

and gait variability were obtained for both single-task and DT gait. Data analysis was conducted using SPSS 26 and PROCESS 3.5. As expected, the dementia group had lower cognitive domain scores and slower walking speed than MCI group. Results also indicated that visual-spatial processing skills was the only cognitive domain that did have a moderation effect on gait velocity ( $F=4.2$ ,  $p<0.05$ , R-square change 10%). Our results indicate that differences between walking speed in MCI and dementia groups are moderated by visual spatial skills. Improvement in visual spatial skills could improve the dual task effects of individual gait measures.

#### PERSISTENT DISABILITY SIX MONTHS AFTER INITIAL DISABILITY LESS LIKELY IN OLDER WOMEN

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Many community-dwelling older adults develop activity of daily living (ADL) disability and subsequently regain function. Using data from the ASPirin in Reducing Events in the Elderly (ASPREE) clinical trial, we examined the relationship of gender, incident disability, and persistent disability 6 months after the incident disability. Walking, bathing, dressing, transferring, toileting, and eating were assessed as ADLs, at bi-annual interviews. ADL disability was defined as requiring help with or inability to do or severe difficulty with  $\geq 1$  ADL; persistent disability was an ADL loss at 6 months after a first (incident) ADL disability. Discrete time, multivariable Cox proportional hazards regression was utilized to estimate associations with developing incident ADL disability described as cause-specific hazard ratios, with death as a competing outcome. For persons with incident ADL disability, odds of developing persistent disability at 6 months as compared to recovery was determined using multivariable logistic regression. These analyses included 18,414 (51.6% women) ASPREE participants in the United States and Australia aged 70+ years (65+ years if U.S. ethnic minority) without ADL disability at trial entry. During a median follow-up of 4.7 years, 1,485 participants (63.2% women) developed an incident ADL disability, and, of those, 272 (57.0% women) met criteria for persistent disability at 6 months. Women had an increased risk ( $HR=1.17$ , 95%  $CI=1.05$  to  $1.32$ ) of developing incident ADL disability; however, women were less likely to have persistent disability versus recovery 6 months later ( $OR=0.66$ , 95%  $CI=0.49$  to  $0.89$ ). Why persistent disability development is lower in older women needs further exploration.

#### PHYSICAL FUNCTION TRANSITIONS AND HEALTHCARE UTILIZATION AMONG OLDER MEXICAN AMERICANS.

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The aim of this study was to examine the relationship between 2-year physical function transitions and one-year healthcare utilization among Mexican American Medicare

beneficiaries. The sample consisted of 429 Mexican Americans  $\geq 75$  years old from the Hispanic Established Population for the Epidemiologic Study of the Elderly linked with Medicare claims data from the Centers for Medicare and Medicaid Services. Short Physical Performance Battery (SPPB) from Wave 5 (2004/05) to Wave 6 was used to create physical function transition groups. The outcomes were physician visits ( $<6$ ,  $6-12$ ,  $>12$  visits), number of emergency room visits, and number of acute hospitalizations one-year after physical function transitions. Multinomial logistic regression and Generalized Estimating Equation with negative binomial distribution were used to estimate the odds ratio of healthcare utilization as a function of physical function transition groups, controlling for socio-demographics and comorbidities. Participants who improved or remained moderate-high physical function had lower odds ratio (OR) of being hospitalized (0.40, 95% Confidence Interval [CI]=0.18, 0.90) or visiting the emergency room ( $OR=0.52$ , 95%  $CI=0.32-0.84$ ) one-year later compared to participants who remained in the low physical function group. No difference in physician visits across physical function transition groups was found. This study showed healthcare utilization differed by physical function transition groups among Mexican American Medicare beneficiaries. Physical function improvement or maintenance of moderate-high physical function should be targeted in older Mexican Americans, a population at great risk of developing disability, to reduce or delay dependency and healthcare burden.

#### RELATIONSHIP BETWEEN CLUSTERS OF CHRONIC CONDITIONS AND DISABILITY TRAJECTORIES

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Recent evidence shows that more complex clusters of chronic conditions are associated with poorer health outcomes. Less clear is the extent to which these clusters are associated with different types of disability (basic and instrumental activities of daily living (ADL, IADL) and functional mobility (FM)) over time. This was a longitudinal analysis using the National Health and Aging Trends Study (NHATS) ( $n = 6,179$ ). Using latent class analysis, we determined the optimal clusters of chronic conditions, then assigned each person to a best-fit class. Next, we used mixed-effects models with repeated measures to examine the effects of group (best-fit class), time (years from baseline), and the group by time interaction on each of the outcomes in separate models over 4 years. We identified 5 chronic condition clusters: “multisystem morbidity” (13.9% of the sample), “diabetes” (39.5%), “osteoporosis” (24.9%), “cardio/stroke/cancer” (4.5%), and “minimal disease” (17.3%). Group by time interaction was not significant for any outcome. For ADL outcome, only time was significant ( $F_{3,16249} = 224.72$ ,  $p < .001$ ). For IADL, both group ( $F_{4,5403} = 6.62$ ,  $p < .001$ ) and time ( $F_{3,22622} = 3.87$ ,  $p = .009$ ) were significant. For FM, both group ( $F_{4,5920} = 2.96$ ,  $p = .02$ ) and time were significant ( $F_{3,16381} = 213.41$ ,  $p < .001$ ). We did not find evidence that any cluster experienced greater increases in disability over time, but all clusters containing multiple chronic conditions had risk of IADL and FM disability. Increased screening for IADL and FM disability could identify early disability and prevent decline.