

## Supplementary material:

### Standardised brief geriatric evaluation versus routine care for preventing functional decline in primary care: a pragmatic cluster-randomised trial

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#### 1. Patient selection

Physicians could use two strategies for patient selection: random selection of one or two patient per consultation date or systematic exhaustive screening of all their patients until reaching the planned sample size. 9/43 (20.9%) FPs chose random selection.

Table S1. Comparison of patients according to selection method

	No random selection	Random selection
<b>Number of physicians</b>	34	9
<b>Number of patients screened</b>	616	338
<b>Number ineligible (% among screened)</b>	47 (7.6)	17 (5.0)
<b>Number of patients included (% among eligible)</b>	328 (57.6)	101 (31.5)
<b>% female among included</b>	62.2	66.3
<b>Mean age among included (in years)</b>	82.0	82.7

When comparing the 429 included patients with non-included aged over 75 years old seen during the screening period, included patients were slightly younger (82 versus 83 years old, and a slightly higher proportion of females (63% vs 60%, not significant).

Table S2. Comparison patient characteristics between not-included and included patients

	<b>Total (N=954)</b>	<b>Included (N=429)</b>	<b>Not included (N=513)</b>	<b>p-value</b>
<b>N female, %, 12 missing</b>	576 (61.2)	271 (63.2)	305 (59.5)	0.244
<b>Mean age at screening (SD) (23 missing)</b>	82.7 (5.3)	82.2 (4.9)	83.2 (5.5)	0.004

## 2. Sensitivity analyses

Table S3. Sensitivity analysis (I) considering deaths and admissions to an institution as having lost more than 1 IADL, respectively ADL. Results of generalized linear mixed effect models

	<b>Intervention (I)</b>	<b>Control (C)</b>	<b>Estimated difference (I-C, 95%CI)*</b>	<b>OR (I/C, 95%CI)</b>	<b>p-value</b>	<b>ICC (95%CI)</b>
At least 1 IADL lost, n/N (%)	95/190 (50.0 %)	99/191 (51.8 %)	-1.8% (-11.8%, 8.1%)	0.93 (0.62,1.39)	0.721	0.00 (0.000,0.066)
At least 1 ADL lost, n/N (%)	44/194 (22.7 %)	46/195 (23.6 %)	-1.0% (-10.2%, 8.3%)	0.94 (0.54,1.64)	0.825	0.04 (0.011,0.168)

Table S4. Sensitivity analysis (II) considering all missing at 2 years as having lost more than 1 IADL, respectively ADL. Results of generalized linear mixed effect models

	<b>Intervention (I)</b>	<b>Control (C)</b>	<b>Estimated difference (I-C, 95%CI)*</b>	<b>OR (I/C, 95%CI)</b>	<b>p-value</b>	<b>ICC (95%CI)</b>
At least 1 IADL lost, n/N (%)	107/201 (53.2 %)	102/193 (52.8 %)	+0.38% (-9.6%,10.1%)	1.02 (0.68,1.51)	0.939	0.00 (0.000,0.044)
At least 1 ADL lost, n/N (%)	57/205 (27.8 %)	48/196 (24.5 %)	+3.1% (-6.5%,12.4%)	1.18 (0.70,1.99)	0.512	0.04 (0.007,0.150)

### 3. Per-protocol population

Table S5. Per protocol analysis. Results of generalized linear (IADL and ADL) and linear (WHOQOL - Score) mixed effect models

	<b>Interventio n (I)</b>	<b>Control (C)</b>	<b>Estimated difference (I-C, 95%CI)*</b>	<b>OR (I/C, 95%CI)</b>	<b>p- value</b>	<b>ICC (95%CI)</b>
At least 1 IADL lost, n/N (%)	38/83 (45.8%)	83/174 (47.7%)	-1.9% (-15.1%, 11.2%)	0.93 (0.52,1.63)	0.782	0.01 (0.001,0.128)
At least 1 ADL lost, n/N (%)	10/87 (11.5%)	30/178 (16.9%)	-5.7% (-14.9,5.2)	0.60 (0.21,1.45)	0.274	0.10 (0.023,0.337)
WHOQOL- OLD score	(N=73)	(N=153)				
Mean difference (sd)	-0.33 (7.8)	0.74 (7.8)	-1.04 (-3.25,1.22)	-	0.363	0.01 (0.000,0.100)

\* Corrected for cluster effect

Abbreviations:

ADL: basic activities of daily living; IADL: instrumental activities of daily living; ICC intracluster correlation; OR odds ratio; sd: standard deviation; WHOQOL-OLD: WHO Quality-of-life score for older adults

## 4. Longitudinal analysis

Table S6. Results of the unadjusted Poisson mixed effect model (IADL and ADL) and of the linear mixed effect model (WHOQOL-score).

	IADL			ADL			WHOQOL-OLD score		
	Median / median ratio	(95% CI)	p-value	Median/ median ratio	(95% CI)	p-value	mean / mean difference	(95% CI)	p-value
<b>baseline control</b>	7.33	(7.16-7.47)	0.00	5.58	(5.47-5.67)	0.00	76.9	(75.24-78.67)	0.00
<b>intervention</b>	0.85	(0.62-1.17)	0.31	0.97	(0.71-1.31)	0.82	0.57	(-1.81-2.96)	0.64
<b>1 year</b>	1.29	(1.08-1.52)	0.00	1.12	(0.86-1.47)	0.41	-1.21	(-2.32--0.09)	0.04
<b>2 years</b>	1.62	(1.37-1.92)	0.00	0.97	(0.73-1.29)	0.82	-0.63	(-1.79-0.53)	0.29
<b>1 year * intervention</b>	1.05	(0.82-1.35)	0.69	0.84	(0.56-1.25)	0.38	0.72	(-0.88-2.31)	0.38
<b>2 years * intervention</b>	1.05	(0.81-1.35)	0.73	0.81	(0.53-1.24)	0.34	0.90	(-0.76-2.56)	0.29

For the first (Poisson), results are expressed in terms of median ratio (due to the logarithmic transformation); for the second (linear), they are expressed in terms of mean differences. In the unadjusted model the interaction between the intervention and the time (1 year and 2 years) gives the effect of intervention on the time change in the outcome.

Table S7. Results of the adjusted Poisson mixed effect model (IADL and ADL) and of the linear mixed effect model (WHOQOL-score).

