managing their chronic conditions in addition to the level of action the patient is willing to do. Areas identified are discussed between patient and resident increasing patient activation. Referrals to community-based resources to identified SDOH needs are guided by the clinic's care manager. The Office-GAP tool is administered during three subsequent visits to ensure that patients actually accessed the community resources.

## SESSION 2918 (PAPER)

#### COGNITION AND COGNITIVE IMPAIRMENT I

# LIFE COURSE SOCIOECONOMIC STATUS AND LATE-LIFE COGNITION AND COGNITIVE DECLINE IN THE RUSH MEMORY AND AGING PROJECT

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The relationships among life course socioeconomic status (SES) measures with later life cognition and cognitive decline are unclear. We test the hypothesis that life-course SES is associated with late life level of cognition and rate of cognitive decline. The Rush Memory and Aging Project enrolled 1,864 dementia-free people aged  $\geq 65$  years between 1994 – 2018. Participants reported early life (parental education, number of siblings, and childhood financial need), mid-life (income at 40 years), and late life (baseline income) SES. Global cognitive function is a composite of 19 neuropsychological tests, administered annually. We utilized marginal structural models to assess the effect of SES (dichotomized at the median) at three life-course stages on late life global cognitive function and decline. We calculated inverse probability weights to adjust for socio-demographic confounders at each life-course stage. A total 1,063 participants had all relevant variables. Average follow-up was 4.4 years, and mean baseline age was 80.4 years. Most respondents were non-Hispanic white (89.7%) and female (74.1%). In the fully adjusted model, high childhood SES (coefficient 0.10; 95% CI 0.01, 0.20) and high late-life SES were associated with higher cognition intercept (coefficient 0.21; 95% CI 0.09, 0.32). High mid-life SES was associated with slower rate of cognitive decline (coefficient 0.02; 95% CI 0.001, 0.05). Childhood and late-life SES measures were not related to cognitive decline. Childhood and adult SES may reflect processes in building cognitive capacity, while midlife SES may reflect cognition maintenance. Interventions relating to SES across the lifecourse may benefit later life cognition.

## MACULAR GANGLION CELL–INNER PLEXIFORM LAYER AS A MARKER OF COGNITIVE AND SENSORY FUNCTION IN MIDLIFE

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Neurodegenerative diseases are public health challenges in aging populations. Early identification of people at risk for neurodegeneration might improve future treatment. Noninvasive, inexpensive screening tools are lacking but of great potential. Optical coherence tomography (OCT) measures nerve cell layer thicknesses in the retina, which is an anatomical extension of the brain and might be reflective of generalized neurodegeneration. We aimed to determine associations of macular ganglion cell-inner plexiform laver (mGCIPL) thickness with cognitive and sensorineural function in midlife. This study included 1880 Beaver Dam Offspring Study participants from the 10-year follow-up examination. We assessed cognition (principal component analysis of multiple cognitive test scores), cognitive impairment, hearing sensitivity thresholds and impairment, central auditory processing (% correct on a dichotic digits test), and visual and olfactory impairment. We measured mGCIPL using the Cirrus 5000 HD-OCT Macular Cube Scan. Multivariable linear and logistic regression models were used to determine associations of mGCIPL thickness and thin mGCIPL, defined as 1 standard deviation below average, with cognitive and sensorineural functions. Thinner mGCIPL was associated with worse cognition (0.01 standard deviation increase per um thickness;95% confidence interval (CI) 0.01,0.02;p<.0001), worse central auditory function (0.07% increase per µm thickness;CI 0.01,0.13;p=.03) and visual impairment (Odds Ratio=0.95;CI 0.94,0.97;p<.0001). MGCIPL thickness was associated with hearing sensitivity in women only. There were no associations with impairments in hearing, olfaction and cognition. Results for thin group comparisons were consistent. MGCIPL thickness is associated with cognitive and sensorineural function and has potential as a marker for neurodegeneration in middle-aged adults.

### PRELIMINARY RESULTS OF MYCOG, A BRIEF ASSESSMENT FOR THE DETECTION OF COGNITIVE IMPAIRMENT IN PRIMARY CARE

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Early detection of Cognitive impairment (CI) is imperative to identify potentially treatable underlying conditions or provide supportive services when due to progressive conditions such as Alzheimer's Disease. While primary care settings are ideal for identifying CI, it frequently goes undetected. We developed 'MyCog', a brief technology-enabled, 2-step assessment to detect CI and dementia in primary care settings. We piloted MyCog in 80 participants 65 and older recruited from an ongoing cognitive aging study. Cases were identified either by a documented diagnosis of dementia or mild cognitive impairment (MCI) or based on a comprehensive cognitive battery. Administered via an iPad, Step 1 consists of a single self-report item indicating concern about memory or other thinking problems and Step 2 includes two cognitive assessments from the NIH Toolbox: Picture Sequence Memory (PSM) and Dimensional Change Card Sorting (DCCS). 39%(31/80) participants were considered cognitively impaired. Those who expressed concern