

Figure 1. Interaction effect between mutation status and years to expected age of disease onset.

with the strongest effects being seen in the insula and the caudate nucleus (Figure 1). Conclusions: CBF decreased as individuals approached the expected age of disease onset and this CBF decrease was accelerated in the presymptomatic mutation carriers compared to controls, in key regions implicated in FTD. These preliminary findings demonstrate the potential utility of non-invasive perfusion MRI as an early biomarker for genetic FTD. References 1. Montine et al., Neurology 2014 2. Rohrer et al., Lancet Neurol 2015

P1-026

NIH TOOLBOX-COGNITIVE AND COGSTATE COMPUTER-BASED ASSESSMENT IN THE IDENTIFICATION OF MCI SUBTYPES

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Background: As the older adult population increases, medical conditions will become more prevalent, including neurodegenerative diseases. Early detection, including at the mild cognitive impairment (MCI) level, will become increasingly necessary for prevention and treatment of Alzheimer's disease and related dementias. We investigated the use of computerized neuropsychological batteries in the identification of amnestic MCI (aMCI) and non-amnestic MCI (naMCI) compared to cognitively healthy older adults. Methods: Volunteers were 114 persons (69% female, 45% African-American) recruited from the University of Michigan Alzheimer's Disease Center (MADC) and the Wayne State University Institute of Gerontology's Healthy Black Elders Center (HBEC). All were enrolled in the longitudinal cohort of the MADC and underwent complete NACC Uniform Data Set (UDS) assessment, being diagnosed via consensus conference as aMCI (n=13, 72.5±7.6 years), naMCI (n=10, 72±5.9 years) or cognitively healthy older adults (n=91, 72.1±7.6 years). No significant differences were noted across the groups in MMSE, age, or education). The computerized tests were not used for consensus. Results: ANOVA results showed healthy older adults' performance to significantly differ (p < 0.05 or better) from both aMCI and naMCI participants on three of the four subtests of the CogState measure used in our study (Identification, One Card Learning, One Back), though no significant difference was found for the simple reaction time measure (Detection). For the Toolbox, similar results were found for all subtests, not just memory-related, within the "fluid" cognitive dimension, though no significant differences were found for "crystalized" (premorbid, well learned material) subscales. Of all the measures, only one NIH Toolbox subtest, the Dimensional Change Card Sorting Task, showed a difference between aMCI and naMCI performance (p = 0.05), with naMCI (92.4 \pm 12.5) scoring below the aMCI group (102.7±13.7), and healthy older above both (108.3 \pm 11.3). Conclusions: Overall, both of these computer-based neuropsychological batteries accurately differentiate healthy older adults from those with MCI in a relatively mildly affected community sample. Additionally, on the more extended Toolbox assessment of multiple domains, one subtest was able to identify select executive-based deficits in the naMCI group. For both clinical and pharmacological outcomes, both of these approaches hold great promise in identification of potential MCI participants.

P1-027

PROVIDERS' PREFERENCES AND UNDERSTANDING OF CARE MANAGEMENT CONCEPTS: A NATIONAL PILOT

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Background: Current care management plans and programs for individuals with ADRD are often based on long-term care providers' interpretation of care management decisions. Although these programs capture a number of key treatment and symptom-related decisions that family caregivers have to make, very few investigations are focused on the relevance and importance of certain system navigation and social dimensions of care management. The objective of this pilot study was to explore the congruence and discordance in ranking of these care management concepts. We conducted focus groups with 17 providers and 24 family caregivers with structured activities to identify, define, and rank care management concepts. 16 concepts were identified, defined, and ranked by all caregivers and providers. Caregiver and provider congruence was 69% on definitions of concepts. When asked to rank concepts as most important, caregivers identified navigating the healthcare system, finding information on the condition, having a support network, and advocating for their loved one's needs as their top 5 most important concepts. On the other hand, only two of these concepts (Finding information, advocating for the needs of the care recipient) were in providers' top 5 most important concepts to address. Providers' remaining concepts included assessing treatment options, dealing with family dynamics, and behavior management in their top ranked concepts. However, when asked to provide examples of services for these concepts, providers' were unable to articulate appropriate services or professions for 2 of their top 5 concepts. The discordance demonstrated from the concept definitions indicates that there is a system gap present that may suggest a number of possibilities. The first of these is a communication gap between a family caregivers and long-term care providers, while the ranking indicates that providers may be focused on more symptom management and less on social or system issues that are a part of care management. Our pilot study indicates that more investigation into both communication of care management goals and in social issues surrounding families of individuals with ADRD may improve health care system delivery for this population.