

# A CURRENT GLOBAL PERSPECTIVE ON THE EPIDEMIOLOGY AND NATURE OF THE DEMENTIAS, THEIR GLOBAL IMPACT, PRESSING CHALLENGES AND WHAT IT WOULD MEAN IF DEMENTIA WERE A MAJOR PUBLIC HEALTH PRIORITY

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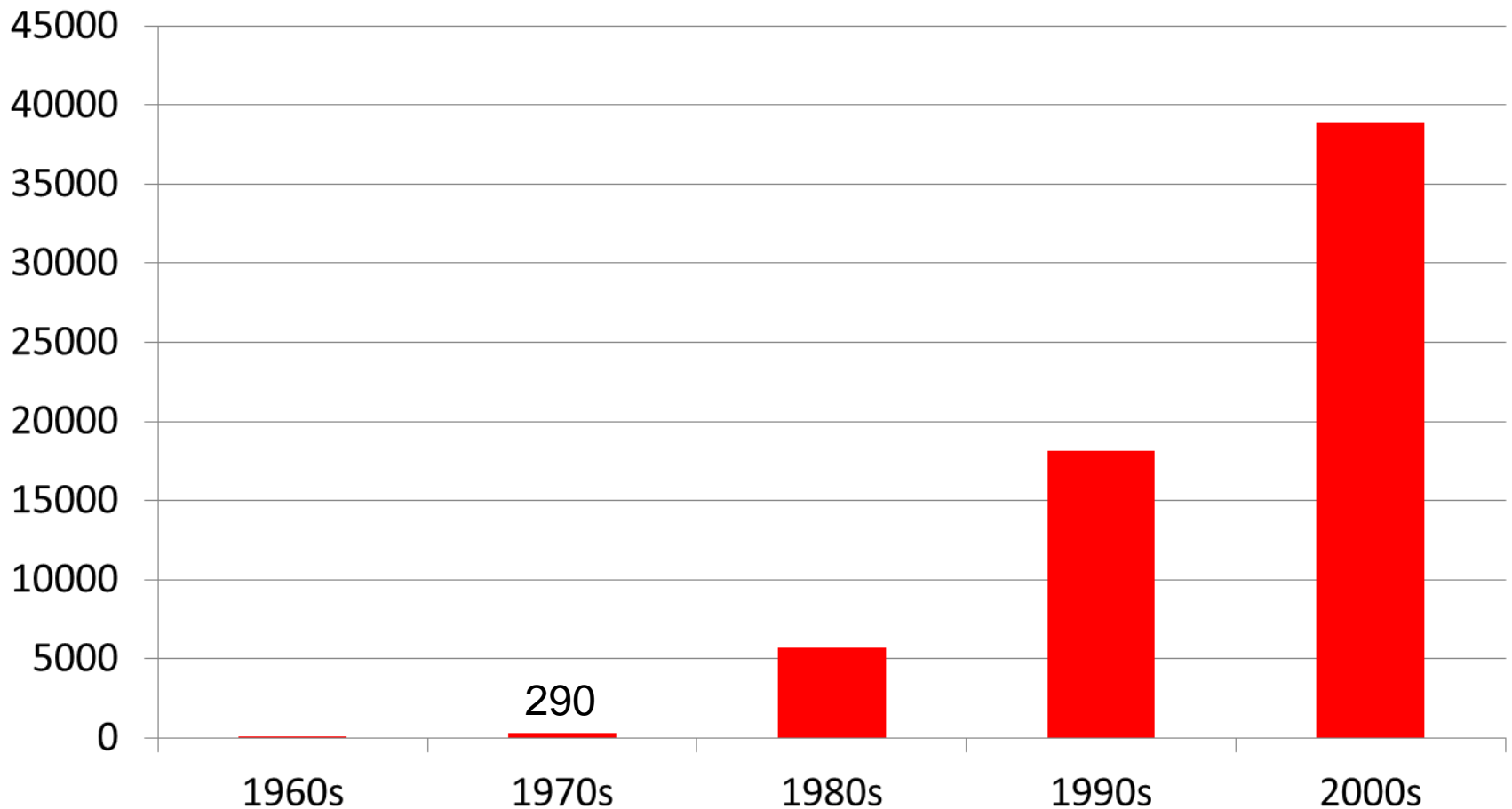


we need to know  
much more about  
dementia

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CHALLENGES AND SOLUTIONS - 1

# Numbers of papers on Alzheimer's Disease by decade



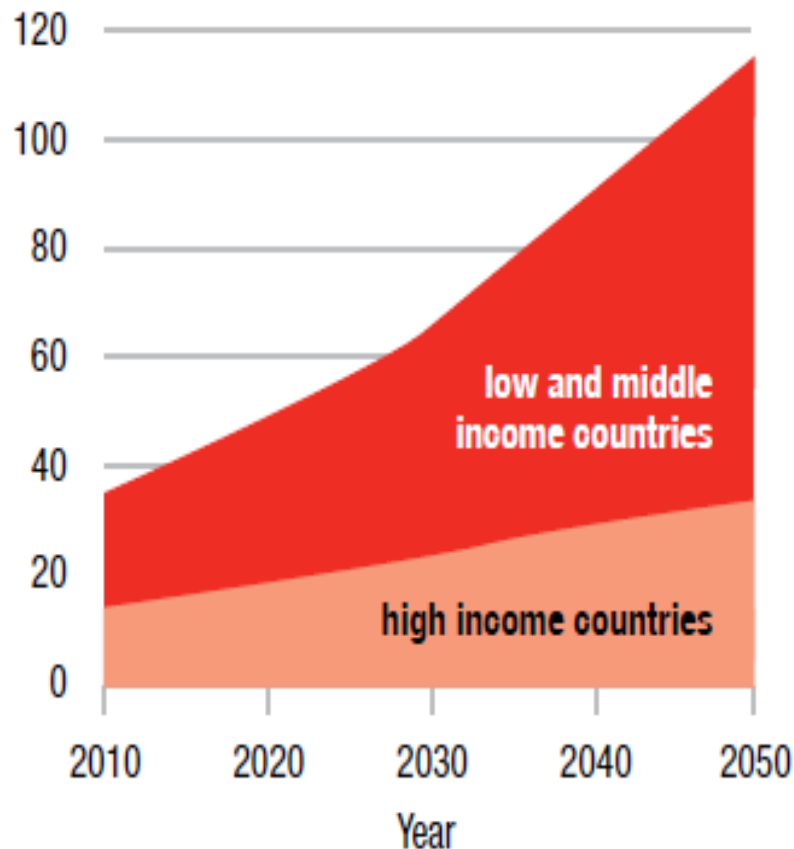
# Disorders of the brain and mind are leading contributors to disability and dependence

| Health condition/ impairment       | Mean population attributable fraction (Dependence) | Mean population attributable fraction (Disability) |
|------------------------------------|--|--|
| <b>1. Dementia</b>                 | <b>36.0%</b>                                       | <b>25.1%</b>                                       |
| <b>2. Limb paralysis/ weakness</b> | <b>11.9%</b>                                       | <b>10.5%</b>                                       |
| <b>3. Stroke</b>                   | <b>8.7%</b>  | <b>11.4%</b>                                       |
| <b>4. Depression</b>               | <b>6.5%</b>  | <b>8.3%</b>  |
| <b>5. Visual impairment</b>        | <b>5.4%</b>  | <b>6.8%</b>  |
| <b>6. Arthritis</b>                | <b>2.6%</b>  | <b>9.9%</b>  |

