BIO
Dr. Eunice Yang is the founder and CEO of OK2StandUP Inc., a healthcare technology company using AI to help prevent fall-related injuries in hospitals and skilled nursing facilities. She previously served as a professor in the University of Pittsburgh's Mechanical Engineering Department before spinning OK2StandUP out of the University of Pittsburgh.

Narrative

Thank you for the opportunity to speak today, and thank you to the Committee for focusing on how artificial intelligence is reshaping biotechnology and strengthening Pennsylvania's leadership in healthcare innovation.

When we talk about AI, it's often in abstract terms—algorithms, automation, and future potential. I'd like to ground this conversation in something very real: patient safety, caregiver burden, and how AI is already improving care today.

Before I begin, I'd like to ask a quick question: How many of you have a family member—or know an older adult—who has fallen?
Most hands go up when I ask that. And that's because falls are not rare events; they're a shared experience for families across Pennsylvania.

I'm the founder of OK2StandUP Inc., a healthcare technology company focused on fall prevention in skilled nursing communities and hospitals. Falls are among the leading causes of serious injury for older adults, and the consequences can be devastating—physically, emotionally, and financially—for families and for our healthcare system. To understand this challenge firsthand, I spent 150 nights in nursing homes, observing the daily realities of care teams and the very real human cost when an older adult falls.

To put this in perspective: Across Pennsylvania hospitals alone, 35,450 inpatient falls were reported in 2024. For me, this isn't just a number—several members of my own family are represented in that statistic. And the challenge is often even more intense in skilled nursing facilities, where residents are older, risk is higher, and staffing ratios are tighter.

At the same time, nurses and care aides are under enormous pressure. Staffing shortages aren't theoretical—they're a daily operational reality. Traditional fall-prevention tools, like bed alarms and frequent rounding, can be reactive and labor-intensive. Too often, they alert staff after a resident has already begun to move, leaving little time to intervene.

This is where AI is making a meaningful difference.

At OK2StandUP, we use AI and machine learning to analyze movement data from a small wearable sensor. The system identifies patterns that suggest a person is about to attempt to get out of bed unassisted. When that intent is detected, an alert is sent in real time to a nurse's smartphone—giving caregivers critical seconds to respond proactively.

Those seconds matter.

Instead of reacting after a fall, staff can intervene before one happens. Instead of constant monitoring, nurses can better prioritize care. And instead of asking an already-stretched workforce to do more, AI helps extend the reach of the staff we already have—supporting them in the moments that matter most.

Importantly, this technology does not replace nurses or clinical judgment. It is designed to support existing fall-prevention protocols, not disrupt them. The nurse remains in control; AI simply delivers earlier, more actionable information at the right moment.

What we've seen in skilled nursing settings is encouraging. In one evaluation, 44 high fall-risk residents were monitored for more than 4,500 hours, and staff reported zero fall incidents during the evaluation period. While outcomes will vary by setting, the takeaway is clear: AI can help overburdened care teams respond more proactively—improving safety while fitting into real-world workflows.

From a broader perspective, this is how AI is strengthening Pennsylvania's biotechnology and healthcare sectors. It improves safety without increasing labor costs. It helps reduce the financial impact of preventable injuries. It can ease workforce burnout. And it creates scalable innovation rooted here in the Commonwealth.

That is the impact I've seen firsthand—and why responsible AI adoption is not just a technology strategy for Pennsylvania. It's a workforce strategy, a patient safety strategy, and an economic strategy.