

Supplemental Table 1. Comparison of baseline characteristics of participants included and excluded from the analytical sample

	Included	Excluded	Died by wave 6	p difference	Included with no missing	Excluded with no missing	Dead with no missing
n	2437	6119	2550				
Sex, % female	56.5	56.88	48.2	<.0001			
Age, years	58.8 ±8.1	60.9 ±9	71.9 ±9.5	<.0001	2437	6119	2550
BMI, kg/m ²	27.1 ±4.1	27.9 ±4.7	27.5 ±4.7	<.0001	2437	5450	2154
CRP, mg/L	2.27 ±2.11	2.51 ±2.18	3.02 ±2.27	<.0001	1229	1650	815
Number of CRP occasions	2.34 ±0.47	0.72 ±0.79	0.59 ±0.74	<.0001	2437	6119	2550
Education, %				<.0001	2437	6117	2549
Low	30.7	43.67	58.14				
Medium	39.6	35.08	27.81				
High	29.8	21.25	14.04				
Current smokers, %	14.7	20.27	21.65	<.0001	2437	6117	2550
Use of NSAID, %	12.68	17.43	32	<.0001	2437	6119	2550
Use of antihypertensive drug, %	13.21	19.35	34.43	<.0001	2437	6119	2550
Hypertensive, %	41.5	51.1	63.2	<.0001	1943	4005	1768
Vigorous physical activity, %	22.4	13.28	5.11	<.0001	1619	3606	1624
Arthritis wave 1, %	26.5	32.38	40.42	<.0001	2436	6115	2548
Limitation with ADL wave 1, %	10.1	18.21	37.57	<.0001	2437	6045	2489
Limitation with IADL wave 1, %	9.2	18.88	40.26	<.0001	2437	6045	2489
Depression wave 1 (CES-D≥4), %	10.8	16.01	22.91	<.0001	2407	5907	2396

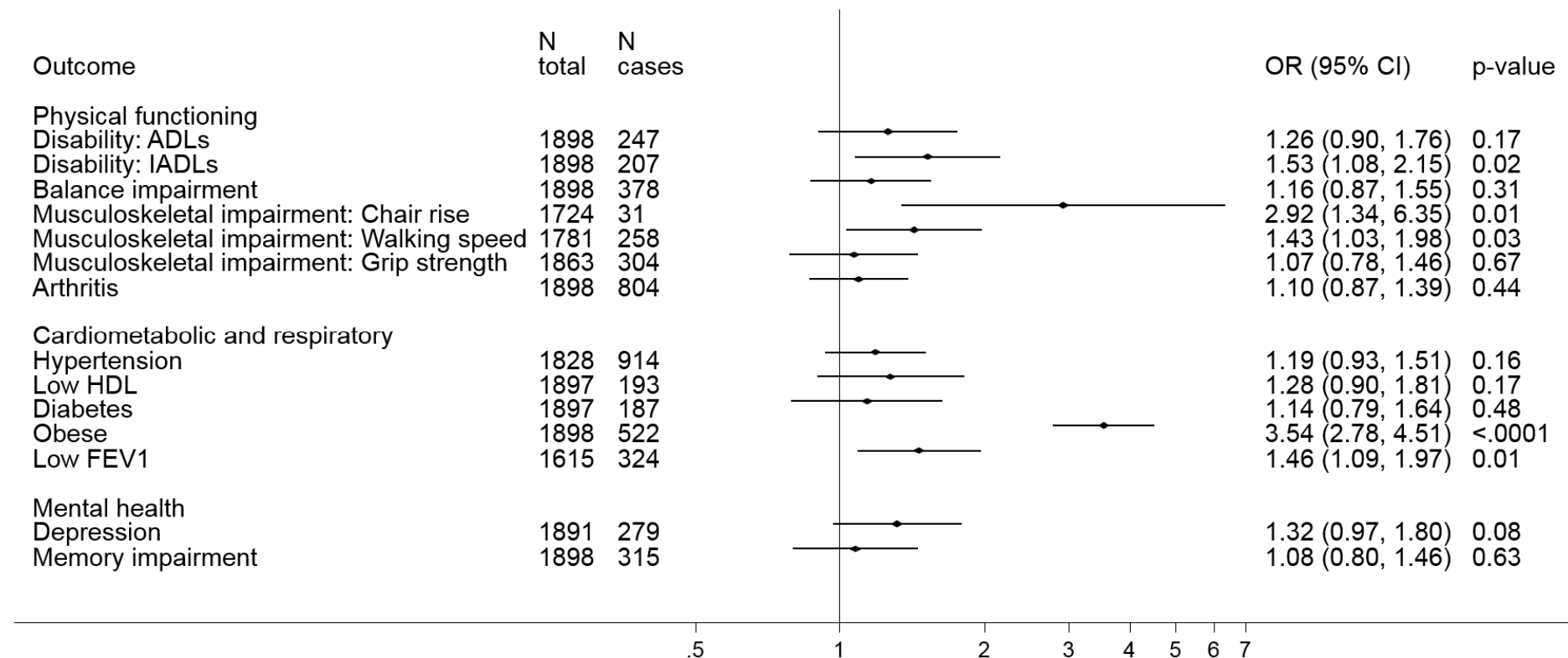
Supplemental Table 2. Generalized linear regression models for associations between CRP trajectories and continuous outcomes at wave 6 (2012-2013), the English Longitudinal Study of Ageing

