

## Long-Term Care Survey Alert

### CASE STUDY: Field-Tested System Heads Off Falls And Improves Clinical Outcomes

**Consider this facility's wellness-focused approach.**

Looking for a fun way to reduce residents' falls, depression and pain -- and wow surveyors and consumers to boot?

A strength training and exercise program that integrates physical and occupational therapy expertise can do more than you might imagine to achieve those goals.

**How it works:** Postacute and long-term care residents participating in the SeniorFIT program at **Addolorata Villa** use Nautilus equipment with one-pound increments. That allows them to "make gains at their own pace," explains **Larry Carlson**, executive director of the continuing care retirement community in Wheeling, IL.

Physical and occupational therapists automatically refer rehab patients to the program. People with cognitive losses who have trouble following commands also join in, which helps reduce falls and fall-related injuries. The physician approves the resident's participation in the program. A physical therapist designs the resident's program, says **Steve Ferris,PT**, the program director. Each participant also works with an assigned exercise physiologist who serves as a personal trainer. The exercise program "involves circuit training" where participants "work out on five different machines that exercise five different body parts," explains Carlson. The residents do a set of 10 repetitions on each machine two or three times a week.

#### Outcomes Speak for Themselves

The program staff measures the resident's progress by comparing his baseline muscle strength at the outset to what he can do at 12 weeks. "We have seen people achieve a 250 percent increase in leg strength over that time," he says. Some of the participants are in their 90s.

The program boosts participants' confidence in their own bodies, which reduces falls, says **Trephina Bedell**, exercise physiologist and SeniorFIT coordinator.

The program has also shown it can accomplish the following goals:

- **Reduce falls and fall-related injuries.** For example, the program reduces falls in people with cognitive impairment by increasing their lower extremity strength. Those are the muscles people use to "catch themselves" when they start to lose their balance, explains Carlson. The biggest impact the facility has in fall reduction occurs when people are able to trade their walkers for a four-prong cane, he adds.
- **Increase functional independence.** The program is a "win-win" for residents and staff in that way, says Carlson. Residents require less assistance with transfers and ADLs, which means staff have more time to focus on other caregiving activities and spending more quality time with residents, he notes. "The resident who can toilet independently also has better self-esteem," he adds.
- **Improve depression and socialization.** Ferris notes that some of the residents in the nursing home, assisted living and independent living come just for the socialization. "They compare who is doing what with the weights and become a little competitive but in a positive way."
- **Reduce arthritis pain.** "We have had residents in severe pain participate in the arthritis exercise program who have

achieved good pain reduction," says Ferris. The arthritis program helps participants improve range of motion and circulation in the affected joints, says Bedell.

**How much does it cost?** The program's cost runs about \$30 a month per participant, which includes the personal trainer, says Carlson. The facility incorporates the rate into the rent as an amenity for private pay residents. Residents on Medicare "are probably on physical therapy and don't do the program until they complete" rehab, he adds. The facility raised \$20,000 through philanthropy to pay for the Nautilus equipment. (See news of a study showing how a structured exercise program can stave off major walking disability in the elderly, the article is in this issue under the title "Survey & Clinical News".)