

FIGURE 1. Factorial Design of Study of Nonpharmacological Interventions for Nursing Home Residents With Dementia

Convenience List Sample	Intervention Allocation Sample	Patient-Centered Care	Antipsychotic Review	Social Interaction Intervention	Exercise Intervention
1	9	X			
2	10	X			X
3	11	X		X	
4	12	X		X	X
5	13	X	X		
6	14	X	X		X
7	15	X	X	X	
8	16	X	X	X	X

FIGURE 2. CONSORT Diagram Showing Flow of Participants Through Study of Nonpharmacological Interventions for Nursing Home Residents With Dementia

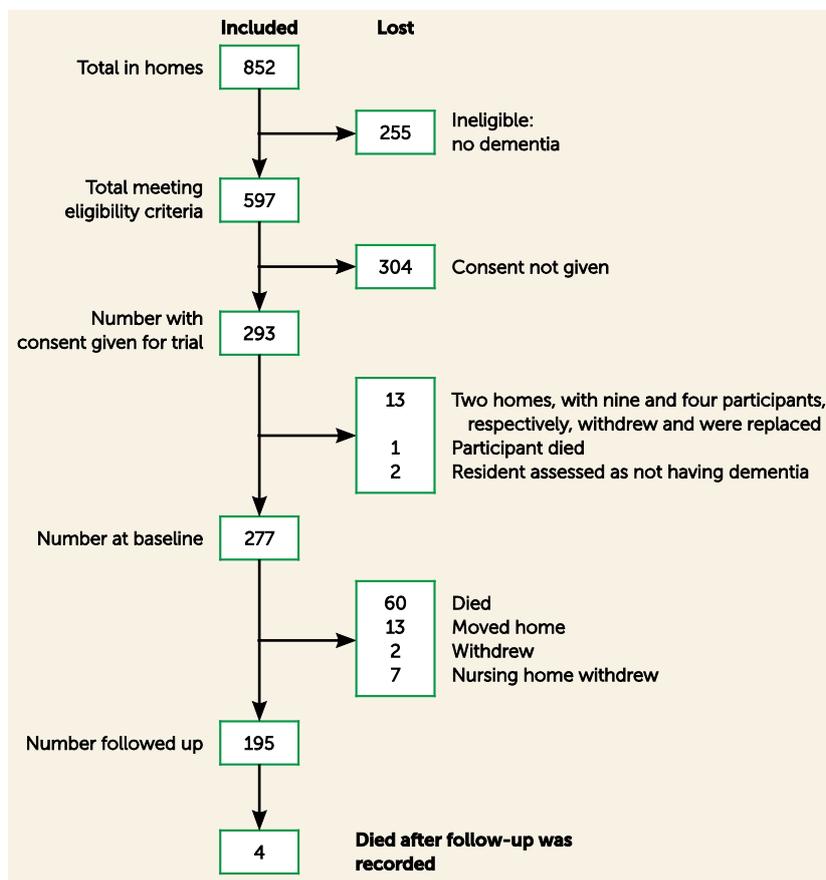


Table S1. Comparison of model including baseline covariates and interaction effects compared with the model just adjusting for baseline covariates when significant interaction effects were present

	Adjusted for Baseline Covariates And Interaction effects			Adjusted for only baseline covariates		
Continuous Outcomes						
	Mean Diff	P-value	95% CI	Mean Diff	P-value	95% CI
CSDD (N=178)						
Antipsychotic Review	-1.70	0.183	-4.29 to 0.90	1.43	0.201	-0.85 to 3.71
Exercise	-1.21	0.425	-4.35 to 1.93	-3.41	0.022	-6.72 to -0.56
Antipsychotic Review # Exercise	4.65	0.015	1.03 to 8.27	—	—	—
NPI-NH total score (N=193)						
Antipsychotic Review	7.37	0.017	1.53 to 13.22	3.27	0.087	-0.54 to 7.07
Social Interaction	5.45	0.046	0.12 to 10.77	1.46	0.482	-2.86 to 5.78
Antipsychotic Review # Social Interaction	-7.81	0.030	-14.74 to -0.88	—	—	—
Binary Outcomes						
	Odds Ratio	P-values	95% CI	Odds Ratio	p values	95% CI
Death (N=255)						
Antipsychotic Review	0.67	0.141	0.39 to 1.14	0.93	0.739	0.62 to 1.41
Social Interaction	0.26	<0.001	0.13 to 0.51	0.37	0.001	0.21 to 0.66
Antipsychotic Review # Social Interaction	2.06	0.033	1.06 to 4.01	—	—	—

Table S2. Sensitivity analyses based on the worst and best case data scenarios

Worst Case Scenario				
	Score	Odds Ratio	P value	95% CI
Antipsychotic Use (N=273)				
Antipsychotic Review	-	0.53	0.039	0.29 to 0.97
Social Interaction	—	0.50	0.012	0.29 to 0.85
Exercise	—	1.53	0.163	0.84 to 2.79
CMAI (N=275)				
Antipsychotic Review	7.37	—	0.102	-1.64 to 16.38
Social Interaction	4.21	—	0.301	-4.18 to 12.60
Exercise	-2.79	—	(0.392)	-9.52 to 3.95
CSDD (N=275)				
Antipsychotic Review	0.71	—	0.603	2.13 to 3.55
Social Interaction	3.61	—	0.126	1.14 to 8.36
Exercise	4.74	—	0.023	0.76 to 8.72
Death (N=277)				
Antipsychotic Review	—	0.68	0.153	0.40 to 1.16
Social Interaction	—	0.40	0.024	0.18 to 0.89
Exercise	—	1.24	0.378	0.77 to 2.00
NPI-NH (N=275)				
Antipsychotic Review	9.09	—	0.045	0.21 to 17.96
Social Interaction	3.99	—	0.206	-2.45 to 10.43
Exercise	-5.34	—	0.033	-10.18 to -0.51
Best Case Scenario				
	Score	Odds Ratio	P value	95% CI
Antipsychotic Use (n =)				
Antipsychotic Review	-	0.21	0.004	0.07 to 0.60
Social Interaction	—	0.48	0.170	0.17 to 1.37
Exercise	—	1.44	0.483	0.52 to 3.94
CMAI (N=194)				
Antipsychotic Review	5.15	—	0.115	-1.40 to 11.69
Social Interaction	5.18	—	0.112	-1.36 to 11.72
Exercise	-1.61	—	0.527	-6.91 to 3.69
CSDD (N=194)				
Antipsychotic Review	0.47	—	0.621	-1.51 to 2.45
Social Interaction	2.75	—	0.115	-0.75 to 6.25
Exercise	2.64	—	(0.057)	-0.09 to 5.36
Death (N=255)				
Antipsychotic Review	—	0.59	0.066	0.34 to 1.04
Social Interaction	—	0.27	<0.001	0.14 to 0.52
Exercise	—	1.18	0.447	0.77 to 1.81
NPI-NH (N=193)				
Antipsychotic Review	6.60	—	0.025	0.97 to 12.24
Social Interaction	5.10	—	0.082	-0.73 to 10.92
Exercise	-3.74	—	0.049	-7.45 to -0.03