Continuous outcome	N total	CRP trajectory						
		Stable-low	Medium-to-high	p-value	High-to-medium	p-value	Stable-high	p-value
		B (SE) ^a	B (SE) ^a		B (SE) ^a		B (SE) ^a	
Cardiometabolic health								
SBP (mm Hg) ^b	2303	Ref	2.52 (1.11) *	0.02	2.24 (1.31)	0.09	1.76 (1.84)	0.34
HDL-cholesterol (mmol/L)	2038	Ref	-0.1 (0.03) *	0.001	-0.09 (0.03) *	0.01	-0.09 (0.05) *	0.07
HbA1c (mmol/mol)	2019	Ref	1.70 (0.46) *	0.0002	0.16 (0.57)	0.78	2.02 (0.77) *	0.01
BMI (kg/m ²)	2348	Ref	0.95 (0.15) *	<.0001	-0.06 (0.18)	0.74	0.74 (0.26) *	0.004
Respiratory function								
FEV1 (% predicted value)	2077	Ref	-5.57 (1.61) *	0.001	-5.39 (1.92) *	0.01	-6.2 (2.72) *	0.02
Physical functioning								
Grip strength (kg) ^c	2381	Ref	0.07 (0.41)	0.87	-0.31 (0.49)	0.53	-1.92 (0.69) *	0.01
Walking speed (m/s) ^c	2219	Ref	-0.02 (0.01)	0.26	0 (0.02)	0.85	-0.01 (0.02)	0.64
ADL (number of difficulties) ^d	2436	Ref	0.14 (0.05) *	0.003	-0.05 (0.05)	0.35	-0.02 (0.08)	0.75
IADL (number of difficulties) ^e	2436	Ref	0.05 (0.04)	0.16	0 (0.04)	0.91	-0.03 (0.06)	0.66
Mental health								
Depressive symptoms (0-8) ^f	2422	Ref	0.26 (0.09) *	0.01	0.09 (0.11)	0.45	-0.05 (0.16)	0.73
Memory score (0-20) ^g	2437	Ref	-0.11 (0.18)	0.56	-0.19 (0.22)	0.38	0.09 (0.3)	0.77

