

Technology and dementia

Overview of dementia

Different stages of disease

Prevention

Early detection

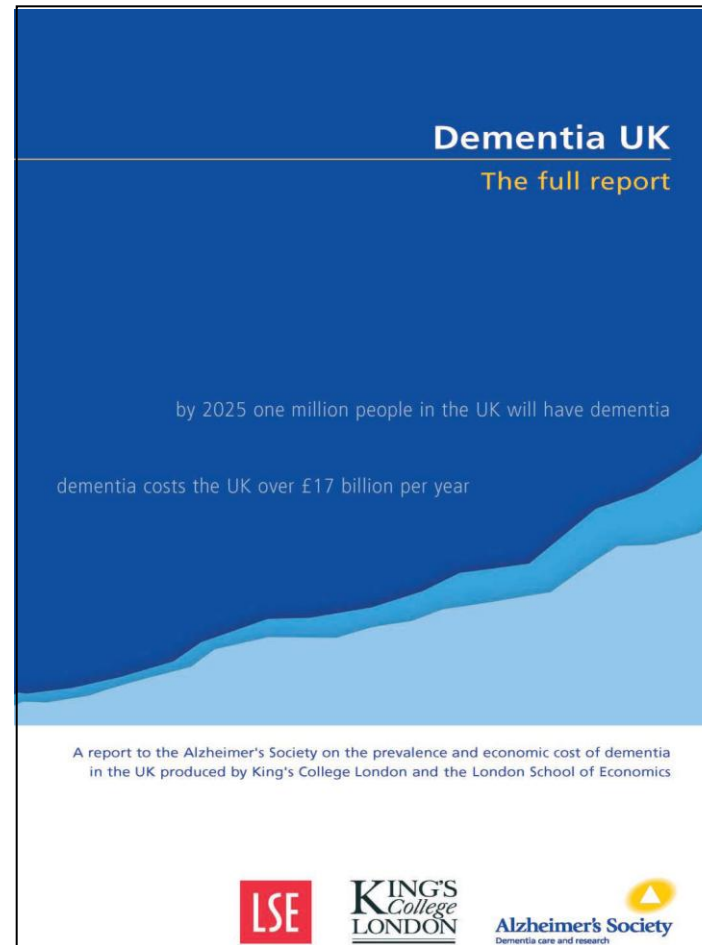
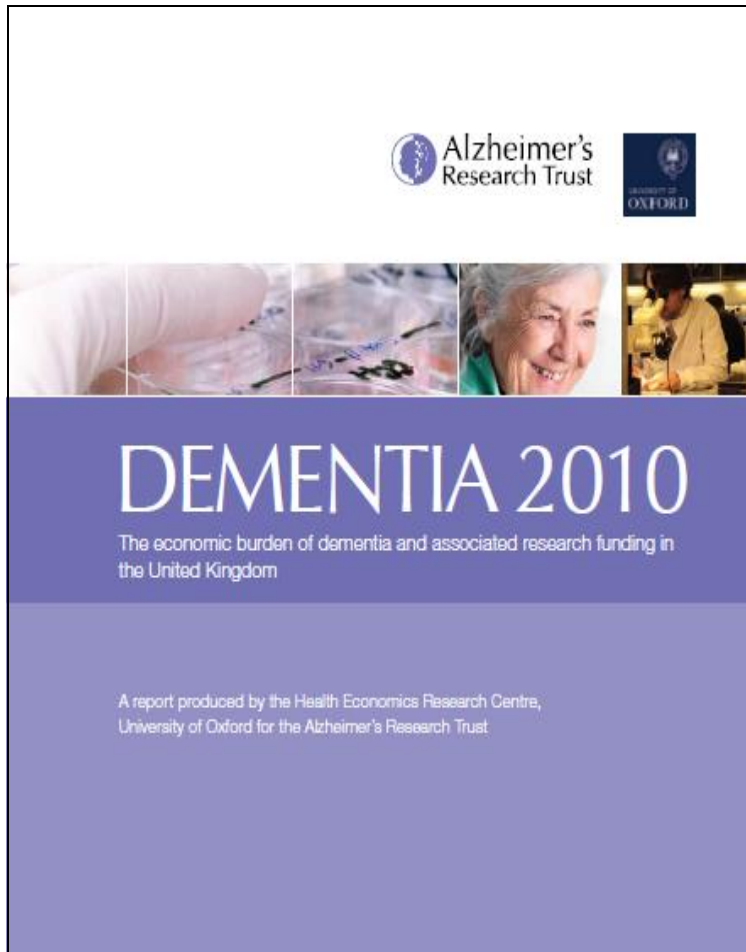
Maintaining people at home

