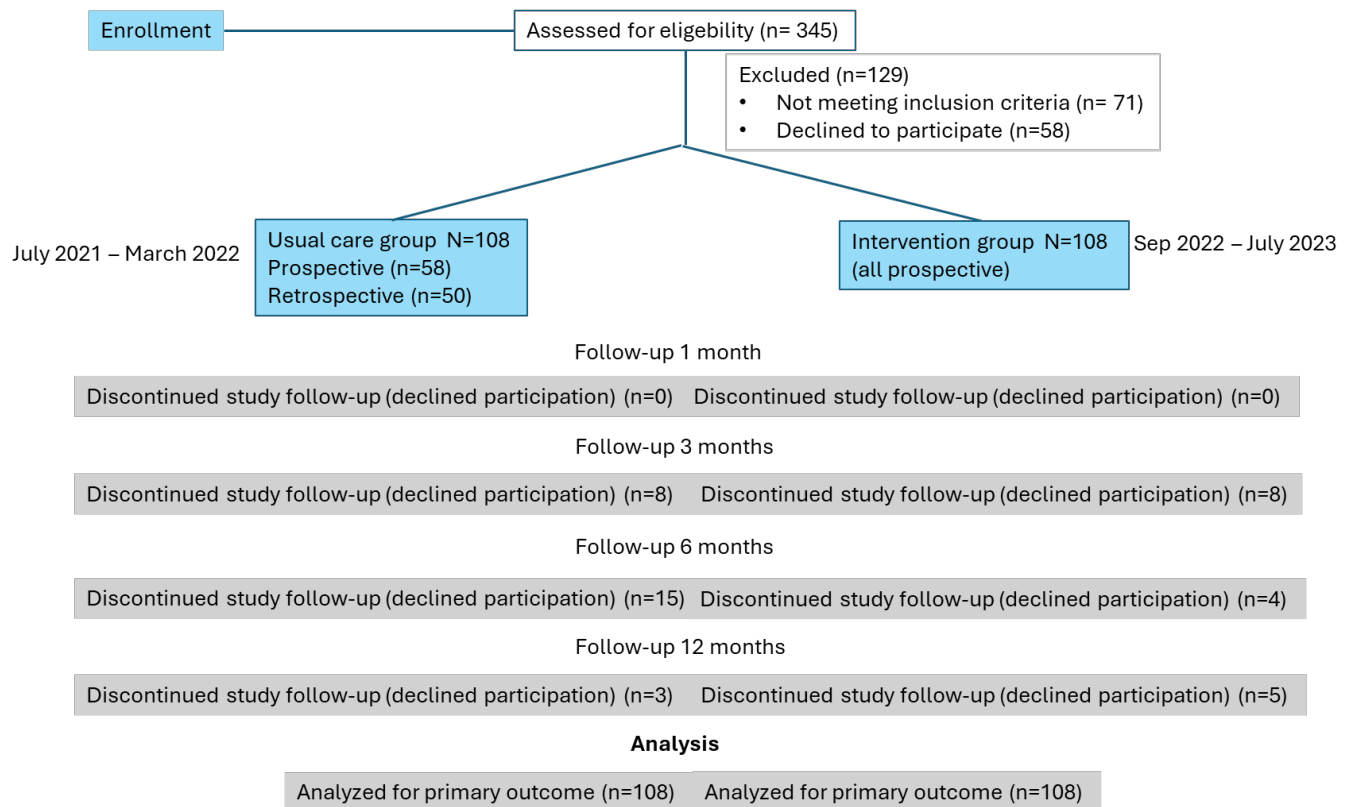


ISRCTN

Study 20491828

Participant flow



Baseline characteristics

	Usual care (N = 108)	Intervention (N = 108)	p-value
Age (years), mean (SD)	84.9 (6.4)	85.3 (5.6)	0.647
Female gender, % (N)	67.6 (73)	70.4 (76)	0.659
Age-adjusted CCI (3-37), mean (SD)	5.6 (2.0)	5.8 (1.9)	0.414
ASA score			
ASA 1, % (N)	1.0 (1)	2.0 (2)	0.561
ASA 2, % (N)	30.6 (33)	22.2 (24)	0.165
ASA 3, % (N)	58.3 (63)	74.1 (80)	0.014
ASA 4, % (N)	10.2 (11)	2.0 (2)	0.010
Polypharmacy (≥ 5 different medications), % (N)	73.1 (79)	76.9 (83)	0.530
Use of calcium/vitamin D supplements, % (N)	48.1 (52)	51.9 (56)	0.586
Use of anti-osteoporosis medication*, % (N)	12.0 (13)	15.7 (17)	0.431
Living situation			
Home, % (N)	72.2 (78)	70.4 (76)	0.764
Assisted living, % (N)	8.3 (9)	9.3 (10)	0.810
Nursing home, % (N)	19.5 (21)	20.4 (22)	0.865
Functional status			
Katz ADL (6-18), mean (SD)	8.6 (3.0)	8.8 (2.4)	0.653
Barthel ADL (0-100), mean (SD)	79.4 (24.8)	75.9 (18.5)	0.252
iADL status (0-8), mean (SD)	4.8 (2.6)	4.3 (2.5)	0.137
Parker Mobility status (0-9), mean (SD)	6.8 (2.6)	6.3 (2.2)	0.175
Cognitive status Mini-Cog (0-5), mean (SD)	2.7 (1.8)	2.3 (1.5)	0.057
Type of fracture			
Proximal femur, % (N)	72.2 (78)	71.3 (77)	0.880
Proximal humerus, % (N)	8.3 (9)	2.8 (3)	0.075
Pelvis, % (N)	12.0 (13)	21.3 (23)	0.068

Acetabulum, % (N)	2.8 (3)	1.9 (2)	0.651
Distal ulna/radius, % (N)	4.6 (5)	2.8 (3)	0.471