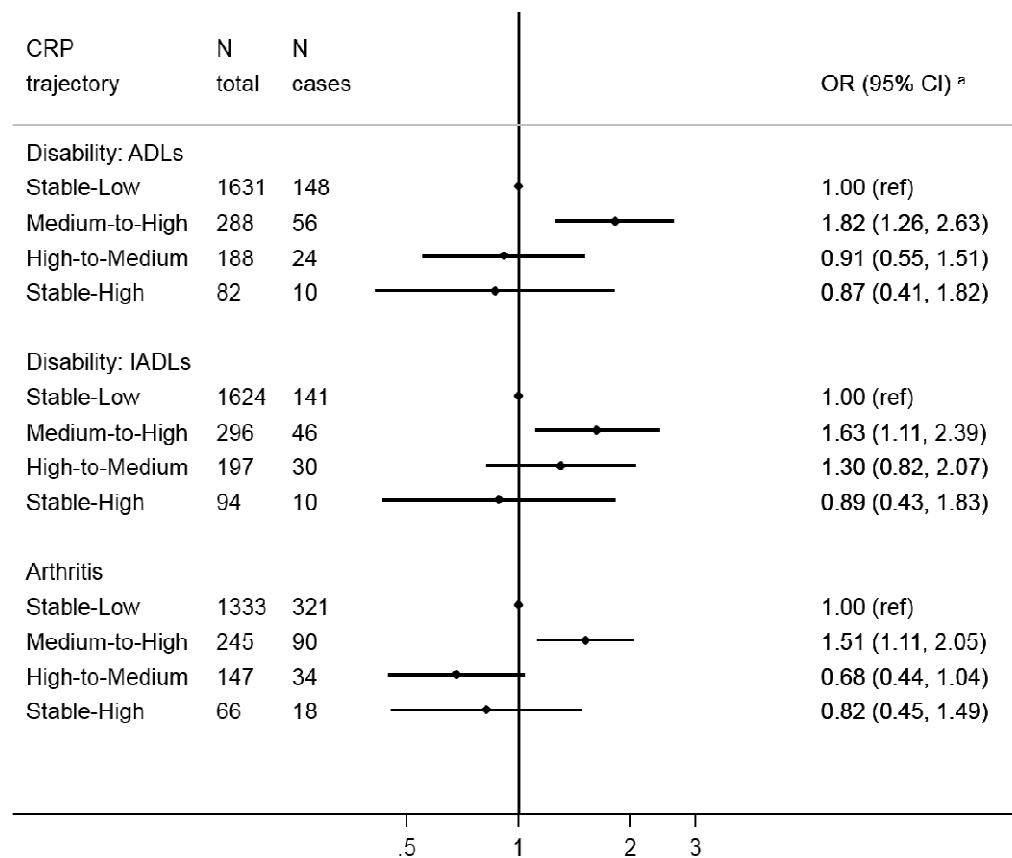
^a Regression coefficients adjusted for sex and baseline age, body mass index, smoking status, physical activity level, educational level and use of anti-inflammatory drugs; ^b Further adjusted for baseline antihypertensive drug use; ^c Further adjusted for baseline arthritis; ^d Further adjusted for baseline ADL difficulties; ^e Further adjusted for baseline IADL difficulties; ^f Further adjusted for baseline depressive symptoms; ^g Further adjusted for baseline memory score. * P<0.05

Abbreviations: SBP, systolic blood pressure; HbA1c, glycated haemoglobin; HDL-chol, high density lipoprotein cholesterol; BMI, body mass index; FEV1, forced expiratory volume in 1 second; ADL, activities of daily living; IADL; instrumental activities of daily living; CES-D, centre for epidemiologic studies depressive scale.

Supplemental Figure 1. Cross-sectional associations (OR and 95% CI) between elevated CRP (≥ 3 vs < 3 mg/L) and ageing outcomes at wave 6 (2012-2013), the English Longitudinal Study of Ageing