Sousa et al, Lancet, 2009; BMC Geriatrics 2010

# Growth of numbers of people with dementia

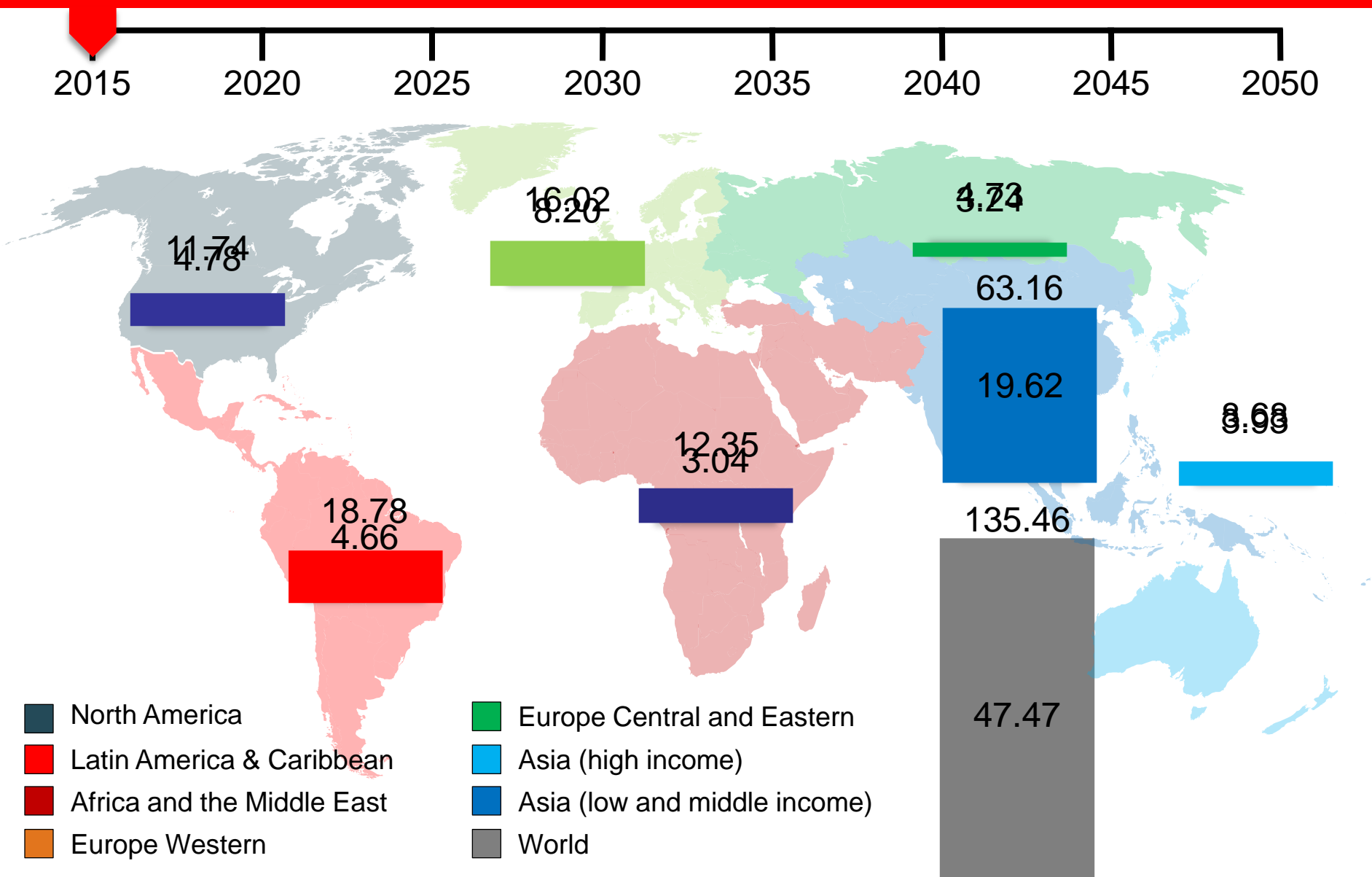
Numbers of people with dementia (millions)



The World Alzheimer Report (2009) estimated:

- **35.6 million people living with dementia worldwide in 2010**
- **Increasing to 65.7 million by 2030**
- **115.4 million by 2050**

# Numbers of people with dementia by world region (2015-2050)



# Future projections

Alzheimer's Society, March , 2012

The number of people in the UK with dementia will double in the next 40 years.

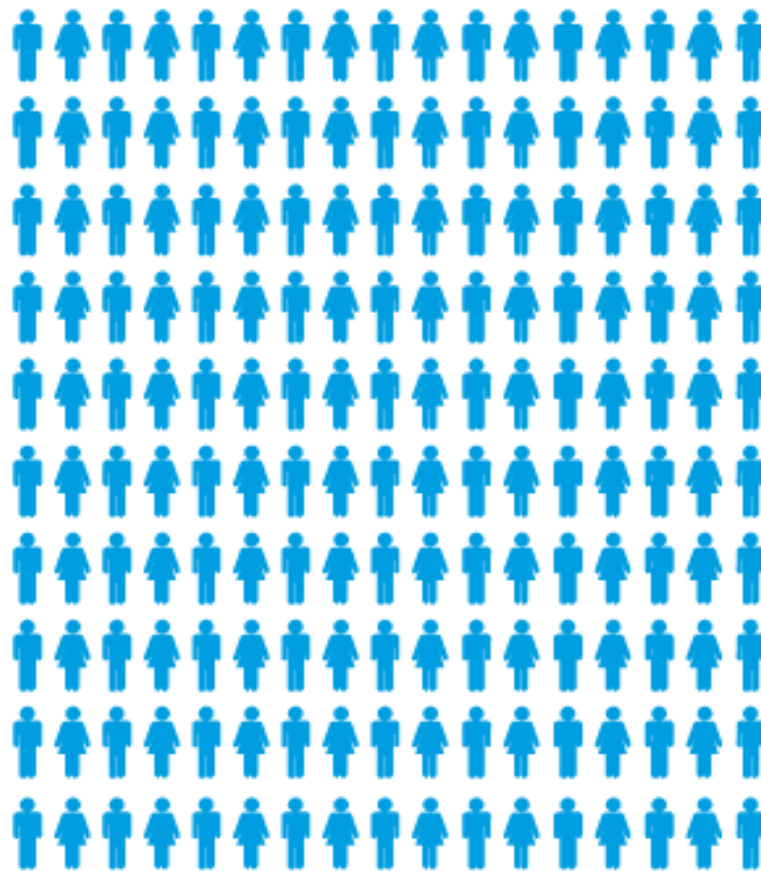
 = 10,000 people



800,000 people  
with dementia in  
2012



1,000,000 people  
with dementia in  
2021



1,700,000 people  
with dementia in  
2051





**Alzheimer's Disease  
International**

*The global voice of dementia*

## **Women and Dementia**

A global research review



# Worldwide cost of dementia

The societal cost of dementia is already enormous.

Dementia is already significantly affecting every health and social care system in the world.

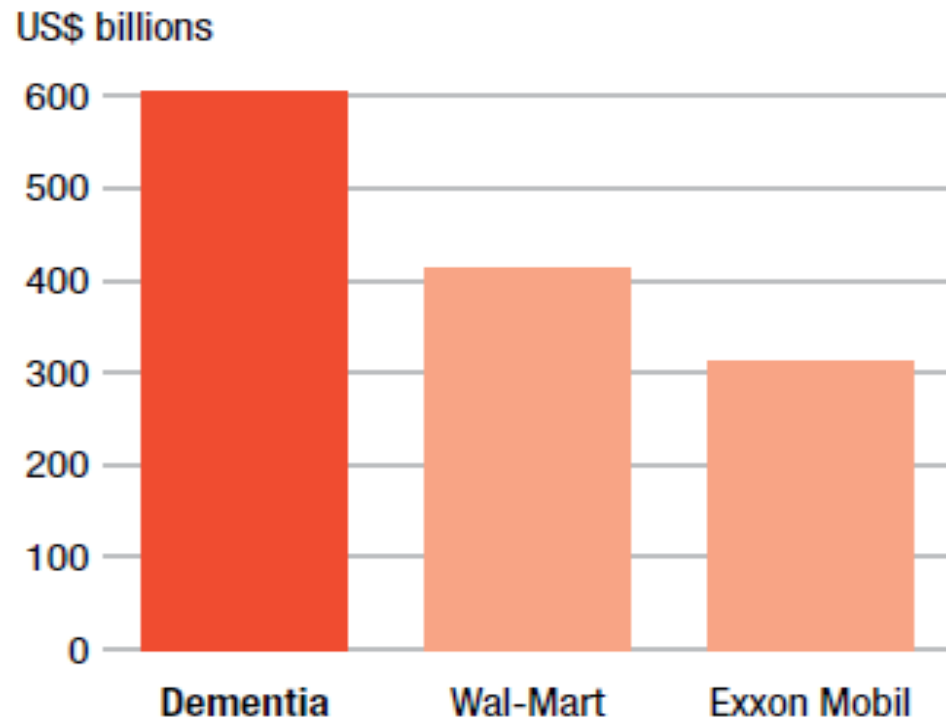
The economic impact on families is insufficiently appreciated.

