

# Simple, Flexible, Effective: How Nurses Use Curbell Medical's 360° Solution to Prevent Falls

BY MARIE BIANCUZZO, RN MS CCL IBCLC

## THE CHALLENGE

Millions of Americans, especially older adults, fall during some type of activity. These falls often result in serious injuries. According to the Centers for Disease Control and Prevention (CDC), an older adult dies from a fall every 20 minutes in the United States.

Of course, falls happen when those adults are moving, which is a biological human necessity — just like food, water, and sleep. During hospitalization, however, older adults often experience immobility and inactivity. Studies show that patients spend approximately 83-95% of their time in bed during hospital stays, which contributes to hospital-acquired weakness and other negative outcomes. Encouraging early mobility and activity can help mitigate these risks and improve patient outcomes.

The challenge for healthcare teams is clear: How can they promote mobility while minimizing fall risks?

## CURBELL'S 360° SAFE MOBILITY SOLUTION

At Curbell Medical, we are committed to advancing patient safety by providing intelligent fall prevention solutions, empowering patients at risk of falls to move freely while supporting the caregivers dedicated to their safety. We interviewed expert clinicians to understand their needs and challenges regarding fall management, asking them how we can make their job easier in terms of how to protect patients against anticipated falls, and what technology has done to improve results. Their feedback helped shape our 360° Safe Mobility Solution, designed to be simple, flexible, and effective.

## SIMPLE

**A Hassle-Free Approach to Fall Prevention**  
One common intervention to reduce the risk of falls in patients with various impairments is the use of a bed or chair alarm. The purpose of an alarm is twofold — to protect against falls, and to enable safe mobility. However, traditional alarm systems often come with complex setups, maintenance burdens, and usability frustrations. Healthcare professionals value efficiency—they want to avoid anything that feels complicated or like a nuisance. Everyone wants to save time, conserve energy, and avoid distractions in setting up, using, and maintaining medical devices — a “set-it-and-forget it” solution.

## DESIGNED FOR EASE OF USE

We asked those who had tested or used Curbell Medical's 360° Safe Mobility Solution to give feedback on their experience of the initial set up, learning curve, and ongoing maintenance. One nurse said, “The rep came and... [showed us] how to pair [the monitor with the sensor], how to change the battery, etc. It wasn't difficult. Within a month everyone felt comfortable with it.” One nurse noted that physical therapists and other healthcare staff were also likely to support the use of these easy-to-use alarms.

Because Curbell's system is so adaptable, it can be easily moved:

- to different common equipment (bed, chair, or wheelchair)
- from one clinical unit to another (e.g., emergency room to intensive care unit or geriatric unit)

Nurses found that general maintenance was easy because it was:

- easy to clean, and always ready for use
- able to accommodate low-cost reusable pads or convenient disposable pads
- easy to add or subtract pads and mats that can be moved to different locations
- low effort: batteries last up to 18 months before needing to be replaced

## FLEXIBLE

**Empowering Mobility While Ensuring Safety**  
These days, technology is a critical adjunct to high quality care; and care occurs in an environment where both patients and clinicians are constantly on the move.

Patients move from the bed to the bathroom, from bed to chair, and even out into the hallway. So observing only the patient and their immediate surroundings isn't enough. Especially in today's healthcare environment, high acuity and high census can make the nurse feel like she needs eyes in the back her head. The question becomes, then, how can the nurse be aware of the patient's movements when the patient is not within view?

---

*“Everyone is worried about the hallway patient.” (In ED). “If the patient is in the hallway, you can hear the alarm all the way down the hallway.”*

---

When the fall management solution has the capability to “see” 360°, it's like having eyes in the back of your head. You can see what's going on in the entire room, or even up to 60 feet away in the hall or a nearby room.

But safe mobility is threatened when devices have cables, as some alarms do.

---

*“An alarm that has a cable then means... you've got a trip hazard in the environment!”*

---

Unlike wired alarms, the BC600 monitor is completely wireless, offering no trip hazards and eliminating clutter and in patient areas. A wireless monitoring system provides safe mobility for patients to go where they need to go.

©2025 Curbell Medical Products, Inc. MAP1921A

Curbell's system centers around the BC600 cordless monitor, and up to three sensors can be linked to it. Bed and chair sensors

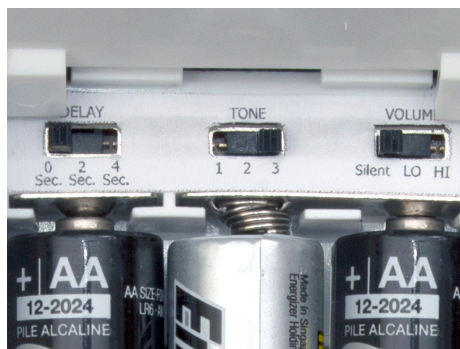


The BC600 Cordless Fall Monitor

are common choices, but floor sensors can be placed near doors to detect room exit, a motion sensor can be used in the bathroom or hallway near the room, and a wrist sensor can detect falls when a patient is up to 60 feet away from the monitor.

*Curbell's 360° Fall Management Solution: because it "helps me to focus on what I'm doing... knowing that it's there."*

Curbell's BC600 monitor is also tamper-resistant, with controls hidden in the battery compartment. Nurses felt that this was an especially important factor for the neurocognitively-impaired patient. That might include patients who are experiencing dementia, alcohol detox, medication side effects, etc.).