	IADL			ADL			WHOQOL-OLD score		
	Median/ median ratio	(95% CI)	p-value	Median/ median ratio	(95% CI)	p-value	mean / mean difference	(95% CI)	p-value
<b>baseline control</b>	7.33	(7.16-7.47)	0.00	5.58	(5.47-5.67)	0.00	76.9	(75.24-78.67)	0.00
<b>intervention</b>	0.85	(0.62-1.17)	0.31	0.97	(0.71-1.31)	0.82	0.57	(-1.81-2.96)	0.64
<b>1 year</b>	1.29	(1.08-1.52)	0.00	1.12	(0.86-1.47)	0.41	-1.21	(-2.32--0.09)	0.04
<b>2 years</b>	1.62	(1.37-1.92)	0.00	0.97	(0.73-1.29)	0.82	-0.63	(-1.79-0.53)	0.29
<b>1 year * intervention</b>	1.05	(0.82-1.35)	0.69	0.84	(0.56-1.25)	0.38	0.72	(-0.88-2.31)	0.38
<b>2 years * intervention</b>	1.05	(0.81-1.35)	0.73	0.81	(0.53-1.24)	0.34	0.90	(-0.76-2.56)	0.29
<b>baseline control, age&lt;80, woman</b>	7.71	(7.54-7.82)	0.00	5.52	(5.27-5.68)	0.00	78.26	(75.38-81.1)	0.00
<b>Intervention</b>	0.48	(0.24-0.96)	0.04	0.64	(0.34-1.19)	0.16	-0.63	(-4.68-3.47)	0.77
<b>age&gt;80</b>	2.24	(1.42-3.53)	0.00	1.18	(0.75-1.87)	0.47	-2.58	(-5.67-0.49)	0.10
<b>Men</b>	2.36	(1.53-3.64)	0.00	0.51	(0.31-0.83)	0.01	0.53	(-2.54-3.73)	0.74
<b>Intervention * age&gt;80</b>	1.53	(0.76-3.06)	0.23	1.44	(0.72-2.85)	0.30	1.73	(-2.7-6.08)	0.44
<b>Intervention * Men</b>	1.56	(0.84-2.89)	0.16	1.49	(0.76-2.94)	0.25	0.74	(-3.71-5.09)	0.74
<b>1 year</b>	1.29	(0.86-1.93)	0.23	0.91	(0.54-1.55)	0.74	-2.32	(-4.32--0.32)	0.02
<b>2 years</b>	2.12	(1.43-3.13)	0.00	0.65	(0.37-1.16)	0.14	-1.59	(-3.64-0.46)	0.13
<b>Intervention * 1 year</b>	1.48	(0.77-2.84)	0.25	1.01	(0.44-2.33)	0.98	1.94	(-0.95-4.84)	0.19
<b>Intervention * 2 years</b>	1.72	(0.92-3.22)	0.09	1.36	(0.57-3.27)	0.49	2.75	(-0.21-5.7)	0.07
<b>age&gt;80 * 1 year</b>	1.05	(0.71-1.56)	0.80	1.22	(0.68-2.2)	0.51	0.53	(-1.73-2.78)	0.65
<b>age&gt;80 * 2 years</b>	0.88	(0.6-1.29)	0.52	1.58	(0.84-2.97)	0.16	1.46	(-0.88-3.79)	0.22
<b>1 year * Men</b>	0.94	(0.66-1.34)	0.74	1.31	(0.71-2.42)	0.39	2.01	(-0.28-4.29)	0.09
<b>2 years * Men</b>	0.70	(0.49-0.99)	0.04	1.35	(0.71-2.56)	0.36	0.34	(-2.04-2.71)	0.78
<b>1 year * intervention * age&gt;80</b>	0.75	(0.4-1.41)	0.37	0.86	(0.35-2.14)	0.75	-1.50	(-4.76-1.76)	0.37
<b>2 years * intervention * age&gt;80</b>	0.58	(0.32-1.08)	0.09	0.49	(0.19-1.28)	0.15	-2.08	(-5.45-1.29)	0.23
<b>1 year * intervention * men</b>	0.83	(0.5-1.4)	0.49	0.74	(0.3-1.81)	0.51	-0.53	(-3.85-2.78)	0.76

<b>2 years * intervention * men</b>	0.86	(0.51-1.46)	0.58	0.94	(0.37-2.41)	0.89	-1.87	(-5.33-1.58)	0.29
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For the first (Poisson), results are expressed in terms of median ratio (due to the logarithmic transformation); for the second (linear), they are expressed in terms of mean differences.

In the adjusted model (bottom), interactions between time, intervention and covariates (age and sex) represent eventual age or sex differences in the above effect. All effects are kept into the model regardless to their significance. Graphs are predictions for each combination of arm, time and covariates obtained with each model.

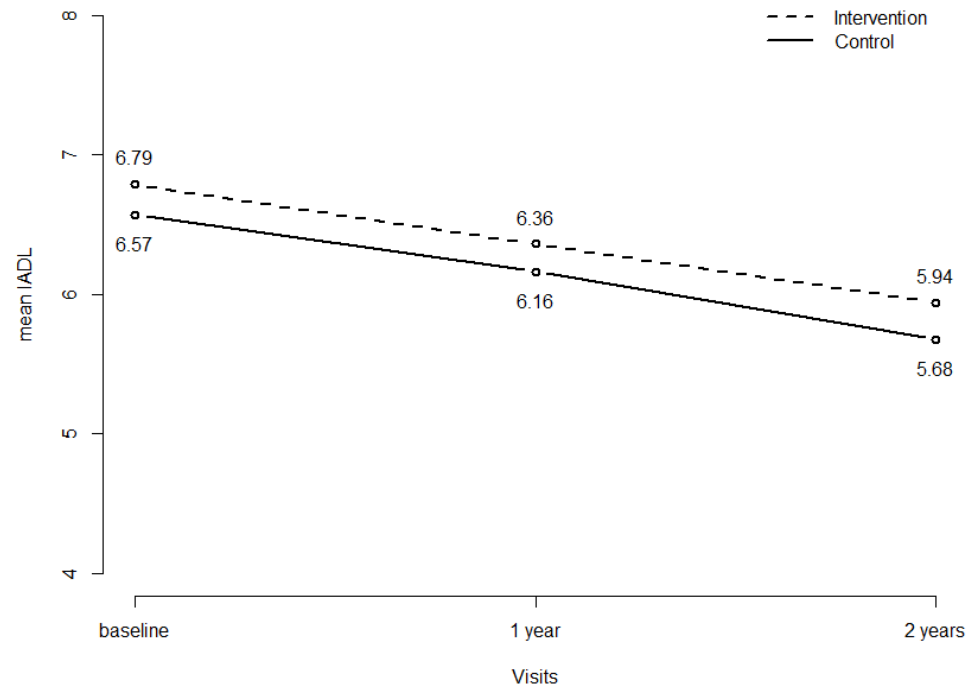


Figure S1. Evolution of independence in instrumental activities of daily living at baseline and after one and two years of the intervention and control arms; AGE3 study (N=414).

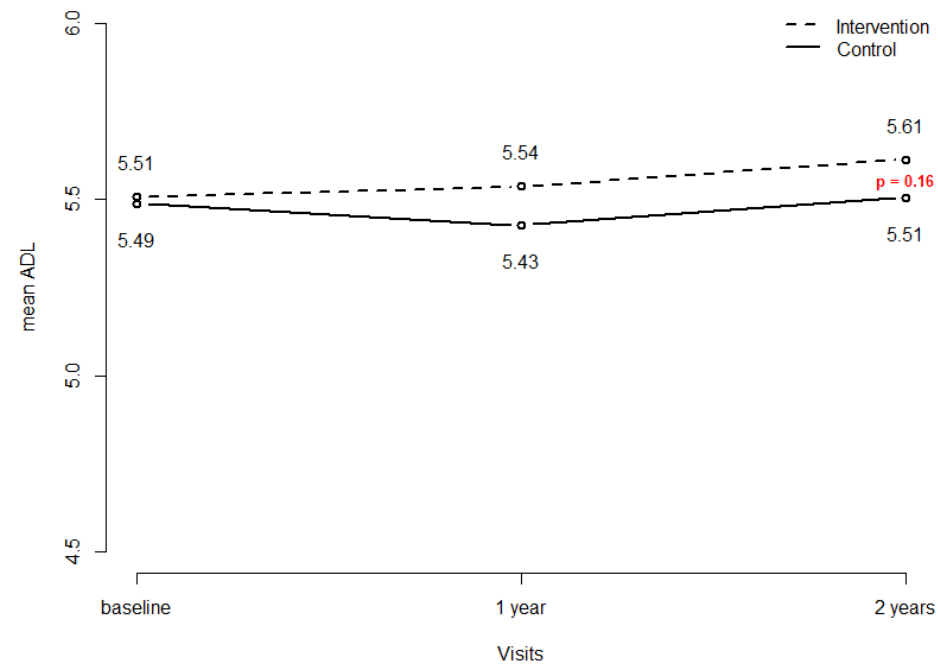


Figure S2. Evolution of independence in basic activities of daily living at baseline and after one and two years of the intervention and control arms; AGE3 study (N=415).

