

exposure to chemotherapy in colorectal cancer survivors demonstrated a protective effect for AD HR=0.821 (0.784-0.860). The beneficial effect held in race-, sex-, cancer-stage-specific subgroups, across chemotherapy agents (e.g., Fluorouracil, Oxaliplatin, or Fluorouracil+Leucovorin), in multivariable analyses, and in propensity score-based pseudorandomization based on 70 demographic, socioeconomic, cancer-diagnosis-related, and comorbidity variables. The effect was diminished or absent when non-AD dementias were analyzed. Findings further demonstrated that the association between chemotherapy exposure and AD was not affected by competing risk of long-term mortality or possible correlation between choosing chemotherapy and higher cognitive score or use of alternative health insurance. The effect of anesthesia on AD was not significant (0.998 per hour, 0.992-1.005) and this effect held in all subgroups, multivariable analyses, and for pseudorandomized subpopulations. Harmful effect was detected for cerebral degeneration, excluding AD, cognitive deficits following cerebral hemorrhage, cognitive disorder due to injury, hepatic encephalopathy, and hepatolenticular degeneration. Sensitivity analyses focused on SEER-Registry-specific effects and possible misspecifications in anesthesia records with alternative models demonstrated stability of estimates.

#### DUAL DECLINE IN GAIT AND COGNITION IS ASSOCIATED WITH FUTURE DEMENTIA: EVIDENCE FOR A PHENOTYPE

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**BACKGROUND:** The concurrent decline in gait speed and cognition are associated with future dementia. However, the clinical profile of those who present with dual-decline has not yet been described. We aimed to describe the phenotype and risk for incident dementia of individuals who present a dual-decline in comparison with non dual-decliners. **METHODS:** Prospective cohort of community-dwelling older adults free of dementia at baseline. We evaluated participants' gait speed, cognition, medical status, functionality, incidence of adverse events, and dementia biannually over 7 years. Gait speed was assessed with a 6-meter electronic-walkway, and global cognition was assessed using the MoCA test. We compared characteristics between dual-decliners and non dual-decliners using t-test, Chi-square, and hierarchical regression models. We estimated incident dementia using Cox models. **RESULTS:** Among 144 participants (mean age 74.23 ± 6.72 years, 54% women), 17% progressed to dementia. Dual-decliners had a three-fold risk (HR: 3.12, 95%CI:1.23-7.93, p=0.017) of progression to dementia compared with non dual-decliners. Dual-decliners were significantly older with a higher prevalence of hypertension and dyslipidemia (p=0.002). Hierarchical regression models show that age and sex alone explained 3% of the variation in the dual-decliners group, while adding hypertension and

dyslipidemia increased the explained variation to 8% and 10%, respectively. The risk of becoming a dual-decliner was 4-fold if hypertension was present. **CONCLUSION:** Older adults with concurrent decline in gait speed and cognition represent a group at the highest risk of progression to dementia. These dual-decliners have a distinct phenotype with a higher prevalence of hypertension, a potentially treatable condition.

#### RECRUITMENT OF A DIVERSE RESEARCH COHORT IN A LARGE METROPOLITAN AREA FOR DEMENTIA INTERVENTION STUDIES

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In the near future, the costs, both human and financial, of dementia care will grow exponentially. Over five and a half million older Americans are estimated to be living with Alzheimer's disease and related dementia (ADRD). By 2050, this is expected to increase to over 13 million, with persons of color being at the highest risk for developing dementia. Considerable federal, state and private funds have been committed to research to prevent, treat, and care for persons at risk for ADRD. However, enrollment of research participants, particularly those coming from diverse backgrounds into studies, is a perennial challenge and has serious implications. Between 2014 and 2019, a Johns Hopkins study team implemented a wide ranging research recruitment effort in the Baltimore-Washington DC area to enroll participants into two large federally funded dementia care coordination trials. A total of 2,063 study participants were self- or caregiver referred to these projects via referrals from organizations (e.g. religious, health, social service, aging, Medicaid claims) and targeted community outreach (e.g. events, media). Ultimately, 647 ADRD/study partner dyads were enrolled (31%). Outreach and recruitment challenges included stigma, lack of confirmed diagnosis, mistrust of research, and situational crises. The study team adapted enrollment criteria as challenges emerged, and ultimately spent \$101,058 on outreach and recruitment to enroll 647 participant dyads. This represents a cost of \$156.19 per dyad. This poster will provide background on the research program, detail the comprehensive outreach and recruitment strategies employed and their costs, and discuss best practices for recruiting this population.

#### SESSION 2922 (PAPER)

##### FALL PREVENTION I

#### DISABILITY PREVENTION PROGRAM IMPROVES LIFE-SPACE AND FALLS EFFICACY: A RANDOMIZED CONTROLLED TRIAL

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