Controls for the BC600 are hidden inside the battery compartment

## EFFECTIVE

### Reducing Falls and Alarm Fatigue

These nurses confirmed the ease and reliability of the Curbell's 360° solution as part of a good process for falls protection. But what about the outcomes? That is, does it achieve the hoped-for results? And, might there be other positive results that we hadn't anticipated?

As we listened to the nurses, we found that Curbell's 360° solution offered three important results in clinical areas. Increased safety and Return on investment Falls are expensive. Patricia Dykes' recent study of a large cohort (900,635 patients; 7858 non-injurious falls; 2317 injurious falls), showed that the average total cost of a fall was \$62,521 (\$35,365 direct costs), and injury was not significantly associated with increased costs. Preventing just one fall covers the cost of implementing Curbell's Fall Management Solution across 100 beds, prioritizing safety and savings in one smart move.

Minimize alarm fatigue and false alarms Everyone is familiar with the momentary beeping of blood pressure cuffs,



The Wireless Motion Sensor works with the BC600

thermometers, and IV machines in acute care settings. One study showed that hundreds of alarms sounded on one clinical unit in one day. Plus, there's the almost constant beeping and buzzing of pulse oximeters, carbon dioxide monitors, telemetry, and other alarms. Both patients and staff want to avoid alarm fatigue and false alarms. Is that possible?

Some bed or chair alarms contribute to that cacophony of deafening alarm noises; but because the Curbell monitor connects into the already-existing nurse call system, it can create fewer beeps in the environment, which can be more convenient for the nursing staff.

Alarms that are at the same pitch or sound similar to the telemetry monitors might explain why they have limited value in reducing falls. An alarm that is persistent and unmistakable helps. If an audible alarm is part of your fall prevention plan, Curbell's BC600 has a unique audible alarm that will not be confused with other medical equipment.

*"The selling point to Curbell is how distinct the alarm is. Alarms that sound similar to the [telemetry] monitors... will get ignored."*

In addition to connecting the monitor to the nurse call system and silencing completely, the nurse or other clinician can adjust three other settings of the Curbell BC600 monitor that can help minimize alarm fatigue and false alarms:

- Volume: Loud, moderate, low, silent (if plugged in to nurse call)
- Tone: The frequency of the sound to differentiate one monitor from another.
- Delay: so the alarm doesn't sound if the patient merely moves on the sensor pad but doesn't get up.

Nurses expressed different ideas about the "ideal" volume for a bed or chair alarm. That's not surprising. The ideal volume will be different, depending on different patient populations, different clinical units, and different times of day. Nurses who work nights may prefer the silent alarm that's available when the monitor is connected to nurse call.

*"It does not wake up other residents. Sleep is important."*

Yet, some felt that the louder alarm is preferable. "[Using] the silent alarm feature does the patient a disservice."

Curbell's system meets both preferences. The monitor can sound an alarm so that it's audible in the room or hallway, or the audible alarm can be turned off entirely when the monitor is connected to the nurse call system.

## PROTECTIVE FOR STAFF

We often assume that the alarm protects only the patient or resident. But that's not always the case. This includes those with dementia, or those who are undergoing medically-assisted detoxification. These patients are often unpredictable. For example, the alarm serves as an alert for the aggressive patient. Having the alarm can help.

Challenging staff to a different mindset  
One experienced nurse says that she is inspired by and agrees with the very compelling stance from The Joint Commission's video that Zero Harm is Achievable. Despite practicing for decades in clinical units rife with patients who are at high risk for falls, she insists:

---

*"If we changed our mindset we could reduce or eliminate falls."*

---

Is it true that mindset is a part of the equation that we haven't measured? Is "zero harm" an unrealistic goal? Perhaps. In her book, *Preventing Patient Falls*, Joyce Morris says that 90% of falls are preventable. Other sources explain that 90% of falls are attributable to environmental issues. What are those environmental issues?

One of the interviewees noted that many environmental falls, aside from those related to toileting, happen when patients attempt to reach for items such as cell phones. These incidents are often linked to infrequent staff rounding to move objects within easy reach or to make basic adjustments, like ensuring the bed is correctly positioned. Such falls are preventable.

Having only a 10% fall rate may seem ambitious. But in their renowned study, Morris and colleagues said:

---

*Not all falls are preventable, but neither are they inevitable: 20-30% of falls can be prevented by assessing risks and intervening to reduce these risks.*

---

The question then becomes, what are the risks, and what are the interventions? And how many different types of interventions might be needed to reduce the number of falls?

In some facilities, it's common to assume that the current alarms are adequate, or that alarms are necessary for only a few

patients, or that telesitters are sufficient to reduce falls in at-risk patients. But that might not be the case at all.

## CONCLUSION

Safe mobility starts with a comprehensive plan to protect against falls that combines technology, proactive risk assessments. Curbell Medical's 360° Safe Mobility Solution offers healthcare teams the tools they need to minimize fall risks while supporting patient movement and independence. By integrating adaptable, reliable, and easy-to-use systems, clinicians can protect patients, reduce alarm fatigue, and improve overall outcomes. With a focus on safety, efficiency, and collaboration, achieving significant reductions in falls — and working toward a culture of zero harm — is not only possible but essential for enhancing patient care and well-being.

- Easy to use, setup, and maintain
- Flexible for multiple care settings and mobility needs
- Effectively reduces falls, alarm fatigue, and workplace hazards

Ready to enhance patient safety and reduce falls in your facility? Contact Curbell Medical today at 1-800-235-7500 for a demo or trial of the 360° Fall Management System.