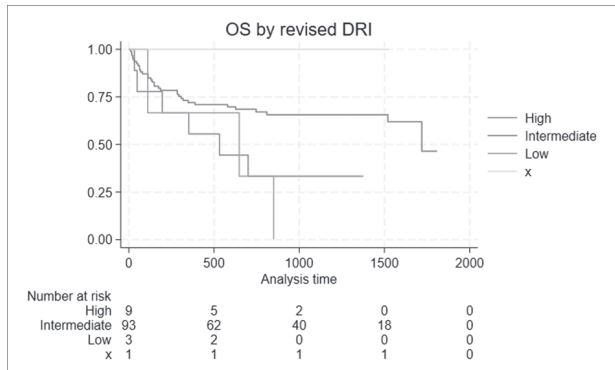


exhibiting the poorest survival, characterized by a steep decline within the first 1,000 days post-transplant. Intermediate-risk patients had superior OS compared to high-risk patients but showed a progressive decline over time. The low-risk group did not demonstrate better outcomes, likely due to limited sample size.

Conclusion: The rDRI effectively stratifies post-transplant OS in patients with hematologic malignancies, supporting its prognostic value. The poor survival of high-risk patients underscores the need for novel therapeutic strategies to improve outcomes in this cohort.



C85 Student Presentation

The Relationship Between Time Perception and Cognitive Function in Older Adults: An Observational Pilot Study

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Background:

Cognitive conditions, such as dementia, delirium, anxiety, and depression, may alter subjective time perception. The study's objective is to better understand how time estimation varies across cognitive and psychiatric conditions.

Methods:

In this observational pilot study, participants aged ≥ 65 were recruited from a geriatric and memory disorder clinic. They were stratified by Mini-Cog (MC) score into a cognitively intact (C) group (score 4-5) and a cognitively impaired (CI) group (score 1-3). A standardized stopwatch test was conducted by asking the participants to stop the timer at 1 minute. Ten consecutive trials were recorded for each participant to assess estimation accuracy and within-person consistency. Clinical variables collected included the MC, Patient Health, and Generalized Anxiety Disorder Questionnaires, as well as medical comorbidities. The primary outcomes were the mean stopwatch deviation from 1 minute and the number of trials required to reach consistent performance. Secondary analyses explored correlations between time-duration estimation deficits and cognitive measures.

Results:

The CI group was older (median 81 years, IQR 75-84) than the C (77, 72-79). On the time-estimation task, CI patients showed lower mean time estimations (29 seconds, IQR 19-48) than C (57 seconds, IQR 42-73; Wilcoxon $p < 0.001$). The CI group also had a larger negative deviation from the target time (mean deviation: -31 seconds; IQR: -41 to -12 vs. -3s, -18 to 13; $p < 0.001$). The C group shows improvement in time estimation, on subsequent trials, closer to the target time. The effects of anxiety and depression were inconclusive.

Conclusion:

Individuals with CI demonstrated a tendency to be inaccurate and inconsistent in their personal estimation of time's passage. Results can inform future larger-scale studies assessing whether time-perception metrics could serve as a simple adjunctive clinical marker for CI.

C86 Student Presentation

Depression, Anxiety, and Medication Burden as Key Predictors of the Drug Burden Index in Older Adults

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Background: The Drug Burden Index (DBI) quantifies exposure to anticholinergic and sedative/hypnotic medications and is associated with adverse outcomes in older adults. Although DBI has been described in several populations, prior studies have not comprehensively considered how demographic, medical, and cognitive factors contribute to DBI. This study examined these factors among older adults enrolled in the Medicare Chronic Care Management (CCM) program.

Methods: This retrospective cohort of primary care patients aged ≥ 65 years with multiple comorbidities were required to have a documented Annual Wellness Visit, Cognitive Assessment and Care Plan Visit within the past year. DBI was calculated using the original Hilmer et al. (2007) DBI equation with a updated 2025 medication list. DBI was dichotomized at the cohort median to classify patients as having low versus high DBI. Univariate logistic regression analyses evaluated associations between DBI category and demographic, medical, and cognitive variables; those with $p < 0.2$ advanced to multivariable logistic regression. Odds ratios (ORs), 95% confidence intervals (CIs), and p -values were reported. Analyses were conducted in Minitab (version 22.4), with $p < 0.05$ considered significant.