Care homes

Ethical issues

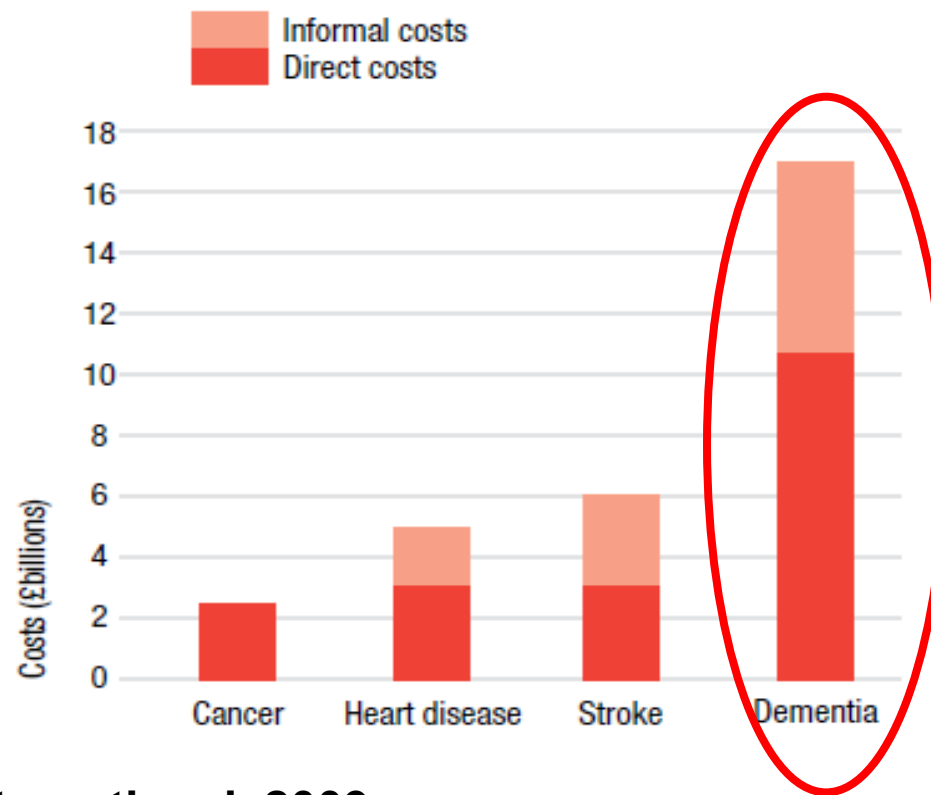
The future

In the UK: 750,000 people with dementia Cost about £20 billion per year



Societal Cost

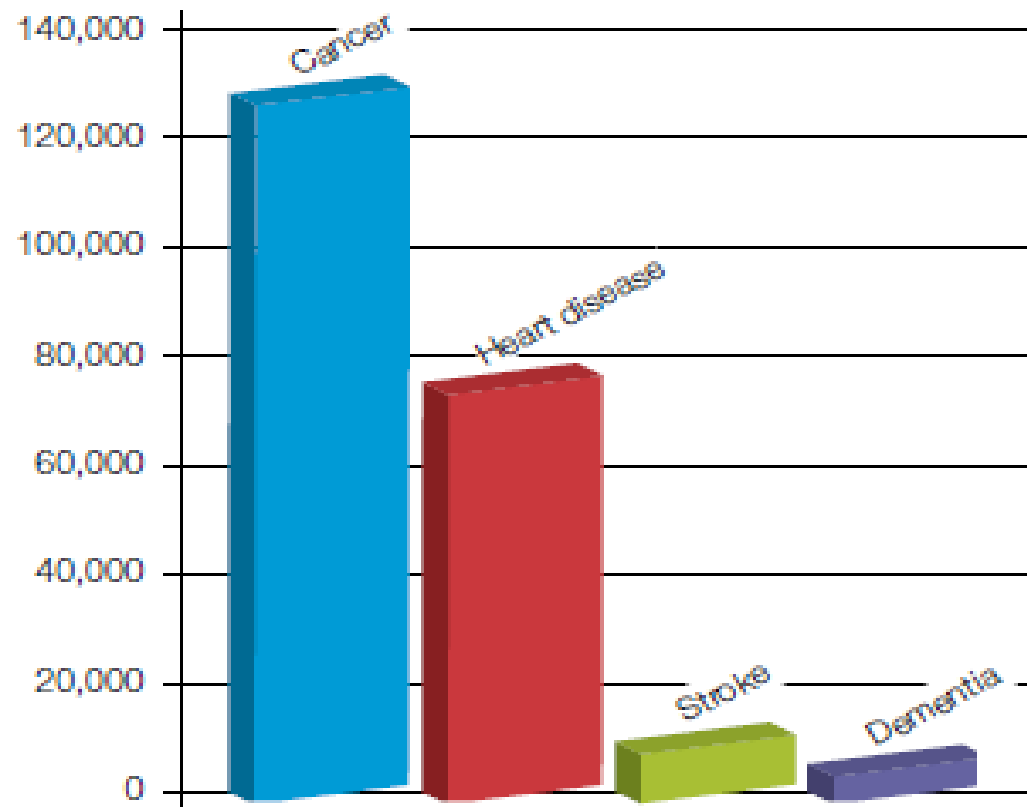
The comparative societal costs of cancer, ischaemic heart disease, stroke and dementia in the United Kingdom