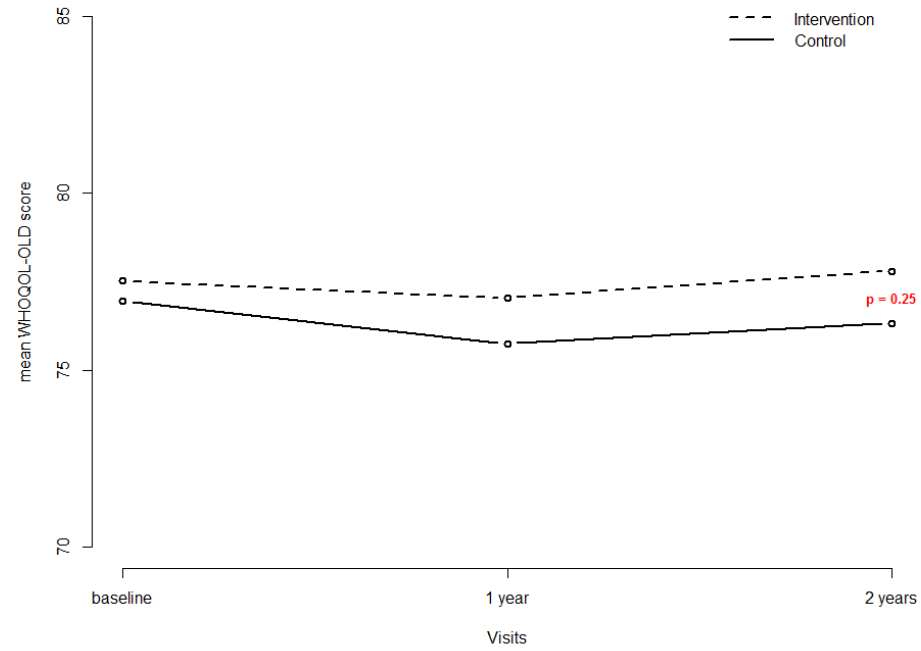


Figure S3. Evolution of the quality-of-life score (WHOQOL-OLD) at baseline and after one and two years of the intervention and control arms; AGE3 study (N=389)



## 5. Longitudinal analysis stratified by age and gender

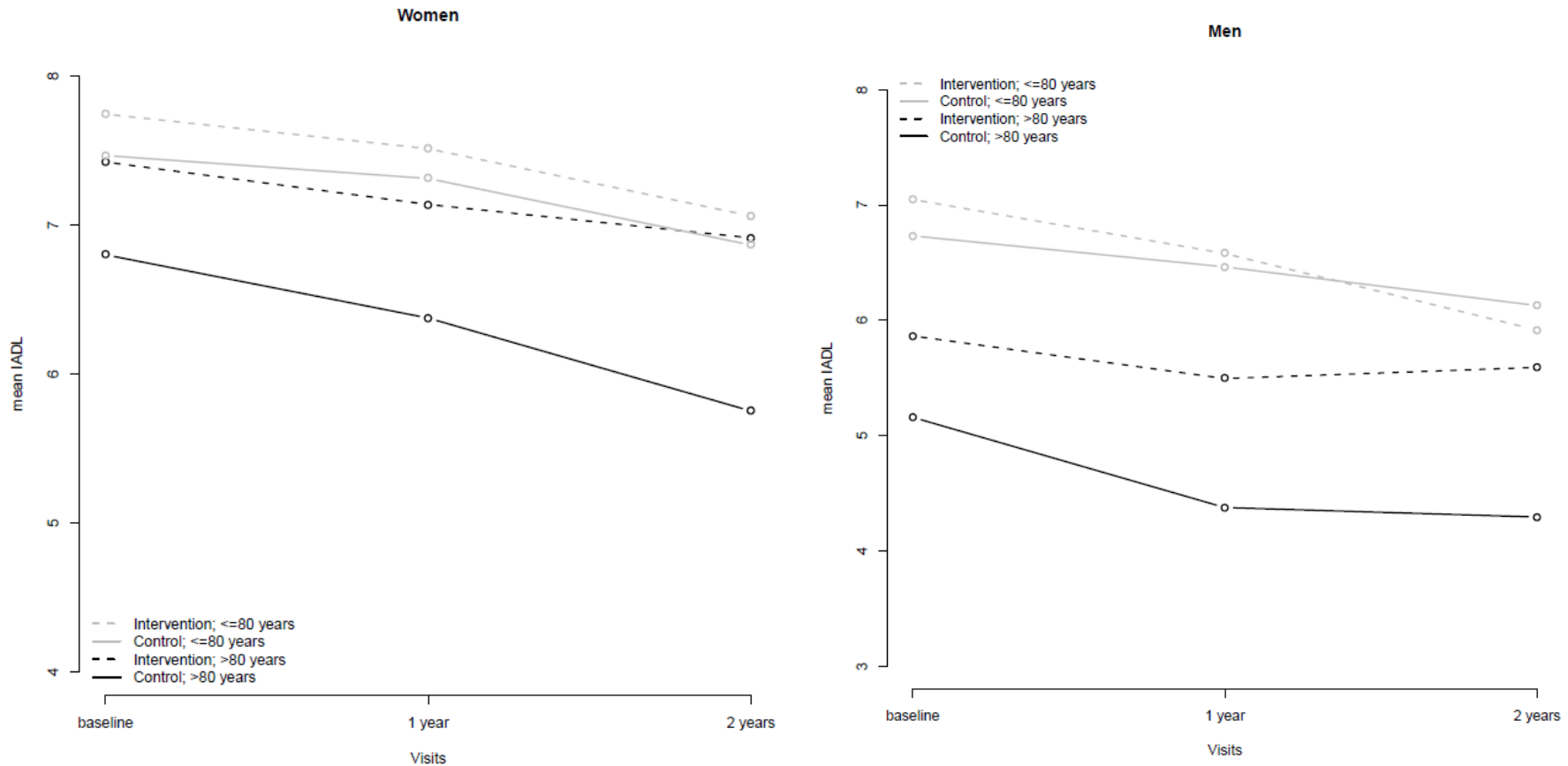


Figure S4. Evolution of independence in instrumental activities of daily living at baseline and after one and two years by gender and age category, in the intervention and control arms; AGE3 study.