Results: Of 390 patients screened, 75 (20%) met inclusion criteria. The median DBI was 0.5. In univariate analyses, depression, anxiety, insomnia, urinary incontinence, and medication load were associated with high DBI. In multivariable analysis, only depression (OR 6.7; 95% CI 2.2–20.4; $p = 0.001$) and anxiety (OR 3.9; 95% CI 1.2–12.4; $p = 0.022$) remained significantly associated. Coexisting depression and anxiety markedly increased the odds of high DBI (OR 21.8; 95% CI 2.7–179; $p = 0.004$). No demographic characteristics, cognitive assessment findings, fall-risk history, or other multimorbidity combinations were associated with DBI. Medication load was significantly associated with high DBI (OR: 1.23; [1.11–1.38]; $p < 0.001$).

Conclusion: Depression and anxiety diagnoses were each significantly associated with having a high DBI. Having both diagnoses together was associated with the greatest odds for a high DBI. These conditions and the total number of medications should be prioritized when identifying older adults most likely to benefit from pharmacist-led CCM medication review and deprescribing interventions.

C87 Student Presentation

Positive Affect and Onset of Cognitive Impairment in Older Mexican Americans: Findings from a Longitudinal Study

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Background: Cognitive impairment (CI) is a known precursor to Alzheimer's disease and other dementias. Recent studies have shown positive affect (PA) to be associated with lower rates of CI. This study examined the association between PA and CI among Mexican American adults aged 75 and older with cognitive function in the normal range at baseline (2004/2005).

Methods: Participants ($n = 976$) were from the Hispanic Established Population for the Epidemiological Study of the Elderly (2004/05-2016). Measures included socio-demographics, language of interview, body mass index, multi-morbidity, negative affect, pain, and falls. Participants who scored below 21 on the Mini-Mental State Examination at follow-up were classified as having CI. PA was assessed using four items from the Center for Epidemiologic Studies Depression scale.

Results: Participants were categorized into four PA quartiles: 0-<8 (n=129), 8-<10 (n=201), 10-<12 (n=214), and 12 (n=432). Generalized estimating equations were used to estimate the odds ratio (OR) and 95% confidence limits (CL) of CI over time across PA quartiles, controlling for covariates. Participants in the 2nd, 3rd, and 4th PA quartiles had lower odds (OR=0.47, 95% CL=0.32-0.68, OR=0.37, CL=0.24-0.55, and OR=0.31, 95% CL=0.21-0.47, respectively) of developing CI over time than those in the 1st PA quartile.

Conclusions: Association of higher levels of PA with decreased risk of CI over time suggests a need to develop PA-enhancing interventions. Increasing participation in culturally responsive activities known to boost PA, such as social and community events, stress management practices, culturally meaningful and purposeful activities, and cognitive stimulation, may help mitigate the onset of CI and dementia in older Mexican American adults, a rapidly growing segment of the U.S. older adult population.

C88 Student Presentation
Describing Social Determinants in the Dementia Research, Education, and Advancement in Los Angeles (DREAM-LA) Clinical Study

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Background: Though Black/African American and Hispanic/Latinx communities bear a disproportionate burden of disease for Alzheimer’s Disease and Related Dementias (ADRD), most ADRD research has focused on non-Hispanic White populations, leaving the relationship between social determinants and ADRD in minority populations understudied¹.

Methods: Through a multi-center, three-tiered observational design with increasing levels of involvement and compensation, the Dementia Research, Education, and Advancement in Los Angeles (DREAM-LA) clinical study aims to develop a comprehensive database of biological, social, and environmental factors associated with ADRD in underrepresented populations throughout Los Angeles County. Participant’s social determinants of health (SDOH) are assessed through survey responses. For this study, our objective was to analyze how SDOH are associated with tiered recruitment preference and cognitive status.

