The Bottom Line

The Bottom Line is a translation of study findings for application to clinical practice. It is not intended to substitute for a critical reading of the research article. Summaries are written by invitation of the Editor in Chief.

[Shumway-Cook A, Ciol MA, Hoffman J, Dudgeon BJ, Yorkston K, Chan L. Falls in the Medicare population: incidence, associated factors, and impact on health care. *Phys Ther*. 2009;89:324–332.]

What problems did the researchers set out to study, and why?

Falls represent a major health problem in the elderly population, but the current literature has not examined the incidence of falls in the general population or in the Medicare population. Medicare is the largest health insurance program in the United States, so this information could help close a large gap in present knowledge about the impact of falls. In addition to examining the incidence of falls in the Medicare population, the investigators wanted to examine the factors related to medically injurious and recurrent falls as well as to examine health care provider response to falls and aggregate health costs as a function of fall status.

What data were used in this study?

Data were collected from 12,669 Medicare beneficiaries, who received a survey via a multistage, stratified sampling procedure that was designed to provide a representative sample of the entire population of Medicare beneficiaries.

What new information does this study offer?

The results of this study support previous data that falls are common (occurring in 22% of this sample) and often are associated with increased health care utilization costs. It was estimated that, in 2002, 3.7 million people had a single fall, and 3.1 million people had recurrent falls, with 2.2 million people reporting a fall-related injury. Forty-eight percent of Medicare beneficiaries who had a fall discussed the fall with a health care provider, and 60% of those individuals reported receiving information or guidance on fall prevention. The study identifies sociodemographic factors associated with increased likelihood of recurrent and injurious falls.

What new information does this study offer for patients?

This study provides information that falls are common in older persons and often result in injuries and higher health care costs. It is critical that health care providers understand as much as possible about falls as they work to prevent them. This study suggests that health care providers might be missing chances to help prevent falls, and that patients might not be reporting all falls. The study also suggests that people should report falling to a health care provider and should make sure that they know how to reduce their risk for falling.

How did the researchers go about this study?

A 6-question supplement that addressed issues related to falls was added to the 2002 Medicare Current Beneficiary Survey (MCBS). The MCBS is a longitudinal, ongoing survey sponsored by the Centers for Medicare and Medicaid Services. The survey examined self-reported factors related to falls, including incidence, provider response, and injuries related to falls in the previous 12 months. Cost data were obtained from Medicare claims summary data for 2002.

How might the results be applied to physical therapist practice?

This information provides a current estimate of the rate and impact of falls in the Medicare population, as well as information about provider response to falls. This study suggests that health care providers might be missing opportunities to provide fall prevention services to older people and that not all falls are reported. Physical therapists can serve a primary role in identifying fallers by routinely asking older individuals about their fall history and by performing screening examinations in those who may be at risk for falls. Given evidence supporting the efficacy of fall prevention programs, the results from this study may signal an opportunity for physical therapists to have a beneficial impact on this population and on health care utilization costs.

What are the limitations of the study, and what further research is needed?

This study provides self-reported data from one year. A recall period of 12 months might have resulted in an under-reporting of falls. Furthermore, "falls" were not specifically defined, and provider response to falls was measured indirectly. Because the data were from a single year, the logistic regres-

sion models that were used could not determine risk, only association. Future research should examine specific risk factors related to falls, factors affecting the reporting of falls, provider response to falls, and more specific data about costs from injuries sustained in falls.

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