

# How Prepared Are European Health Care Systems to Deliver a Future Alzheimer's Treatment?

As the populations of European nations age, the devastating burden of Alzheimer's disease on patients and families looms. The prevalence of the disease is expected to double between 2015 and 2050. Yet recent clinical trials give hope that a disease-modifying therapy might become available soon. The therapy would treat early-stage patients to prevent or delay the progression to dementia. When this therapy becomes available, are European health systems prepared to deliver it?

# AN ASSESSMENT OF HEALTH CARE INFRASTRUCTURE IN FRANCE, GERMANY, ITALY, SPAIN, SWEDEN, AND THE UNITED KINGDOM

## A therapy for early-stage disease means that millions of patients would need care

Recent clinical trials offer hope that an Alzheimer's disease-modifying therapy may become available soon. The therapy would treat the disease at an early stage to prevent or delay the progression to dementia.



If untreated, MCI due to Alzheimer's disease progresses to dementia **ALZHEIMER'S DEMENTIA** Treatment reduces the risk of transitioning to dementia

## If a therapy becomes available, there would be millions of patients to

1. screen for MCI



2. evaluate for Alzheimer's disease



3. test for biomarkers (cerebrospinal fluid assays or brain imaging)



**4. treat** with intravenous infusion therapy



A RAND study used simulation modeling to assess the health care system capacity to evaluate, test, and treat expected patients in six countries that represent 65 percent of the population in the European Union (EU). The analysis looked at a scenario in which a therapy is available in 2020 and is delivered monthly to patients with MCI due to Alzheimer's disease.





patients may seek evaluation  ${f MILLION}$  by a dementia specialist.





patients may have MCI due to Alzheimer's MILLION and be eligible for treatment.

## Wait times for specialist visits and infusion therapy could delay access to care

#### MAXIMUM WAITING TIME BASED ON THEORETICAL CAPACITY First year with Dementia specialist visits Infusion therapy no wait times >12 months France <6 months 2033 Germany No wait <6 months 2030 Italy <6 months 6-12 months 2040 Spain 6-12 months 6-12 months 2044 Sweden <6 months 6-12 months 2036 United Kingdom >12 months 6-12 months 2042

Delays in care could result in more than 1 million patients developing Alzheimer's dementia while waiting for evaluation and treatment between 2020 and 2050.

NOTE: There are no waiting times for biomarker testing if cerebrospinal fluid assays are used for 90 percent of testing and positron emission tomography scans are used for 10 percent of testing

### Policies and planning could help increase capacity

**Establish** graduated clinical pathways to screen for cognitive impairment and develop better detection tools.

**Utilise** dedicated outpatient infusion centers in collaboration with hospitals, memory clinics, and other facilities.

**Ensure** appropriate reimbursement of services.

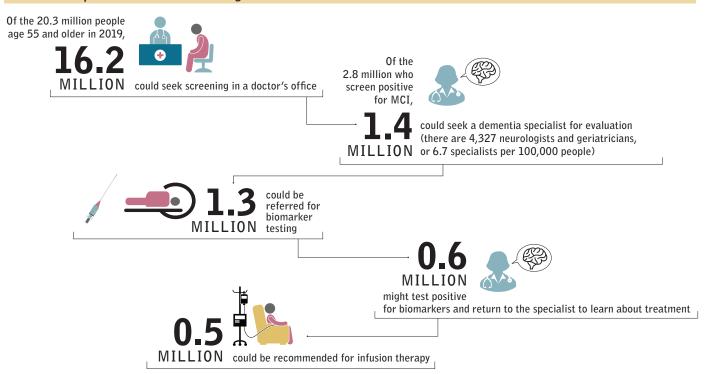
**Create** EU-wide guidance and best practices for coordinated and timely care.

A combination of reimbursement, regulatory, and workforce planning policies and innovation in diagnosis and treatment delivery is needed to expand capacity and to ensure that available capacity is leveraged optimally to treat patients with early-stage Alzheimer's disease.

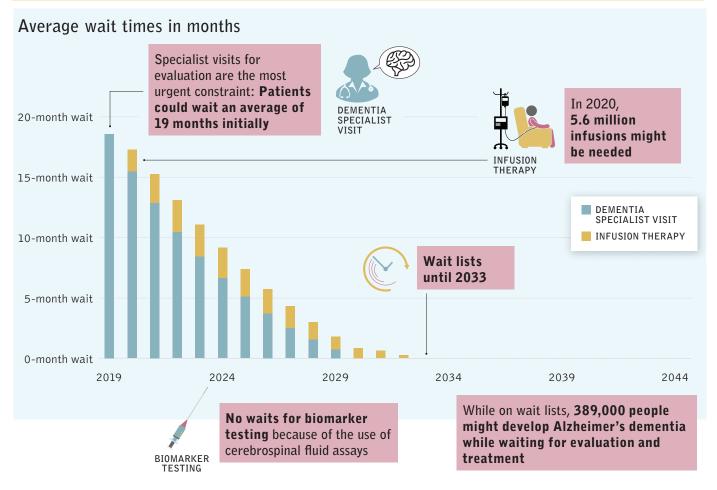


# FRANCE: EXPECTED PATIENTS AND HEALTH CARE SYSTEM CAPACITY

## Millions of patients could seek diagnosis and treatment



## Wait times might be extensive, particularly for dementia specialist visits





Excerpted from Assessing the Preparedness of the Health Care System Infrastructure in Six European Countries for an Alzheimer's Treatment, by Jakub P. Hlávka, Soeren Mattke, and Jodi L. Liu, Santa Monica, Calif: RAND Corporation, RR-2503-BIOG, 2018 (available at www.rand.org/t/RR2503). The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest.

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