

Appendix 1. Characteristics of included studies.

Study	Inclusion/Exclusion	Population	Screening Tests	Outcomes (Incidence)	No. Recruited	Losses/ Exclusions	Duration of Follow-Up	Notes
Bergland and Laake, 2005 [1]	Female ≥ 75 years randomly selected from Oslo census file. Excluded: Unable to get to research office. Major cognitive impairment. Unable to stand for > 60 s.	Age: mean 80.3 range 75–93. Sex: 0% male. Previous falls: 41%. Cognitive impairment: ? Visual impairment: ?	Getting up from lying on floor	All falls (57%). Falls with serious injuries: fractures, joint dislocations, lacerations requiring sutures; other high-impact soft tissue injuries	328	21 (6%)	12 mo	—
Bogle Thorbahn and Newton, 1996 [2]	Volunteer independent-living residents of two life care communities. Excluded if unable to follow directions of test.	Age: mean \pm SD = 79.2 \pm 6.2. Sex: 24% male. Previous falls: ? Cognitive impairment: ? Visual impairment: ?	BBS	All self-reported falls (28%)	66	12 (18%)	6 mo	—
Cwikel et al., 1998 [3]	Aged ≥ 60 , functional independence, able to be interviewed.	Age: mean 71.5. Sex: 42% male. Previous falls: 20.6%. Cognitive impairment: ? Visual impairment: ?	Elderly Fall Screening test (EFST)	All falls (self-reported, 35%)	361	78 (22%)	12 mo	—
Faber et al., 2006 [4]	Resident in participating residences. Able to walk at least 6 m with walking aid if used. MMSE ≥ 18 . No medical contraindications.	Age: mean \pm SD = 84.7 \pm 6.1. Sex: 19% male. Previous falls: ? Cognitive impairment: MMSE mean \pm SD = 25.7 \pm 2.9. Visual impairment: ?	Tinetti mobility tests (gait, balance, and total)	2 or more falls (31%)	Unclear	Unclear	10 mo	Population was control group of RCT. Number included unclear; text states 72 participants but results presented for 81.
Flemming, 2006 [5]	Aged ≥ 65 . Resident at home, family member's residence, boarding home, assisted living center. Followed for Home Health Agency services up to 120 d.	Age: mean \pm SD = 78.58 \pm 7.62. Sex: ? Previous falls: ? Cognitive impairment: ? Visual impairment: ?	Falls Risk Assessment (FRA)	All falls (13%)	307	0 (0%)	Unclear	Data collected prospectively, but study conducted retrospectively. Serious error in results and conclusions: specificity for cutoff of 8 is wrong.
Hale et al., 1992 [6]	Community living consecutive patients of family practice. Aged ≥ 65 , ambulatory, mentally competent (no dementia and able to answer questions), not acutely ill.	Age: mean 74.7. Sex: 19.6% male. Previous falls 27.5%. Cognitive impairment: 0%. Visual impairment: ?	Tinetti mobility test	All falls (36%)	120	18 (15%)	12 mo	—
Kario et al., 2001 [7]	Aged ≥ 65 ; screened and ineligible for systolic hypertension study.	Age: mean \pm SD = 75.5 \pm 5.0. Sex: 46% male. Previous falls: ? Cognitive impairment: Blessed mental status score > 3 : 32%. Visual impairment: ?	Computerized dynamic posturography	All falls (23%)	266	27 (10.2%)	12 mo	—
Killough, 2001 [8]	Community dwelling. Age ≥ 65 . Ability to walk 6 m. Could follow directions and answer survey questions.	No information	Coalition for Community Fall Prevention (CCFP) screen 9-test battery	All falls (39%)	122	0 (0%)	12 mo	Reported as abstract only.
Laessoe et al., 2007 [9]	Aged 70-80; healthy community dwelling.	Age: mean \pm SD = 73.7 \pm 2.9. Sex: 26% male. Previous falls: NR. Cognitive impairment: ? Visual impairment: ?		Falls not as result of major intrinsic event (e.g., stroke) or overwhelming hazard (15%)	96	2 (2%)	12 mo	—