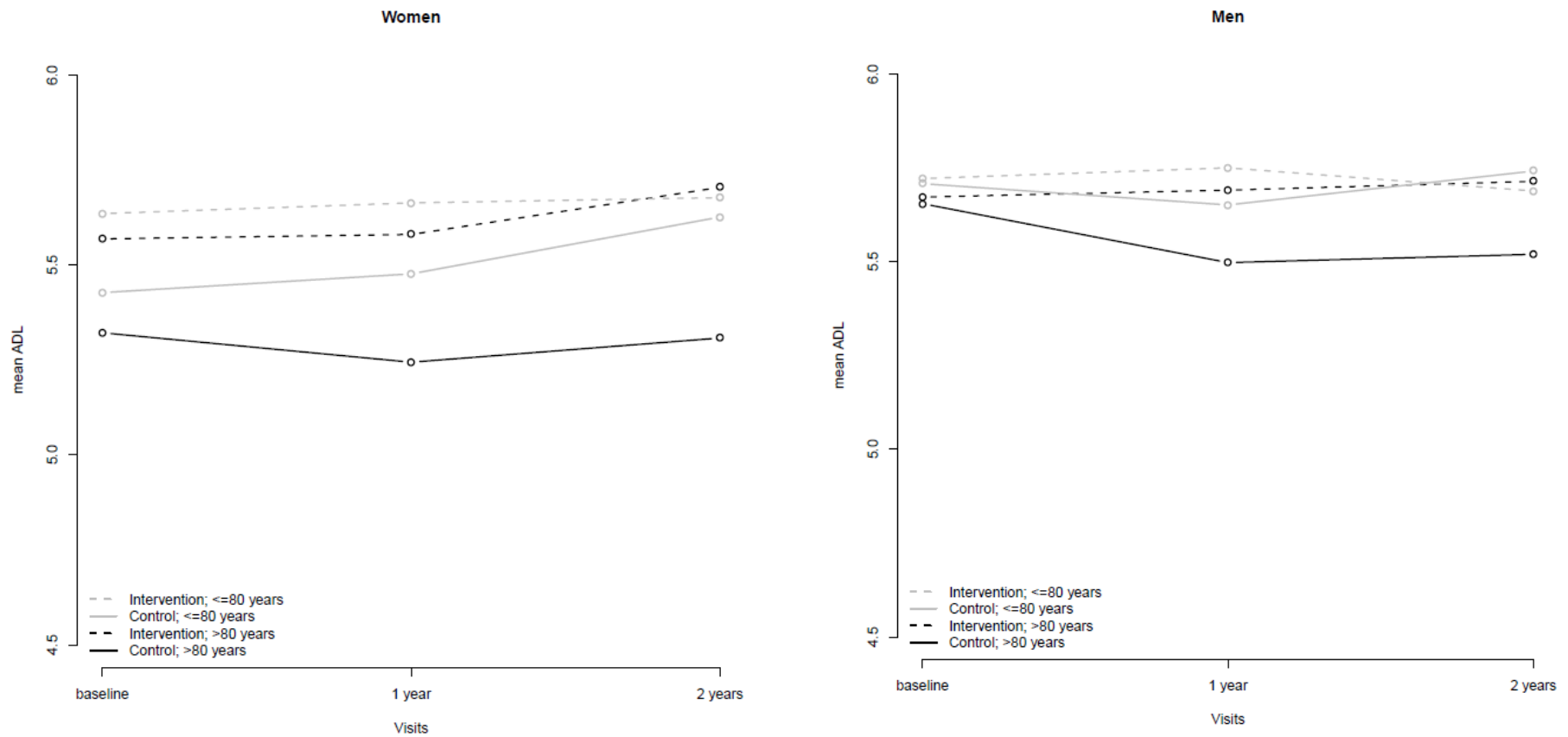


Figure S5. Evolution of independence in basic activities of daily living at baseline and after one and two years by gender and age category in the intervention and control arms; AGE3 study.

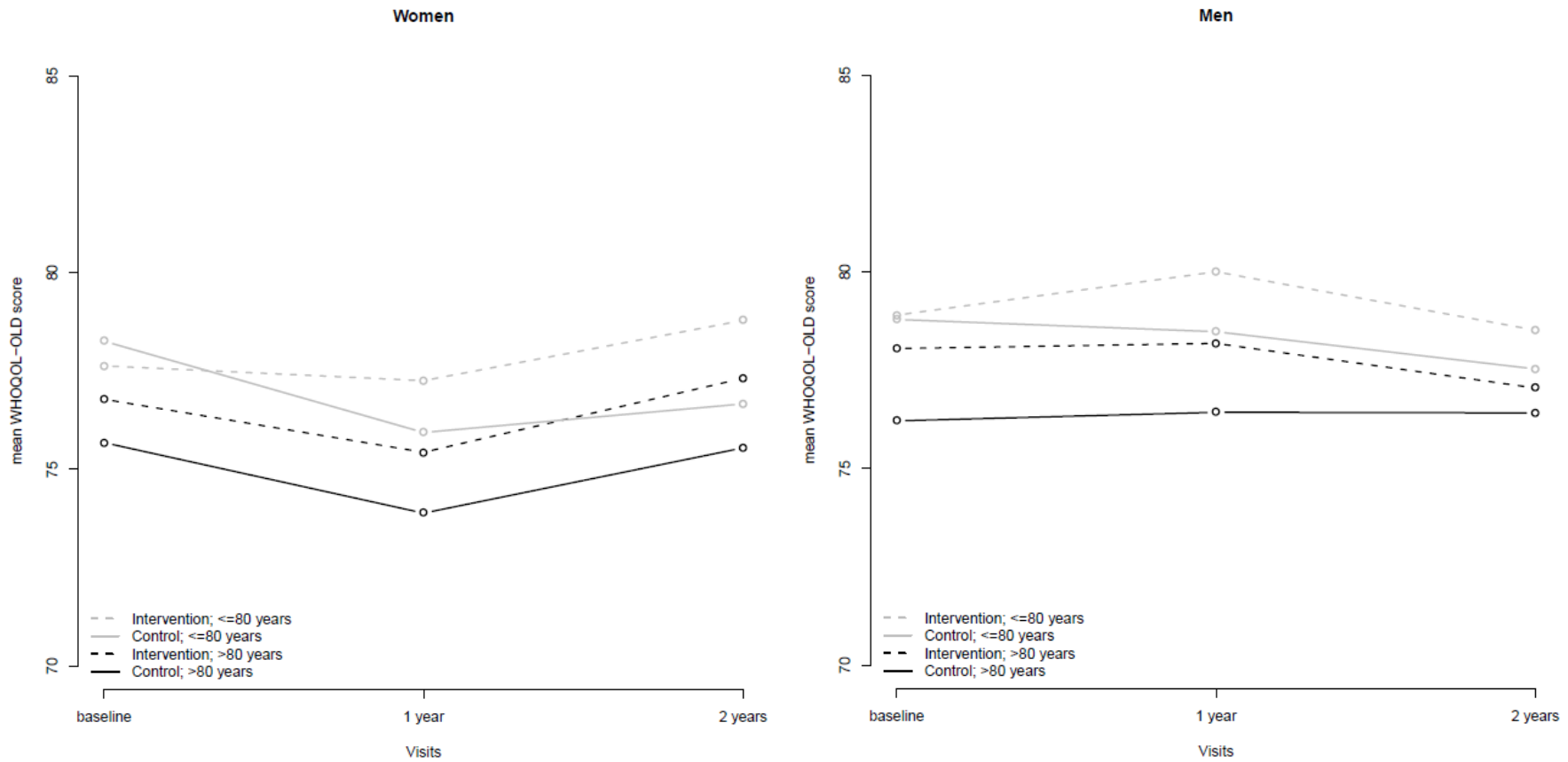


Figure S6. Evolution of the quality-of-life WHOQOL-OLD score at baseline and after one and two years by gender and age category in the intervention and control arms; AGE3 study.

## 6. Distribution of IADL and ADL loss

Table S8. Distribution of difference in instrumental and basic activities of daily living between baseline and two years. A negative difference corresponds to an increase.

	IADL (N=339)	ADL (N=347)
- 4 points	2 (0.6%)	0
- 3 points	1 (0.3%)	0
- 2 points	7 (2.1%)	1 (0.3%)
- 1 points	29 (8.6%)	70 (20.2%)
0 points	145 (42.8%)	225 (64.8%)
1 point	82 (24.2%)	47 (13.5%)
2 points	40 (11.8%)	1 (0.3%)
3 points	18 (5.3%)	2 (0.6%)
4 points	5 (1.5%)	1 (0.3%)
5 points	6 (1.8%)	0
6 points	2 (0.6%)	0
7 points	2 (0.6%)	NA

## 7. Details of instrumental and basic activities of daily living

Table S9. Instrumental activities of daily living (IADL) at baseline, after one- and two-years.

Instrumental activities of daily living	Baseline			One year			Two years		
	Total (N=405)	Control arm (N=198)	Intervention arm (N=207)	Total (N=374)	Control arm (N=188)	Intervention arm (N=186)	Total (N=358)	Control arm (N=183)	Intervention arm (N=175)
<b>Ability to Use Telephone</b>									
1 Operates telephone on own initiative; looks up and dials numbers	347 (85.7)	165 (83.3)	182 (87.9)	307 (82.1)	145 (77.1)	162 (87.1)	309 (86.3)	151 (82.5)	158 (90.3)
1 Dials a few well-known numbers	46 (11.4)	24 (12.1)	22 (10.6)	44 (11.8)	27 (14.4)	17 (9.1)	27 (7.5)	15 (8.2)	12 (6.9)
1 Answers telephone, but does not dial	5 (1.2)	3 (1.5)	2 (1.0)	12 (3.2)	10 (5.3)	2 (1.1)	10 (2.8)	7 (3.8)	3 (1.7)
0 Does not use telephone at all	6 (1.5)	5 (2.5)	1 (0.5)	11 (2.9)	6 (3.2)	5 (2.7)	12 (3.4)	10 (5.5)	2 (1.1)
Missing	1	1		0			0		
<b>Shopping</b>									
1 Takes care of all shopping needs independently	307 (75.8)	147 (74.2)	160 (77.3)	255 (68.2)	126 (67.0)	129 (69.4)	216 (60.3)	105 (57.4)	111 (63.4)
0 Shops independently for small purchases	44 (10.9)	20 (10.1)	24 (11.6)	49 (13.1)	18 (9.6)	31 (16.7)	66 (18.4)	33 (18.0)	33 (18.9)
0 Needs to be accompanied on any shopping trip	25 (6.2)	15 (7.6)	10 (4.8)	30 (8.0)	20 (10.6)	10 (5.4)	30 (8.4)	15 (8.2)	15 (8.6)
0 Completely unable to shop	28 (6.9)	15 (7.6)	13 (6.3)	40 (10.7)	24 (12.8)	16 (8.6)	45 (12.6)	30 (16.4)	15 (8.6)
Missing	1	1		0			1		1

