occupancy. Virtual nursing is becoming the newest strategy to handle admissions, discharges, and patient questions in a busy hospital, while AI tools are empowering floor staff to do more with less. When these solutions work together, acute teams may be able to unlock a brand-new way to care for patients.



In 2022, several hospitals across the U.S. chose to institute VSTOne patient monitoring to maintain and improve patient safety. VSTOne provides 24/7, autonomous in-room patient monitoring for fall prevention. Unlike other solutions, the system uses LIDAR sensors and AI (artificial intelligence) to proactively prevent falls without needing FTE sitters or virtual sitters.

## Site 1

### 60% Reduction in Falls and 0 Falls with Injury

Between May 2022 and September 2022, a Midwestern hospital used VSTOne in a med-surg unit. At the end of these five months, the unit had **reduced its patient falls by 60%**. This unit also reported 0 falls with injury during this 5-month period. This med-surg unit had previously been using pressure alarms and patient sitters for fall prevention; by using VSTOne as a replacement, **the site was able to save approximately \$66,000<sup>1</sup> in fall prevention costs** across those 5 months.



\$66K

Maintaining close to zero falls with injury also impacts hospital liability and insurance costs. Each avoided fall injury reduces money spent on insurance claims and reduces the opportunity for lawsuits to be brought by patients and their families. Preventing these costs can put tens of thousands of dollars back into a hospital's budget annually.

“The VSTOne system has helped to continue to prioritize the culture of our med-surg unit as a culture of patient safety and innovation. The VSTOne system gives nurses peace of mind.” - Nurse Manager

## Site 2

### 48% Reduction in Sitter Hours

In 2022, a hospital site on the East Coast used VSTOne from June 2022 to September 2022. During this time, the site was able to **reduce its average sitter hours by 48%** in that unit. VSTOne monitoring is driven by an advanced AI interpreting data from LIDAR sensors. This means that each **patient being monitored by VSTOne is getting 1:1 monitoring**, without the need for human oversight. In the same millisecond a bed or chair exit is detected, an alert is routed to floor staff. VSTOne's accuracy allowed this unit to remove an average of over 400 hours of sitter FTE, per month, from their unit budget, an estimated \$22,400<sup>2</sup> in saved labor during those months.



48%

During these four months, this site also saw its average falls per 1000 patient days drop to just 0.95— less than one fall per 1000 patient days. This site was already well under the national average of five falls per 1000 patient days, but this improvement offered over 60% fall reduction while reducing sitter FTE.

## Site 3

### Average Response Time of 27 Seconds

During a five-month period from May 2022 to September 2022, a hospital in the Midwest using VSTOne saw its average fall alert response time reach just 27 seconds, roughly 30 seconds faster than the average benchmark. Nurse response time indicates efficiency and process clarity in a busy unit. VSTOne's smart alerting helps teams work seamlessly and without interruptions.

To keep teams working in unison, VSTOne has in-built escalation protocols and three delivery points for an alert. Assigned nursing staff receive an audible alert to their mobile device, a notification light in the hall outside the room begins to flash, and a console at the nurses' station also receives the alert. These notifications are automatically updated when a clinician responds, ensuring clear communication between team members. If an alert is not responded to within the expected threshold, an automatic escalation is routed to the managing team. Even if Wi-Fi network issues occur, VSTOne's hallway notification lights are hardwired into the solution, so alerts can still be handled during a network interruption.

**“Nursing staff have to see an immediate value relative to the tools. This can be for efficiency or improved patient outcomes; preferably both! [With VSTOne] there are fewer false alarms for bed exits compared to our older technologies.” - Chief Information Officer**



## AI is Just the Beginning

Hospitals are facing more challenges from every angle. Finances are stressed, labor is short, and the burden of maintaining the highest level of care is paramount. VSTOne is being developed to be the one-stop ecosystem for digital empowerment— from patient monitoring tools available today to virtual nursing support launching in the near future. VSTOne's AI technology is supplying ways to allow your budget, your staff, and your resources to go further in today's healthcare environment. Healthcare AI is here today, and VSTOne is growing your digital care platform for tomorrow.



**How can VSTOne impact your hospital?**  
[Click here](#) to get a personalized ROI breakdown.



<sup>1</sup> Approximate savings calculated with the average sitter hourly wage of \$11 in the Midwest, according to [ZipRecruiter](#).

<sup>2</sup> Average East Coast patient sitter wage of \$14 per [ZipRecruiter](#), 2023.