Lin et al., 2004 [10]	Aged ≥65; living in one of six rural villages. Not hospitalized or bedridden.	Age: mean 73.4. Sex: 59.1% male. Previous falls: 10.6%. Cognitive impairment: 53.6% (mild or severe). Visual impairment: ?	TUG, Functional reach, One-leg stance, Tinetti balance SWWT	All falls (?)	1200	402 (33.5%)	12 mo	Results given as odds ratio and area under curve.
Lundin-Olsson et al., 1997 [11]	Living in sheltered accommodation. Able to walk without aids. Able to follow simple instructions.	Age: mean ± SD = 80.1 ± 6.1. Sex: 28% male. Cognitive impairment: MMSE median 21.5 (IQR = 18–26). Visual impairment: ?		Falls indoors (36%)	58	0 (0%)	6 mo	—
Lundin-Olsson et al., 2000 [12]	Residents of residential care facility aged ≥65.	Age: median 82, range 66–99. Sex: 39.3% male. Previous falls: 47%. Cognitive impairment: MMSE median 21 (range 12–26). Visual impairment: 21.8%	Mobility Interaction Fall (MIF)	Falls indoors (42%)	78	0	6 mo	—
Lundin-Olsson et al., 2003 [13]	Residents of 4 residential care facilities aged ≥65. No exclusions specified.	Age: mean ± SD = 83.2 ± 6.8. Sex: 30.3% male. Previous falls: ? Cognitive impairment: ? Visual impairment: 22.1%	MIF	Falls indoors including those resulting from acute medical events. (50%)	208	0 (0%)	6 mo	—
Morris et al. 2007 [14]	Female; aged ≥60; ≥1 vertebral fracture. Referred by GP to osteoporosis clinic.	Age: mean ± SD = 77.9 ± 6.5. Sex: 0% male. Previous falls: 49%. Cognitive impairment: ? Visual impairment: ?	5 m TUG	All falls (46%)	104	18 (17%)	12 mo	—
Murphy et al., 2003 [15]	Aged ≥60; independently living.	Age: mean ± SD = 72.3 ± 8.6. Sex: 26% male. Previous falls: ? Cognitive impairment: ? Visual impairment: ?	Floor transfer, 5-step test, Tandem stance, Tinetti balance, Functional reach, 5-minute walk	Nonaccidental falls (24%)	50	5 (10%)	14 mo	5 participants who had accidental falls were excluded from the analysis.
Nandy et al., 2004 [16]	Random sample of people aged ≥65 living in one primary care group area contacted.	Age: mean ± SD = 74.4 ± 6.4. Sex: 45% male. Previous falls: 25.4%. Cognitive impairment: ? Visual impairment: ?	FRAT (part 1)	All falls (?)	510	165 (32.4%)	6 mo	—
Okumiya et al., 1998 [17]	Participants in Kahoku Longitudinal Aging Study; non-fallers at start of study.	Age: ? Sex: ? Previous falls: ? Cognitive impairment: ? Visual impairment: ?	TUG	All falls (28%)	278	35 (12.6%)	5 yr	Results also presented as odds ratio for Button score and visuospatial cognitive performance test.
Raiche et al., 2000 [18]	Participants in control group of RCT. Random sample of 225 from electoral list over 75.	Age: mean ± SD = 80.0 ± 4.4	Tinetti balance scale	All falls (24%)	225	0 (0%)	12 mo	—
Rosendahl et al., 2003 [19]	Residents of one residential care facility in Feb 1994 or moved in during subsequent year. Aged ≥65. No exclusions specified.	Age: mean ± SD = 81 ± 6. Sex: 28% male. Previous falls: ? Cognitive impairment: MMSE median 21 (IQR 12–26). Visual impairment: ?	Downton index	Indoor falls (62%) Falls not caused by acute illness or drug side effects	78	0 (0%)	12 mo	—