<b>Food Preparation</b>										
1	Plans, prepares, and serves adequate meals independently	293 (72.4)	141 (71.2)	152 (73.4)	270 (72.2)	134 (71.3)	136 (73.1)	239 (66.8)	119 (65.0)	120 (68.6)
0	Prepares adequate meals if supplied with ingredients	48 (11.9)	23 (11.6)	25 (12.1)	32 (8.6)	15 (8.0)	17 (9.1)	51 (14.3)	24 (13.1)	27 (15.4)
0	Heats and serves prepared meals or prepares meals but does not maintain adequate diet	45 (11.1)	22 (11.1)	23 (11.1)	38 (10.2)	20 (10.6)	18 (9.7)	27 (7.5)	15 (8.2)	15 (8.6)
0	Needs to have meals prepared and served	18 (4.4)	11 (5.6)	7 (3.4)	34 (9.1)	19 (10.1)	15 (8.1)	40 (11.2)	25 (13.7)	15 (8.6)
Missing		1	1	0	0			0	0	1
<b>Housekeeping</b>										
1	Maintains house alone with occasion assistance (heavy work)	227 (56.1)	101 (51.0)	126 (60.9)	218 (58.3)	108 (57.5)	110 (59.1)	170 (47.5)	91 (49.7)	79 (45.1)
1	Performs light daily tasks such as dishwashing, bed making	116 (28.6)	60 (30.3)	56 (27.1)	91 (24.3)	42 (22.3)	49 (26.3)	149 (41.6)	66 (36.1)	83 (47.4)
1	Performs light daily tasks, but cannot maintain acceptable level of cleanliness	10 (2.5)	11 (5.6)	5 (2.4)	5 (1.3)	1 (0.5)	4 (2.2)	3 (0.8)	0 (0.0)	3 (1.7)
1	Needs help with all home maintenance tasks	16 (4.0)	11 (5.6)	5 (2.4)	20 (5.4)	13 (6.9)	7 (3.8)	4 (1.1)	2 (1.1)	2 (1.1)
0	Does not participate in any housekeeping tasks	35 (8.6)	19 (9.6)	16 (7.7)	40 (10.7)	24 (12.8)	16 (8.6)	31 (8.7)	23 (12.6)	8 (4.6)
Missing		1	1	0	0			1	1	0
<b>Laundry</b>										
1	Does personal laundry completely	289 (71.4)	135 (68.2)	154 (74.4)	244 (65.2)	116 (61.7)	128 (68.8)	221 (61.7)	114 (62.3)	107 (61.1)

1	Launders small items, rinses socks, stockings, etc	46 (11.4)	28 (14.1)	18 (8.7)	24 (6.4)	11 (5.9)	13 (7.0)	23 (6.4)	9 (4.9)	14 (8.0)
0	All laundry must be done by others	67 (16.5)	34 (17.2)	33 (15.9)	101 (27.0)	58 (30.9)	43 (23.1)	110 (30.7)	58 (31.7)	52 (29.7)
Missing		3	1	2	5	3	2	4	2	2
<b>Mode of Transportation</b>										
1	Travels independently on public transportation or drives own car	337 (83.2)	161 (81.3)	176 (85.0)	288 (77.0)	144 (76.6)	144 (77.4)	260 (72.6)	126 (68.9)	134 (76.6)
1	Arranges own travel via taxi, but does not otherwise use public transportation	6 (1.5)	3 (1.5)	3 (1.5)	10 (2.7)	5 (2.7)	5 (2.7)	7 (2.0)	3 (1.6)	4 (2.3)
1	Travels on public transportation when assisted or accompanied by another	13 (3.2)	6 (3.0)	7 (3.4)	11 (2.9)	7 (3.7)	4 (2.2)	9 (2.5)	3 (1.6)	6 (3.4)
0	Travel limited to taxi or automobile with assistance of another	40 (9.9)	23 (11.6)	17 (8.2)	50 (13.4)	25 (13.3)	25 (13.4)	65 (18.2)	40 (21.9)	25 (14.3)
0	Does not travel at all	8 (2.0)	4 (2.0)	4 (1.9)	13 (3.5)	7 (3.7)	6 (3.2)	17 (4.8)	11 (6.0)	6 (3.4)
Missing		1	1	0	2	0	2	0		
<b>Responsibility for Own Medications</b>										
1	Is responsible for taking medication in correct dosages at correct time	360 (88.9)	174 (87.9)	186 (89.9)	314 (84.0)	158 (84.0)	156 (83.9)	283 (79.1)	138 (75.4)	145 (82.9)
0	Takes responsibility if medication is prepared in advance in separate dosages	36 (8.9)	17 (8.6)	19 (9.2)	40 (10.7)	16 (8.5)	24 (12.9)	60 (16.8)	35 (19.1)	25 (14.3)

0	Is not capable of dispensing own medication	8 (2.0)	6 (3.0)	2 (1.0)	18 (4.8)	12 (6.4)	6 (3.2)	13 (3.6)	9 (4.9)	4 (2.3)
Missing		1	1	0	2	2	0	2	1	1
<b>Ability to Handle Finances</b>										
1	Manages financial matters independently (budgets, writes checks, pays rent and bills, goes to bank); collects and keeps track of income	305 (75.3)	149 (75.3)	156 (75.4)	270 (72.2)	131 (69.7)	139 (74.7)	258 (72.1)	128 (70.0)	130 (74.3)
1	Manages day-to-day purchases, but needs help with banking, major purchases, etc	32 (7.9)	13 (6.6)	19 (9.2)	23 (6.2)	8 (4.3)	15 (8.1)	20 (5.6)	10 (5.5)	10 (5.7)
0	Incapable of handling money	67 (16.5)	35 (17.7)	32 (15.5)	78 (20.9)	46 (24.5)	32 (17.2)	75 (21.0)	42 (23.0)	33 (18.9)
Missing		1	1	0	3	3	0	5	3	2



Table S10. Basic activities of daily living at baseline, after one- and two-years.

Basic activities of daily living		Baseline			One year			Two years		
		Total (N=405)	Control arm (N=198)	Intervention arm (N=207)	Total (N=374)	Control arm (N=188)	Intervention arm (N=186)	Total (N=358)	Control arm (N=183)	Intervention arm (N=175)
<b>Bathing (sponge, shower, or bathtub)</b>										
1	Receives no assistance	373 (92.1)	179 (90.4)	194 (93.7)	330 (88.2)	162 (86.2)	168 (90.3)	324 (90.5)	164 (89.6)	160 (91.4)
1	Receives assistance in bathing only one part of the body (such as back or a leg)	17 (4.2)	11 (5.6)	6 (2.9)	23 (6.2)	12 (6.4)	11 (5.9)	21 (5.9)	9 (4.9)	12 (6.9)
0	Receives assistance in bathing more than one part of the body (or no bathed)	14 (3.5)	7 (3.5)	7 (3.4)	20 (5.4)	13 (6.9)	7 (3.8)	13 (3.6)	10 (5.5)	3 (1.7)
Missing		1	1	0	1	1	0	0	0	0
<b>Dressing (gets clothes from closets and drawers and gets dressed)</b>										
1	Receives no assistance	387 (95.6)	190 (96.0)	197 (95.2)	357 (95.5)	176 (93.6)	181 (97.3)	338 (94.4)	168 (91.8)	170 (97.1)
1	Receives assistance only in tying shoes	10 (2.5)	3 (1.5)	7 (3.4)	7 (1.9)	5 (2.7)	2 (1.1)	9 (2.5)	5 (2.7)	4 (2.3)
0	Receives assistance in getting clothes or in getting dressed, or stays partly or completely undressed	7 (1.7)	4 (2.0)	3 (1.5)	9 (2.4)	6 (3.2)	3 (1.6)	11 (3.1)	10 (5.5)	1 (0.6)
Missing		1	1	0	1	1	0	0		
<b>Going to toilet (for bowel and urine elimination; cleaning self after elimination, and arranging clothes)</b>										
1	Receives no assistance	404 (99.8)	197 (99.5)	207 (100.0)	368 (98.4)	184 (97.9)	184 (98.9)	353 (98.6)	178 (97.3)	175 (100.0)
0	Receives assistance in going to "toilet room" or in cleaning self or in arranging clothes	0	0	0	5 (1.3)	3 (1.6)	2 (1.1)	3 (0.8)	3 (1.6)	0 (0.0)

