Translating a Multifactorial Fall Prevention Intervention into Practice: A Controlled Evaluation of a Fall Prevention Clinic

Meghann Moore, MPH, RD, Barbara Williams, PhD,† Sally Ragsdale, ARNP, BSN, MN,‡ James P. LoGerfo, MD, MPH,†§ J. Richard Goss, MD, MPH,§ Astrid B. Schreuder, PhD,‖ and Elizabeth A. Phelan, MD, MS*†*

Although multifactorial fall prevention interventions have been shown to reduce falls and injurious falls, their translation into clinical settings has been limited. This article describes a hospital-based fall prevention clinic established to increase availability of preventive care for falls. Outcomes for 43 adults aged 65 and older seen during the clinic's first 6 months of operation were compared with outcomes for 86 age-, sex-, and race-matched controls; all persons included in analyses received primary care at the hospital's geriatrics clinic. Nonsignificant differences in falls, injurious falls, and fall-related healthcare use according to study group in multivariate adjusted models were observed, probably because of the small, fixed sample size. The percentage experiencing any injurious falls during the follow-up period was comparable for fall clinic visitors and controls (14% vs 13%), despite a dramatic difference at baseline (42% of clinic visitors vs 15% of controls). Fall-related healthcare use was higher for clinic visitors during the baseline period (21%, vs 12% for controls) and decreased slightly (to 19%) during follow-up; differences in fall-related healthcare use according to study group from baseline to follow-up were nonsignificant. These findings, although preliminary because of the small sample size and the baseline difference between the groups in fall rates, suggest that being seen in a fall prevention clinic may reduce injurious falls. Additional studies will be necessary to conclusively determine the effects of multifactorial fall risk assessment and management delivered by midlevel providers working in real-world clinical practice settings on key outcomes, including injurious falls, downstream fall-related healthcare use, and costs. **J Am Geriatr Soc 58:357–363, 2010.**

From the *Divisions of Gerontology and Geriatric Medicine, ‡Cardiology, and §General Internal Medicine, Department of Medicine and †Health Promotion Research Center, Department of Health Services, School of Public Health and Community Medicine, University of Washington, Seattle, Washington; and ‖Department of Quality Improvement, Harborview Medical Center, Seattle, Washington.

Address correspondence to Elizabeth A. Phelan, Department of Medicine/Division of Gerontology and Geriatric Medicine, 325 9th Avenue, Box 359755, Seattle, WA 98104. E-mail: phelane@u.washington.edu

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One-third of community-dwelling adults aged 65 and older and half of adults aged 80 and older fall at least once each year.[1,2] Falls are the most common cause of death due to unintentional injury in adults in this age category.[3] Falls are associated with considerable morbidity, restricted activity, functional decline, and nursing home admission.[3,4] Falls account for approximately 10% of visits to an emergency department (ED) and 6% of hospitalizations in Medicare beneficiaries.[4]

Research supports the effectiveness of multifactorial fall prevention programs. A multifactorial fall risk assessment and management program was consistently the most-effective fall prevention strategy in community-living older adults, associated with an 18% reduction in falls and a 37% reduction in the rate of falls per person-month.[5]

However, most older adults who report having fallen do not receive a basic fall examination.[6] Others have also observed that fall prevention is frequently not attended to in clinical practice,[4] and locally collected data suggest that patients seeking medical attention after a fall received follow-up for the acute fall-related injury but no preventive care for falls.[7]

The Fall Prevention Clinic (FPC) at Harborview Medical Center (HMC) in Seattle, Washington, began operation in June 2005 to address this issue. The primary aim of the clinic is to make evidence-based care for falls readily available. One of the authors (EAP) engaged in discussions with hospital leadership and in program planning over a 1-year period before the clinic's establishment; leadership was supportive of the idea from the outset.

This research is an evaluation of the clinic in terms of its effects on falls, injurious falls, and fall-related healthcare

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use. It was hypothesized that fall-related healthcare use would be less after the FPC visit and that this would occur through a reduction in injurious falls. The most common treatment recommendations given to patients evaluated in the FPC, their reported adherence to these recommendations at follow-up, and payments to the hospital for FPC visits were also investigated.

