

The diagnosis journey of Alzheimer's disease: why early detection matters

Alzheimer's is a chronic, progressive brain disease that slowly gets worse over time and affects memory, behaviour, problem-solving and daily activities.¹ It is one of the biggest global public healthcare crises facing society.²

Today, the Alzheimer's diagnosis journey is complex and lengthy

- **Alzheimer's is typically missed or diagnosed late in the disease journey.**
 - Changes in the brain may start 20+ years before symptoms of Alzheimer's become noticeable, by which time the disease has already advanced^{3,4}
- **It may take up to 2 years, sometimes longer, of appointments and thorough neurological testing before Alzheimer's is diagnosed.^{5,6}**
 - Diagnosis is based on detection of cognitive decline through a series of cognitive assessments and then later, through brain scanning technology such as:
 - MRI or CT scans, primarily used to rule out other conditions that can cause similar symptoms⁷
 - Positron emission tomography (PET) scans and cerebrospinal fluid (CSF) testing to detect the presence of amyloid and tau⁴
- Reasons for missed diagnosis or delays include:^{1,4,8}
 - **Stigma of dementia and fear of diagnosis, lack of awareness**
 - **Difficulty in distinguishing Alzheimer's dementia from typical age-related changes**
 - **Lack of access to specialist practitioners and equipment**



Contrary to popular belief, the cognitive decline associated with Alzheimer's is not a natural part of ageing⁸



A timely diagnosis can bring important benefits because individuals can:⁹



Begin health measures to preserve existing cognitive function



Access medication that may reduce the impact of memory loss and confusion

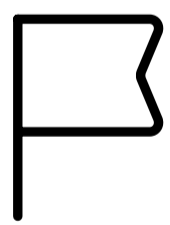


Identify social support services to benefit the entire family



Start planning for the future and be part of decision making

Early detection and timely diagnosis are becoming increasingly important



Early detection of Alzheimer's:^{10,11} involves identifying physiological changes that occur in the brain, long before changes in memory function or ability to perform daily tasks become apparent.

Biological markers, or 'biomarkers', are naturally occurring characteristics of the body that can be objectively measured via analysis of body fluids, tissues or imaging to help determine the presence of disease.



Research has shown that disease-modifying treatments may be more likely to slow the progression of Alzheimer's when given during the preclinical or early stages of disease^{11,12}



By screening more people with a higher likelihood of developing Alzheimer's, before symptoms appear, they can be referred for further tests



Quicker, cheaper, less invasive biomarker tests have significant potential to change how we detect, diagnose, manage and monitor Alzheimer's^{13,14}

- › Currently in clinical practice: Tests that use samples of CSF can be used to monitor levels of the 'hallmarks of Alzheimer's', amyloid and tau, and support diagnosis⁴
- › Currently being researched: blood-based and digital biomarkers^{14,15}

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