

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 life-course 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 layer (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  $\mu\text{m}$  thickness; 95% confidence interval (CI) 0.01, 0.02;  $p < .0001$ ), worse central auditory function (0.07% increase per  $\mu\text{m}$  thickness; CI 0.01, 0.13;  $p = .03$ ) and visual impairment (Odds Ratio = 0.95; CI 0.94, 0.97;  $p < .0001$ ). MCIPL 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. MCIPL 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

in Step 1 (n=52, 66%) resulted in a 37% false positive and 3% false negative rate. With the addition of the PSM and DCCS assessments in Step 2, the paradigm demonstrated 91% sensitivity, 75% specificity and an area under the ROC curve (AUC)=0.82. Steps 1 and 2 had an average administration time of <7 minutes. We continue to optimize MyCog by 1) examining additional items for Step 1 to reduce the false positive rate and 2) creating a self-administered version to optimize use in clinical settings. With further validation, MyCog offers a practical, scalable paradigm for the routine detection of cognitive impairment and dementia.

#### RELATIONSHIP BETWEEN PATIENT AND INFORMANT ASSESSMENT OF PERSONALITY AND COGNITIVE STATUS

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Personality has been linked to risk of dementia. Most studies ask individuals to rate their own personality traits or for a knowledgeable informant to perform the rating; few collect data from both. When informants are asked to give an estimate of the patient's lifelong personality traits, they often describe personality before disease onset. When asked to self-rate, patients may instead assess their personality as they see themselves, providing a personality-state measure. The goal of this study was to assess agreement between two independent measures of personality and evaluate whether stage of cognitive impairment and characteristics of patients or caregivers impact concordance. In 79 consecutive patient-caregiver dyads presenting to our center (mean age:76.8±8.4; 44.1% female; 6% cognitively normal, 41% MCI; and 53% dementia) with in-depth psychosocial and neuropsychological evaluations, we found informants rated patients lower on openness (O) (ICC=0.434; 95%CI: 0.235-0.598) and agreeableness (A) (ICC=0.491; 95%CI: 0.302-0.643) and higher on extraversion (O) (ICC=0.396; 95%CI: 0.191-0.568) and neuroticism (N) (ICC=0.444; 95%CI: 0.247-0.607). Greater discordance was observed in established dementia (ICCE=0.497; 95%CI: 0.222-0.700; ICCA=0.337; 95%CI:0.031-0.586; ICCN=0.422; 95%CI: 0.191-0.683), compared with MCI (ICCO=0.568; 95%CI: 0.282-0.762). We explored the effect of patient and caregiver mood and caregiver burden on personality ratings. Although personality is typically described as a trait, we present evidence that in the eyes of patients, personality ratings may represent a state that changes across the spectrum of cognitive impairment. Understanding how patients and caregivers differentially perceive personality may assist in developing novel psychotherapeutic interventions and approaches dealing with behavioral manifestations of dementia.

#### THE IMPACT OF COGNITIVE IMPAIRMENT ON RESOURCE UTILIZATION DURING MEDICARE HOME HEALTH CARE

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Older adults with cognitive impairment have unique care needs that often lead to greater levels of health care utilization.

Prior work suggests that older adults with cognitive impairment access home health care at higher rates; yet, recent Medicare home health payment system revisions exclude patient cognitive status when determining risk adjustment. This research examines the relationship between patient cognitive status and resource utilization during Medicare home health care. We examine 1,217 (weighted n=2,134,620) community-dwelling older adults who received Medicare-funded home health between 2011-2016, using linked nationally representative survey data from the National Health and Aging Trends Study (NHATS), home health patient assessment data, Medicare claims data, and Medicare Provider of Services files. We use weighted, multivariable negative binomial regressions to model the relationship between patient dementia status and the expected number of total visits and number of each visit type (nursing, therapy, and aide) during home health. Models adjusted for patient sociodemographic characteristics and health and functional status during home health, as well as home health provider characteristics. Among Medicare home health patients, the presence of cognitive impairment during home health is associated with 2.87 additional total visits (p<0.001), 1.27 additional nursing visits (p<0.01), and 1.23 additional therapy visits (p=0.04) during the home health episode. Findings suggest that recent revisions to the Medicare home health payment system may disincentivize home health care for older adults with dementia and/or financially penalize home health providers whose patient populations have a greater dementia burden.

#### SESSION 2919 (PAPER)

##### COGNITION AND COGNITIVE IMPAIRMENT II

##### CERTIFIED NURSING ASSISTANTS' EXPERIENCES OF WORKPLACE VIOLENCE CARING FOR PERSONS WITH DEMENTIA

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**Problem:** Certified nursing assistants (CNAs) are the primary providers of direct care to persons residing in long term care facilities (LTCFs), many of whom have dementia. The need to deliver direct and intimate care increases CNAs' exposure to verbal and physical workplace violence. **Purpose:** To describe CNAs' experiences of physical and verbal workplace violence experienced during direct care activities in LTCFs. **Design:** Qualitative. **Sample & Procedure:** Ten African-American CNAs (9 female, 1 male) were recruited using snowball sampling from multiple LTCFs. Interviews were recorded and transcribed. NVivo12 software was used to manage the thematic analyses. **Results:** The identified themes were: 1) CNAs' perception that verbal and physical abuse was "part of the job" and unavoidable; 2) CNAs' feelings of minimization of the abuse by administration; and 3) inadequate CNA training to recognize and de-escalate triggers of verbal and physical violence, notably care-resistant