Demència

Impacte econòmic

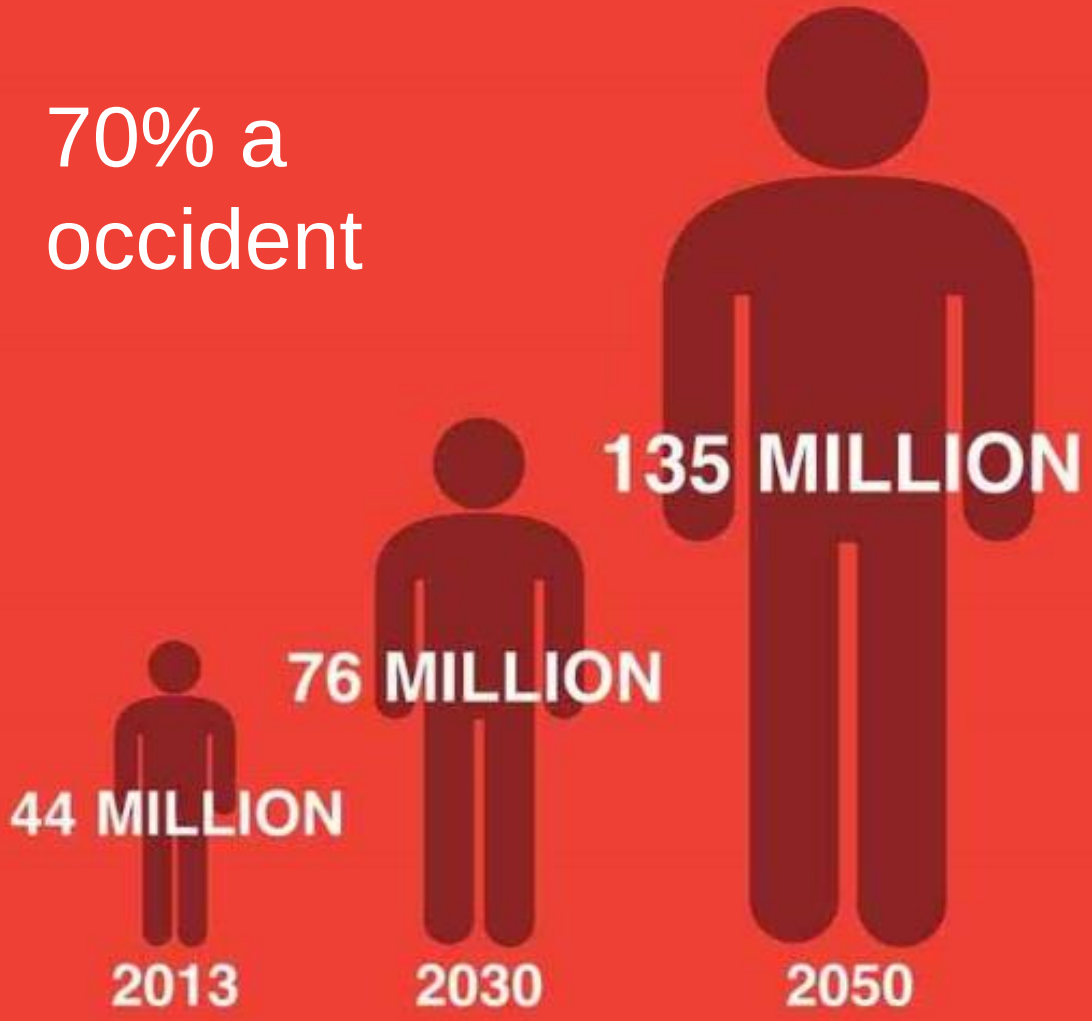
Tino Martí
CASAP

JORNADA DE DEBAT DE GESTIÓ CLÍNICA EN DEMÈNCIA

9 de juny de 2015


富嶽三十六景
神奈川沖
浪裏

70% a occident



L'efecte 2050 s'aguditza a Àsia

In 2010, the annual cost of dementia care was estimated at $604 billion. If dementia care were a company, it would be the world's largest by annual revenue exceeding Wal-Mart and Exxon Mobil.

