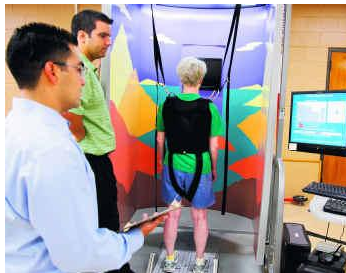




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## Firms, Researchers Aim to Keep Seniors Steadier on Their Feet

By BOB MOOS  
bmoos@dallasnews.com



DAVID WOO/DMN

*Raul Ramirez (left) and Christopher Ray, of the University of Texas at Arlington, monitor Linda McDonald during tests to determine her risk of falling. Entrepreneurs and companies are creating products and services to help seniors' footing.*

Rocky Miller has just made a career change that's likely to turn a few heads.

After years of selling motorcycles, the 60-year-old Plano resident has launched a business, Slip Doctors, that will treat floors with a chemical that he says will make them more resistant to slips, slides and falls.

"Simply put, my partners and I sell friction," he said. "In a country where the older population will double over the next 25 years, we think that's something that will be in demand for a long time."

The Addison-based business hopes to set itself apart from competitors, Miller said, by using a high-tech robot that scoots across the floor of a home or senior-living community and identifies slick spots.

Slip Doctors joins an industry springing up from people's concern over falling. Entrepreneurs and big corporations are creating products and services to stem a problem that threatens to worsen as boomers age.

Every year, about a third of Americans 65 and older fall, and about a third of those who lose their footing require medical treatment, according to the federal Centers for Disease Control and Prevention.

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More than 1.8 million older adults are treated annually in emergency departments for injuries from falls, 433,000 are admitted to hospitals and 16,000 die because of their injuries, the agency reports.

"The good news is that we can reduce the risk of falling. It doesn't have to be an inevitable part of growing old," said Lynn Beattie, vice president of injury prevention at the National Council on Aging.

Aside from promoting longer lives and greater independence, the new efforts to prevent falls may help control health care costs as the oldest boomers qualify for Medicare in about a year, she said.

More than \$19 billion is spent annually on treating seniors who fall. Without better prevention, that cost is projected to escalate to \$43.8 billion a year by 2020, and Medicare will pay for most of it.

## Falls alarm



MELANIE BURFORD/DMN

*Slip Doctors uses a machine to find floors' slick spots and treats them with a chemical to make them slip-resistant.*

At the University of Texas at Arlington, researchers are putting older adults through a battery of tests to determine their risk of falling and to teach them to maintain their balance.

In one exercise, the seniors climb into a booth where the floor rocks, the walls shake and a video screen flashes words and colors to distract them. A harness protects them from slipping.

Patricia Elder, a 63-year-old Grand Prairie resident who worries about tripping because of her poor eyesight, held her ground by shifting her weight when she took the test.

"It reminded me of going through a carnival funhouse as a child," she said. "I guess this old gal still has it in her."

Christopher Ray, an assistant professor of kinesiology, said he hoped the research project will lead to programs and products to help older adults become more sure-footed.

"When seniors regain their strength and balance, they also regain their confidence," he said. "As long as people fear falling, they limit their activities, and that only makes them more vulnerable to accidents."

Dallas-based AT&T Inc. and 24eight LLC of New York are working on a high-tech monitoring system that will signal caregivers when it detects someone is at risk of falling.

The system will use a shoe insole with built-in sensors that track changes in the wearer's gait, said Bob Miller, executive director of AT&T's communications technology research department.

"If, for example, someone becomes dizzy because of a bad reaction to medication, we should be able to detect the unsteady walk and alert caregivers in time to head off trouble," he said. Texas Tech University will begin testing the monitoring system at a geriatric care center in Lubbock in about a month, Miller said. He expects the technology to be on the market within two years.

## **Lower tech**

Low-tech approaches are also reducing older adults' risk of tumbling, Beattie said. Many home health care agencies are creating services tailored to fall victims.

Gentiva Health Services, a national home health care company, aggressively markets its "Safe Strides" program.

"Our typical patient has already fallen but doesn't want to move into an assisted-living facility or nursing home," said Keith Gray, rehabilitation director for Gentiva's branch in Bedford.

A therapist evaluates each patient and designs an in-home exercise program to improve balance, he said. The home is also checked for hazards, and medications are reviewed for possible side effects.

Medicare covers the cost of the four- or five-week program if a doctor orders it, Gray said.

Older adults can significantly lower their risk of falling if they make better use of "old technology" such as walkers and canes, said Candy Wade, who teaches "Matter of Balance" classes to Dallas area seniors.

Seniors sometimes borrow walkers or canes from friends, Wade said, which can be dangerous because a walking aid needs to be fitted to each person.

Tom Polston, who owns Specialty Medical Sales in Lewisville, said he and his employees routinely measure customers for walkers and canes and give a short course on how to use the aids.

"This isn't a one-size-fits-all business," he said.

## **On guard**

The industry that's done the most to prevent falls is the one with the most to gain – long-term care providers such as nursing homes, assisted-living facilities and senior independent-living communities.

Because it cares for the frailest seniors, a nursing home with 100 beds averages from 100 to 200 falls a year, the Centers for Disease Control and Prevention reports. About 1,800 residents die each year from falls.

At Christian Care Centers in Mesquite, staff members are trained to guard against falls and frequently rely on lifts to help nursing home patients out of chairs and onto their feet.

The community's "Senior Body Balance" class – with its mix of Pilates, tai chi and yoga exercises – also helps put residents on surer footing, said Martha Fiddes, assistant vice president of therapy and wellness services.

"I've had fall-prone seniors who haven't had a single accident since taking the course," she said.

Experts see interest in fall-related products and programs headed no way but up.

The people most vulnerable to falling and injuring themselves – those 85 and older – also make up the fastest-growing age group in this country, said Beattie of the National Council on Aging.

"Preventing falls has to become a booming enterprise," she said. "Otherwise, we won't have enough surgeons to treat all the hip fractures."

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