

APPENDIX

Table S1. Attendance and intensity of followed lifestyle programmes

	Age ≥ 65 years (n = 99)	Age < 65 years (n = 261)	P-value
Followed 0 programmes	19 (19.2)	36 (13.8)	0.25
Followed 1 programme	50 (50.5)	124 (47.5)	0.64
Physical activity	26 (52.0)	60 (48.4)	
Weight reduction	21 (42.0)	44 (35.5)	
Smoking cessation	3 (6.0)	20 (16.1)	
Followed 2 programmes	29 (29.3)	92 (35.2)	0.32
Physical activity and weight reduction	26 (89.7)	78 (84.8)	
Physical activity and smoking cessation	3 (10.3)	8 (8.7)	
Weight reduction and smoking cessation	0 (0.0)	6 (6.5)	
Followed 3 programmes	1 (1.0)	9 (3.4)	0.30
Intensity Direct Life	56 (56.6)	155 (59.4)	
12 weeks (completed)	49 (87.5)	127 (81.9)	0.41
7 - 11 weeks	1 (1.8)	13 (8.4)	
< 7 weeks	4 (7.1)	10 (6.5)	
Only assessment	2 (3.6)	5 (3.2)	
Intensity Weight Watchers (in sessions)	47 (47.4)	136 (52.1)	
Median no. of sessions [IQR]	30 [12 - 40]	10 [2 - 20]	< 0.001
> 30	23 (48.9)	19 (14.0)	
20-30	6 (12.8)	14 (10.3)	
11-20	7 (14.9)	26 (19.1)	
3-10	7 (14.9)	39 (28.7)	
1-2	4 (8.5)	33 (24.3)	
0	0 (0.0)	5 (3.7)	
Intensity LuchtSignaal	7 (7.1)	43 (16.5)	
Completed	5 (71.4)	29 (67.4)	0.96
Half of the sessions (3-4 sessions)	1 (14.3)	8 (18.6)	
Less than half of the sessions (<3 sessions)	1 (14.3)	6 (14.0)	

Values are n/N (%)

Legend for figures S1-S5

The panel shows how the treatment effect, that is, the difference between (the natural logarithms of the) odds ratios, varies as age increases, for each of the five outcomes. The top graphs, for each outcome, show the results of the non-parametric subgroup treatment effect pattern plot (STEPP, tail method) approach.¹ The straight middle graphs show the results of linear models, while the bottom graphs show fractional polynomial-2 models with intermediate flexibility (flex3) as described in reference 3 [*flex* option in Stata's user-written *mfp* command]. The p-values below each graph are for the interaction of treatment with age. As always, p-values should not be interpreted too rigidly, and these p-values are no exception. We interpret these graphs as strong evidence of a stronger treatment effect with increasing age for body mass index (BMI); moderate to weak evidence for overall success and unchanged lifestyle-related risk factors; and no evidence for a different treatment effect at different ages for smoking and exercise. Grey areas are 95% confidence intervals. All graphs were based on data from 711 patients. Models were not adjusted for confounders.

References

1. Bonetti M, Gelber RD. Patterns of treatment effects in subsets of patients in clinical trials. *Biostatistics* 2004;5:465–481.
2. Royston, P., Sauerbrei W. A new measure of prognostic separation in survival data. *Statistics in Medicine* 2004;23:723–748.
3. Royston, P., Sauerbrei W. Two techniques for investigating interactions between treatment and continuous covariates in clinical trials. *The Stata Journal* 2009; 9(2):230–251.