EXXON MOBIL
$311 BILLION

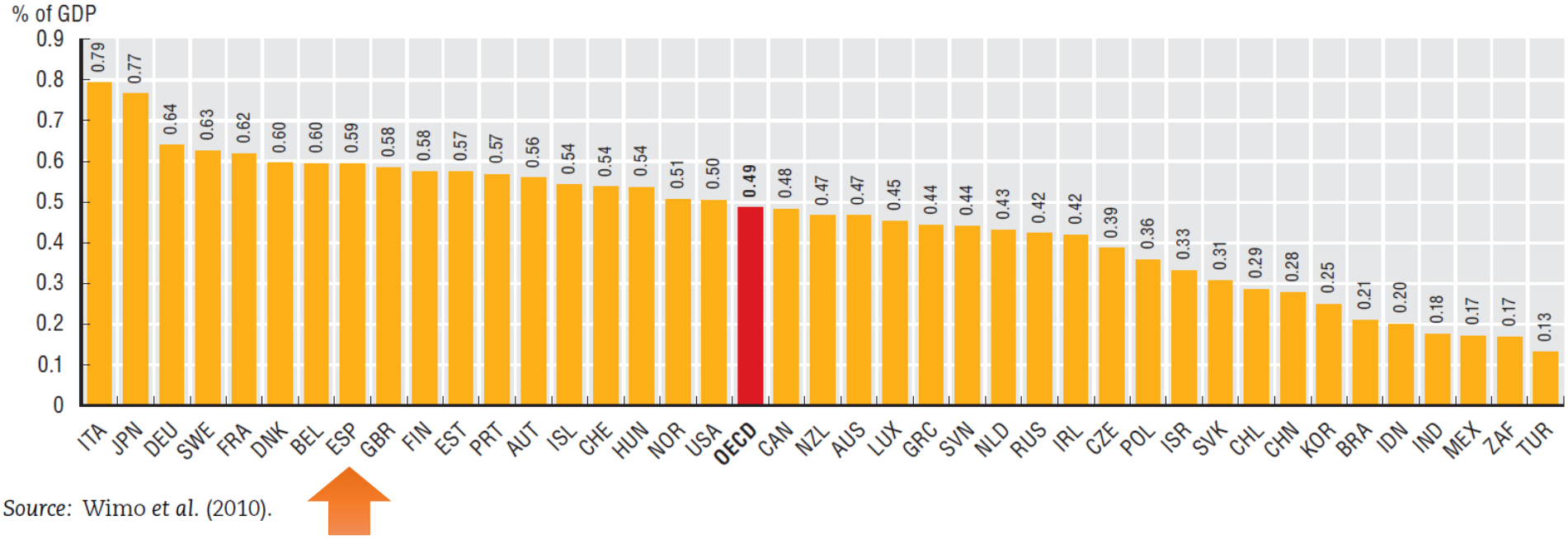
WAL-MART
$414 BILLION

DEMENTIA CARE
$604 BILLION

1% PIB

1. Càncer
2. Cor
3. Cap

8.3.3 Direct cost of dementia for population aged 60 years and over, as a share of GDP, 2009



Source: Wimo *et al.* (2010).

"This is a global challenge and one which is set to intensify."

- Jeremy Hunt
UK Secretary of State for Health

infradiagnòstic

Two out of three people with dementia and family carers feel that there is little or no understanding of dementia in their countries.

At the moment, figures suggest that approximately 3 out of 4 have not even received a diagnosis.

ELSEVIER

Alzheimer's & Dementia 3 (2007) 186–191

Alzheimer's & Dementia

Featured Articles

Forecasting the global burden of Alzheimer's disease

Ron Brookmeyer[a,*], Elizabeth Johnson[a], Kathryn Ziegler-Graham[b], H. Michael Arrighi[c]

[a]*Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, USA*
[b]*Statistics Program, St. Olaf College, Northfield, MN, USA*
[c]*Epidemiology, Elan Pharmaceuticals, San Diego, CA, USA*

Background: Our goal was to forecast the global burden of Alzheimer's disease and evaluate the potential impact of interventions that delay disease onset or progression.

Methods: A stochastic, multistate model was used in conjunction with United Nations worldwide population forecasts and data from epidemiological studies of the risks of Alzheimer's disease.

Results: In 2006, the worldwide prevalence of Alzheimer's disease was 26.6 million. By 2050, the prevalence will quadruple, by which time 1 in 85 persons worldwide will be living with the disease. We estimate about 43% of prevalent cases need a high level of care, equivalent to that of a nursing home. If interventions could delay both disease onset and progression by a modest 1 year, there would be nearly 9.2 million fewer cases of the disease in 2050, with nearly the entire decline attributable to decreases in persons needing a high level of care.