METHODS

Setting: FPC at HMC

The setting for this study was the FPC at HMC. HMC is a public hospital delivering comprehensive medical services to the residents of inner-city Seattle. Owned by King County, governed by the HMC Board of Trustees, and managed under contract by the University of Washington (UW), it is part of the UW Academic Medical Center.

An advance registered nurse practitioner (ARNP) (SR) staffs the FPC, which operates 1 half-day a week. The initial clinic visit is 1 hour long and consists of a comprehensive fall risk assessment, including a structured algorithm, adapted from the Assessing Care of Vulnerable Elders (ACOVE) II intervention[8,9] to identify risk factors for falls; a focused medical evaluation (vision, gait, balance, strength, postural vital signs, and cognitive and functional status); and recommendations for treatment of modifiable risk factors (e.g., physical therapy referral, environmental modifications, referral for eye examination).[5] Each patient also receives education about fall prevention, physical activity, and home safety.

The ARNP usually recommends a follow-up visit to the FPC within a few months. Typically 30 minutes in length, follow-ups focus on whether patients have any questions about their treatment plan to prevent falls, are afraid of falling, and are adhering to treatment recommendations from the initial visit. Barriers to adherence are identified and addressed, and gait, balance, and strength are reassessed. All forms used in the FPC are available upon request.

Visits to the FPC are billed to the patient's primary and (if available) secondary insurers. These insurers include Medicare, Medicaid, and commercial carriers. The initial visit is in nearly all instances billed as a comprehensive consultation.

Study Design

The analysis was designed along the lines of firm system research,[10] wherein an outpatient clinic is subdivided into smaller units (firms), and changes are then introduced with one unit but not the other(s), and effects on outcomes are subsequently assessed. The period of visits to the FPC (clinic visit period) was June 1, 2005, through December 31, 2005 (7 months). June 1, 2003, through May 31, 2005 (24 months) marked the baseline period, and January 1, 2006, through June 30, 2007 (18 months) was the follow-up period of observation (Figure 1). A retrospective, comparison-group design was used to answer the study questions.

Participants

Source of Study Participants

Study participants were primary care patients of the geriatric medicine clinic at HMC. The clinic has two sessions each week, one on Tuesday, the other on Thursday, wherein academic geriatricians see patients. All patients must be aged 65 and older and community dwelling to receive primary care in this clinic. Approximately two-thirds of the clinic's patients are female, and one-third are nonwhite. Most have two or more chronic conditions (Phelan, unpublished data). Approximately 650 patients are seen routinely for primary care.

When the FPC began operating, geriatricians practicing in the Thursday clinic were asked to delay letting their patients know about the clinic for 6 months so that a control group could be drawn from their practices, because those practices consisted of patients who were comparable to intervention patients and intervention patients were to be drawn from the practices of academic geriatricians seeing patients on Tuesdays rather than Thursdays. Providers whose clinics were held on Tuesdays were asked to let their patients know of the clinic as soon as it opened and to encourage evaluation therein.

Fall Prevention Clinic Visitors

The FPC visitors (n = 43) were patients referred by their Tuesday geriatrician provider to the FPC between June 1, 2005, and December 31, 2005. Providers were not asked to invite patients to be seen in the FPC based on any particular predisposition to fall, although many patients who ultimately elected to be seen had a history of falls. A few patients were referred to the FPC from the HMC ED. It was decided to include these persons in the analysis, because most were primary care patients of HMC outpatient clinics and thus were from the same population base.

