with fall prevalence and frequency, respectively. Adjustments were made for sex, height, BMI, socioeconomic position, physical activity, smoking, knee pain, diabetes, cardiovascular events and respiratory and depressive symptoms.

Results Women reported higher prevalence of falls than men at ages 60–64 (23% vs 14%) and 68 (26% vs 18%). Longer balance time at age 53 was associated with reduced odds of falling at age 60–64 [OR: 0.98 (95% CI: 0.97,1.00)]; similar associations were found between balance at age 60–64 and falls at age 68 [0.96 (0.93,0.99)]. Better balance at age 53 was associated with lower risk of 3 or more falls (vs no falls) at ages 60–64 [RRR: 0.88 (0.80,0.98)] and 68 [0.93 (0.88,0.97)]. Better balance at age 60–64 was also associated with lower risk of 3+ falls at age 68 [RRR: 0.92 (0.85,0.98)] and in addition was associated with lower risk of 1–2 falls [0.97 (0.94,1.00)]. These associations remained after adjustments.

Discussion Poorer balance at ages 53 and 60–64 was associated with subsequent fall risk. Balance at age 53 was most strongly associated with 3 or more falls, while balance at age 60–64 was associated with both 1–2 and 3+ falls. Whether this is due to stronger associations at age 60–64 or a shorter time between balance and falls assessments requires further investigation. Balance tests in middle age may help identify high risk individuals who would benefit from earlier interventions to prevent future recurrent falls.

multiple imputation, Diggle-Kenward selection model, and pattern-mixture model. All models were adjusted for gender, age, ethnicity, and marital status.

Results At baseline in wave 2, we found differences between the most and least affluent categories of socioeconomic position. Participants with foreign or no qualifications (0.16 log (mg/l), 95% CI 0.09–0.23), participants in the lowest wealth tertile (0.24 log(mg/l), 95% CI 0.16–0.32), and participants in manual occupations (0.13 log(mg/l), 95% CI 0.07–0.19) had increased levels of C-Reactive protein compared to the most advantaged categories of education, wealth, and social class. Although, C - reactive protein levels decreased in later waves, the differences between the most and least socioeconomic advantaged groups remained large. Furthermore, differences between the Diggle-Kenward and other methods for compensating for missing data suggest that the missing completely at random and missing at random analyses underestimated socioeconomic differences in C-Reactive protein.

Conclusion This study demonstrates that living in socioeconomic disadvantage is associated with higher C - reactive protein levels over time and that the social discrepancies in health between the most and least affluent socioeconomic groups persist at older ages. It also highlights the importance of compensating for missingness in longitudinal studies with ageing participants who are susceptible to non-random drop out.

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Background Although social inequalities in health are consistently observed across the lifecourse in different populations, there are methodological issues in describing whether these inequalities decrease in later life. The association between socioeconomic adversity and systemic inflammation is well documented in cross-sectional studies, however, the association between living in socioeconomic disadvantage and repeated systemic inflammation in older adults has not been examined in detail, particularly taking into account longitudinal patterns of missingness. Inference from longitudinal analyses of ageing populations is susceptible to biases arising from attrition and non-random dropout. The accumulation of drop-outs over several waves reduce the representativeness of the study population and certain subpopulations can be over or underrepresented in the sample.

Methods 4,574 men and women aged 52 years and older from the English Longitudinal Study of Ageing (ELSA) wave 2 onwards were analysed. ELSA is a prospective cohort study that is representative of the English population. C - reactive protein levels were measured in waves 2, 4, 6, and 8 (2004–2016). Latent growth curve models estimated the relationship between different measures of socioeconomic position (education, wealth, and social class) and C - reactive protein, compensating for missing data under different assumptions: complete case analysis, full information maximum likelihood,

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Background There is a growing literature drawing on theories of cognitive reserve suggesting that factors relating to social networks, activity and support can predict dementia in older age. Much of this work has focused on social deficits (such as loneliness and isolation), but there is increasing evidence that engaging in social activities can be protective. The aim of this study was to compare the potential protective associations of between three different types of social activity (socialising, community group activities and cultural engagement) and dementia incidence.

Methods We used nationally-representative data from 9,550 adults aged 50+ from the English Longitudinal Study of Ageing followed-up over a 12 year period. We determined dementia occurrence using an algorithm that combined self- or informant-reported physician diagnosis of dementia with informant-reported score on the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE). We ran three types of time-to-event analyses: Cox proportional hazards models (modelling time to dementia), competing risk regressions models (modelling time to dementia vs the competing risk of death), and modified Fine and Gray Subdistribution hazards models (modelling time to dementia or death with a high probability of dementia vs the competing risk of death with a low probability of dementia). Analyses controlled for all identified demographic, health-related, and social covariates.