Alzheimer's Disease International, 2009

Research spend

Investment (£) in research for every £1 million in social and health care costs

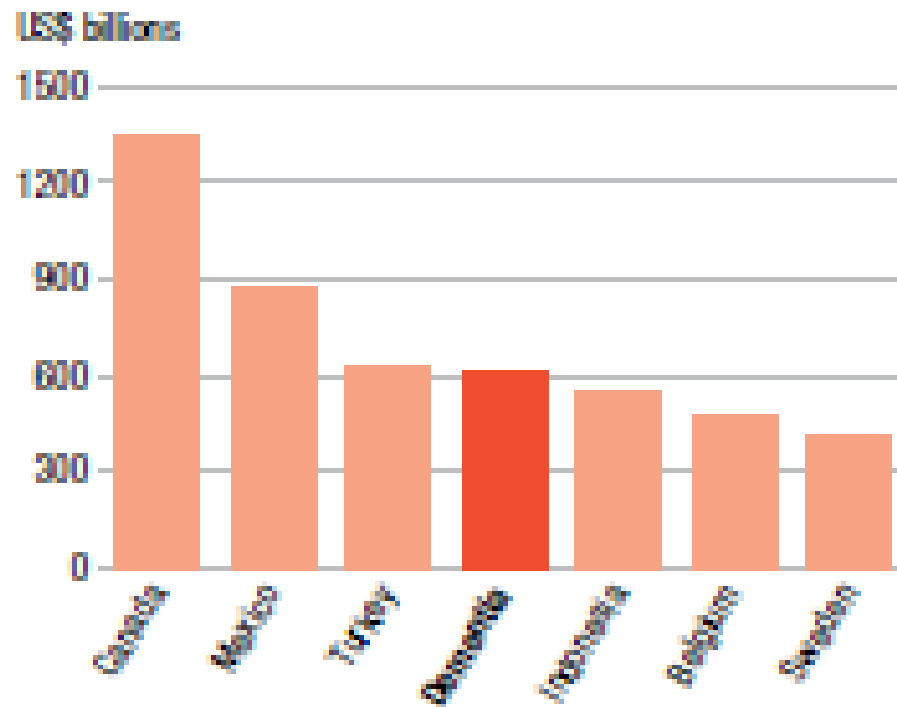


For every £1 million in care costs for the disease:
£129,269 is spent on cancer research
£73,153 on heart disease research
£8,745 on stroke research
just £4,882 on dementia research.