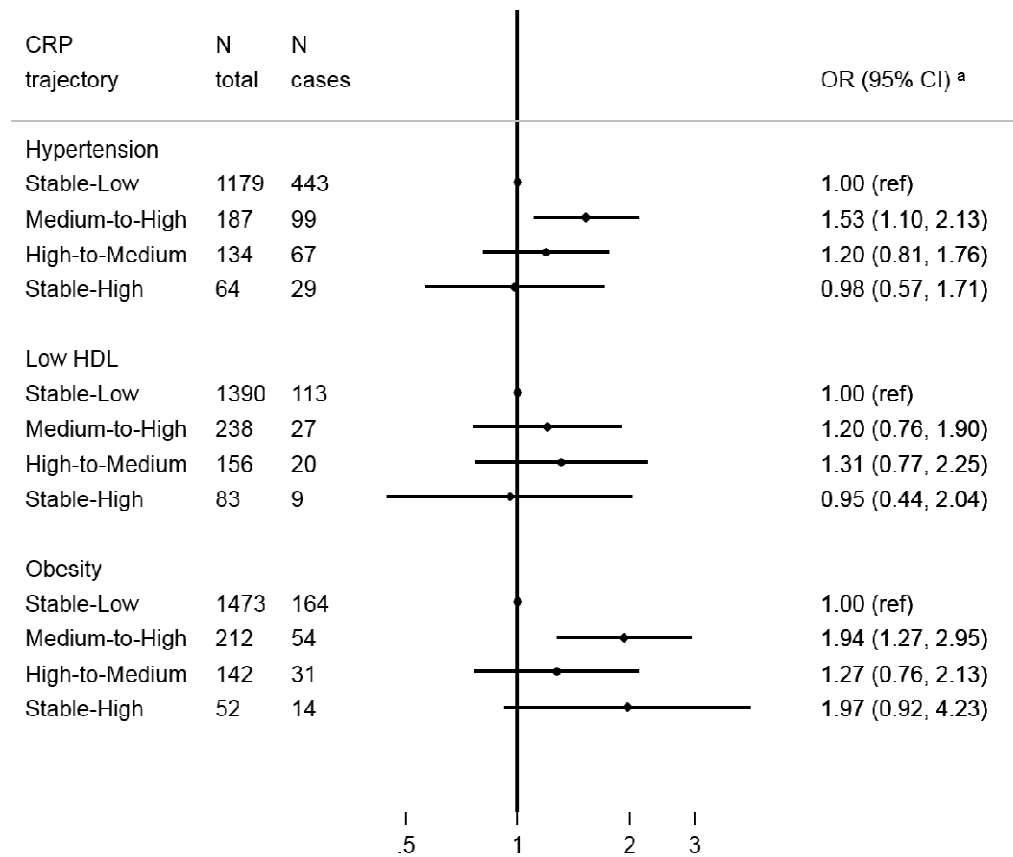


Supplemental Figure 2. Odds ratios (95% CI) for the associations between CRP trajectories and impairment in physical functioning at wave 6 (2012-2013) after excluding participants with respective impairment at baseline, the English Longitudinal Study of Ageing



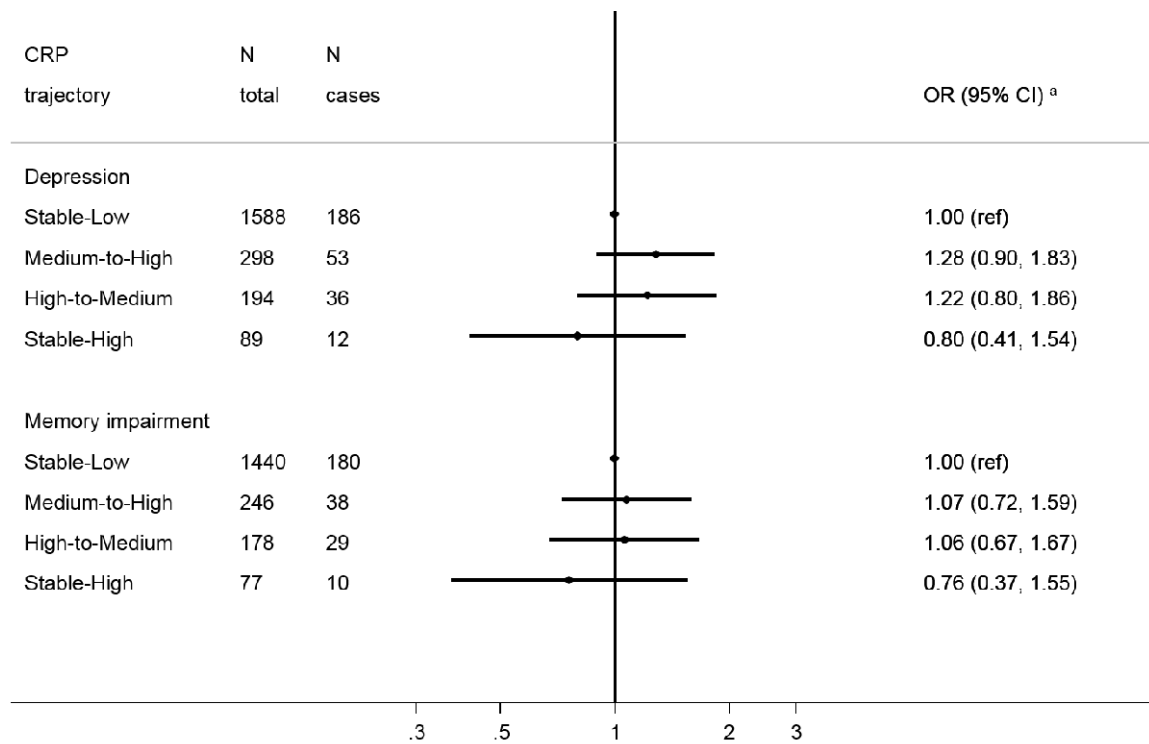
^a All ORs are adjusted for sex and baseline age, body mass index, smoking status, physical activity level, educational level and use of anti-inflammatory drugs.

