

## Neuropsychology: Awareness of cognitive capacities and subjective cognitive decline

## Pre-screening models for patient engagement: The MOPEAD project

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**Abstract**

**Background:** Alzheimer's disease (AD) is a devastating condition that not only impacts greatly on the patient's health but also poses an important burden on the patient's immediate family circle. Early detection of AD allows patients to have an active role in managing their condition, and to plan how to minimize the strain on their dear ones. Despite known benefits, a large proportion of dementia cases remains undiagnosed or receives a late stage diagnosis. The MOPEAD project aims to address this issue by exploring innovative strategies to emerge "hidden" cases of cognitive impairment.

**Method:** Memory clinics located in five different European countries participated in the project. Four innovative pre-screening strategies were implemented to detect cognitive decline among individuals aged 65-85 years who had never received a dementia related diagnosis: a) a web-based pre-screening tool along with an online marketing campaign, b) open house initiatives where people with memory complaints were invited to receive a quick evaluation at participating memory clinics, c) a primary care-based protocol for early detection of cognitive decline using easily administered tools, and d) a tertiary care-based pre-screening at diabetologist clinics specifically designed to assess risk of dementia among patients with diabetes. A positive pre-screening result implied that individuals were at high risk of having mild cognitive impairment or AD.

**Result:** The number of individuals enrolled, and the proportion of those with positive pre-screening results varied across strategies. The web-based tool evaluated the largest number of individuals (n=1487) and yielded 547 positive results (36.8%). The Open house initiative pre-screened 661 subjects of whom 235 (35.6%) obtained a positive result. A total of 435 patients were pre-screened in the primary care-based strategy and 193 of them (44.4%) were found to have a positive result. Finally, 264 patients from diabetes clinics underwent pre-screening and 154 (58.3%) showed a positive result.

**Conclusion:** Using innovative pre-screening strategies, we were able to identify 1129 individuals at high risk of having dementia who had otherwise remained unnoticed. Initiatives like this, show us the way to go in order to shift the paradigm of AD towards an earlier diagnosis.