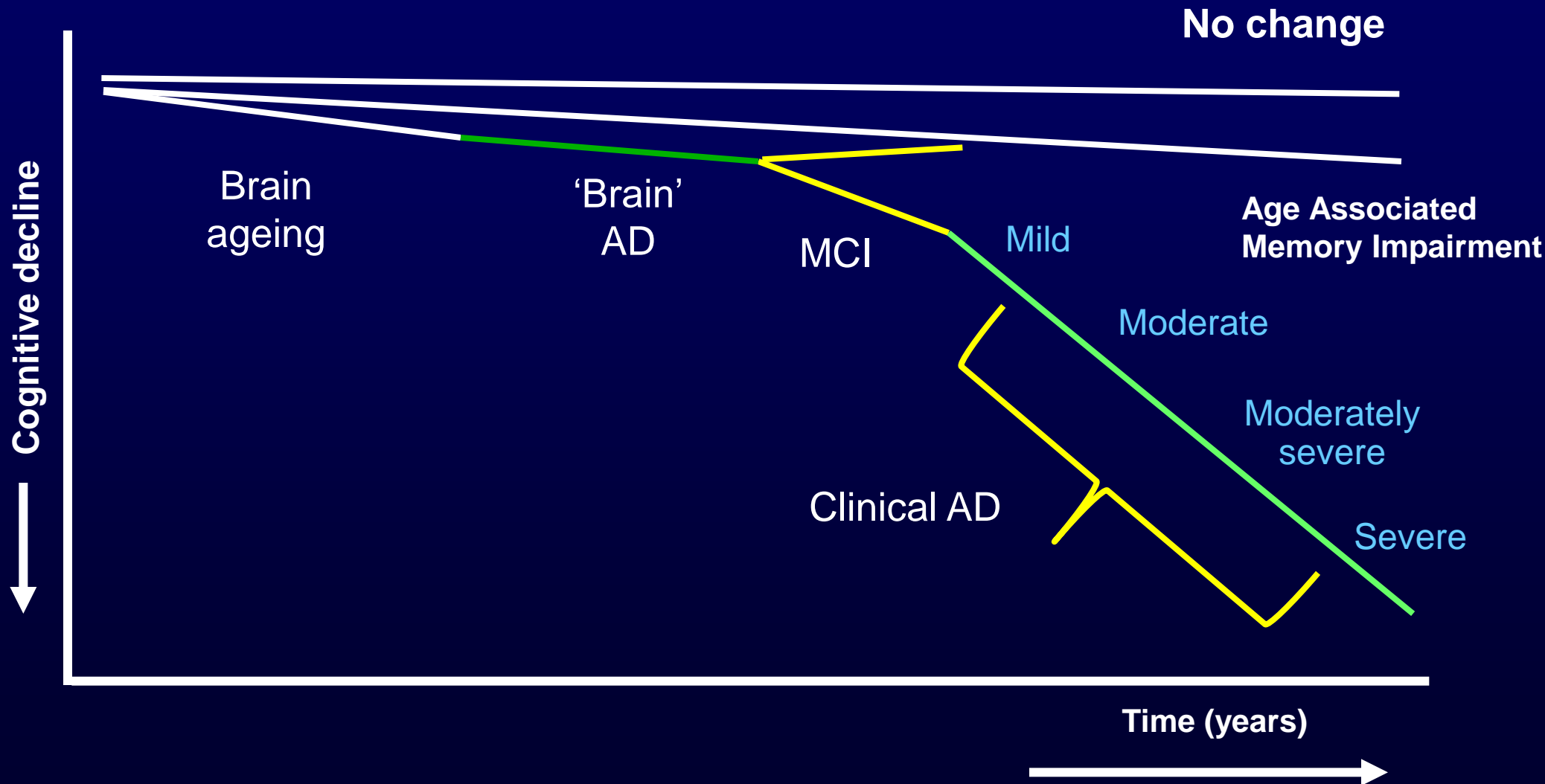
**Alzheimer's Research Trust
Dementia 2010**


World Alzheimer Report 2010

Figure 3 Cost of dementia compared to national economies



Ageing, Mild Cognitive Impairment (MCI) and Alzheimer's disease (AD)





**Quality outcomes for people
with dementia: building on the
work of the National Dementia
Strategy**

**Early diagnosis and
intervention in primary
care**

**Dementia in the General
Hospital**

**Dementia in Care
homes**

**Reduction of
antipsychotics**

Support for carers

LETTERS

Putting brain training to the test

Adrian M. Owen¹, Adam Hampshire¹, Jessica A. Grahn¹, Robert Stenton², Said Dajani², Alistair S. Burns³, Robert J. Howard² & Clive G. Ballard²

tioning. Here we report the results of a six-week online study in which 11,430 participants trained several times each week on cognitive tasks designed to improve reasoning, memory, planning, visuospatial skills and attention. Although improvements were observed in every one of the cognitive tasks that were trained, no evidence was found for transfer effects to untrained tasks, even when those tasks were cognitively closely related.

Early Computer Assisted Identification of dementia (EL CID)

Background – importance of early diagnosis

Screening?

The use of computer technology

Text/data mining

Monitoring and surveillance

Use as a cognitive companion or nudge to seek help

Can Assistive Technologies Extend Independent Living for People with dementia?

- (1) Specific Environmental Risks Monitoring and Alerting (e.g. Smoke Detector, Temperature Sensor, Gas Detector),
- (2) Lifestyle Monitoring Systems (Property Exit Sensors, Bed Sensors, Room Movement Sensors),
- (3) Automatically Triggered Devices (Auto-lighting activated as patient gets out of bed and deactivated on return,
- (4) Memo Minder prerecorded message (e.g. "Don't forget your keys" activated when patient exits property),
- (5) Wandering Monitoring (Exit Sensors, Watch-based GPS Tracking Device).

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