The total estimated worldwide costs of dementia are US\$604 billion in 2010.

These costs are around 1% of the world's GDP

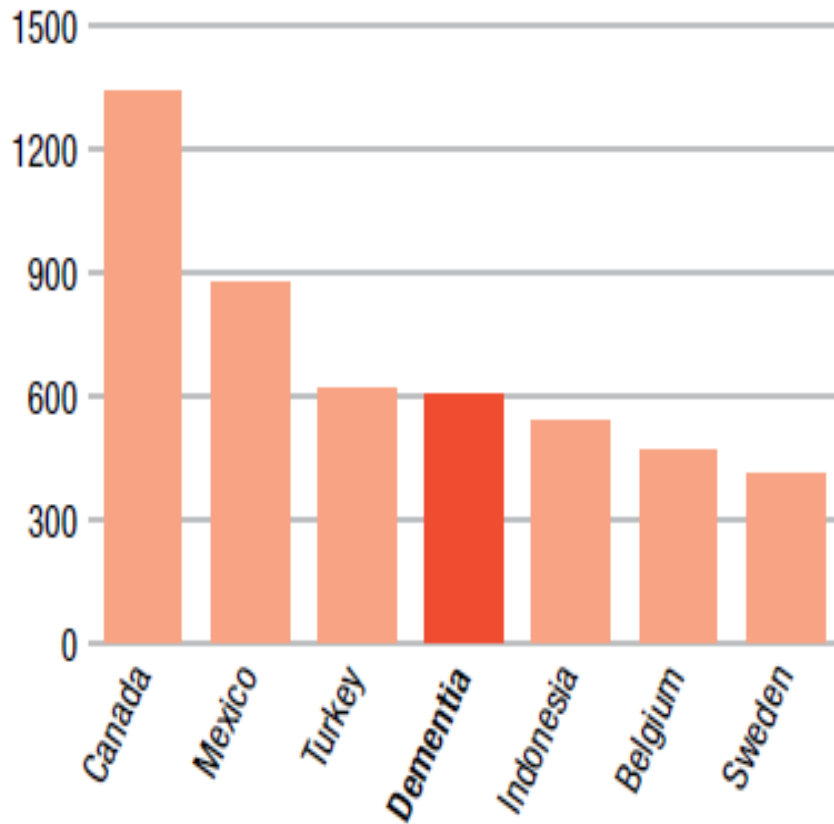
**0.24% in low income**

**1.24% in high income**



# Worldwide costs of dementia

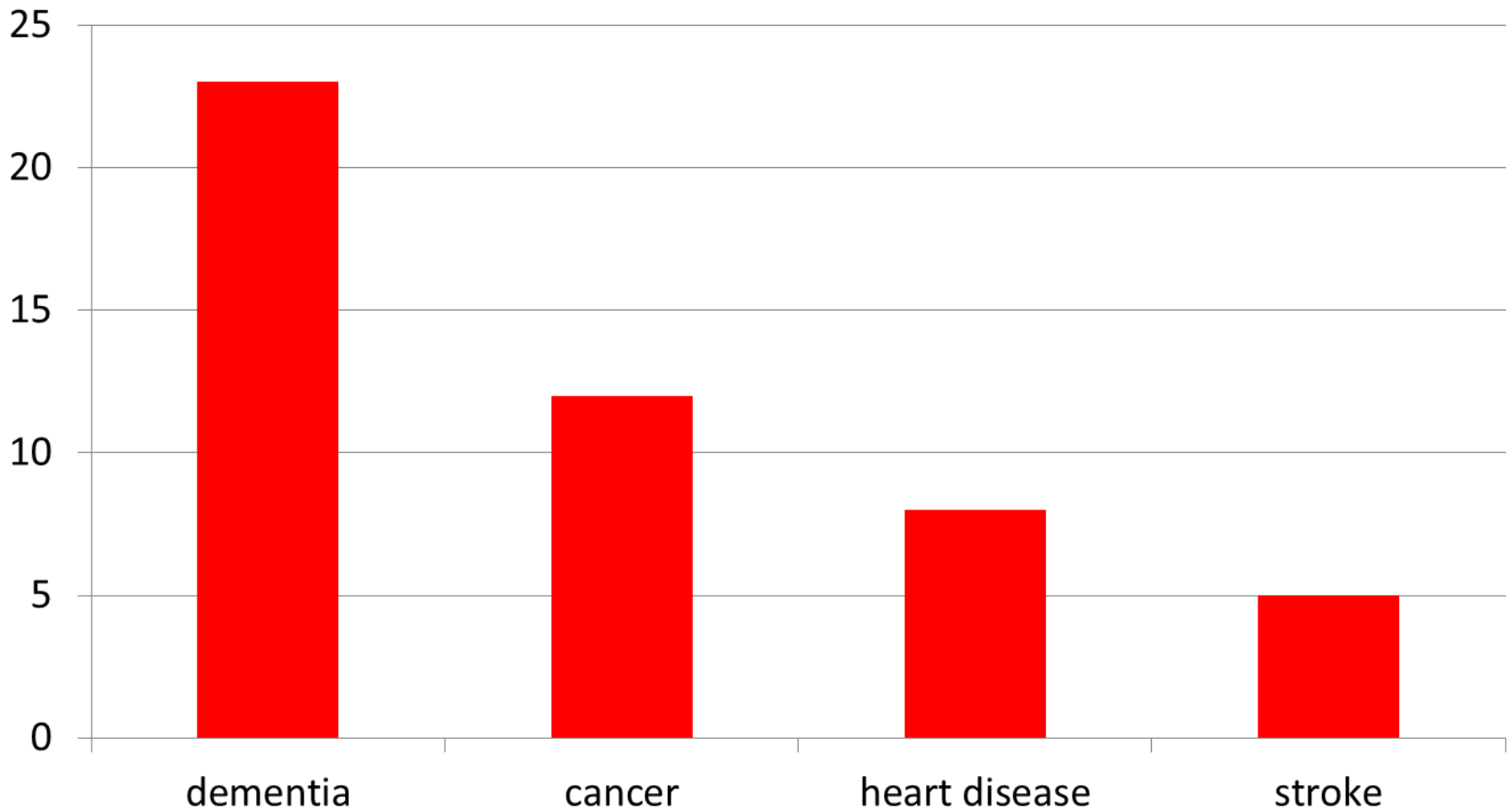
US\$ billions



The World Alzheimer Report (2010) estimated that:

If dementia care were a country, it would be the world's 18th largest economy

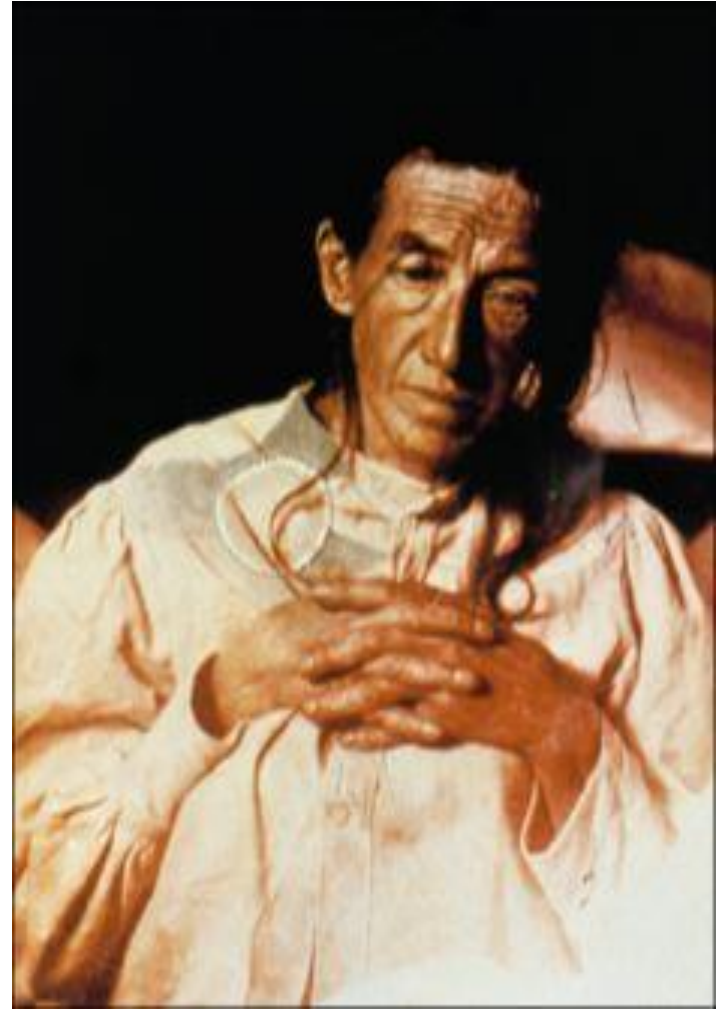
# Cost of illness per year (£billion)



*Ich hab mich verloren*



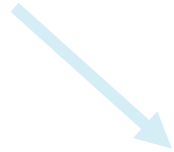
Dr Alois Alzheimer  
1864 - 1915



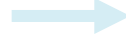
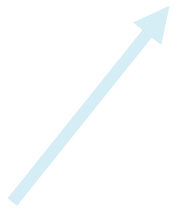
Mrs Auguste Deter  
1850 - 1906

# Amyloid cascade hypothesis

Environment

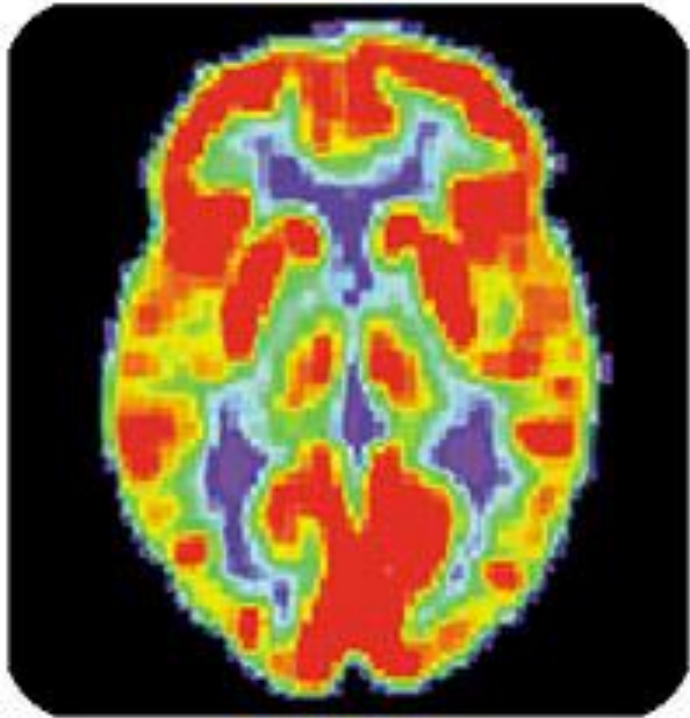


Genes

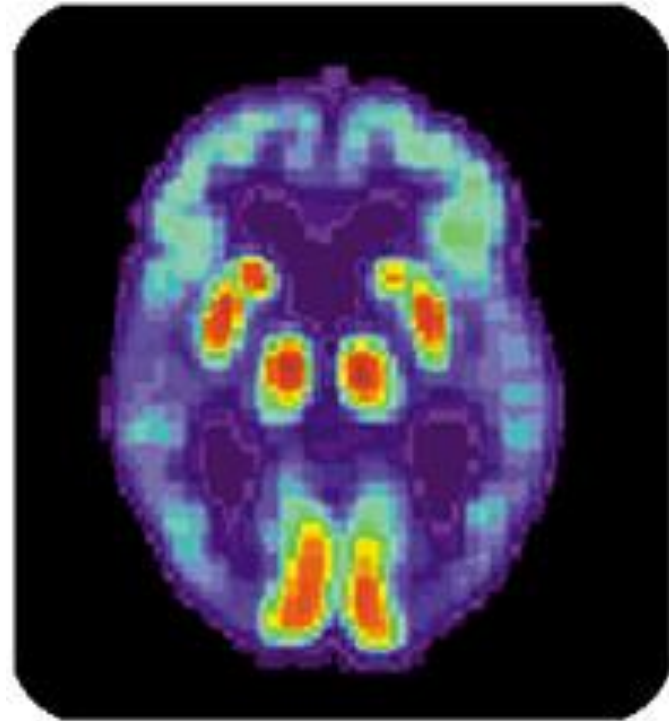


# The Changing Brain in Alzheimer's Disease

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Pet Scan of  
Normal Brain



Pet Scan of brain in  
Alzheimer's Disease



improving public  
and professional  
attitudes and  
understanding

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# National dementia strategies

France

Wales

Scotland

Australia

Germany

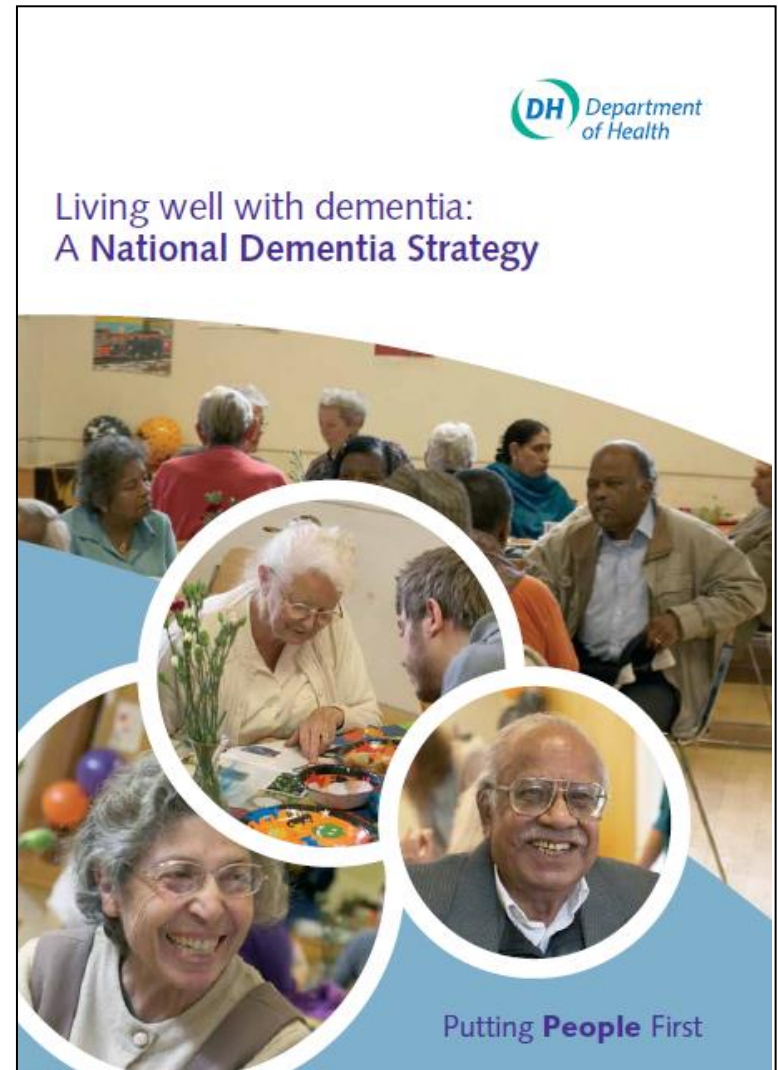
Japan

South Korea

India

England

...