Stel et al., 2003 [20]	Subset of participants in LASA cohort study. Random sample of elderly people in 3 regions of Netherlands; 328 participants who fell in previous year plus random sample of 196 of 746 who did not fall were invited.	Age: mean \pm SD = 78.3 \pm 6.2. Sex: 45.4% male. Previous falls: 15.9%. Cognitive impairment: ? Visual impairment: ?	Mediolateral sway, handgrip strength, leg extension strength, tandem stand	Recurrent falls: \geq 2 falls (23%)	439	21 (4.8%)	12 mo	Results given as ROC AUC.
Studenski et al., 1994 [21]	Aged \geq 70; lived within 30 mile radius of Durham VA hospital. Receive care in ambulatory care clinics. Excluded: terminal illness, blindness, acute illness. Severe cognitive impairment (MMSE < 18) and no caregiver to assist with falls monitoring.	Age: mean \pm SD = 74.3 \pm 5.1. Sex: 100% male. Previous falls: 50.6%. Cognitive impairment: ? Visual impairment: ?	Mobility screen (6 item, high/low risk)	Recurrent falls: 2 or more falls not due to loss of consciousness, acute illness, unusual activities or unusually hazardous environment (28%)	325	19 (5.8%)	6 mo	—
Tinetti et al., 1986 [22]	First time admissions to intermediate care. Excluded: Less than 60 years old. Did not walk as a means of transportation Admitted for less than 3 mo. Unable to participate.	Age: mean 79, range 61–92. Sex: 32% male. Previous falls: ? Cognitive impairment: ? Visual impairment: ?	Balance score (0–28), gait score (0–13), mobility score (0–28)	Recurrent falls (\geq 2 falls under circumstances in which fit person could have resisted external hazard if there was one) (32%)	79	0	3 mo	—
Trueblood et al., 2001 [23]	Living in community and retirement centers. Aged \geq 60; able to stand for at least 5 min. Able to walk at least 40 ft. Excluded: Cognitive deficit (MMSE \leq 24), underlying neurological problems (Parkinsons or cerebral vascular accident).	Age: mean \pm SD = 78.1 \pm 8.2. Sex: 19.2% male. Previous falls: 50%. Cognitive impairment: ? Visual impairment: ?	Tinetti gait and balance scale, TUG, Modified CTSIB, Limits of stability	All falls (17%)	198	18 (9.1%)	6 mo	—
Vellas et al., 1997 [24]	Participants in Albuquerque Falls Study: volunteers aged \geq 60, no serious medical conditions. No exclusions specified.	Age: mean \pm SD = 72.7 \pm 6.1. Sex: 41% male. Previous falls: ? Cognitive impairment (MMSE <30): 45.6%. Visual impairment: ?	One-leg balance	Falls not result of violent blow, loss of consciousness or sudden onset of paralysis (22%). Falls for which medical attention was sought	364	48 (13.2%)	3 yr	—
Verghese et al., 2002 [25]	Participants in Einstein Aging Study – randomly selected Medicare recipients in the Bronx, New York. Aged \geq 65; Excluded: Severe visual loss interfering with completion of tests. Not speaking English or Spanish; institutionalization	Age: mean \pm SD = 79.6 \pm 6.4. Sex: 43% male. Previous falls: 28%. Cognitive impairment: ? Visual impairment: 0%	Tinetti balance and mobility screen, Timed gait, Walking while talking (WWT) tasks: simple and complex	All falls (22%)	60	1 (1.7%)	12 mo	—

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- ? = data not given, AUC = area under curve, BBS = Berg Balance Scale, CTSIB = Clinical Test for Sensory Interaction in Balance, FRAT = Fall Risk Assessment Tool, GP = general practitioner, IQR = interquartile range, LASA = Longitudinal Aging Study Amsterdam, MMSE = Mini-Mental State Examination, RCT = randomized controlled trial, SD = standard deviation, SWWT = stops walking while talking, TUG = Timed Up and Go (test).
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