Surgical treatment of fracture, % (N)	88.9 (96)	84.3 (91)	0.418
Time to surgery (hours), median (IQR)	18 (15.5)	20 (16)	0.095
Mini Nutritional Assessment (0- <u>14</u>), mean (SD)	11.0 (3.1)	10.9 (2.8)	0.740
BMI (kg/m ²), mean (SD)	24.5 (4.6)	24.2 (4.0)	0.583
Quality of Life (0- <u>1</u>), mean (SD)	0.8 (0.4)	0.7 (0.3)	0.310

CCI = Charlson Comorbidity Index; ASA score = American Society of Anesthesiologists Classification score; ADL = basic activities of daily living, iADL = instrumental activities of daily living. *Anti-osteoporosis medication includes alendronate, risedronate, teriparatide, zoledronate, denosumab, or romosozumab. Underlined scores mean no comorbidities (in case of age-adjusted CCI), independence (Katz, Barthel, iADL score), no difficulties (Parker mobility, Quality of Life), no impairment (Mini-Cog), or no malnutrition (Mini Nutritional Assessment). Bold values denote statistical significance at the $p < 0.05$ level.

Primary Outcome

	Usual care N = 108	Intervention N = 108	p-value
In-hospital complication, % (N)	46.0 (50)	38.0 (41)	0.215
Delirium, % (N)	34.0 (37)	21.0 (23)	0.033
Congestive heart failure, % (N)	8.0 (9)	5.0 (5)	0.269
Pneumonia, % (N)	10.0 (11)	5.0 (5)	0.119
Deep venous thrombosis, % (N)	0.0 (0)	0.0 (0)	/
Pulmonary embolism, % (N)	0.0 (0)	1.0 (1)	0.316
Myocardial infarction, % (N)	0.0 (0)	0.0 (0)	/
Urinary tract infection, % (N)	19.0 (21)	18.0 (19)	0.726
Mortality, % (N)	2.0 (2)	2.0 (2)	1.000