Controls

The control group (n = 86) consisted of patients who were explicitly not referred to the FPC between June 1, 2005, and December 31, 2005. Thursday providers were informed

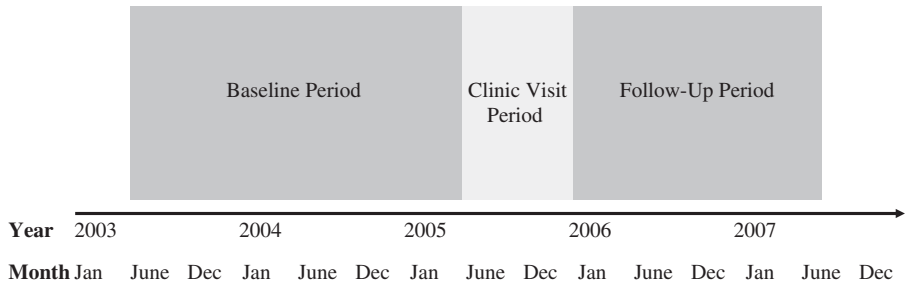

Figure 1. Study time line.

that they could begin referring their patients as of January 1, 2006. Controls were matched two to one to FPC patients on age, sex, and whenever possible, race.

Data Collection

Abstraction Methods

Data about demographic characteristics, health insurance, medications, comorbid conditions, fall history, and fall-related injury came from a thorough review of electronic medical records (EMRs). Data on healthcare use were derived from automated databases of HMC's quality improvement department. One of the authors (MM) abstracted all data and another monitored the abstraction process (EAP) and vetted abstraction questions from the abstractor whenever questions arose about interpretation of information contained within the medical record. Because this was a quality improvement project, all authors, including the abstractor, were familiar with the FPC's purpose, but specific study hypotheses were known only to the senior author and not discussed with the abstractor.

Variable Definitions

Age on June 1, 2005, the first day of the clinic visit period, defined each patient's age. Comorbid conditions and medications were those documented in the EMR at the time of the FPC visit (or at the first geriatric medicine clinic visit made during June–December 2005 for all control participants). All prescription medications, except for as-needed medications, were counted; benzodiazepines were the only medication class specifically tracked, given their strong association with falls.[11]

Comorbid conditions identified in prior research as fall risk factors (e.g., arthritis, cognitive impairment)[12] and those common in older adults (e.g., hypertension, diabetes mellitus) were abstracted from the EMR. Some comorbid conditions were grouped together for analysis purposes. For example, stroke included transient ischemic attack and cerebrovascular accident.

Fall-Related Outcome Measures

Classification of Outcome Occurrences into Baseline and Follow-Up Periods

Data on falls, fall-related injuries, and fall-related healthcare use occurring from June 2003 until the participant's first FPC visit during the clinic visit period (June–December 2005) were included in the baseline period. The baseline period thus ranged from 24 to 30 months. Each control participant's baseline period was matched to that of the corresponding FPC participant. Follow-up data were derived from the time immediately after participants' FPC visits during the clinic visit period to participants' last recorded medical chart notes, through June 30, 2007. Follow-up time averaged 1.6 years for the clinic group and 1.5 years for controls.

Falls

Falls were defined as "unintentionally coming to rest on the ground, floor, or other lower level from a standing, sitting, or horizontal position, not due to seizure, stroke, fainting, motor vehicle accident, or risky behavior (i.e., skiing, roof repair, drug overdose)."[12] Any reference to falls in plural form (e.g., "fell multiple times") was counted as two falls; in one case, a reference to "falls once per month" over a 1 year period was conservatively counted as six total fall events. Records were carefully screened to identify multiple reports of a single fall event.

Injurious Falls

Fall-related injuries were divided into two categories (major and minor) and defined as any sequelae resulting from a fall. Major injuries included upper extremity, midbody (pelvic, sacral, and multiple rib) and lower extremity fractures, and head injury. Minor injuries included soft tissue injury (abrasions, contusions, and lacerations), ligamentous injury, single rib fracture, broken tooth or teeth, and swollen body part. If more than one injury resulted from a fall, each injury was independently counted.

Fall-Related Healthcare Use

The primary outcome was healthcare use (ED visit or hospitalization) resulting from a fall event. If a participant presented to an ED with a fall-related injury and was discharged, this was considered a fall-related ED visit. If a participant was admitted to a hospital on the same day as a reported fall, the hospital visit was considered fall-related.