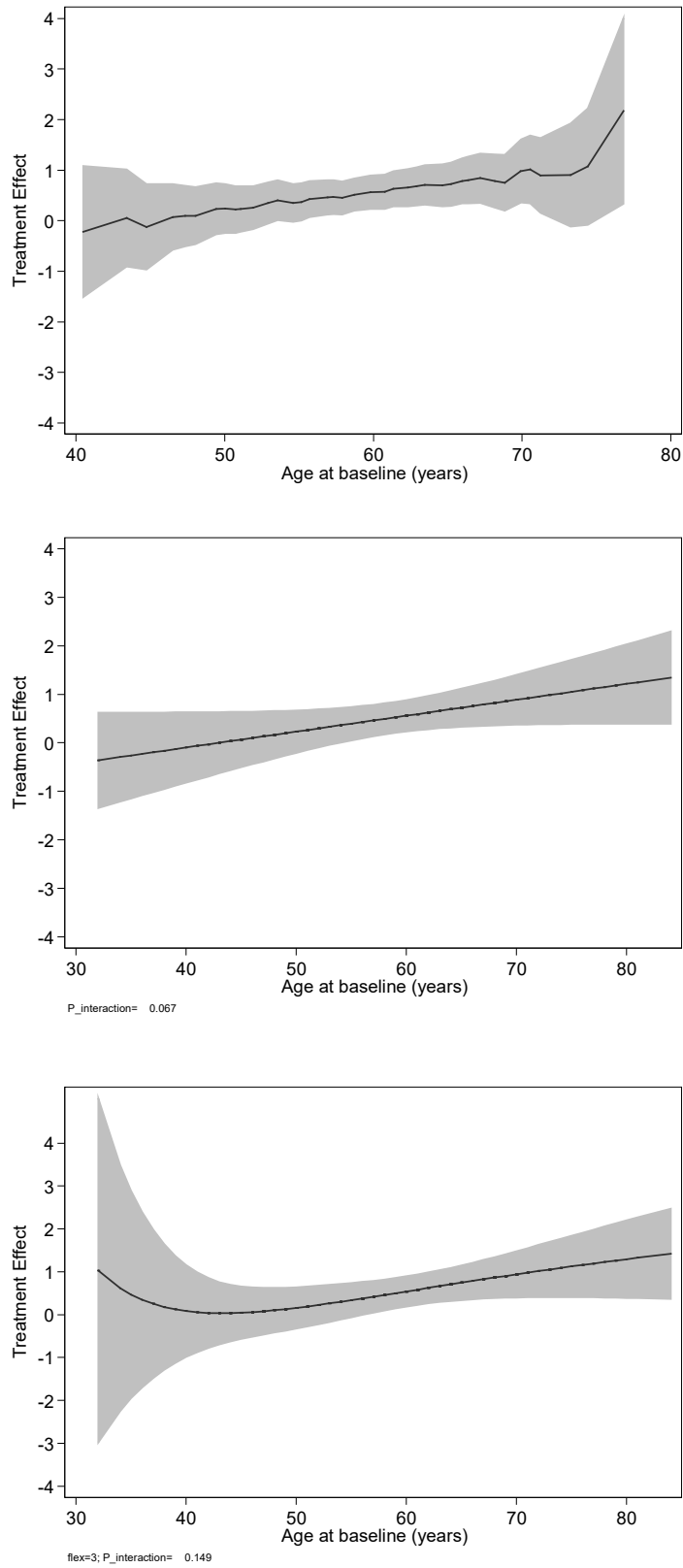


Figure S1. Treatment effect by age as a continuous variable for success on lifestyle-related risk factors