Supplemental Figure 3. Odds ratios (95% CI) for the associations between CRP trajectories and markers of cardiometabolic health at wave 6 (2012-2013) after excluding participants with respective dysfunction at baseline, the English Longitudinal Study of Ageing



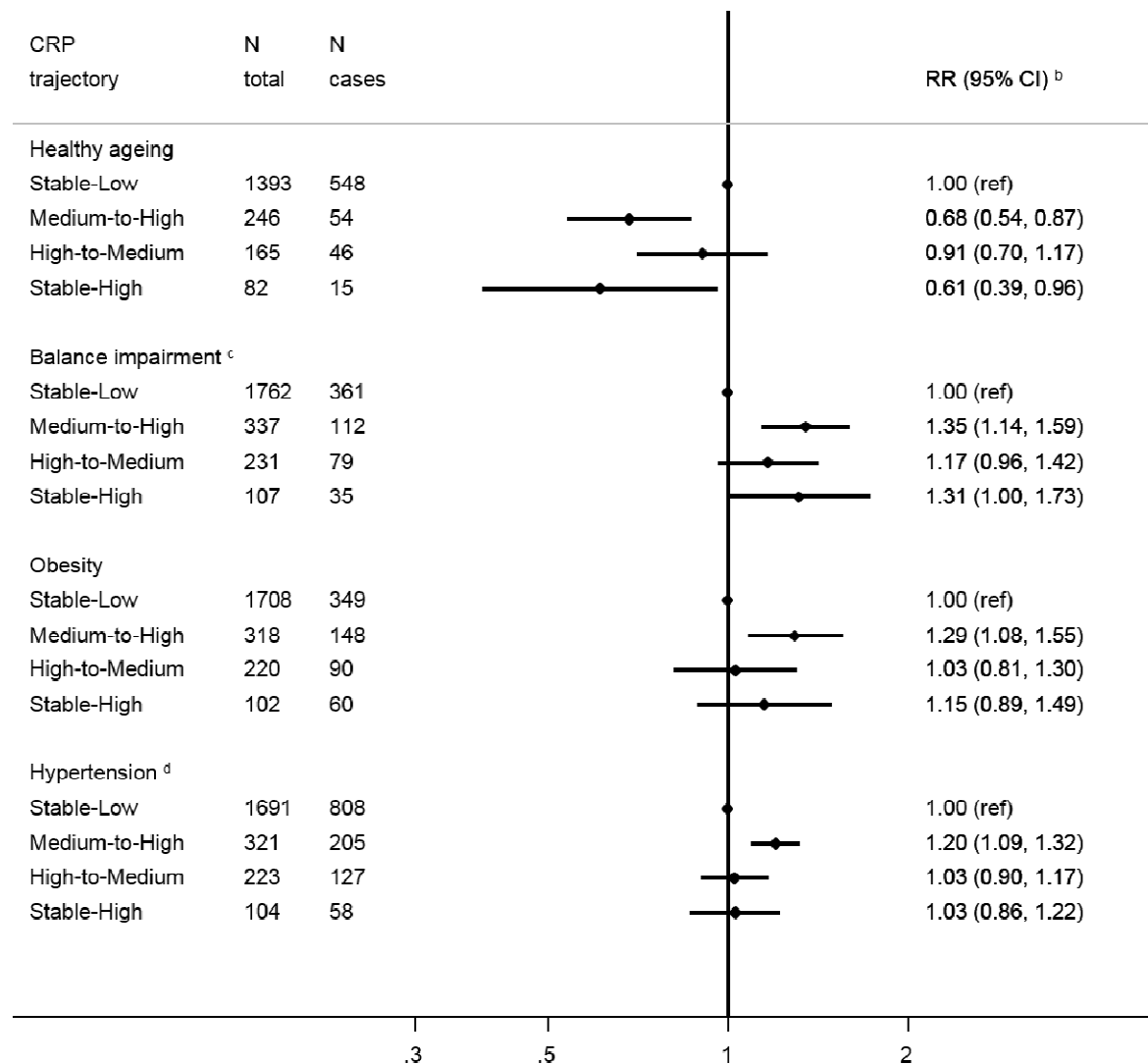
^a All ORs are adjusted for sex and baseline age, body mass index, smoking status, physical activity level, educational level and use of anti-inflammatory drugs.

Supplemental Figure 4. Odds ratios (95% CI) for the associations between CRP trajectories and mental health outcomes at wave 6 (2012-2013) after excluding participants with respective impairment at baseline, the English Longitudinal Study of Ageing



^a All ORs are adjusted for sex and baseline age, body mass index, smoking status, physical activity level, educational level and use of anti-inflammatory drugs.

Supplemental Figure 5. Relative risk estimates ^a (95% CI) for the associations between CRP trajectories and non-rare outcomes (>20%), the English Longitudinal Study of Ageing



^a Relative risk estimates were obtained from Poisson regression with robust error variance

^b All RRs are adjusted for sex and baseline age, body mass index, smoking status, physical activity level, educational level and use of anti-inflammatory drugs.

^c RRs further adjusted for baseline arthritis

^d RRs further adjusted for baseline antihypertensive drug use