Payments Received and ARNP Salary

Payments received by the hospital for FPC visits during the clinic visit period (June–December 2005) were determined from hospital administrative files. Salary paid to the ARNP by the hospital for staffing the clinic during the clinic visit period was also tracked. The ARNP salary was the amount of money paid to the ARNP for her work in the FPC only and not the amount of her full-time salary.

Statistical Analyses

Power was calculated for the fixed sample size. Estimating the annual incidence of falls to be 30% to 40% in the control group[1] and that the falls clinic intervention would reduce the risk of falls in the clinic visitor group by 30% from baseline,[5] with a fixed sample size of 43 FPC participants and a two-tailed significance level of .05, power was estimated to be approximately 80% for this outcome.

The data were analyzed using an intention-to-treat approach. Statistical analyses were performed using SPSS version 13.0 (SPSS Inc., Chicago, IL). FPC and control participants were compared on demographic and health characteristics, baseline fall-related characteristics, and fall-related healthcare use. Chi-square and *t*-tests were used to test for between-group differences on these variables. McNemar tests were used to assess the significance of differences in within-group proportions at baseline and follow-up for each fall-related outcome. Logistic regression models, one for each fall-related outcome measure (falls, injurious falls, and fall-related healthcare use, a composite outcome of ED visits and hospitalizations) as the dependent variable and study group (clinic visitor or control) as the primary independent variable were generated (hereinafter referred to as unadjusted models). Confounders adjusted for in each (adjusted) model for each outcome were age, sex, race, number of comorbidities (from 11: hypertension, depression, arthritis, heart problems, vision problems, diabetes mellitus, dementia, anemia, stroke, syncope, and

dizziness), number of medications, days of follow-up, and one or more falls in the baseline period (yes/no) (for the falls and injurious falls regression models) or one or more ED visits or hospitalizations (yes/no) (for the fall-related healthcare use model). Depression was omitted as a covariate from adjusted models because it was highly correlated with comorbidity count. Results were considered statistically significant at $P<.05$. The University of Washington institutional review board approved this study.

RESULTS

Participant Flow

During the 7-month (June 1, 2005 through December 31, 2005) clinic visit period, 43 patients were seen in the FPC, 35 (81.4%) of whom were referred by providers of the geriatric medicine clinic; the remainder were referred from the hospital's ED. Of the 43 patients, 36 (83.7%) remained active in the hospital system and had medical chart notes available through the end of the follow-up period. Of the seven lost to follow-up, during the clinic visit period, one died, and one discontinued care at HMC, and during the follow-up period, two died, and three had no chart activity.

Of the 86 controls, 64 (74.4%) remained active in the HMC system with chart notes updated through the follow-up period. Of the 22 lost to follow-up, during the clinic visit period, one died, and four had no medical chart activity, and during the follow-up period, one died, three discontinued care at HMC, and 13 had no medical chart activity.

Participant Characteristics

Table 1 shows baseline demographic, health-related, and fall-related characteristics of participants. Cases and controls were balanced on age, sex, and race, as expected be-

Table 1. Baseline Demographic, Health, and Fall-Related Characteristics of Study Participants, According to Study Group

