

## SOCIAL COHESION AFFECTS THE ASSOCIATION BETWEEN FRAILTY AND DISABILITY IN COMMUNITY-DWELLING OLDER ADULTS

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The relationships between physical frailty and perceived neighborhood social cohesion (PNSC) and functional disability among community-dwelling older adults are poorly understood. This study aims to (1) examine the associations of frailty and PNSC with disability; and (2) evaluate low PNSC as a risk factor in the association between frailty and disability. A sample of 1645 older adults using multi-stage sampling method in Shanghai were randomly selected in this cross-sectional study. Frailty operationalized as Cardiovascular Health Study criteria (OR=2.4, 95%CI 1.16-4.96 for pre-frailty; OR=7.28, 95%CI 3.37-15.73 for frailty) and PNSC measured as Neighborhood Cohesion Scale (OR=1.81, 95%CI 1.23-2.67) were independently associated with basic and instrumental activities of daily living disability. A significant interaction of frailty and PNSC on disability ( $F(2, 66)=4.31, P=.014$ ) was found, using a two-way analysis of covariance (ANCOVA). Compared to robust individuals with high PNSC, pre-frailty with high PNSC was not significantly associated with disability while pre-frailty with low PNSC was associated with approximate 4-fold increased prevalence of disability (OR=3.87, 95%CI 1.46-10.24,  $p=.006$ ). Frailty with high PNSC was associated with higher likelihood of disability (OR=6.47, 95%CI 2.35-17.87) and frail individuals with low PNSC stood out with 10-fold increased prevalence of disability (OR=9.94, 95%CI 3.50-28.26). All analyses were controlled for demographical and clinical covariates. Our results suggest high level of social cohesion serves as a buffer against the impact of physical frailty on functional disability. These findings notably imply to the development of interventions for older frail adults from the neighborhood perspective.

## SESSION 3595 (PAPER)

### RESEARCH METHODS AND MEASUREMENT OF COGNITIVE IMPAIRMENT

#### FEASIBILITY AND ACCEPTABILITY OF DETECTING COGNITIVE IMPAIRMENT AND DEMENTIA IN PRIMARY CARE PRACTICES

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As the age of the US population increases, so does cognitive impairment (CI); therefore early detection of CI is critical for ensuring its appropriate management. As part of a NINDS Consortium to detect CI and dementia in primary care (DetectCID), we are implementing and evaluating a brief 2-step CI detection paradigm (MyCog), that can be delivered in clinics with diverse populations via the electronic health record (step 1) and iPad (step 2). We conducted focus groups with 25 clinicians and administrative leaders from academic and community primary care practices to 1) understand how CI is being assessed, and 2) evaluate the feasibility of implementing the MyCog paradigm into existing

primary care workflows. Several key themes emerged from the discussions. No proactive detection strategy for CI was regularly used outside of the Medicare Annual Wellness Visits (AWV); variable assessments including the Minicog, MoCA, or MMSE were used to fulfill the AWV requirement. Regarding the feasibility of our MyCog Paradigm, our 2-step process was positively received, with the brief case-finding step 1 satisfying AWV requirements and replacing the longer assessments currently being used. Clinicians preferred that step 2 be self-administered due to limited clinician time for wellness visits, and highlighted logistical challenges such as room availability and storage and maintenance of the iPad. Overall, clinicians felt that the identification of CI was valuable and supported standardization, but indicated regular case finding was unlikely without clear guidance on clinical decision-making.

#### GEOGRAPHIC DISPARITIES IN COUNTY-LEVEL PREVALENCE OF ALZHEIMER'S DISEASE ACROSS THE UNITED STATES

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Small-area geographic disparities in health care delivery have been observed across multiple disorders, but remain poorly studied for Alzheimer's disease (AD) and other dementias. While national and state estimates of the prevalence and incidence of AD are available, estimates across finer geographic regions offer an opportunity to tailor programs to the needs of the local population. We estimated prevalence of AD at the county level across the continental United States. We used prevalence rates of AD by age category and race among Medicare fee-for-service beneficiaries published by the Centers for Disease Control (CDC). These prevalence rates were projected onto bridged-race county-level population data for 2017 from the National Center for Health Statistics, with empirical Bayes spatial smoothing to reduce variability in rates due to small population sizes. Estimated prevalence of AD varied more than threefold across counties, from a low of 51.8 per 1,000 persons in Loving County, Texas to a high of 169.6 per 1,000 persons in Kalawao County, Hawaii. Higher prevalence of AD was seen in the Southeastern and Midwestern United States. However, we observed specific counties with low prevalence of AD within regions with high prevalence of AD, and vice versa. These small-area geographic variations may provide vital information about social and environmental influences on dementia care, yet little data have been available to date. Understanding geographic disparities in prevalence will be critical for addressing practice variation in the prevention and diagnosis of dementia.

#### MISCLASSIFICATION IN DEMENTIA DATA IN THE CARDIOVASCULAR HEALTH STUDY: A PROBABILISTIC BIAS ANALYSIS

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