over the 10 year period than professional workers. Most of these differences were explained by health status in 2001. For those who stopped work (n=89,330), gender-adjusted mean differences in time from stopping work to death (before aged 85) were greatest for managerial and skilled non-manual groups [0.76 (0.02,1.50) and 1.01 (0.24,1.77)], compared to professional occupations, with no differences seen for lower social groups. This U-shaped relationship was explained by the combination of higher social class occupations staying in work longer but experiencing lower rates of mortality, and lower social class occupations leaving work at earlier ages but experiencing higher rates of mortality.

Conclusion Lower occupational social groups were both more likely to stop work before state pension age and also could expect less years in receipt of state pension.

OP51   **FUNCTIONAL AND MENTAL HEALTH TRAJECTORIES PREDICTING DEMENTIA INCIDENCE: LATENT CLASS ANALYSIS IN THE ENGLISH LONGITUDINAL STUDY OF AGEING**

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Background Functional disability and depression might be related to an increased risk of future dementia. We aimed to examine the occurrence of functional disability and depression over an eight-year period and evaluate the predictive role of these changes in dementia incidence.

Methods The data used for these analyses are from 1670 men and women aged 65 and older from the English Longitudinal Study of Ageing (ELSA), an on-going, open, prospective cohort study. Seven waves of data between 2002 and 2014 were analysed.

Dementia was determined by doctor-diagnosis combined with a score above the threshold of 3.38 on the Informant Questionnaire on Cognitive Decline in the Elderly.

Independent linear growth models with time-invariant covariates and a categorical distal outcome (dementia incidence in 2014) were used to examine whether different trajectories of functional abilities (activities of daily living, ADL; and instrumental activities of daily living, IADL) or depressive symptoms (Centre for Epidemiologic Studies Depression Scale, CES-D) between 2002 and 2010 were predictive of new dementia cases four years later.

Results We identified three independent patterns of functional and depressive symptoms trajectory. Most people showed no functional impairments over time ('class III') in either ADL (86%) or IADL (90%), a small group showed a steep deterioration ('class II') in ADL (5%) and IADL (3%), while the others show a substantial disability in either ADL (9%)or IADL (7%) at baseline with only a slow improvement over time ('class I'). Similarly, most participants (79%) did not experience depressive symptoms during the study period ('class III'), a small group (9%) showed increased depressive symptoms over time ('class II'), while the others (2%) started with depressive symptoms and experienced a minor improvement over time ('class I').

After adjustment for age, sex, education and wealth, relative to participants in 'class III', study members who experienced a sharp deterioration in either measure of functional capabilities or depressive symptoms ('class II') were markedly more likely to be classified with dementia four years later (ADL: Odds Ratio (OR)=3.29 (95% Confidence Intervals (CI) 0.37–6.21); IADL: OR=14.59 (95% CI 2.09–26.09) and CES-D: OR=3.94 (95% CI 1.27–6.61)).

Conclusion Our results showed heterogeneity in all measures of functional abilities or depressive symptoms over time, suggesting that a steeper decline in each of these functions is not necessarily a normative process, but could constitute an early indication of neurodegeneration and pre-clinical symptomatology.

OP52   **ENJOYMENT OF LIFE AS A PREDICTOR OF HEALTHY LIFE EXPECTANCY: EVIDENCE FROM THE ENGLISH LONGITUDINAL STUDY OF AGEING**

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Background In older adults evidence showed that subjective wellbeing is associated with reduced risk of mortality and the incidence of chronic conditions. With the dramatic increase in life expectancy, it is important to gain a better understanding of the lives of older individuals. While life expectancy is a useful indicator of health, it is becoming increasingly recognised that health expectancy, which quantifies the quality of remaining years of life, is also crucial. The aim of this study is to estimate health expectancy in men and women according to enjoyment of life.

Methods We used data from a nationally representative sample of 8852 individuals aged 50 and over participants of the English Longitudinal Study of Ageing (ELSA), followed from 2002 to 2013.The main outcome measures are chronic disease-free and disability-free health expectancy, the main exposure is enjoyment of life, adjustment variables are social class, sex and age.Discrete-time multistate life table models were used to estimate health expectancies from the ages of 50 to 100, by age and sex and adjusted for social class.

Results Men and women experiencing high enjoyment of life could expect to live an additional 32 and 34 years of their remaining lives free from disability. Disability-free life expectancy at the age of 50 and 65 was approximately four years shorter for men and women who experienced low enjoyment of life compared to those who experienced high enjoyment of life. At the age of 50 men and women who experienced low enjoyment of life could expect to live an additional 16 years of their lives free from a chronic condition, compared to 20 and 22 additional years for men and women who experienced high enjoyment of life. At the age of 65 chronic disease-free life expectancy is 6 years for men and women experiencing low enjoyment of life and 9 years for those who experienced high enjoyment of life.

Conclusion Our study showed that those who experienced enjoyment of life have higher life expectancy than those who don't. This study also showed that the quality of remaining life is also important, individuals experiencing high enjoyment of life could expect to live a higher number of years in good health (without disability and chronic conditions) compared to those experiencing low enjoyment of life.