Results: As of July 2025, 95 participants from Hispanic/Latinx, Black/African American, and Asian American Native Hawaiian Pacific Islander racial and ethnic groups were enrolled in DREAM-LA. Our results suggest that self-described socioeconomic status did not differ by participant tier (Kruskal-Wallis, p = 0.1649). However, some tiers differed in language, race (Fisher exact, p < 0.004), and access to transportation (Fisher exact, p = 0.004). Participants were stratified by Mini-Mental State Examination (MMSE) score into two groups: ≤ 24 and ≥ 25. SDOH that differed significantly between the groups included marital status (FDR-adjusted p = 0.0145), living situation (FDR-adjusted p = 0.0464) and medication nonadherence due to cost (FDR-adjusted p = 0.0464).

Conclusion: Differences in race, language, transportation access, and other SDOH factors across tiers and MMSE groups highlight the need for adequate translation support and transportation assistance, and broader attention to social context as contributors to cognitive status in underrepresented communities.

1. Mooldijk SS, Licher S, Wolters FJ. Characterizing Demographic, Racial, and Geographic Diversity in Dementia Research: A Systematic Review. *JAMA Neurol.* 2021;78(10):1255-1261. doi:10.1001/jamaneurol.2021.2943

C89 Student Presentation
Cross-National Assessment of Intrinsic Capacity Among Older Adults: Harmonized Analysis Across Seven Aging Cohorts
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Background:

Intrinsic Capacity (IC) provides a multidimensional view of older adults’ health, yet cross-national comparisons are limited by inconsistent measurements and reliance on summary scores that mask functional heterogeneity. We harmonized IC measures across diverse global cohorts to identify functional aging profiles and examine social and health determinants.

Methods:

We analyzed harmonized data from seven longitudinal studies—HRS, ELSA, SHARE, KLoSA, CHARLS, MHAS, and LASI—totaling 82,839 adults aged ≥60 years from 35 countries. Standardized IC domains (cognition, psychological health, sensory function, vitality, and locomotion) were constructed using comparable indicators. Principal Component Analysis and K-means clustering identified aging profiles. Multinomial logistic regression examined associations with sociodemographic characteristics and chronic disease burden.

Results:

Three profiles were identified. *Successful Aging* (38%) demonstrated high performance across all IC domains and was associated with higher education, stronger socioeconomic conditions, and fewer chronic conditions. *Comprehensive Frailty* (31%) showed deficits across domains - especially vitality and locomotion - and was linked to multimorbidity and socioeconomic disadvantage. *Compensatory Aging* (30%) featured relatively preserved cognition alongside lower functioning in other domains and was more prevalent among socially vulnerable groups. High-income countries had higher proportions of Successful Aging, whereas middle-income countries showed more Compensatory Aging.

Conclusions:

Cross-national harmonization of IC reveals substantial heterogeneity in functional aging and underscores the importance of social and health determinants. IC offers a unified framework for understanding variations in aging across countries and supports policies that strengthen resilience, reduce socioeconomic disparities, and promote multidimensional healthy aging.

C90 Student Presentation, Encore Presentation
Prevalence of foot and ankle osteoarthritis: The Johnston County Health Study

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Osteoarthritis (OA) is a leading cause of disability and is estimated to affect 90 million people in the U.S. While much of OA research is focused on hip and knee OA, few studies have been focused on foot or ankle OA, despite their major impact on function and quality of life. Our purpose was to describe the prevalence of ankle and foot symptoms and radiographic and symptomatic osteoarthritis (rOA and sxOA, respectively) in a population-based cohort in the southeastern U.S. This addresses research gaps identified by the International Ankle and Foot Osteoarthritis Consortium.

Adults (n=902) aged 35-70 years were enrolled from Johnston County, NC. Participants provided demographic information, weight-bearing radiographs to evaluate presence of ankle or foot OA, and questionnaires on medical history, symptoms, pain, function, and quality of life. Survey-weighted proportions and 95% confidence intervals were calculated to examine prevalence overall and by subgroups.

Ankle and foot rOA were present in 1 in 10 and 1 in 7 participants, respectively, with a higher prevalence in older age and those