Conclusions: We face a looming global epidemic of Alzheimer's disease as the world's population ages. Modest advances in therapeutic and preventive strategies that lead to even small delays in the onset and progression of Alzheimer's disease can significantly reduce the global burden of this disease.

x4

Europa x2

Projections of Alzheimer's disease prevalence (in millions) in 2006 and 2050, by regions and stage of disease*

	Prevalence (in millions)					
	2006			2050		
	Overall	Early-stage	Late-stage	Overall	Early-stage	Late-stage
Africa	1.33	0.76	0.57	6.33	3.58	2.75
Asia	12.65	7.19	5.56	62.85	34.84	28.01
Europe	7.21	4.04	3.17	16.51	9.04	7.47
Latin America and Caribbean	2.03	1.14	0.89	10.85	5.99	4.86
North America	3.10	1.73	1.37	8.85	4.84	4.01
Oceania	0.23	0.13	0.10	0.84	0.46	0.38
Total	26.55	14.99	11.56	106.23	58.75	47.48

* Regions defined according to the United Nations Population Division [4]. Oceania includes Australia, New Zealand, Melanesia, Micronesia, and Polynesia.

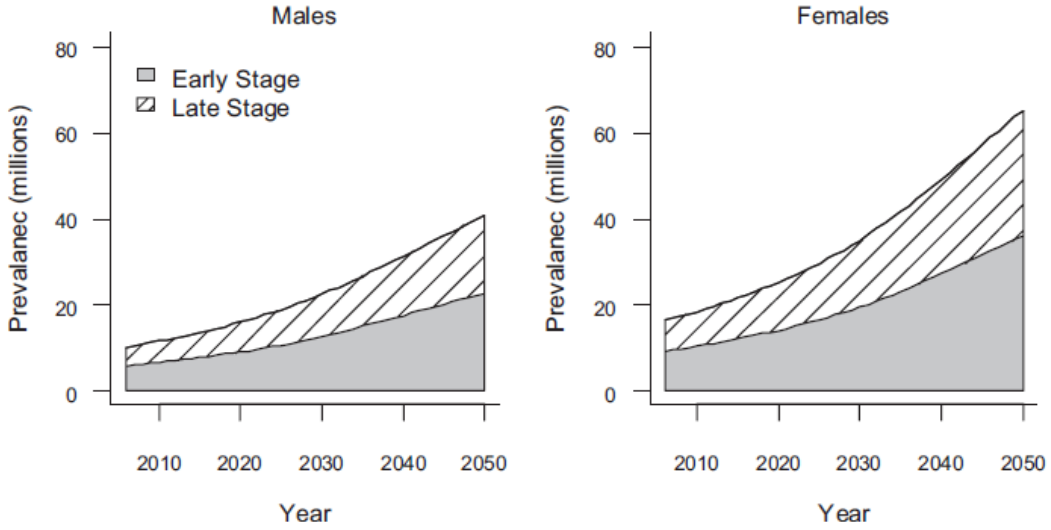
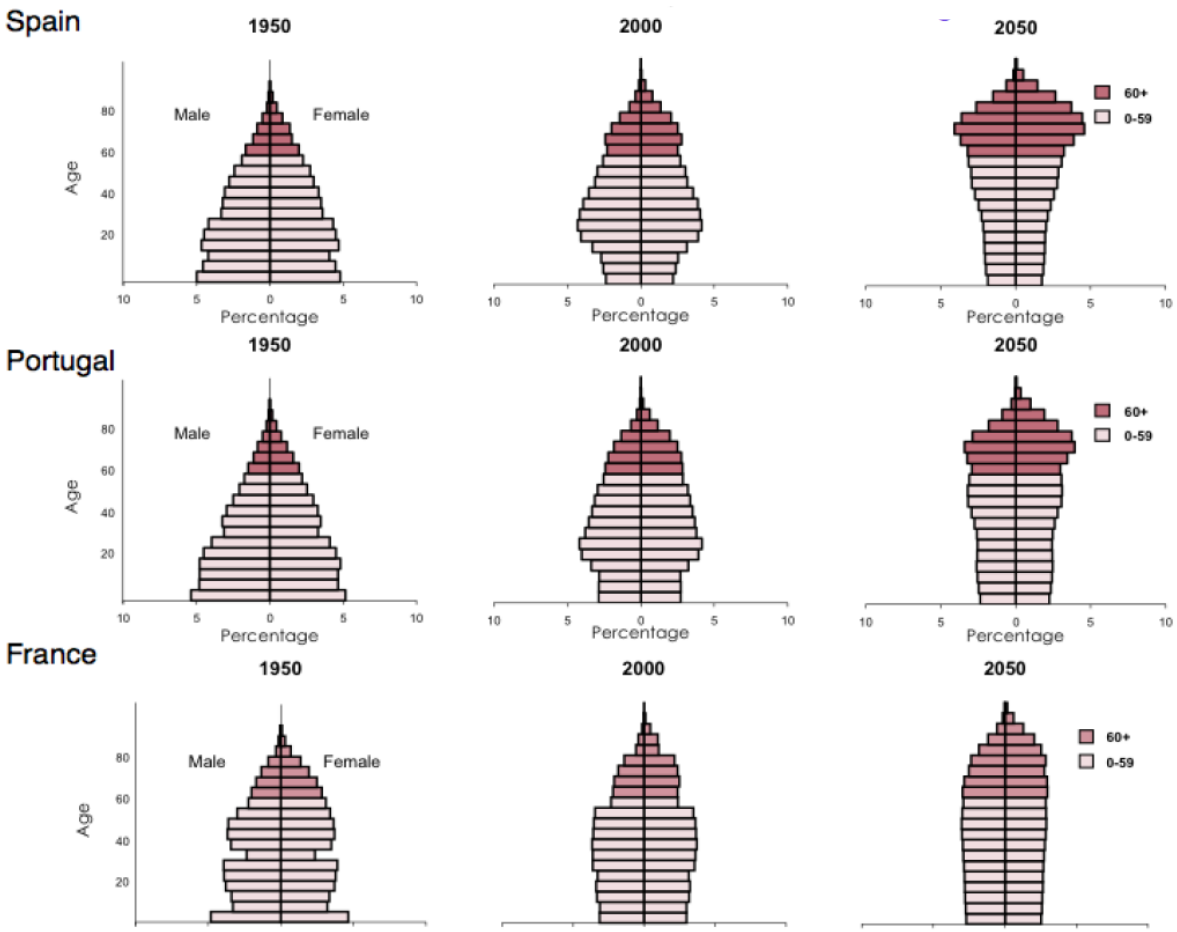


