AGE-RELATED MACULAR DEGENERATION AND THE AGING BRAIN

Heather Whitson,[1] Alexandra Badea,[2] Jacques Stout,[2] Simon Davis,[2] Jie Zhuang,[3] and David Madden,[2] *1. Duke University School of Medicine, Durham, North Carolina, United States, 2. DUKE UNIVERSITY, Durham, North Carolina, United States, 3. Shanghai University of Sport, Durham, North Carolina, United States*

Age-related macular degeneration (AMD), a leading cause of vision loss in older Americans, is associated with cognitive decline and, particularly, worse performance on verbal fluency tasks. To determine whether AMD is associated with changes in brain structure that may underlie decline in cognition, we conducted a longitudinal, observational study of 39 visually impaired AMD patients and 33 age-matched peers with healthy eyes. Participants (mean age 74.3) underwent cognitive assessments and 3T magnetic resonance imaging (MRI) at baseline and two years. At baseline, AMD patients exhibited lower cortical volume and worse white matter tract integrity, especially in inter-hemispheric connections (FDR <0.05). Principal components analyses revealed faster white matter decline in the AMD group, especially in visual cortex and left hemisphere, which is implicated in language tasks. Understanding patterns of regional brain atrophy in AMD sheds light on mechanisms for the AMD-cognition link and opens windows of opportunity for intervention.

Session 2090 (Symposium)

IMPLICATIONS OF DISABILITY FOR FUNCTIONAL TRAJECTORY, SERVICE USE, AND EXPENDITURES

Chair: Wayne Anderson

Discussant: Gretchen Alkema

People with disabilities face a diverse array of health care and support needs. These needs can vary by disability type, degree, and timing of the advent of functional limitations. These differences have implications for needed health care service use and related expenditures. The symposium will open with a Centers for Disease Control and Prevention-sponsored analysis of adult disability-associated health care expenditures, both nationally and by U.S. state, in total, by per adult, by per adult with disability, and by payer, to illustrate the contribution and variation of these expenditures to individual states and the health care system. We will next present a U.S. Department of Health and Human Services' Office of the Assistant Secretary for Planning and Evaluation effort to identify onset and patterns of reduced functional ability at end of life for older adults with and without dementia as related to other comorbidities. The last paper will present a Commonwealth Foundation study on older adults with functional disabilities and multiple chronic conditions, comparing those with high health care needs versus the subset of those people who are also high cost. Patterns of utilization differed between these two groups, and by state. These findings have implications for the development of care models that might best meet people's needs. Our discussant will respond to the studies' findings and discuss the important role that efforts to understand the nature of disability and functional status and the scale and scope of service use and costs have for people with disabilities.

STATE-LEVEL HEALTH CARE EXPENDITURES ASSOCIATED WITH DISABILITY

Wayne Anderson,[1] Olga Khavjou,[1] Amanda Honeycutt,[1] Laurel Bates,[1] NaTasha Hollis,[2] Scott Grosse,[2] and Hilda Razzaghi,[2] *1. RTI International, Research Triangle Park, North Carolina, United States, 2. Centers for Disease Control and Prevention (CDC), Atlanta, Georgia, United States*

This study updated prior (2003) state-level estimates of disability-associated health care expenditures (DAHE). We combined 2013-2015 data from three national data sets to estimate using multivariate regression all state-level DAHE for US adults in total, by payer, and per adult and per (adult) person with disability (PWD). In 2015, DAHE were $868 billion nationally (State range, $1.4 billion to $102.8 billion) accounting for 36% of total health care expenditures (range, 29%-41%). From over a decade ago, total DAHE increased by 65% (range, 35%-125%). DAHE per PWD was $17,431 (range $12,603 to $27,839). From over a decade ago, per-PWD DAHE increased by 13% (range, –20% to 61%). In 2015, Medicare DAHE per PWD ranged from $10,067 to $18,768. Medicaid DAHE per PWD ranged from $9,825 to $43,365. DAHE are substantial and vary by state and payer. Stakeholders can use these results to develop public health programs to support people with disabilities.

UTILIZATION AND EXPENDITURES OF HIGH-NEED, HIGH-COST OLDER ADULTS WITH DISABILITIES

Sarita Karon,[1] Cleanthe Kordomenos,[2] Molly Knowles,[2] and Micah Segelman,[2] *1. RTI International, Waltham, Massachusetts, United States, 2. RTI International, Research Triangle Park, North Carolina, United States*

The factors that lead people to have high needs for care can vary greatly, with implications for the best approaches to serving their needs. One high need group of interest is older adults with disabilities and multiple comorbidities. There is variation in need within this group. Of particular interest is the subset that is both high need and high cost (HNHC). We present work describing Medicare and Medicaid utilization and expenditures for this high need group and the HNHC subset. Over 7.6 million people were identified as high need; 13.6% of them also were defined as HNHC. Patterns of utilization differed between these groups, with the HNHC group more likely to use inpatient care and nursing home care, but less likely to use community-based long-term services and supports. These findings have implications for the development of care models that might best meet the needs of this population.

FUNCTIONAL TRAJECTORIES FOR PEOPLE WITH DEMENTIA AND OTHER COMORBIDITIES IN THE LAST YEARS OF LIFE

Ila Broyles,[1] Lauren Palmer,[2] Emily Graf,[3] Qinghua Li,[4] Zhanlian Feng,[4] Helen Lamont,[5] Judith Dey,[5] and Iara Oliveira,[5] *1. RTI International, RTI International, North Carolina, United States, 2. RTI International, RTI International, Massachusetts, United States, 3. UC Berkeley, Berkeley, California, United States, 4. RTI International, Research Triangle Park, North Carolina, United States, 5. Office of the Assistant Secretary for Planning and Evaluation, Washington, District of Columbia, United States*