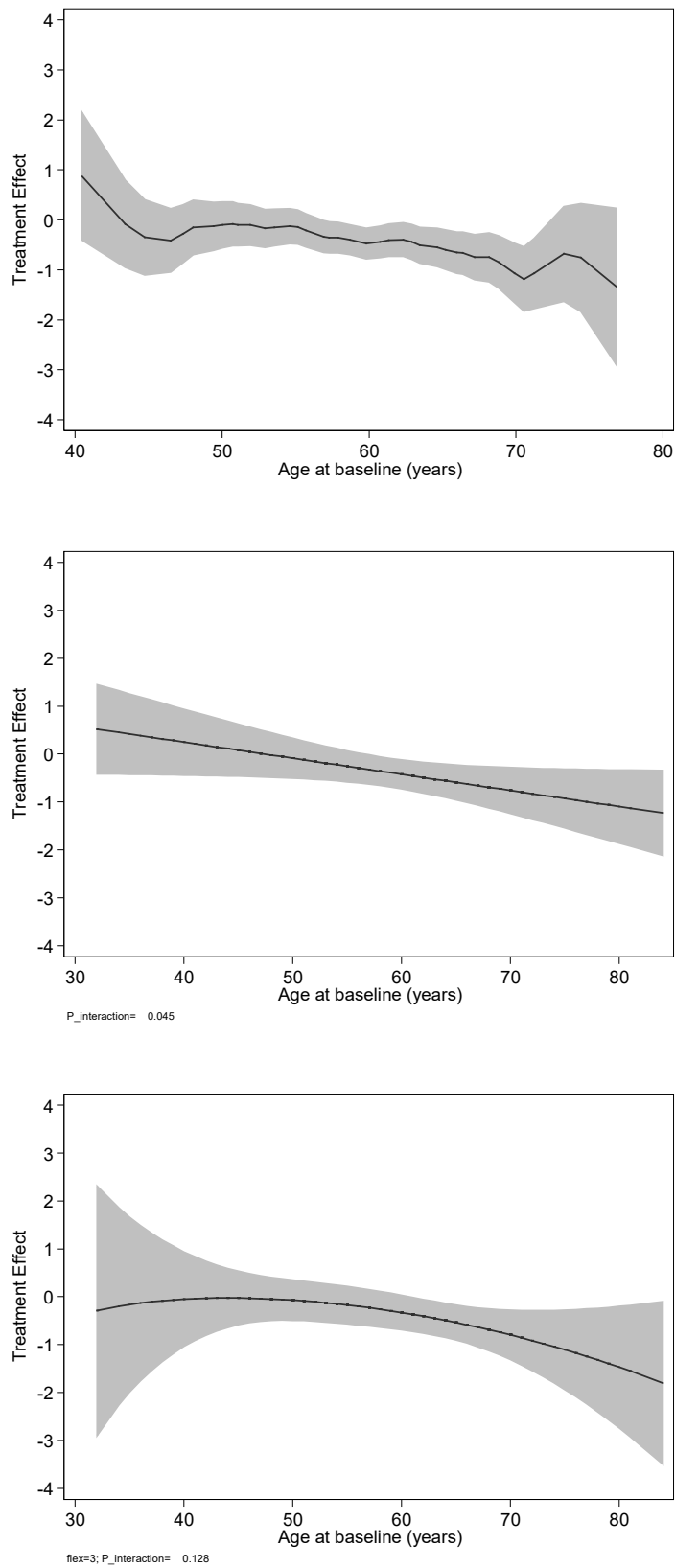


Figure S2. Treatment effect by age as a continuous variable for non-improved lifestyle-related risk factors

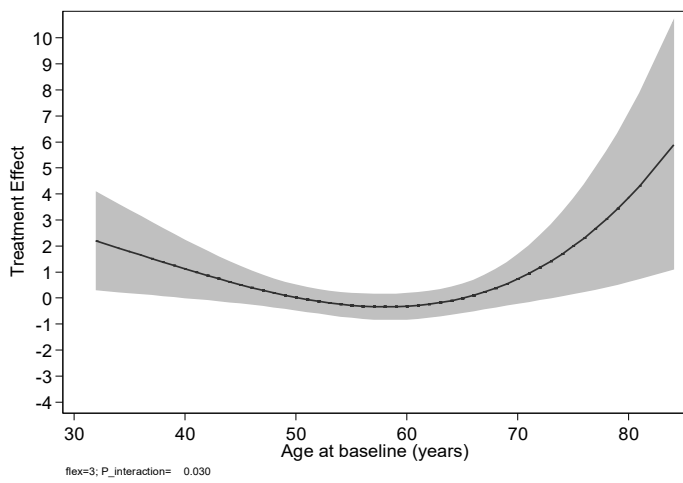
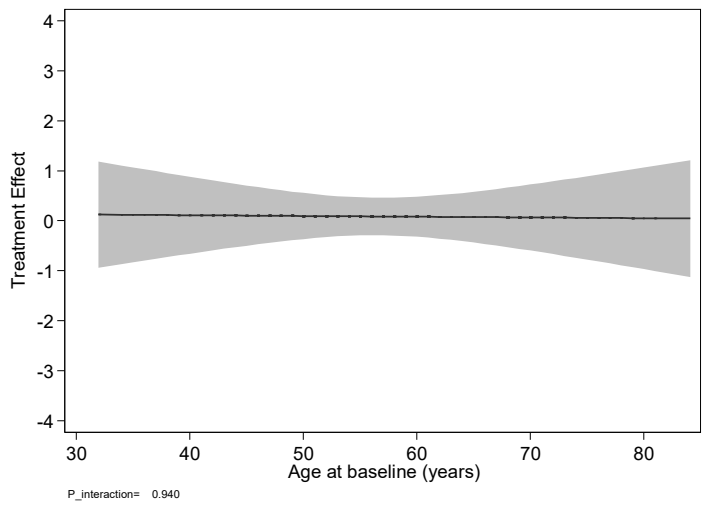
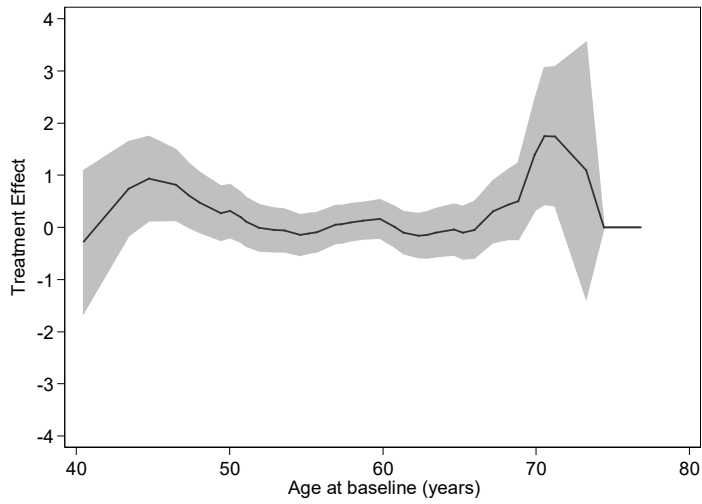