Fig. 3. Worldwide projections of Alzheimer's prevalence (in millions) for the years 2006–2050, by stage of disease: **(a)** males and **(b)** females.

Prediccions a Espanya



- **1,5 millones** de persones a Espanya al 2050 (actulament 800.000)
- El cost de 2010 a 2040 es podria **duplicar**

Old age dependency ratio
(>65 vs 15-64)

	2010	2030	2050
FR	25.66	39.06	45.48
ES	24.69	35.52	56.91
PT	26.7	37.85	55.62

Cost de la malaltia

Pharmacoeconomics 2009; 27 (5): 391-403
1170-7690/09/0005-0391/$49.95/0

The Cost of Dementia in Europe

A Review of the Evidence, and Methodological Considerations

Linus Jönsson[1] and *Anders Wimo*[2]

1 i3 Innovus, Stockholm, Sweden
2 NVS, Karolinska Institute, Stockholm, Sweden

Table II. Mean annual costs of care per patient by disease severity (€, year 2005 values adjusted using purchasing power parities)

Study	Country	Patients (n)	Annual costs			
			mild dementia	moderate dementia	severe dementia	all subjects
Scuvee-Moreau et al.[10]	Belgium	386	6 974	11 538	23 484	14 673
Souêtre et al.[11]	France	51	4 783	NA	7 792	6 435
Rigaud et al.[12]	France	50	6 339	15 961	53 574	22 959
Schulenberg et al.[22]	Germany	158	3 673	10 120	19 446	12 040
Cavallo and Fattore[13]	Italy	423	NA	NA	NA	52 406
Trabucchi[14]	Italy	103	NA	NA	NA	28 691
Kronborg Andersen et al.[15]	Denmark	245	10 113	15 058	22 521	10 752
Jönsson et al.[8]	Nordic region	272	4 953	15 013	30 581	14 038
Jönsson et al.[27]	Sweden	70	4 942	20 561	40 180	27 236
Francois et al.[28]	Finland	137?	7 670	9 265	16 398	33 333
Atance Martinez et al.[16]	Spain	337	NA	NA	NA	30 525
Boada et al.[17]	Spain	337	18 311	23 522	31 759	27 595
Souêtre et al.[19]	UK	128	41 982	65 041	86 254	64 426
Wolstenholme et al.[20]	UK	100	13 488	22 169	36 132	32 468
Livingston et al.[21]	UK	224	NA	NA	NA	35 287
Lopez-Bastida et al.[18]	Spain	237	18 372	31 795	52 137	37 287

NA = not available.

Estructura de costos

18-23%

Figura 9. Reparto del pago en España (Coduras 2010)

Perfil del cuidador

Edad	≥ 55 años	65 %
	< 55 años	33 %
Género	Mujer	67 %
	Varón	33 %
Parentesco	Conyuge	47 %
	Hijo/a	37 %
	Otros Familiares	16 %
Convivencia con el enfermo	Sí	65 %
	No	35 %

Tabla 5. Características sociodemográficas del cuidador principal (83).