Characteristic	Fall Prevention Clinic Group (n = 43)	Control Group (n = 86)	*P*-Value
Age, mean ± SD	78.5 ± 7.4	78.7 ± 7.5	.90
Female, %	69.8	69.8	1.00
Nonwhite, %	32.6	37.2	.61
Primary insurance, %*			.46
Medicare	90.7	91.9	
Medicaid	4.7	4.7	
Other	4.6	3.5	
Number of medications, mean ± SD	7.0 ± 3.1	5.9 ± 3.2	.07
Benzodiazepine use, %	2.3	0	.32
Number of comorbidities, mean ± SD	3.2 ± 1.5	2.4 ± 1.3	.003
Comorbidity, %			
Hypertension	81.4	73.3	.31
Depression	48.8	23.3	.003
Arthritis	44.2	32.6	.20
Heart problems†	32.6	27.9	.59
Vision problems‡	23.3	12.8	.13
Diabetes mellitus	20.9	11.6	.16
Dementia§	16.3	12.8	.59
Stroke‖	4.7	12.8	.15
Number of falls, mean ± SD	1.58 (± 1.20)	1.02 (± 1.94)	.09
Number of injurious falls, mean ± SD	0.6 (± 0.8)	0.2 (± 0.4)	.003
Major injury, %	18.6	8.1	.08
Minor injury, %	23.3	8.1	.02
Fall frequency, %			<.001
0	2.3	61.6	
1	65.1	17.4	
≥2	32.6	20.9	
Fall-related emergency department visit, %	20.9	11.6	.16
Fall-related hospitalization, %	7.0	2.3	.20

* Percentage totals may exceed 100 because of rounding.

† Coronary heart disease, coronary artery disease, congestive heart failure, atrial fibrillation, aortic stenosis, murmur of aortic stenosis, aortic insufficiency, tachycardia syndrome, bradycardia syndrome, arrhythmia, idiopathic cardiomyopathy, restrictive cardiomyopathy, pacemaker, cardiac ischemia.

‡ Cataracts, glaucoma, diplopia, diabetic retinopathy, retinal detachment, macular degeneration.

§ Alzheimer's disease, memory problems.

‖ Transient ischemic attack, cerebrovascular accident.

SD = standard deviation.

cause of matching on those variables. FPC participants had a greater mean number of comorbidities (3.21 vs 2.43, $P = .003$), and a higher proportion experienced depression (48.8% vs 23.3%, $P = .003$) than controls. Nearly all of those seen in the FPC had fallen at least once. The mean number of injurious falls was low in both groups but significantly higher for the FPC group. Major and minor injuries were more common in the FPC group, significantly so for minor injuries. A larger proportion of the FPC group had experienced one or more falls. The percentage with any fall-related ED visits and hospitalizations during the baseline period was higher for the FPC group for both measures, although not significantly so.

Program Implementation

Treatment Recommendations

Treatments that the ARNP recommended most frequently for FPC participants at their initial clinic visit were physical activity (100%), physical or occupational therapy (67%), an eye examination (67.4%), a change in medication (25.6%), a change in footwear or a podiatry evaluation (18.6%), hip protectors (14.0%), and a home safety assessment (9.3%).

Frequency of Follow-Up Visits and Adherence to Treatment Recommendations

Of FPC visitors, 37.2% completed a follow-up visit, and 81.4% of those who did so were working on at least one aspect of their treatment plan at follow-up.

Outcomes

Falls, Injurious Falls, and Fall-Related Healthcare Use According to Study Group

Table 2 shows the percentage of patients in each group in the baseline and follow-up periods for each fall-related outcome. Adjusted odds ratios (ORs) and the 95% confidence intervals (CIs) for the odds of patients in the FPC experiencing each outcome compared with controls is also given. The adjusted odds of each outcome were lower for FPC participants, although CIs crossed 1.00 in each case. Five percent in each group sustained a major injury during follow-up ($P > .99$). Minor injuries occurred in 11.6% of the FPC group and 8.1% of controls during follow-up ($P = .52$). The within-group differences in proportions between baseline and follow-up for the outcomes of falls (McNemar $P < .001$) and injurious falls (McNemar $P = .004$) were significant only for the FPC group.

Payments Received and ARNP Salary

Payments received by the hospital for FPC visits during the clinic visit period totaled $7,756. Salary for the ARNP to provide these services totaled $3,761.

