Improvements in Balance in Older Adults Engaged in a Specialized Home Care Falls Prevention Program.
Authors analyzed data from 11,667 charts of persons aged 65 years and older who were at risk for falling and who were receiving a combination of physical therapy (PT), occupational therapy, speech or nursing interventions in their home. Participants undergoing home care had positive changes in balance/gait and pain after an episode of care. There was a large change in balance at discharge from home care services, regardless of age or medical comorbidities. There do not seem to be large differences between those patients who received only PT interventions versus those who received care from multiple disciplines in the home on the gait/balance recorded measures. It was assumed that the treating clinicians used balance and gait training exercises to remediate deficits noted during the initial examination. A limitation of this study was that authors were unable to determine which interventions were used with the cohort.

Cost-effectiveness of fall prevention programs based on home visits for seniors aged over 65 years: a systematic review.
This systematic review focuses on cost-effectiveness of preventive home visits (PHVs), analyzing randomized controlled trials evaluating incremental cost-effectiveness ratios in fall prevention interventions. Five studies met the authors’ inclusion criteria. No compelling evidence was found to prove PHVs to be comprehensively cost-effective. Cost-effectiveness appears to depend on careful adaptation of selected measures for certain settings in special environments for designated patients and disease patterns, on a case-by-case basis. Authors conclude that more research is necessary with standardized components of the economic evaluation, the setting, personnel and measures of the intervention, as well as the careful selection and analysis of the study sample and its subgroups.
http://journals.cambridge.org/action/displayIssue?jid=IPG&tab=firstview

A cross-sectional study of the prevalence, correlates, and costs of falls in older home care clients 'at risk' for falling.
Authors examined the six-month prevalence, risk factors, and costs of falls in older adults (n = 109) aged 75 and up newly approved to receive home support services and at risk of falling (fall within the previous 12 months, fear of falling, or unsteadiness on feet). 70.6% of participants reported having at least one fall over the 6 month period and 27.5% reported multiple falls. 56% of the falls reported resulted in a hospital stay. Most of the falls occurred in the seniors’ homes during the day time while walking. When comparing risk factors in fallers and non-fallers, authors found lower levels of physical, social, and psychological functioning in fallers. The multivariate analysis revealed the presence of 5
risk factors for falls: neurological disorder (e.g., cognitive impairment, Parkinson’s disease), age \( \geq 85 \) years, environmental hazards, previous slip or trip, and visual impairment. With respect to per-person costs of use of health services in the previous six months, there was no significant difference ($11,500); however, there were significant differences between fallers and non-fallers in specific types of health services utilized.

**The effects and costs of a multifactorial and interdisciplinary team approach to falls prevention for older home care clients 'at risk' for falling: a randomized controlled trial.**
In this randomized control trial, authors examined the effects and costs of a 6-month multifactorial, interdisciplinary falls prevention program in older adults (n = 92) aged 75 and up newly approved to receive home support services and at risk of falling (fall within the previous 12 months, fear of falling, or unsteadiness on feet). The intervention included multidiscipline home visits and case conferencing where the multidiscipline team developed tailored plans for individual clients and employed motivational interviewing techniques when counseling clients. At six months there was no difference in the mean number of falls or in the number and type of fall-related injuries between the intervention and control groups. However, there were significant improvements in fall risk factors (slips and trips, health-related quality of life), and a reduction in the incidence of falls among males (75–84 years), with a fear of falling and a negative history of falls. The measured improvements were achieved at no additional cost to society as a whole. Although authors did not directly measure the acceptability of the intervention, the high engagement rate (98 %) and low “dropout” rate (9 %) over the six-month study period suggests that this approach is highly acceptable to this population.

**Fall prevention and injury protection for nursing home residents.**
Authors found that no study provided a definitive multifactorial model to guide clinical practice programs in nursing homes. Authors did not find any randomized controlled trial on the prevention of injuries. The grading scale, *United States Preventive Services Task Force Grading Scale to Determine Recommendation of Services* was used and ratings were either B (recommends) or C (recommends against routinely providing the service). Authors found that the recommended interventions (B) included comprehensive post fall assessment by a registered nurse, interdisciplinary falls consultative service, multifactorial interventions, and hip protectors.

**An interprofessional team approach to fall prevention for older home care clients ‘at risk’ of falling: health care providers share their experiences.**
Baxter P, Markle-Reid M. International Journal of Integrated Care, 28 May 2009
This qualitative study describes the experiences of five different health care professionals as they participated in an interprofessional team approach to care for the frail older adult living at home and at risk of falling. Authors found that interprofessional collaboration can be a positive experience for health care providers caring for those with chronic
Does a home based strength and balance program in people aged >= 80 years provide the best value for money to prevent falls?: A systematic review of economic analyses of falls prevention interventions.
Authors conducted a systematic review of peer reviewed journal articles reporting an economic evaluation of a falls prevention intervention as part of a randomized controlled trial, a controlled trial, or using an analytic model. Nine studies met the authors’ inclusion criteria. Studies that scored >/=75% on the Quality of Health Economic Studies instrument included (i) an individually customized multifactorial program in those with four or more of the eight targeted fall risk factors, (ii) the home based Otago Exercise Program in people >/=80 years, and (iii) a home safety program in the subgroup with a previous fall. Authors conclude that the best value for money came from effective single factor interventions such as the Otago Exercise Program.

Reducing risk of falling in older people discharged from hospital: a randomized controlled trial comparing seated exercises, weight-bearing exercises, and social visits.
In a 12-week randomized, controlled trial, 180 seniors (average age 80) recently discharged from hospital were visited 8 times and either prescribed seated exercises (SE), weight-bearing exercises (WBE), or no exercise. Seniors prescribed with an exercise program were asked to exercise three times per week. After 12 weeks, there was no statistical difference in completion of exercise sessions between the SE group and WBE groups. Results showed a reduction in falls risk scores for seniors in both exercise programs. However, the WBE group showed additional beneficial impacts for controlled leaning, reaction time, and less musculoskeletal soreness than the SE group.

A classification and regression tree for predicting recurrent falling among community-dwelling seniors using home-care services.
Community-living older persons aged ≥65 years who use home-care services (n = 868) participated in a prospective, observational study for the identification of risk profiles for recurrent falls. The incidence of recurrent fallers was 11.4%. Authors found that a history of falls in the three months prior to the initial interview emerged as a predictor of recurrent falling. Also at a high risk of becoming recurrent fallers were participants with ≥2 prior falls and a score of ≤30 on the Berg balance scale – particularly those who drank alcohol in the six months preceding their examination – as well as participants with ≥2
prior falls but with a score higher than 30 on the Berg scale, who lived in a private residential facility verses a single-family home (i.e. house).

A mail survey of 4743 home care clients from several home care agencies was done to determine whether home care clients had accessed or been influenced by fall prevention programs. Among the clients, 47.2% completed the survey and 46% had fallen within the last year. The results of this research showed that home care clients were a group of older people particularly at risk of falling; however, few were accessing falls prevention programs. Furthermore, few of the clients who had experienced a fall and had been injured were referred to a health professional about their falls. Authors concluded that fall prevention strategies and programs needed to be provided specifically for the home care population.
Falls in the nursing home setting: does time matter?
A retrospective chart review was conducted for falls (n=220) in a skilled nursing facility in New York during a 6-month period. Most falls (66%) occurred in the residents’ rooms and almost half (48%) resulted in injury. A statistically significant higher percentage of falls (27%) occurred between 4 pm and 8 pm. Evening falls were more likely to result in injury than daytime falls. Authors conclude that more research is needed to identify causes of identified falls patterns in the nursing home and to develop specific interventions.