0	Does not go to the room termed "toilet" for the elimination process	0	0	0	0	0	0	2 (0.6)	2 (1.1)	0 (0.0)
Missing		1	1	0	1	1	0	0		
<b>Transfer (moves in and out of bed or chair)</b>										
1	Receives no assistance	398 (98.3)	194 (98.0)	204 (98.6)	367 (98.1)	183 (97.3)	184 (98.9)	355 (99.2)	180 (98.4)	175 (100.0)
0	Moves in and out of bed or chair with assistance	4 (1.0)	2 (1.0)	2 (1.0)	6 (1.6)	4 (2.1)	2 (1.1)	3 (0.8)	3 (1.6)	0 (0.0)
0	Does not get out of bed	0	0	0	0	0	0	0	0	0
Missing		3	2	1	1	1	0	0	0	0
<b>Continence (physiological process of elimination from bladder and bowel)</b>										
1	Controls urination and bowel movement completely by self	225 (55.6)	108 (54.6)	118 (56.5)	216 (57.8)	101 (53.7)	115 (61.8)	236 (65.9)	121 (66.1)	115 (65.7)
0	Has occasional "accidents"	158 (39.0)	76 (38.4)	82 (39.6)	134 (35.8)	69 (36.7)	65 (35.0)	104 (29.1)	48 (26.2)	56 (32.0)
0	Supervision helps keep urine or bowel control; catheter is used or is incontinence	20 (4.9)	13 (6.6)	7 (3.4)	19 (5.1)	14 (7.5)	5 (2.7)	18 (5.0)	14 (7.7)	4 (2.3)
Missing		2	1	1	5	4	1	0		
<b>Feeding (process of getting food from a plate or equivalent into the mouth)</b>										
1	Receives no assistance	400 (98.8)	195 (98.5)	205 (99.0)	373 (99.7)	187 (99.5)	186 (100.0)	355 (99.2)	181 (98.9)	174 (99.4)
1	Feeds self except for getting assistance in cutting meat or buttering bread	3 (0.7)	2 (1.0)	1 (0.5)	0	0	0	3 (0.8)	2 (1.1)	1 (0.6)
0	Receives assistance in feeding or is fed partly or completely by using tubes or intravenous fluids	1 (0.3)	0 (0.0)	1 (0.5)	0	0	0	0	0	0
Missing		1	1	0	1	1	0	0		

## 8. Adhesion to intervention

Table S11. Use of the active geriatric evaluation, per geriatric syndromes screened and management plan completed, per year of study

	Baseline evaluation (N=179)		First year management plan (N=148)		One-year evaluation (N=126)		Second year management plan (N=115)	
	N missing/incomplete	n (%)	n	%	N missing/incomplete	n (%)	n	%
Functional loss	1	40 (22.4)			0	32 (25.4)		
Osteoporosis	15	113 (63.1)	106	(71.6)	12	78 (61.9)	78	(67.8)
Urinary Incontinence	3	94 (52.5)	82	(55.4)	6	69 (54.8)	69	(60.0)
Falls / walking imbalance	0	80 (44.7)	68	(46.0)	0	49 (38.9)	47	(40.9)
Mood disorder	3	63 (35.2)	56	(37.8)	2	32 (25.4)	34	(29.6)
Visual impairment	17	48 (26.8)	44	(29.7)	14	31 (24.6)	32	(27.8)
Hearing impairment	16	44 (24.6)	41	(27.7)	8	31 (24.6)	32	(27.8)
Cognitive disorder	8	38 (21.2)	37	(25.0)	11	22 (17.5)	27	(23.5)
Undernutrition	11	6 (3.4)	6	(4.1)	25	2 (1.6)	3	(2.6)

Table S12. Summary of adherence to different sections of the management plan. Adherence was estimated for each section of management plan. Total adherence was estimated per patient and per item. Number with management plan can be different from number with positive screening because physicians could reclassify the patient after screening to open the corresponding management plan.

Sections of the AGE tool	Positive screening at baseline (N=179)	N with management plan (year 1)	n (%) adherent	n (%) non-adherent	n (%) missing	Positive screening at one-year (N=126)	N with management plan (year 2)	n (%) adherent	n (%) non-adherent	n (%) missing	Mean number of items adhered to	% adherent items	%management plans with at least >50% adherent items
Osteoporosis (max 5 items)	113 (63.1)	106	9 (8.5)	69 (65.1)	28 (26.4)	78 (61.9)	78	8 (10.3)	51 (65.4)	19 (24.4)	1.9	38.8%	32.1%
Urinary incontinence (max 11 items)	94 (52.5)	82	6 (7.3)	72 (87.8)	4 (4.9)	69 (54.8)	69	13 (18.8)	55 (79.7)	1 (1.5)	7.1	64.1%	71.5%
Falls or gait imbalance (max 15 items)	80 (44.7)	68	0 (0.0)	66 (97.1)	2 (2.9%)	49 (38.9)	47	0 (0.0)	47 (100.0)	0 (0.0)	9.3	64.6%	72.2%
Mood disorder (max 7 items)	63 (35.2)	56	41 (73.2)	15 (26.8)	0 (0.0)	32 (25.4)	34	23 (67.7)	11 (32.4)	0 (0.0)	3.0	83.3%	85.4%
Visual impairment (max 3 items)	48 (26.8)	44	7 (15.9)	35 (79.6)	2 (4.6)	31 (24.6)	32	5 (15.6)	25 (78.1)	2 (6.3)	1.3	41.7%	35.5%
Hearing impairment (max 3 items)	44 (24.6)	41	12 (29.3)	27 (65.9)	2 (4.9)	31 (24.6)	32	11 (34.4)	21 (65.6)	0 (0.0)	1.8	58.9%	60.2%
Cognitive disorder (max 11 items)	38 (21.2)	37	7 (18.9)	28 (75.7)	2 (5.4)	22 (17.5)	27	7 (25.9)	18 (66.7)	2 (7.4)	4.8	68.8%	73.4%
Undernutrition (max 8 items)	6 (3.4)	6	0 (0.0)	6 (100.0)	0 (0.0)	2 (1.6)	3	0 (0.0)	3 (100.0)	0 (0.0)	5.4	68.1%	77.8%
<b>Total</b>	<b>179 (82.5)</b>	<b>148</b>	<b>8 (5.4)</b>	<b>131 (88.5)</b>	<b>9 (6.1)</b>	<b>126 (58.1)</b>	<b>115</b>	<b>8 (7.0)</b>	<b>103 (89.6)</b>	<b>4 (3.5)</b>	<b>10.1 / 16.9</b>	<b>59.9% (3347/5585)</b>	<b>48.2% (159/330)</b>

Table S13. Details of the assessment items of the active geriatric evaluation, at baseline and after one year.