DISCUSSION

Others have called for further work to confirm that the reductions in falls achieved in clinical trials are also being found in routine clinical practice.[13] The results of this study showed that a FPC visit operating outside the context of a rigorously designed research study may have important effects on reducing falls, including injurious falls, in older adults with a history of falls. A substantial reduction in the percentages of those older adults who had been seen in the FPC with falls (from 97.7% to 46.5%; Table 2) and injurious falls (from 41.9% to 14.0%; Table 2) was observed. During the follow-up period, the proportion with injurious falls in the FPC group was comparable with that of controls (14.0% vs 12.8%; Table 2), whereas it had been substantially higher in the FPC group during the baseline period (41.9% vs 15.1%; Table 2). The proportion of FPC participants sustaining major injuries (18.6%) during the baseline period in this study was somewhat higher than published reports of community samples, probably because this was a referral clinic sample.[4] Multivariate analyses were suggestive of reductions in falls and injurious falls related to the clinic intervention, although the small sample size limits the interpretability of these models. Additionally, the FPC was modestly income-generating for the hospital.

Table 2. Fall-Related Outcome Measures (Any Falls, Any Injurious Falls, Any Fall-Related Healthcare Use) at Baseline and Follow-Up, According to Study Group (Fall Prevention Clinic (FPC), n = 43; Control, n = 86)

Outcome Measure	%		Unadjusted	Adjusted*
	Baseline	Follow-Up	OR (95% Confidence Interval)	
Any fall			2.25 (1.1–4.8)	0.83 (0.3–2.4)
FPC	97.7	46.5		
Controls	38.4	27.9		
Any injurious fall			1.10 (0.4–3.2)	0.57 (0.2–2.1)
FPC	41.9	14.0		
Controls	15.1	12.8		
Any healthcare use†			1.56 (0.6–4.2)	0.77 (0.2–2.5)
FPC	20.9	18.6		
Controls	11.6	12.8		

* Adjusted odds ratios (ORs) represent the multivariate adjusted odds of the outcome measure in the FPC versus the control group, obtained from logistic regression models of each follow-up outcome measure as the dependent variable and adjusting for age, sex, race, comorbidity count, medication count, days of follow-up, and the baseline value of the outcome measure.

† Healthcare use defined as any fall-related emergency department visit or hospitalization.

A few studies of fall prevention clinics were identified.[14–16] One was a randomized trial in which participants aged 75 and older who were not blind and were free of Parkinson's disease and cognitively intact were selected from a health insurance company database.[15] The intervention, individually modified, emphasized exercise, vision, and counseling. Rates of falls and injurious falls were assessed for 1 year using monthly fall calendars and telephone interviews. Although the intervention reduced some fall risk factors, a decrease in fall-related outcomes (falls, injurious falls) was not observed. This may have been because study participants were at a lower level of fall risk than those in the current study.

A recently published, uncontrolled evaluation of outcomes for 13 Australian falls clinics and 454 older adults represents the largest study of fall prevention clinics to date.[14] Participants were similar to those in the current study (mostly female, mean age $\sim$ 78, at high risk of fall (with a history of falls)). The intervention consisted of a

multidisciplinary assessment and multifactorial intervention. Outcomes, assessed according to self-report, included percentage with falls, injurious falls, and falls requiring medical attention. These outcomes were 40, 28, and 21 percentage points lower at follow-up than at baseline, respectively, resembling the 51 drop percentage drop point in those with falls and 28 drop percentage drop point in those with injurious falls at follow-up in our study. The clinic described in the present report is parsimonious in that a single interventionist (i.e., ARNP), as opposed to a multidisciplinary team, conducts assessments. This approach may be more feasibly implemented in primary care settings.

A third study of falls clinics in the Veterans Affairs in Florida and Puerto Rico is to the authors' knowledge the only published study of falls clinics in the United States.[16] This was an uncontrolled evaluation of an interdisciplinary team that assessed and managed 313 veterans (average age 73.5, >three-quarters male) referred because of high fall risk. Assessments were lengthy (2 hours), and treatment plans consisted of recommendations (usually related to medication adjustment) to the primary care provider and interventions implemented directly by the team. A 36 percentage point reduction in the percentage with falls was observed from baseline to 3-month follow-up. Injurious falls and fall-related healthcare use were not assessed.