## WHO Report, 2012

- Prevalence
- Numbers
- New incidence data
- Cost
- Policy



*M. Chan*

Dr. Margaret  
Chan, Director  
General, WHO

“I call upon all stakeholders to make health and social care systems informed and responsive to this impending threat”

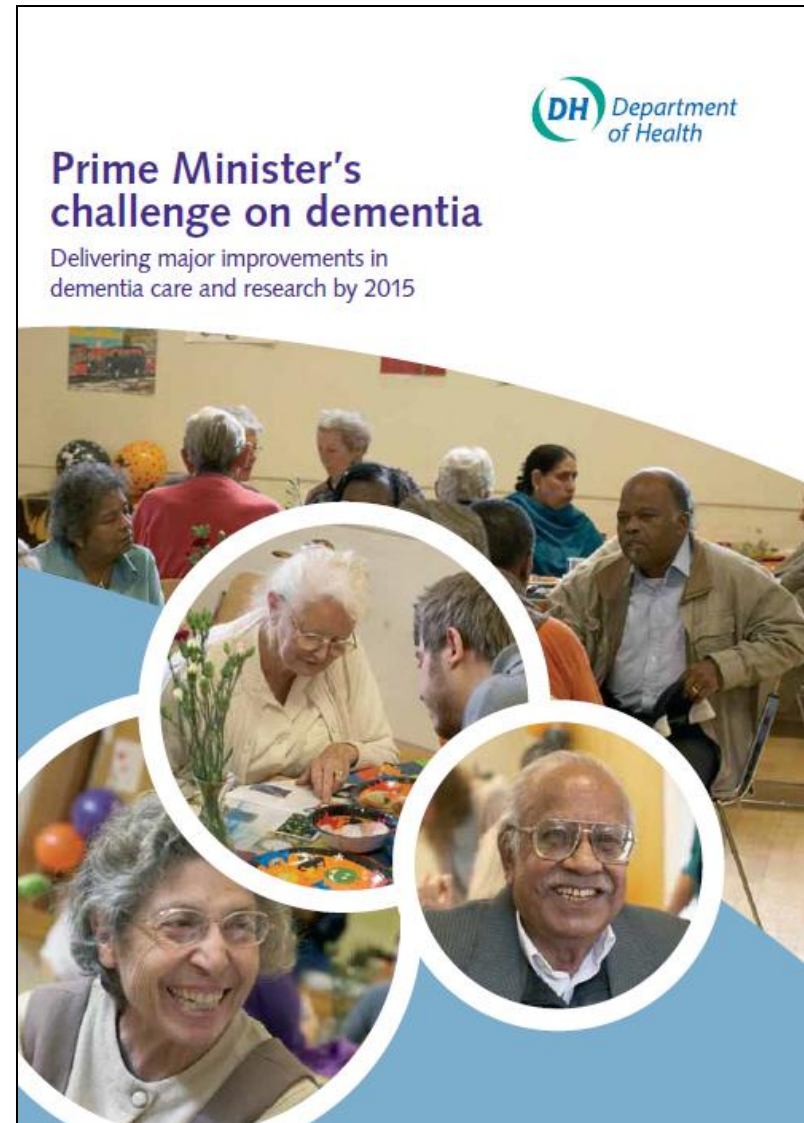


# DEMENTIA

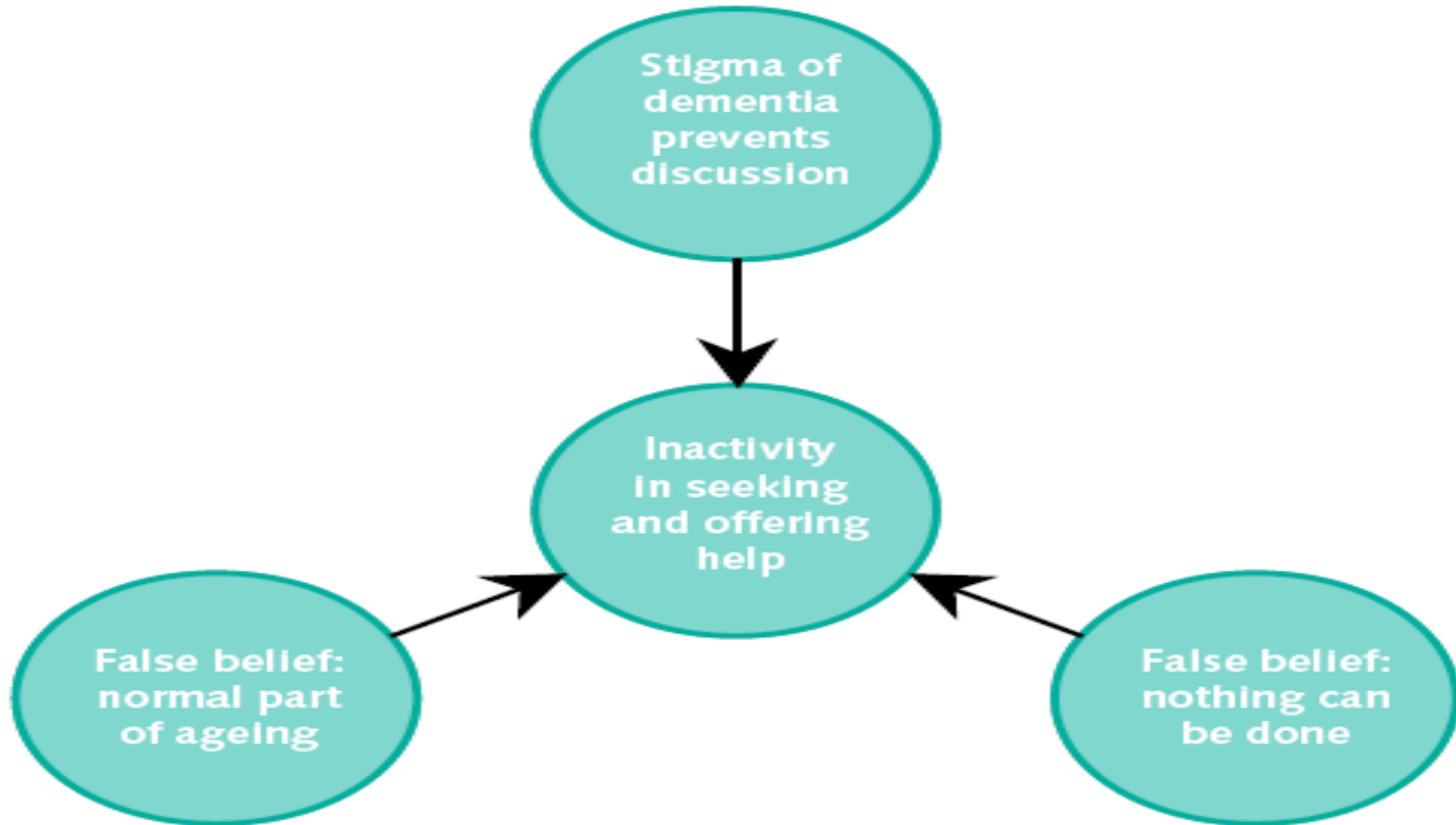
## A PUBLIC HEALTH PRIORITY

# PM Challenge and G8 Dementia Summit

“So I am determined that we will go further and faster on dementia – making life better for people with dementia and their carers, and supporting the research that will ultimately help us slow, stop and even prevent the condition”



# Dismantling the barriers to care: improving public and professional attitudes and understanding



# Health promotion, education

**Worried  
someone  
close  
to you  
is losing  
their  
memory?**

Many people suffer from memory loss as they get older. But if it starts to happen on a regular basis, it could be the early signs of dementia.

