bags around the hips and neck, designed to reduce injury. Despite these innovative ideas, more research, collaboration, and innovation is needed for falls prevention and detection advancements. According to Warrington et al. (2021), five research questions related to fall detection technology must be further researched. These questions specifically address the effectiveness of device use for people with conditions, especially stroke, multiple sclerosis, and age-related frailty.

1. What is the most effective design system that people want to use?
2. Could we use fall detection and alerts to warn of declining balance control?
3. How can we best integrate fall risk assessment into detection technology?
4. How can we best evaluate wearable fall detection technology for extensive studies?
5. What are the most effective algorithms for fall detection and communication?

Answers to these questions may contribute to further reductions in falls, injuries, deaths, and associated costs as well as inspire the next innovations in fall detection. ■

**References online:**
myamericannurse.com/?p=409032

# From a Bedside Nurse–Saved by Technology: My Fall and the Power of Emergency Alerts

Contributing Author: Sandra Levine, BSN, RN

Sandra Levine, BSN, RN, shared her fall detection story with a group of retired nurses from University Hospitals, hoping it would assist them in creating a falls prevention plan and evaluating suitable detection systems for their needs. She shares this story here with the hope that it will benefit the ANA-Ohio Community. ANA-Ohio does not recommend or endorse any specific brand of a falls detection/communication system. The technology discussed in this article reflects the resources accessible to Sandra.

What happens if someone falls and is unconscious? I found out when I fell at the bottom of my basement stairs. My head hit the doorway and I became unconscious. Immediately a fall was detected by the Falls app on my Apple Watch. Fortunately, I had emergency contacts listed on my phone. The app immediately sent an alert to my husband and three children saying "*Sandy - Hard Fall No Response*" with the time and location of the fall. They had to respond to the alert.

My husband was at home but believed I was upstairs and called my name before heading up to look for me. My daughter and one son live close by and recognized an urgent situation. My daughter, a nurse, told her husband to call 911 and immediately got into her car to come to my house. She also called my husband and stayed on the line with him. My son joined the call, using the conference feature, to connect with both my daughter and husband.

When my husband saw me at the bottom of the basement stairs, he recalls wanting to wake me up and move me, but my daughter advised him to wait for the first responders to arrive. Apparently, I was breathing and not externally bleeding. Fortunately, I regained consciousness as the first responders moved me to the stretcher. However, the fall caused two brain bleeds, four fractured ribs, and a wrist fracture. How long would I have waited to be found if no one knew I had fallen? I have friends who wear a life alert button to call for help if they fall. But what if they cannot push that button? I would have been unable to push one.

The technology in the Falls app will vibrate if it detects an unsteady step and continue buzzing until the user responds to the "*Did you fall - yes or no*" question. If yes, the next prompt is "*Are you OK?*" "*Do you need help?*" I was not aware that the app would initiate an alert to my emergency contacts when I could not respond to these prompts. I share this story to encourage others to ensure up-to-date emergency contact information is saved in their phones. If you wear a watch with emergency capabilities, like fall detection, make sure to activate this option and connect it to your emergency contacts—you never know when you might need to depend on this technology to save your life. ■