Figure S3. Treatment effect by age as a continuous variable for smoking cessation

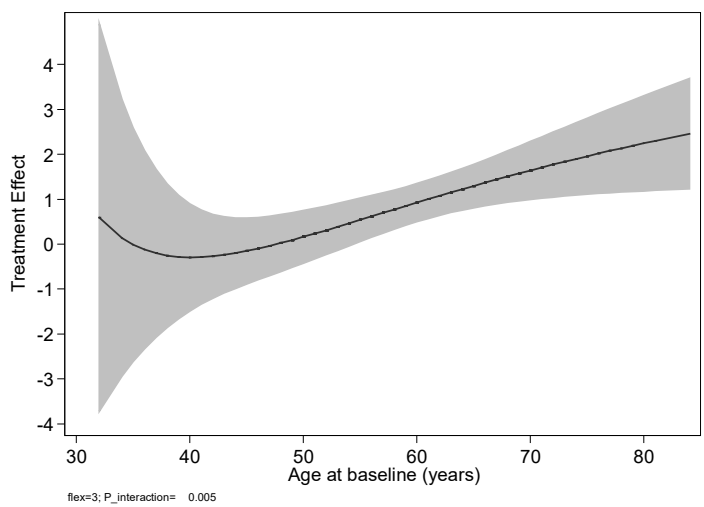
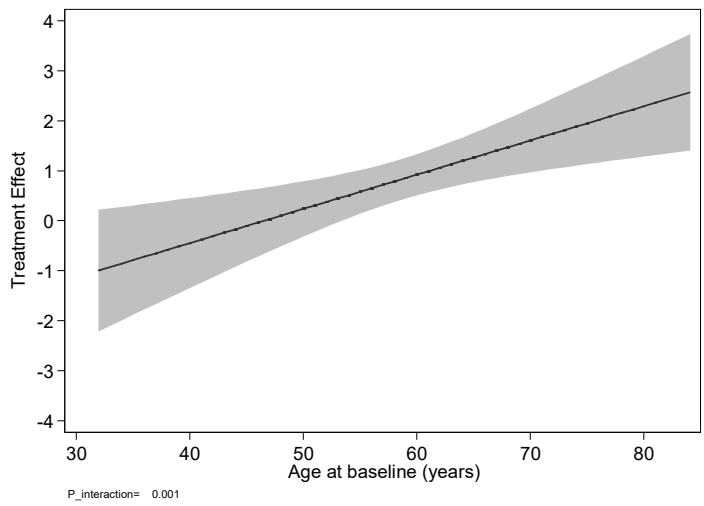
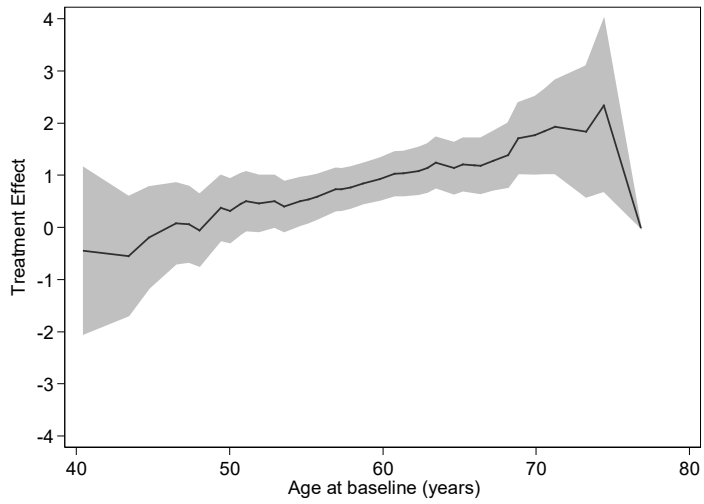