**If you're worried, see your doctor**



Change the word – Japan, we need to change the beliefs

Chihō

痴

Idiocy

呆

Stupidity



Ninchishō

認知

Cognition

症

Disorder

*In 2004, the Japanese Government modified the Japanese terminology for "Dementia"*



we need earlier  
and better  
diagnosis of  
dementia

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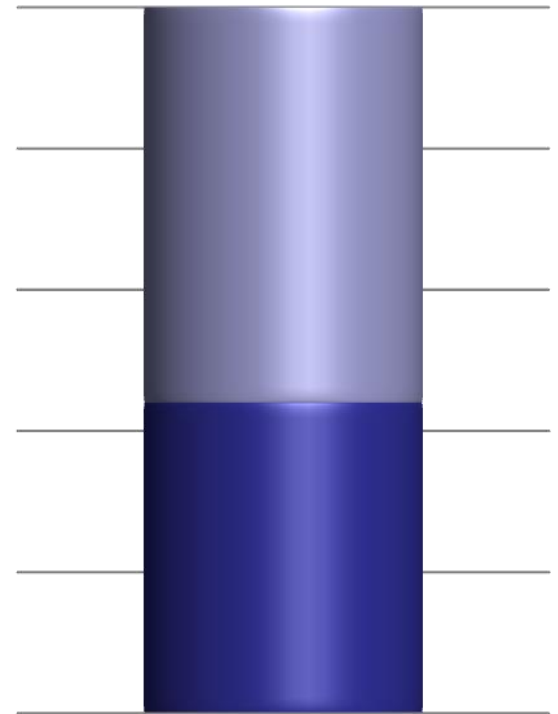
CHALLENGES AND SOLUTIONS - 2

# The fundamental problem - now

**Only around 48% of people with dementia receive any specialist health care assessment or diagnosis**

**When they do, it is:**

- Late in the illness
- Too late to enable choice
- At a time of crisis
- Too late to prevent harm and crises



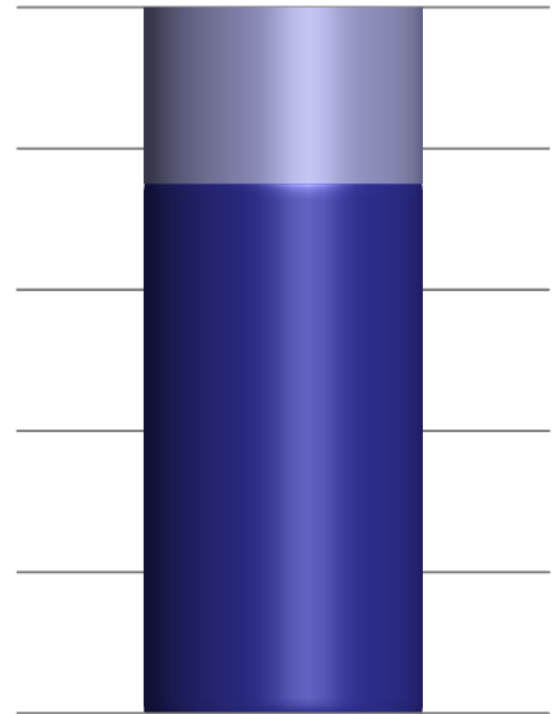
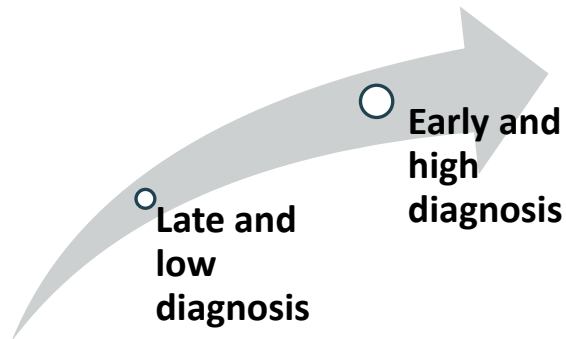


# The goal

70-80% of people with dementia receive accurate assessment and diagnosis

When they do, it is:

- Early in the illness
- Early enough to enable choice
- In time to prevent harm
- In time to prevent crises



# Services for early diagnosis and intervention in dementia for all – markers of quality

## Working for the whole population of people with dementia

- ie has the capacity to see all new cases of dementia in their population

95% acceptance rate



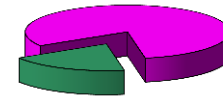
94% appropriate referrals



18% minority ethnic groups



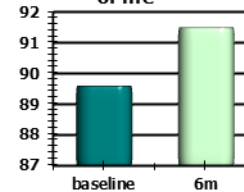
19% under 65 years of age



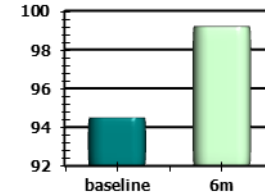
## Working in a way that is complementary to existing services

- About doing work that is not being done by anybody

Improvement in self-rated quality of life



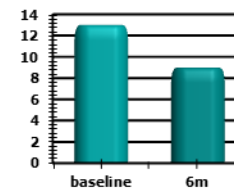
Improvement in carer-rated quality of life



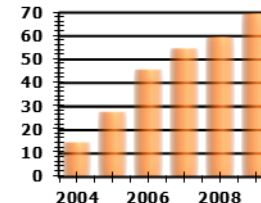
## Service content

- Make diagnosis well
- Break diagnosis well
- Provide immediate support and care immediately from diagnosis

Decrease in behavioral disorder



Proportion of new cases diagnosed



# Early intervention for dementia is clinically and cost effective – “spend to save”

215,000 people with dementia in care homes --  
£400 per week

Spend on dementia in care homes pa

- £7 billion pa

22% decrease in care home use with early  
community based care

28% decrease in care home use with carer  
support (median 558 days less)

Quality – older people want to stay at home,  
higher qol at home

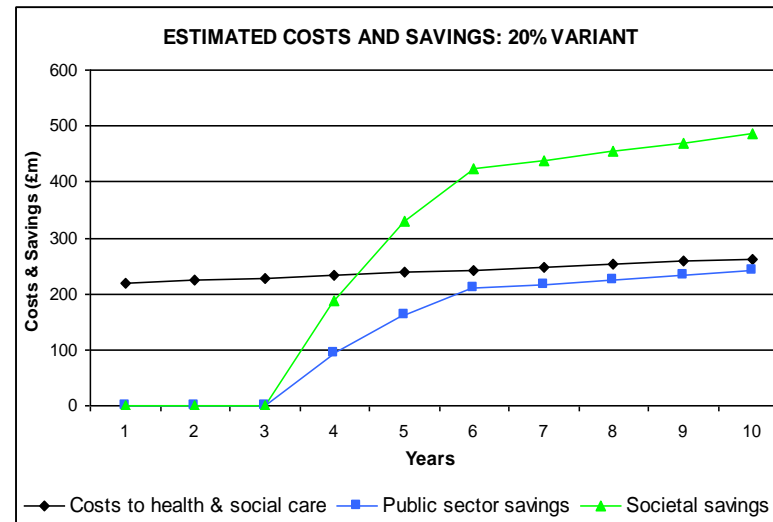
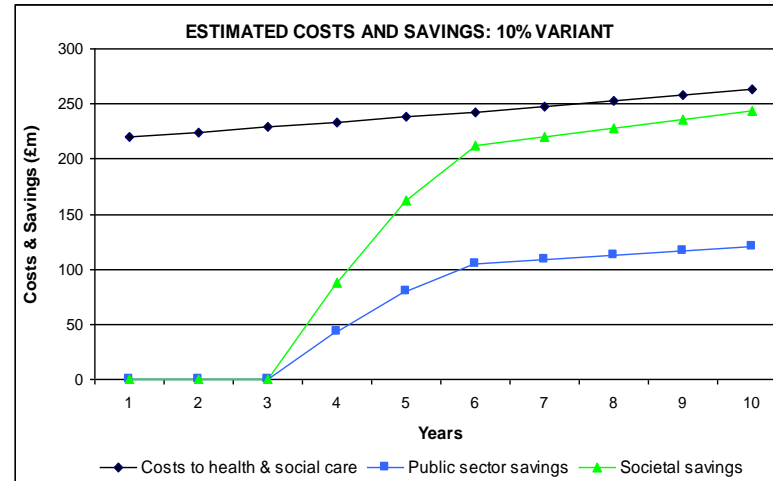
Take an additional 220 million pa

