Fit2drive: Development and testing of a predictor of driving capacity of older adults with cognitive concerns

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The decision to stop driving has been reported by caregivers of persons with dementia as one of the most difficult ones they confront. Additionally, primary care providers to whom they often turn for guidance report being unprepared to provide them with evidence-based information. Our aim was to develop and test a predictive model employing 2 or 3 brief, easily administered cognitive tests to predict the individual’s likelihood of passing an on road driving test. Participants were licensed drivers recruited from our Memory Center’s driver evaluation program and the community to obtain a broadly representative sample of older drivers. A total of 357 drivers age 60 to 97 (mean 81) completed an established on-road driving test and battery of short cognitive tests. Two-thirds of the sample were white, non-Hispanic, one third were Black, African American, 59% male and 41% female, mean MMSE score of 24. Employing Receiver Operating curve analysis, the best set of predictors included participant age, MMSE utilizing world spelled backwards (a better predictor than serial 7’s), Trails B time in seconds and participant age yielding 95% AUC (area under the curve). The model was invariant across gender, education and ethnic group. A website with an interactive calculator in which this data is entered and likelihood of passing an on-road driving test prediction is presently under construction and will be available first to providers and later to individuals with a concern about continuing capacity to drive. Funded by Florida Department of Health Ed and Ethel Moore Alzheimer’s Disease Initiative.

Impact of COVID-19 movement control on older adults’ healthcare utilization

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Singapore was one of the first countries affected by COVID-19. Measures to contain the spread of COVID-19 include raising the Disease Outbreak Response System Condition (DORSCON) risk assessment to Orange and instituting a movement control order, termed as the Circuit Breaker. These measures have caused significant disruption in primary care and chronic disease management. As the first point of contact in testing suspected cases, primary care providers shifted their focus from non-COVID-19 services. Using an interrupted time series analysis, we examine the associations of DORSCON Orange and Circuit Breaker on acute and chronic primary care visits among older adults aged above 50. We found significant reductions in both acute and chronic primary care visits immediately following DORSCON Orange and Circuit Breaker. DORSCON Orange was associated with a drop of 231 mean daily visits (95% CI -356 to -106). Circuit Breaker was associated with a further drop of 268 mean daily visits (95% CI -426 to -111). These reductions were also observed for acute and chronic visits separately. Routine chronic care appointments were deferred or cancelled to reduce the risk of transmission as patients with underlying medical conditions were at higher risk of developing severe complications. Delayed access to...
primary care can have profound health implications, especially for older adults. Ensuring accessibility to primary care is a key priority in maintaining population health. Understanding the impact of COVID-19 tightening measures on older adults’ primary care utilisation will be useful for future public health planning.

PROFILE OF OLDER PUBLIC TRANSPORTATION USERS IN THE UNITED STATES: IMPLICATIONS FOR AGE-FRIENDLY COMMUNITIES

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Public buses, trains, and trams are a growing mode of transportation for older adults in the United States, yet many environmental and health related barriers to use have been reported. Characterizing the population of older public transit users is essential for developing age-friendly communities. We used data from 5696 urban, community dwelling older adults in round 5 of the National Aging and Trends Study (NHATS), an annual nationally representative survey of late-life disability. Using SAS (version 9.4), weighted frequencies were calculated and compared between public transit and non-transit users using procedures that account for the complex design of the NHATS survey. Compared to non-transit users, those who reported using transit within the last month (n=555, 9.8%; weighted n=3,122,583) were significantly more likely to identify their race/ethnicity as Black or Hispanic (50% vs 28%) and reported difficulty meeting financial needs for housing, utility, and food (12% vs 7%), and to speak a language other than English (14% vs 8%). Transit users were significantly less likely to use a walker (9% vs 14%) or wheelchair/scooter (4% vs 9%). Additionally, 15% of transit users did not have a working cell phone and 42% did not have a working computer. Over 20% of transit users (weighted n=658,850) rely on these services to get to their doctor. These findings highlight the clinical, social, and financial barriers that disproportionately affect over 3 million older adult transit users in the United States, and inform initiatives oriented towards improving community access for older adults.

REFINING CARFREEME, A DRIVING RETIREMENT PROGRAM FOR PERSONS WITH DEMENTIA AND THEIR CARE PARTNERS

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Persons living with dementia (PLWD) are at increased risk for roadway crashes and subsequent injury or death. Navigating driving retirement while respecting the PLWD’s autonomy and supporting continued independence can be challenging. CarFreeMe™, originally developed in Australia, is a driving retirement intervention providing tailored psychoeducational telecoaching modules to PLWD and/or their care partners. Session topics include living with dementia, balancing independence and safety, adjusting to loss and change, exploring others’ experiences with driving retirement, planning for alternative transportation, lifestyle planning, advocacy and support, and problem solving. Phase I enrolled 16 care partners and 11 PLWD. Mixed methods data from Phase I’s 1- and 3-month follow-up surveys and post-intervention interviews demonstrated feasibility and acceptance of CarFreeMe™ with a U.S. audience. Phase I participants found the program valuable and would recommend it to others (96% care partners, 100% PLWD). Care partners and PLWD reported improved Readiness of Mobility Transition scores at the 3-month survey. Several felt the program may be most useful early in the decision making process. The program offered strategies and education that facilitated conversations both during and outside of the intervention sessions to support the PLWD’s agency and acceptance of driving retirement. Participant feedback and lessons learned from Phase I informed Phase II development and deployment. Phase II is enrolling 50 care partners, PLWD, or dyads and includes 3- and 6-month follow-up surveys. Preliminary CarFreeMe™ Phase II utility, acceptance, and driving related outcomes will be discussed as well as next steps for evaluation.

SESSION 4230 (AWARD LECTURE)

DONALD P. KENT AND ROBERT W. KLEE MEIER AWARD LECTURES

Chair: Peter Lichtenberg

The Donald P. Kent Award lecture will feature an address by the 2021 Kent Award recipient Luigi Ferrucci, MD, PhD, FGSA, of the National Institute on Aging. The Kent Award is given annually to a member of The Gerontological Society of America who best exemplifies the highest standards of professional leadership in gerontology through teaching, service, and interpretation of gerontology to the larger society. The Robert W. Kleemeier Award lecture will feature an address by the 2021 Kleemeier Award recipient Kenneth F. Ferraro, PhD, FGSA, of Purdue University. The Kleemeier Award is given annually to a member of The Gerontological Society of America in recognition for outstanding research in the field of gerontology.

DUAL FUNCTIONALITY IN LATER LIFE

Kenneth Ferraro, Purdue University, West Lafayette, Indiana, United States

Longevity and quality of life are core interests in gerontology, but debate has ensued as scholars have sought to integrate the two. I propose the concept of dual functionality to examine how humans reach advanced ages while maintaining both physical and cognitive function. Using a large national sample, my colleagues and I operationalize dual functionality and identify life course factors that predict it. Analyses of 33,310 respondents 50 years or older from the Health and Retirement Study show an estimated median age of 74 for loss of dual functionality. Lifetime stress exposure leads to earlier loss of dual functionality, even after adjustment for socioeconomic status and lifestyle factors.