Section of brief assessment tool	Item	n/N baseline	%	n/N 1 year	%
<b>Functionality</b>	Can you dress yourself? Number answering "no"	4/178	2.1	2/126	1.6
	Can you prepare your meals alone? Number answering "no"	12/172	7.0	13/121	10.7
	Can you do your own shopping? Number answering "no"	22/175	12.6	15/123	12.2
	Can you make your payments alone? Number answering "no"	29/175	16.6	22/121	18.2
<b>Urinary incontinence</b>	Do you have difficulty holding in your urine or feel urge to urinate?	57/174	32.8	35/120	29.2
	Do you sometimes find it difficult to reach the toilet in time?	41/174	23.6	25/120	20.8
	Do you have involuntary urine loss when coughing or on effort?	50/176	28.4	31/120	25.8
	Do you sometimes wear protection pads?	66/176	37.5	53/120	44.2
<b>Mood disorder</b>	Over the last 2 weeks, have you been bothered by feeling down, depressed or hopeless	58/176	33.0	30/124	24.2
	Over the last 2 weeks, have you been bothered by little interest or pleasure in doing things	38/176	21.6	18/124	14.5
<b>Cognitive impairment</b>	Clock drawing test: number <2 points	45/172	26.2	29/116	25.0
	3-word registration : number with <3 points	94/173	54.3	51/120	42.5
<b>Visual impairment</b>	Near vision pocket card: right eye not ok	34/163	20.9	24/112	21.4
	Near vision pocket card: left eye not ok	34/163	20.9	22/112	19.6
<b>Hearing impairment</b>	Whispering test: right ear not ok	36/163	22.1	23/117	19.7
	Whispering test: left ear not ok	33/163	20.3	29/117	24.8
<b>Gait and balance</b>	Did you fall during the past year ?	46/177	26.0	30/125	24.0
	On observation, does your patient present gait instability ?	62/177	35.0	38/124	30.7
<b>Osteoporosis</b>	Does your patient have a history of osteoporotic fracture ?	19/171	11.1	16/118	13.6
	Height loss suspect of osteoporosis (≥ 4 cm in women and ≥ 6 cm in men since age 25)	65/133	48.9	32/85	37.7
	Wall-occiput distance >0cm	51/119	42.9	36/79	45.6
	rib-pelvis distance distance <2 fingers	35/109	32.1	24/74	32.4
<b>Undernutrition</b>	Weight loss >5% past month	4/75	5.3	2/55	3.6
	Weight loss >10% past 6 months	3/96	3.1	0/72	0.0

Table S143. Details of adherence to the different recommendations of the management plan.  
 NA = Not applicable. In bold: items considered for adherence calculation.

	Done at 1 year	Not done, patient reason	Not done, physician reason	Not indicated	Missing information	Done at 2 years	Not done, patient reason	Not done, physician reason	Not indicated	Missing information
<b>Urinary incontinence</b>	N=82					N=69				
Complete focused medical history and examination: sensation of emptying, dysuria, pollakiuria, urogynecological problems, urinary retention, prolapse, rectal examination	56 (68.3)	6 (7.3)	19 (23.2)	NA	1 (1.2)	45 (65.2)	5 (7.3)	18 (26.1)	NA	1 (1.5)
Voiding calendar (timing of mictions, nycturia)	48 (58.5)	9 (11.0)	24 (29.3)	NA	1 (1.2)	46 (66.7)	6 (8.7)	16 (23.2)	NA	1 (1.5)
<b>Targeted clinical examination (urinary retention, prolapse, rectal examination)</b>	13 (15.9)	15 (18.3)	52 (63.4)	NA	2 (2.4)	10 (14.5)	13 (18.8)	44 (63.8)	NA	2 (2.9)
<b>Radiological examination for post-miction residue</b>	2 (2.4)	6 (7.3)	35 (42.7)	38 (46.3)	1 (1.2)	1 (1.5)	5 (7.3)	26 (37.7)	36 (52.2)	1 (1.5)
<b>Urinary dipstick</b>	17 (20.7)	4 (4.9)	30 (36.6)	30 (36.6)	1 (1.2)	11 (15.9)	4 (5.8)	25 (36.2)	28 (40.6)	1 (1.5)
<b>Review medication (diuretics, hypnotics, anticholinergics)</b>	40 (48.8)	2 (2.4)	22 (26.8)	16 (19.5)	2 (2.4)	29 (42.0)	3 (4.4)	17 (24.6)	18 (26.1)	2 (2.9)
Prescription of urinary protection pads	43 (2.4)	13 (15.9)	24 (29.3)	NA	2 (2.4)	41 (59.4)	10 (14.5)	17 (24.6)	NA	1 (1.5)
Voiding behavioural hygiene	38 (46.3)	9 (11.0)	32 (39.0)	NA	3 (3.7)	32 (46.4)	3 (4.4)	33 (47.8)	NA	1 (1.5)
<b>Consider anticholinergic / alpha-blocker</b>	10 (12.2)	2 (2.4)	19 (23.2)	49 (59.8)	2 (2.4)	8 (11.6)	4 (5.8)	19 (27.5)	37 (53.6)	1 (1.5)
<b>Refer to gynaecologist / urologist for specialty care / eg surgery</b>	10 (12.2)	7 (8.5)	22 (26.8)	40 (48.8)	3 (3.7)	15 (21.7)	7 (10.1)	16 (23.2)	29 (42.0)	2 (2.9)
<b>Consider specialised physiotherapy and rehabilitation</b>	5 (6.1)	4 (4.9)	30 (36.6)	40 (48.8)	3 (3.7)	4 (5.8)	9 (13.0)	20 (29.0)	34 (49.3)	2 (2.9)
<b>Mood disorder</b>	Done at 1 year (N=56)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information	Done at 2 years (N=34)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information
<b>Complete medical history</b>	44 (78.6)	2 (3.6)	10 (17.9)	NA	0	28 (82.4)	0	6 (17.7)	NA	0
Perform eventually Geriatric Depression Scale (short form)	15 (26.8)	6 (10.7)	35 (62.5)	NA	0	6 (17.7)	4 (11.8)	24 (70.6)	NA	0
<b>Review psychotropic medication</b>	45 (80.4)	2 (3.6)	8 (14.3)	NA	1 (1.8)	29 (85.3)	1 (2.9)	3 (8.8)	NA	1 (2.9)

Mood disorder confirmed or unclear	(N=32)				(N=20)						
- <b>Initiate depression follow-up</b>	23 (71.9)	5 (15.6)	4 (12.5)	NA	0	15 (75.0)	4 (20.0)	1 (5.0)	NA	0	
- Antidepressant medication	12 (37.5)	9 (28.1)	2 (6.3)	NA	9	11 (55.0)	2 (10.0)	3 (15.0)	NA	4 (20.0)	
- <b>Assess alcohol consumption</b>	30 (93.7)				2 (6.3)	19 (95.0)				1 (5.0)	
- <b>Motivational intervention on alcohol consumption</b>	2 (6.3)	0	1 (3.1)	27 (84.4)	2 (6.3)	1 (5.0)	0	0	17 (85.0)	1 (5.0)	
<b>Cognitive disorder</b>	Done at 1 year (N=37)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information	Done at 2 years (N=27)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information	
Medical history, compare to functional status	31 (83.8)	0	5 (13.5)	NA	1 (2.7)	23 (85.2)	1 (3.7)	2 (7.4)	NA	1 (3.7)	
MMSE or Moka test	17 (46.0)	2 (5.4)	17 (46.0)	NA	1 (2.7)	12 (44.4)	3 (11.1)	12 (44.4)	NA	1 (3.7)	
<b>Cognitive disorder confirmed or unclear</b>	<b>(N=26)</b>					<b>(N=19)</b>					
Assess driving ability	3 (11.5)	0	4 (15.4)	NA	19	0	0	0	0	19	
Refer to memory clinic/geriatrician, +/- MRI)	3 (11.5)	3 (11.5)	20 (76.9)	NA	0	2 (10.5)	3 (15.8)	13 (68.4)	NA	1 (5.3)	
Lab tests: full blood count, HbA1c, creatinine clearance, ASAT, ALAT, Gamma-GT, Na, K, Ca, vitamin B12, folic acid, TSH	22 (84.6)	-	3 (11.5)	NA	1 (3.9)	17 (89.5)	-	2 (10.5)	NA	0	
Review medication ( <b>diuretics, psychotropics, opiates, anticholinergics</b> )	24 (92.3)	0	2 (7.7)	NA	0	18 (94.7)	0	1 (5.3)	NA	0	
Assess home care support	15 (57.7)	6 (23.1)	5 (19.2)	NA	0	11 (57.9)	3 (15.8)	5 (26.3)	NA	1	
Meet family / network	12 (46.2)	6 (23.1)	7 (26.9)	1 (3.9)	0	13 (68.4)	2 (10.5)	4 (21.1)	NA	0	
<b>Prepare advance directives</b>	6 (23.1)	8 (30.8)	12 (46.2)	NA	0	5 (26.3)	7 (36.8)	7 (36.8)	NA	0	
Consider specific treatment according to diagnosis	4 (15.4)	5 (19.2)	0	17 (65.4)	0	1 (5.3)	1 (5.3)	5 (26.3)	12 (63.2)	0	
<b>Adapt medication</b>	6 (23.1)	0	4 (15.4)	14 (53.9)	2 (7.7)	7 (36.8)	1 (5.3)	4 (21.1)	6 (31.6)	1	
<b>Procognitive treatment (acetylcholinesterase inhibitors, memantine, ev. ginkgo biloba)</b>	2 (7.7)	0	12 (46.2)	12 (46.2)	0	3 (15.8)	1 (5.3)	11 (57.9)	4 (21.1)	0	