Delayed benefit by 5-10 years

- Strategic head needed

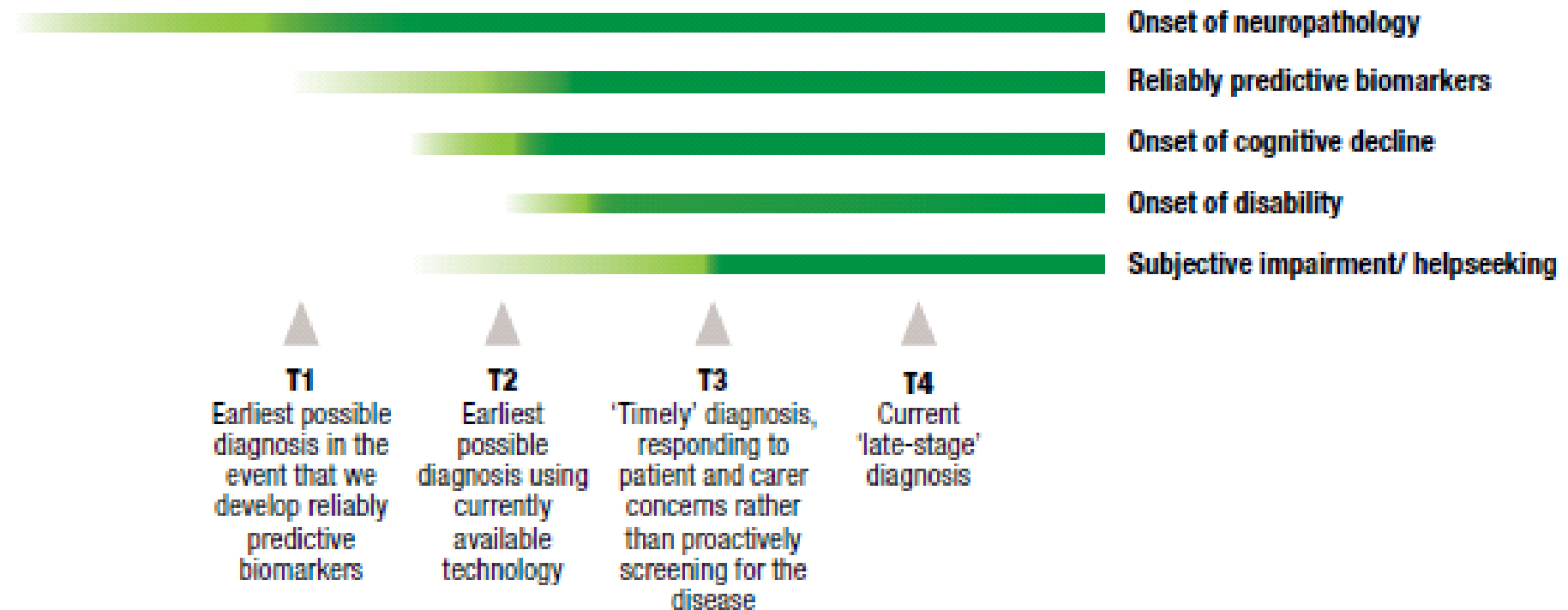
Model published by DH

20% releases £250 million pa y6



# What do we mean by early diagnosis?

Figure 1: Timeline of disease progression



# Where are we in diagnostics?

A simple quick diagnostic test that tells us if we have dementia **x**

A simple efficient screening test that would work in populations to identify those with high likelihood of dementia **x**

Accurate diagnosis by careful clinical assessment with multi-disciplinary synthesis of history, examination and investigation **✓**

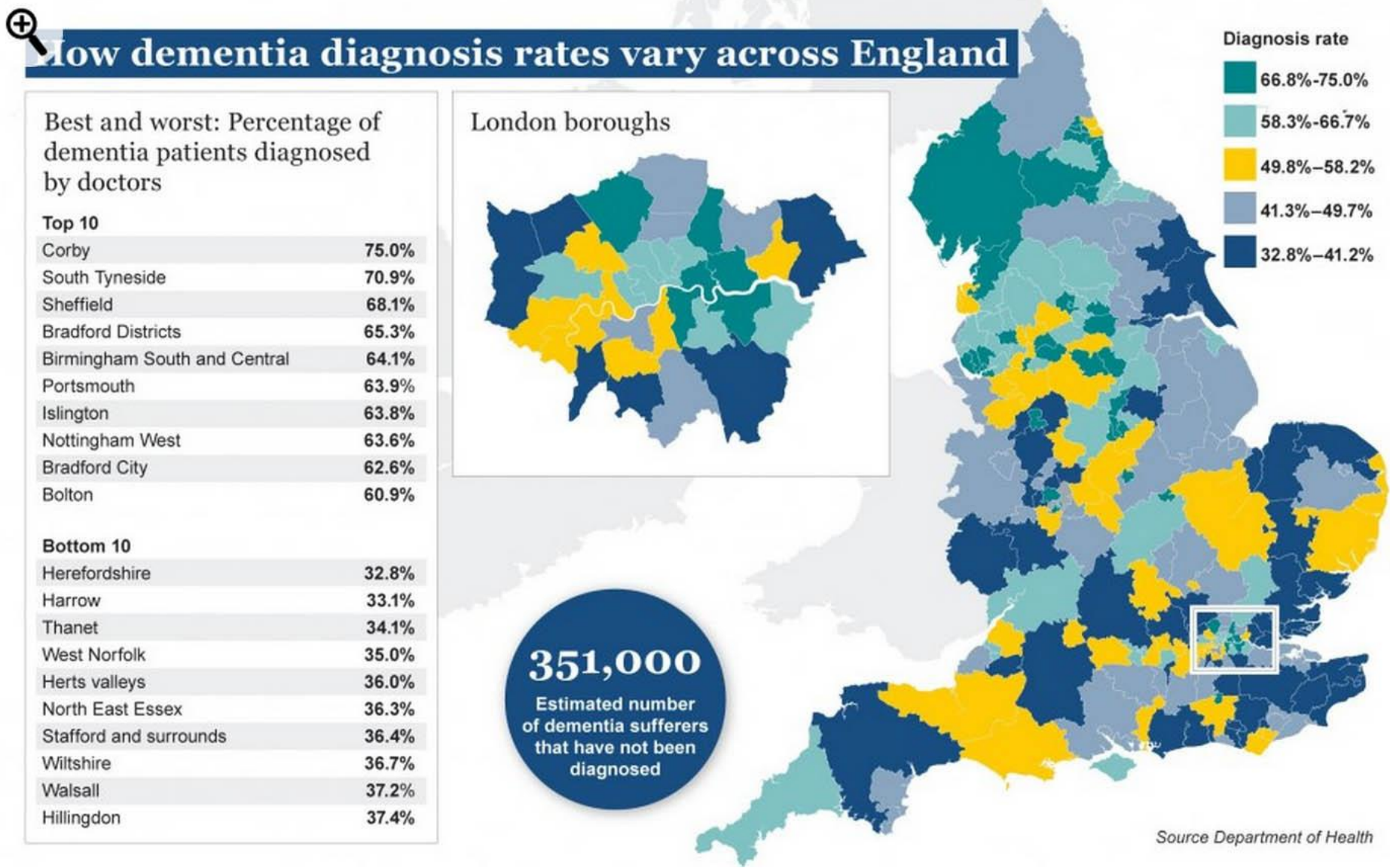
Tests to help make decisions about diagnosis and sub-diagnosis **✓**

Tests to make that diagnosis for us **x**

**BE WARY OF THE DIFFERENCE BETWEEN RESEARCH AND PRACTICE**

# 'Dementia map': how diagnosis rates vary across England

The Health Secretary's "dementia map" of England shows that in some areas, fewer than four in every 10 sufferers have their condition recognised by the NHS