Figure S4. Treatment effect by age as a continuous variable for weight loss

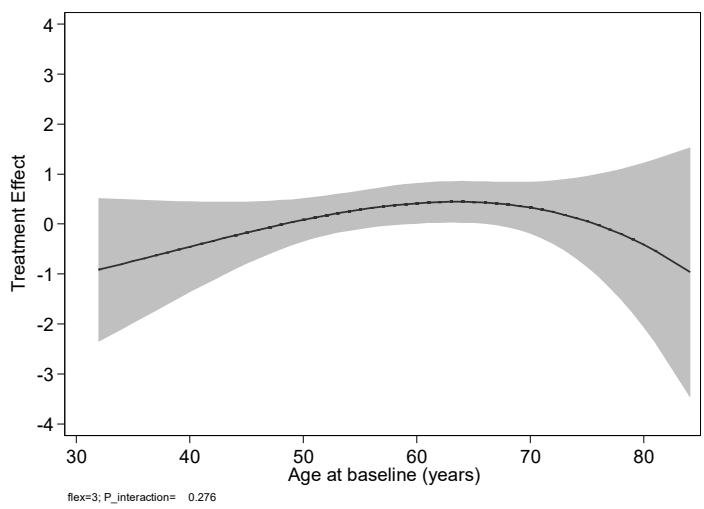
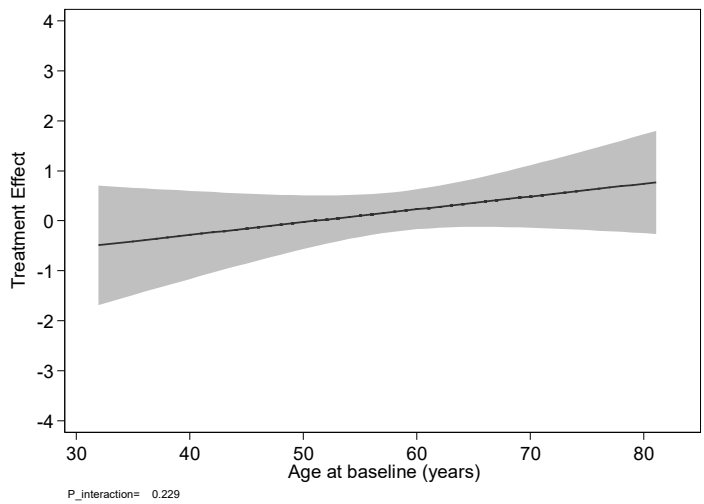
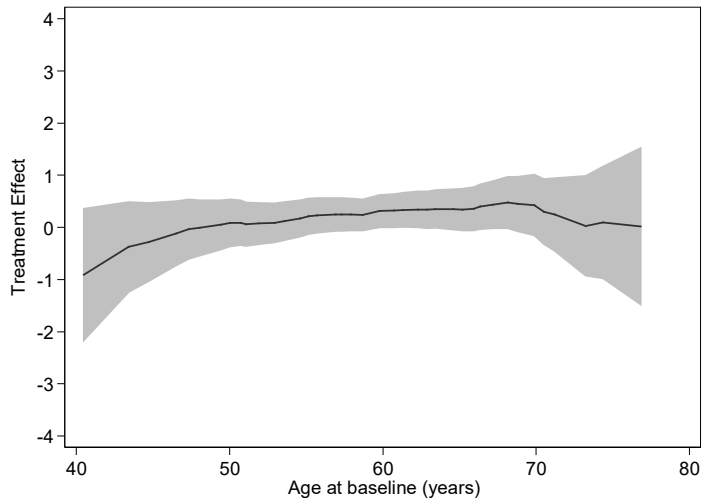


Figure S5. Treatment effect by age as a continuous variable for physical activity