<b>Visual impairment</b>	Done at 1 year (N=44)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information	Done at 2 years (N=32)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information
Complete visual acuity assessment (Snellen chart)	11 (25.0)	3 (6.8)	28 (63.6)	NA	2 (4.6)	8 (25.0)	1 (3.1)	21 (65.6)	NA	2 (6.3)
Refer to ophthalmologist for full assessment (e.g. cataracts, glaucoma)	26 (59.1)	3 (6.8)	13 (29.6)	NA	2 (4.6)	21 (65.6)	1 (3.1)	8 (25.0)	NA	2 (6.3)
<b>Ergo therapist to check indication for auxiliary means</b>	4 (9.1)	8 (18.2)	30 (68.2)	NA	2 (4.6)	7 (21.9)	2 (6.3)	21 (65.6)	NA	2 (6.3)
<b>Hearing impairment</b>	Done at 1 year (N=41)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information	Done at 2 years (N=32)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information
Perform otoscopy (cerumen impaction)	29 (70.7)	1 (2.4)	10 (24.4)	NA	1 (2.4)	16 (50.0)	1 (3.1)	15 (46.9)	NA	0
Refer for audiometry	13 (31.7)	8 (19.5)	19 (46.3)	NA	1 (2.4)	10 (31.3)	9 (28.2)	13 (40.6)	NA	0
Prescription of hearing aid	12 (29.3)	9 (22.0)	18 (43.9)	NA	2 (4.9)	10 (31.3)	11 (34.4)	11 (34.4)	NA	0
<b>Gait and balance</b>	Done at 1 year (N=68)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information	Done at 2 years (N=47)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information
Cardiovascular clinical examination	52 (76.5)	1 (1.5)	13 (19.1)	NA	2 (2.9)	38 (80.9)	0	9 (19.2)	NA	0
Schellong test	13 (19.1)	5 (7.4)	47 (69.1)	NA	3 (4.4)	9 (19.2)	8 (17.0)	30 (63.8)	NA	0
Neurological clinical examination	38 (55.9)	1 (1.5)	27 (39.7)	NA	2 (2.9)	31 (66.0)	3 (6.4)	13 (27.7)	NA	0
Examine feet and shoes	49 (72.1)	0	17 (25.0)	NA	2 (2.9)	31 (66.0)	3 (6.4)	12 (25.5)	NA	1 (2.1)
Refer to specialty care if needed	12 (17.7)	2 (2.9)	20 (29.4)	32 (47.1)	2 (2.9)	12 (25.5)	0	8 (17.0)	27 (57.5)	0
Review medication ( <b>psychotropics, hypotensives</b> )	53 (77.9)	0	12 (17.7)	NA	3 (4.4)	40 (85.1)	0	7 (14.9)	NA	0
Assess alcohol consumption	24 (35.3)				44 (64.7)	14 (29.8)				33 (70.2)
Check calcium and vitamin D	36 (52.9)	2 (2.9)	28 (41.2)	NA	2 (2.9)	26 (55.3)	1 (2.1)	19 (40.4)	NA	1 (2.1)
Home hazard assessment (ergo therapist)	15 (22.1)	17 (25.0)	34 (50.0)	NA	2 (2.9)	15 (31.9)	10 (21.3)	20 (42.6)	NA	2 (4.3)
<b>Assess auxiliary means, telealarm system</b>	21 (30.9)	17 (25.0)	28 (41.2)	NA	2 (2.9)	20 (42.6)	14 (29.8)	13 (27.7)	NA	0
Assess home care support	33 (48.5)	9 (13.2)	23 (33.8)	NA	3 (4.4)	26 (55.3)	10 (21.3)	11 (23.4)	NA	0
Prescribe physical exercise	51 (75.0)	0	15 (22.1)	NA	2 (2.9)	38 (80.9)	2 (4.3)	6 (12.8)	NA	1 (2.1)
Prescribe physical therapy (muscular reinforcement)	27 (39.7)	9 (13.2)	29 (42.7)	NA	3 (4.4)	27 (57.5)	7 (14.9)	13 (27.7)	NA	0
Prescribe adapted shoes	18 (26.5)	8 (11.8)	40 (58.8)	NA	2 (2.9)	13 (27.7)	8 (17.0)	25 (53.2)	NA	1 (2.1)
Consider calcium and vitamin D prescription	45 (66.2)	1 (1.5)	14 (20.6)	6 (8.8)	2 (2.9)	29 (61.7)	2 (4.3)	9 (19.2)	6 (12.8)	1 (2.1)
Motivational intervention on alcohol consumption				68 (100.0)					47 (100.0)	



<b>Osteoporosis</b>	Done at 1 year (N=106)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information	Done at 2 years (N=78)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information
<b>Perform osteodensitometry</b>	30 (28.3)	15 (14.2)	59 (55.7)	NA	2 (1.9)	22 (28.2)	9 (11.5)	45 (57.7)	NA	2 (2.6)
Prescribe physical exercise	40 (37.7)	8 (7.6)	0	NA	58 (54.7)	26 (33.3)	2 (2.6)	2 (2.6)	NA	48 (61.5)
Prescribe physical therapy (muscular reinforcement)	23 (21.7)	9 (8.5)	16 (15.1)	NA	58 (54.7)	18 (23.1)	6 (7.7)	6 (7.7)	NA	48 (61.5)
Consider calcium & Vitamin D prescription	37 (34.9)	1 (0.9)	7 (6.6)	3 (2.8)	58 (54.7)	22 (28.2)	2 (2.6)	3 (3.9)	3 (3.9)	48 (61.5)
Consider specific treatment (biphosphonates, denosumab; others according to specialist advice)	18 (17.0)	11 (10.4)	52 (49.1)	21 (19.8)	4 (3.8)	18 (23.1)	5 (6.4)	37 (47.4)	16 (20.5)	2 (2.6)
<b>Undernutrition</b>	Done at 1 year (N=6)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information	Done at 2 years (N=3)	Not done, patient reason	Not done, physician reason	Not indicated	Missing information
Perform digestive (including constipation) examination	6 (100.0)	0	0	NA	0	2 (66.7)	0	1 (33.3)	NA	0
Perform dental examination	4 (66.7)	0	2 (33.3)	NA	0	0	0	3 (100.0)	NA	0
Assess financial situation	6 (100.0)	0	0	NA	0	0	0	3 (100.0)	NA	0
<b>Consider dietetic advice</b>	0	1 (16.7)	0	5 (83.3)	0	0	1 (33.3)	2 (66.7)	0	0
<b>Review home care support (incl ergotherapy)</b>	2 (33.3)	1 (16.7)	0	3 (50.0)	0	0	0	2 (66.7)	1 (33.3)	0
<b>Treat other causes (e.g. depression, digestive disorder)</b>	1 (16.7)	0	1 (16.7)	4 (66.7)	0	1 (33.3)	0	0	2 (66.7)	0
<b>Review meals organization (shopping, cooking, feeding)</b>	4 (66.7)	0	2 (33.3)	NA	0	1 (33.3)	0	2 (66.7)	0	0
Encourage snacks	3 (50.0)	0	3 (50.0)	NA	0	2 (66.7)	0	1 (33.3)	0	0
<b>Consider hyperproteic supplements</b>	2 (33.3)	0	2 (33.3)	2 (33.3)	0	0	1 (33.3)	1 (33.3)	1 (33.3)	0