## Mapping the Dementia Gap 2012

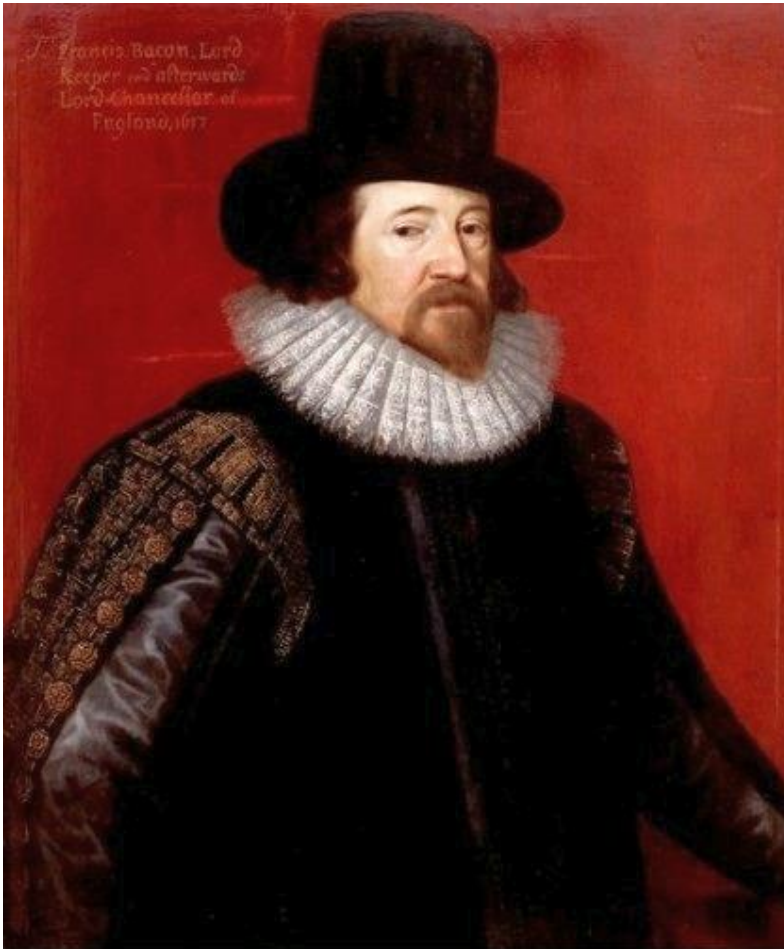
Progress on diagnosis of dementia 2011-2012

☐ 2011 - 41%

☐ 2012 - 44%

☐ 2013 - 48%

# "scientia potestas est" *Meditationes Sacrae* (1597)



Francis Bacon

- 1561 to 1626

Founder of empiricism and the scientific method

**knowledge is power**



# What is diagnosis for?

## Production of health and wellbeing in dementia

**How we turn people with worrying symptoms  
into people who know what is going on**

**How we turn toxic uncertainty  
into empowered understanding**

**How we enable choice, self-efficacy  
and quality of life and quality of care**



we need better  
prevention and  
treatment of dementia  
from diagnosis to end  
of life

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CHALLENGES AND SOLUTIONS - 3

# Improving quality of care

- ☐ Improved home care
- ☐ Improving support for carers
- ☐ Improved quality of care for dementia in general hospitals
- ☐ Improved intermediate care for people with dementia
- ☐ Housing support and telecare
- ☐ Living well with dementia in care homes
- ☐ Improved end of life care for people with dementia

# The acute end of the dementia pathway

70% hospital beds occupied by older people, half of them have dementia

Dementia is a predictor of increased LOS, poorer outcomes and institutionalisation

30% of elderly patients with dementia, admitted into acute hospitals from their own homes are discharged into care homes

# Evaluation RAID model – effect of geriatric psychiatric liaison services in a general hospital

**Saving 12m - 12,951 bed days  
35 beds per day - £3m pa**

**8% increase admission  
prevention  
6 beds per day**

**Discharge home  
Before 34% - after 67%**

**Readmission rates  
Before 19% - after 5%**

Reducing  
Length of Stay

Increasing  
rates of  
discharge at  
MAU

A&E diversion

More home  
discharges

Reducing  
rates of re-  
admissions

**Total savings:  
£3.55 million to NHS**

**Money value  
Cost: return = £1:£4**

**At least 44 beds/day**

**£60,000/week to social  
care cost**

# Reduced use of antipsychotic medication

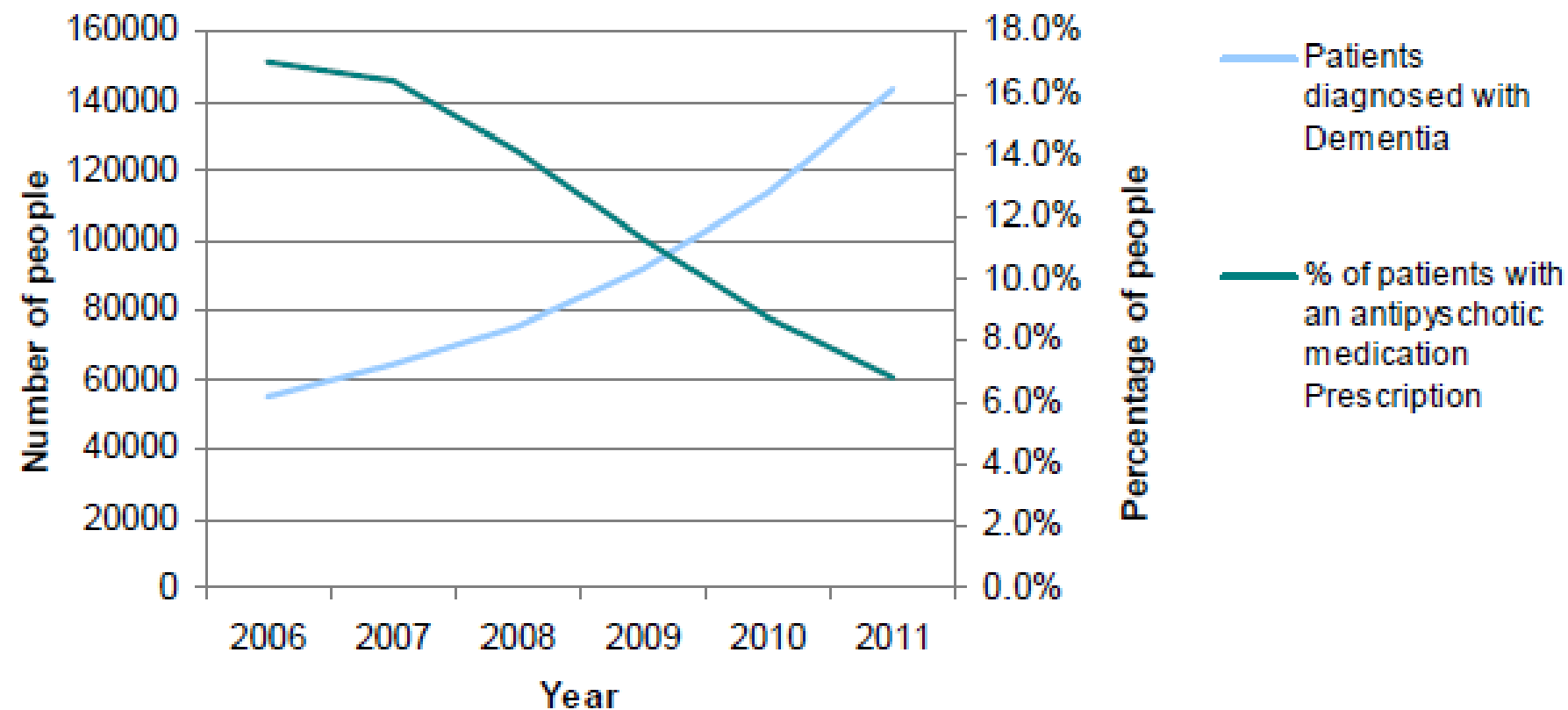
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# Ministerial review of use of antipsychotics in dementia – simple actionable messages from research




An independent report commissioned and funded by the  
Department of Health

# National Audit of antipsychotics in dementia









“The future is unwritten”  
Joe Strummer

Thank you!