

challenge the current understanding of the reasoning processes and experiences of persons with bvFTD and highlight the importance of incorporating mixed method approaches in dementia research that take into consideration the viewpoint of the cognitively compromised individual.

**Categories:** Dementia (Non-AD)

**Keyword 1:** social cognition

**Keyword 2:** decision-making

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### 63 Longitudinal Decline in Everyday Functioning: Exploring the Incremental Validity of Neuropsychiatric Symptoms in Dementia

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**Objective:** Decline in everyday function is a hallmark of dementia and is associated with increased caregiver burden, medical spending, and poorer quality of life. Neuropsychiatric symptoms (e.g., apathy, hallucinations) can also occur in those with dementia and have been associated with worse everyday functioning cross-sectionally. However, research on which neuropsychiatric symptoms are most associated with everyday functioning in those with dementia longitudinally has been more limited. Further, it is unknown which neuropsychiatric symptoms may add incremental validity beyond cognition in predicting everyday function longitudinally. The current study aimed to address both of these gaps in the literature by identifying which neuropsychiatric symptoms are most associated with everyday function over time and if symptoms add incremental validity in predicting everyday function beyond cognition in those with dementia.

**Participants and Methods:** Older adult participants ( $N = 4525$ ), classified as having dementia at baseline by the National

Alzheimer's Coordinating Center, were examined. Severity of neuropsychiatric symptoms were measured via the Neuropsychiatric Symptoms Questionnaire- Informant. Everyday function was assessed via the Functional Activities Questionnaire- Informant. Memory (Logical Memory immediate and delayed) and executive function (Digit Symbol Test, TMT-A and TMT-B) composites were created to assess cognition. Severity of neuropsychiatric symptoms at baseline were analyzed as predictors of everyday functioning beyond demographic factors and cognition at baseline and over the course of five years using multilevel modeling.

**Results:** At baseline, severity of the majority of symptoms, excluding irritability, manic symptoms, and changes in appetite, were associated with everyday function (all  $p < .05$ ). When examining everyday functioning longitudinally, only severity of hallucinations, apathy, motor dysfunction, and sleep dysfunction were associated with differences in everyday function over time (all  $p < .01$ ).

**Conclusions:** There is heterogeneity in the degree to which neuropsychiatric symptoms are associated with everyday functioning over time in those with dementia. Additionally, our results show that some neuropsychiatric symptoms are associated with longitudinal changes in everyday function beyond domains of cognition show to be associated with function. Clinicians should pay particular attention to which neuropsychiatric symptoms individuals with dementia and their families are reporting to aid with treatment planning and clinical decision making related to autonomy. Future research would benefit from examining pathways through which neuropsychiatric symptoms are associated with everyday functioning over time in this population, and if treatments of neuropsychiatric symptoms may improve everyday function in this population.

**Categories:** Dementia (Non-AD)

**Keyword 1:** everyday functioning

**Keyword 2:** neuropsychiatry

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### 64 The Biomarker-Based Etiological Diagnosis of Neurocognitive Disorders: the European Inter-Societal Delphi Consensus

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**Objective:** In the field of neurocognitive disorders, the perspective offered by new disease-modifying therapy increases the importance of etiological diagnosis. The prescription of cerebrospinal fluid analysis (CSF) and imaging biomarkers is a common practice in the clinic but is often driven more by personal expertise and local availability of diagnostic tools than by evidence of efficacy and cost-effectiveness analysis. This leads to a widely heterogeneous dementia care across Europe. Therefore, a European initiative is currently being conducted to establish a consensus for biomarker-based diagnosis of patients with mild cognitive impairment (MCI) and mild dementia.

**Participants and Methods:** Since November 2020, a European multidisciplinary task force of 22 experts from 11 scientific societies have been defining a diagnostic workflow for the efficient use of biomarkers. The Delphi consensus procedure was used to bridge the gaps of incomplete scientific evidence on biomarker prioritization. The project has been in two phases. During Phase 1, we conducted a literature review on the accuracy of imaging, CSF, neurophysiological and blood biomarkers in predicting the clinical progression or in defining the underpinning aetiology of main neurocognitive disorders. Evidence was provided to support the panelists' decisions. In phase 2, a modified Delphi procedure was implemented, and consensus was reached at a threshold of 70% agreement, or 50%+1 when a question required rediscussion.

**Results:** In phase 1, 167 out of 2,200 screened papers provided validated measures of biomarker diagnostic accuracy compared with a gold standard or in predicting progression or

conversion of MCI to the dementia stage (i.e., MRI, CSF, FDG-PET, DaT-imaging, amyloid-PET, tau-PET, and myocardial MIBG-scintigraphy and EEG). During phase 2, panelists agreed on the clinical workspace of the workflow, the stage of application, and the patient age window. The workflow is patient-centered and features three levels of assessment (W): W1 defines eleven clinical profiles based on integrated results of neuropsychology, MRI atrophy patterns, and blood tests; W2 describes the first-line biomarkers according to W1 versus clinical suspicion; and W3 suggests the second-line biomarkers when the results of first-line biomarkers are inconsistent with the diagnostic hypothesis, uninformative or inconclusive. CSF biomarkers are first-line in the suspect of Alzheimer's disease (AD) and when inconsistent neuropsychological and MRI findings hinder a clear diagnostic hypothesis; dopamine SPECT/PET for those leading to suspect Lewy body spectrum. FDG-PET is first-line for the clinical profiles leading to suspect frontotemporal lobar degeneration and motor tauopathies and is followed by CSF biomarkers in the case of atypical metabolic patterns, when an underlying AD etiology is conceivable.

**Conclusions:** The workflow will promote consistency in diagnosing neurocognitive disorders across countries and rational use of resources. The initiative has some limitations, mainly linked to the Delphi procedure (e.g., kick-off questions were driven by the moderators, answers are driven by the Delphi panel composition, a subtle phrasing of the questions may drive answers, and 70% threshold for convergence is conventional). However, the diagnostic workflow will be able to help clinicians achieve an early and sustainable etiological diagnosis and enable the use of disease-modifying drugs as soon as they become available.

**Categories:** Dementia (Non-AD)

**Keyword 1:** dementia - Alzheimer's disease

**Keyword 2:** neuropsychological assessment

**Keyword 3:** neuroimaging: structural

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**65 Learning Ability in Relation to Everyday Activities in Patients with Korsakoff's Syndrome, Other Alcohol-**