Findings from the above studies, taken together with the current one, suggest that the protective effects of a falls clinic's multifactorial intervention on falls and injurious falls may be limited to older adults with a history of falls. The full effects of such programs on downstream healthcare use and costs are largely undetermined, although these results suggest a possible benefit of controlling fall-related healthcare use.

Strengths of the study include its evaluation of a real-world intervention, operating within the context of usual care and involving a heterogeneous group of older adults, in contrast to randomized trials that apply strict eligibility criteria and generally have excluded older people with dementia. As such, these results help answer the question of whether multifactorial fall risk reduction efforts will benefit a broader segment of the community-dwelling elderly population at high risk of falls and injury. It was also possible to identify a control group of age-, sex-, and race-matched older adults drawn from the same clinic as FPC visitors, which permitted a controlled evaluation of important outcomes to be conducted. The design was conservative, in that controls could have been referred to the FPC during the follow-up period, which would tend to bias results toward the null. Finally, the study examined the effects of the FPC intervention over a fairly lengthy (18-month) follow-up period. Although fall risk reduction was attained in other studies during shorter follow-up periods of observation,[16] it is possible that these short-term benefits could diminish by the second year of follow-up, as has been seen in randomized trials of fall prevention interventions.[17] A longer follow-up period is important, because it demonstrates that the effects of a multifactorial fall risk assessment with follow-up persist beyond the initial period after the intervention.

Limitations of this study include that it was observational, without randomization of participants, with measured differences between the groups at baseline. Specifically, an important imbalance was the higher rate of falls in the FPC visitor group at baseline. It was attempted to handle this imbalance in the analysis by controlling for the presence of one or more falls in the baseline period (yes/no) in multivariate models, but this analytical approach may not have fully accounted for the baseline differences between the groups on this measure. A second limitation is the possibility of incomplete data collection. Although data were carefully extracted from medical records, some reports of falls and fall-related healthcare use may have been missed, particularly if care was received outside the healthcare system under study. More likely is the probability that some participants' full fall history was not reflected in their medical records, because it may have gone unreported to healthcare providers. Fewer than half of fallers reported their fall to their primary care provider in the veterans' falls clinic study.[16] In light of this, information on the specific number of falls, mean number of falls, and fall frequency may be underestimates. Although medical records may undercapture events such as falls and fall-related injury, there is no reason to suspect differential rates of underdocumentation according to study group on the primary outcome of fall-related healthcare use, because these data were derived from administrative files. Some of the participants also had ambiguous reports of fall history (i.e., "fell several times"), which required the actual number of falls to be estimated; the estimates in these instances were conservative, again potentially creating an underestimate of fall events. A third limitation was the fixed sample size, which limited power to detect significant differences between the study groups in multivariate analyses. Fourth, although the study included patients with dementia, because of small numbers (7 in the FPC group, 11 in the control group), it was not possible to determine the effect of the intervention for this subgroup. Last, some factors, such as activity restriction due to fear of falling, that may have affected the outcomes of falls and injurious falls were not controlled for; consideration should be given to adjusting for variables such as fear of falling in future studies examining these outcomes.

This study adds to the evidence supporting multifactorial risk assessment and extends that evidence by demonstrating that comprehensive fall risk assessment with follow-up provided by an ARNP in a real-world clinic setting may reduce falls and injurious falls in community-living older people with a history of falls. Such preventive care is likely to improve quality of life by averting the loss of independence that frequently follows an injurious fall. In addition, the opportunity for cost avoidance related to reductions in ED use and hospitalizations is substantial. Data from others suggest that incurring one or more injurious falls is associated with an increase in annual hospital costs of $11,042 and ED costs of $253.[18] Thus, substantial healthcare savings to fee-for-service and managed care Medicare could be realized if this form of preventive care for falls were made more widely available to large numbers of older persons. With larger evaluations of such programs, it is anticipated that best practices for reducing fall-related injuries and fall-related healthcare use will be definitively confirmed.

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