or improve function, use fewer psychotropic medications, and have improved quality of life compared to residents in Education Only settings. There was not a significant treatment effect at the setting or resident level. Reasons for lack of effectiveness include limited evidence of behavioral symptoms at baseline, nationally based environment and policy requirements related to behavioral management, and measurement challenges in identifying behaviors and other outcomes. Future work should focus more on process and changing how staff approach care which was demonstrated in this trial.

#### FACILITATORS AND BARRIERS TO IMPLEMENTATION OF THE EIT-4-BPSD INTERVENTION

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This study aimed to explore the perceptions of stakeholders (site champions, administrators, and front-line, social service, and activity staff) regarding the EIT-4-BPSD implementation strategy, including its utility, and the barriers and facilitators to implementation in real-world settings. A process evaluation included qualitative data from focus groups conducted with 93 stakeholders of 21 nursing homes (NHs) that implemented the EIT-4-BPSD strategy. Data were analyzed using a conventional content analysis. Emerging codes were sorted into categories then organized in meaningful clusters based on the domains of the RE-AIM framework. Challenges, facilitators, and contextual factors explain variability in implementation of EIT-4-BPSD strategy among NHs in six key categories: multi-stakeholder engagement, multi-level outcomes, process adaptations, uptake and utility of EIT resources, adoption barriers and facilitators, and future planning. Overall, stakeholders reported that the EIT-4-BPSD strategy can be successfully implemented in NHs and is helpful in improving staffs' approach to BPSD.

# RECRUITMENT AND MEASUREMENT CHALLENGES AND FUTURE SOLUTIONS

# Kimberly Van Haitsma, *The Pennsylvania State University*, *University Park*, *Pennsylvania*, *United States*

Recruitment of residents in the EIT-4-BPSD study required that residents have evidence of at least one behavioral symptom noted by staff in the past month. Even with this inclusion criteria 25% of the sample had no behavioral symptoms at baseline based on the Cornell Scale for Depression in Dementia, the Cohen-Mansfield Agitation Inventory, the Resistance to Care Scale, Pain in Advanced Dementia Scale, and Quality of Life in Late-stage Dementia Scale. Further, settings had good quality of care. Challenges to recruitment included the lack of willingness of residents with significant behavioral symptoms to assent to participate and legally authorized representatives to consent. Challenges to measurement included recall by staff and assumptions that behavioral symptoms were normal, short observation periods, and resident inability to provide input. Future solutions include some revisions in measures that will be described, longer assessment periods, and elimination of requirements that make recruitment of this population difficult.

## Session 2085 (Symposium)

### HEARING AND VISION IMPAIRMENT IN OLDER ADULTS: IMPLICATIONS FOR COGNITIVE, MENTAL, AND BRAIN HEALTH Chair: Jennifer Deal

Co-Chair: Frank Lin

Discussant: Bonnielin Swenor

Sensory impairment impacts over 55% of Americans aged 60 years or older and may have important downstream consequences for the cognitive health of older adults. This session will present evidence for a relationship between sensory impairment and accelerated cognitive decline, increased risk of incident dementia, and increased mental and physical fatigability from two observational cohort studies. Additionally, this session will investigate the possible nature of these relationships. It may be that sensory impairment is a marker of dementia-related pathological changes in the brain, with potential ramifications for risk prediction and stratification. Alternatively, sensory impairment may have a direct impact on the aging brain, a potential causal mechanism liking sensory impairment and brain health, with implications for disease prevention. As part of this session, we will present evidence for associations between central auditory processing, a potential risk marker, and brain volumes measured with structural magnetic resonance imaging (MRI), and retinal vasculature density, as measured with optical coherence tomography. We will conclude by describing associations between age-related macular degeneration, a leading cause of blindness, and neurocognitive test performance and regional changes in brain atrophy and connectivity.

### VISION, COGNITIVE IMPAIRMENT, AND DEMENTIA IN THE AGING, DEMOGRAPHICS, AND MEMORY STUDY

Joshua Ehrlich,<sup>1</sup> Bonnielin Swenor,<sup>2</sup> Yunshu Zhou,<sup>3</sup> and Kenneth Langa,<sup>3</sup> 1. University of Michigan, University of Michigan, Michigan, United States, 2. Johns Hopkins School of Medicine, Baltimore, Maryland, United States, 3. University of Michigan, Ann Arbor, Michigan, United States

Vision impairment (VI) is common in late-life and may be a modifiable risk factor for cognitive decline and dementia. In this study, using data from the population-based Aging, Demographics and Memory Study (ADAMS), we analyzed the association of VI with cognitive impairment no dementia (CIND) and dementia. We found that VI (binocular presenting acuity <20/40) was significantly associated with incident CIND (OR=3.5, 95% CI=1.4-8.9, p=0.008) and dementia (OR=1.8, 95% CI=1.0-3.1, p=0.040) after adjusting for age. However, among those with CIND, VI was not associated with dementia (OR=0.9, 95% CI=0.4-1.8, p=0.733). The association between VI and CIND remained significant