Methods This study used data from the Survey of Health, Ageing and Retirement in Europe (SHARE) and English Longitudinal Study of Ageing (ELSA). We measured cognitive function by one key cognitive domain available in both surveys, namely episodic memory score (range 0–20). Sensory impairment was measured using self-reported hearing and vision quality in both SHARE and ELSA. Vision and hearing function in both surveys were each coded on a scale from 1 (excellent) to 5 (poor). We recoded the scores of hearing and vision function into two categories by combining the responses excellent, very good and good into `good' sensory function and collapsing fair and poor vision into `poor' sensory function. We defined sensory impairment as having poor sensory function and categorised it into three: no impairment, single impairment (vision or hearing), and dual impairment (vision and hearing).

Results Using growth curve analysis, we found that older adults with single and dual sensory impairment (hearing and/or vision) were able to recall fewer words than those with no sensory impairment in final model in all 11 European countries included in this study, where the potential confounders were included. The cognitive trajectories of older adults with no sensory impairment followed curvilinear shapes, while those of older adults with single and dual sensory impairments showed more precipitous pattern trajectory of cognitive decline after the age of 50 in both surveys. Being female, having attained a higher level of education, having paid job and being relatively wealthy, were associated with higher cognitive function in older age both in SHARE and ELSA.

Conclusion These findings demonstrate that hearing and/or vision impairment is a marker for risk of cognitive decline that could inform preventative interventions to maximise cognitive health and longevity. Further studies are needed to investigate how sensory markers could inform strategies to improve cognitive ageing, including hearing and vision rehabilitative intervention in combination with healthy ageing interventions to promote social engagement, physical activity and positive health behaviours.

| P08 | INCIDENCE OF DIAGNOSED DEMENTIA IN THE ENGLISH LONGITUDINAL STUDY OF AGEING IN ENGLAND: A 12-YEAR FOLLOW-UP |

[1]D Cadar*, [1]H Davies, [2]D Llewellyn, [3]GD Batty, [1]A Steptoe. [1]Department of Behavioural Science and Health, University College London, London, UK; [2]Mental Health Research Group, University of Exeter Medical School, University of Exeter, Exeter, UK; [3]Department of Epidemiology and Public Health, University College London, London, UK

Background There has been a suggestion that the incidence of dementia in England has recently declined. Crucially, however, these estimates have not been based on nationally representative samples. Accordingly, we calculated dementia incidence, the temporal trends and, additionally, examined various socioeconomic and geographical predictors of its occurrence.

Methods Data from the English Longitudinal Study of Ageing (ELSA), a prospective cohort study at baseline known to be representative of the English population, were used to investigate the rates of dementia incidence over seven waves between 2002 and 2014.

Dementia was determined by doctor-diagnosis and the Informant Questionnaire on Cognitive Decline in the Elderly (score >3.38 indicative of dementia). Age- and sex-specific incidence rates of dementia were calculated for 5131 individuals aged 65 and older at study entry. Dementia incidence over time was examined by comparing age-specific incidence rates between two age-period-cohorts derived in ELSA using a median split in birth-year range (ELSA I: 1900–1925 and ELSA II: 1926–1950). The predictive value of education, wealth, geographical area, the index of multiple deprivations and the degree of urbanisation for dementia incidence were examined using Poisson regression.

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The predictive value of education, wealth, geographical area, the index of multiple deprivations and the degree of urbanisation for dementia incidence were examined using Poisson regression.

Results The average duration of follow-up was 7.7 years. As anticipated, there was a significant increase in the rates of dementia incidence with age, from 5.90 per 1000 person years at ages 65–69 to 31.59 at ages 85+.

We observed an age-period-cohort effect on dementia incidence, with nearly 30% reduction in the incidence rates for participants of the same initial age group (75–79) at the study entry from ELSA I and II.

Higher rates of dementia incidence were observed for London (Rate=15.52, Incidence rate ratio (IRR)=1.43 95% confidence intervals (CI) 1.01–2.03) compared with Northern England, and for those in the lowest wealth quintiles (Rate=14.61, IRR=2.18, 95% CI 1.55–3.06) compared with the highest.

Conclusion In a nationally representative sample, we observed a reduction in the age-specific dementia incidence over time. This incidence appeared to be patterned by group- and individual-level characteristics.

| P09 | AFFECTIVE PROBLEMS AND MEMORY DECLINE: A SYSTEMATIC REVIEW AND META-ANALYSIS |

[1]A John*, [1]U Patel, [2]M Richards, [1]J Rusted, [1]D Gaysina. [1]Psychology, University of Sussex, Brighton, UK; [2]MRC Unit for Lifelong Health and Ageing, UCL, London, UK

Background Previous evidence suggests that the presence of affective problems, such as depression and anxiety, may confer an increased risk for late-life dementia. However, the extent to which affective symptoms may influence memory decline in particular, even many years prior to the clinical threshold for a diagnosis of dementia, is not clear. The present study systematically reviews and synthesises the current evidence surrounding the association between depression and memory decline across the life course.

Methods An electronic search of PubMed, PsycInfo and ScienceDirect was conducted to identify studies on the association between depression and subsequent memory decline. Key inclusion criteria were prospective, longitudinal studies with a minimum follow-up period of one year. Cross-sectional,