Perfil del cuidador

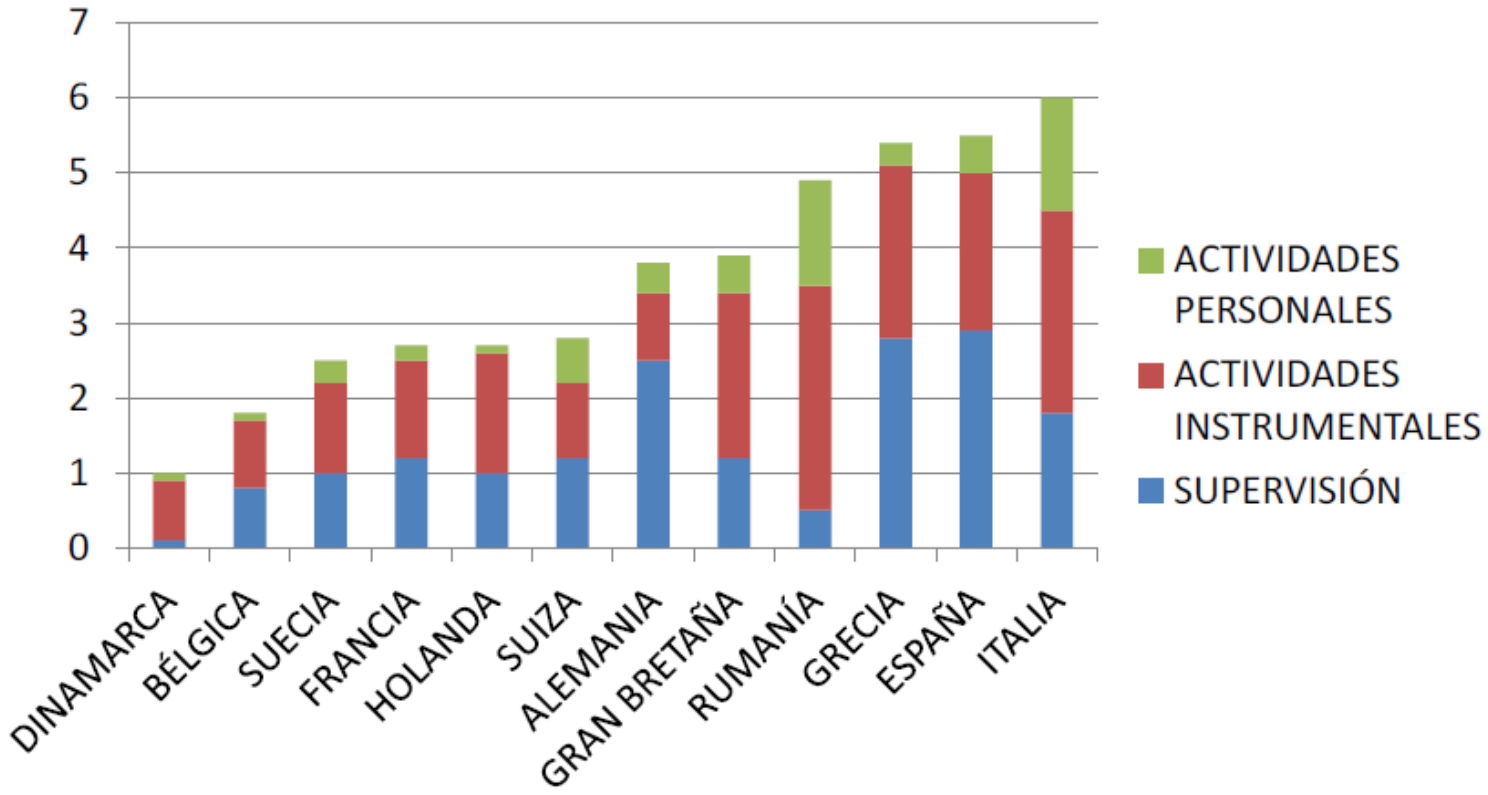


Figura 14. Comparación entre países según horas dedicadas al cuidado informal. Adaptado de Gustavsson 2010

Oportunitat o Substitució

Deixo de guanyar Em costa

Coste-efectividad del tractament

Tractament farmacològic

NICE National Institute for Health and Care Excellence

NICE Pathways | Guidance | Standards and indicators | Evidence services | Sign in

Evidence search | BNF | BNFC | CKS | Journals and databases

Donepezil, galantamine, rivastigmine and memantine for the treatment of Alzheimer's disease

Guidance | Tools and resources | Download | Share | Print

NICE technology appraisal guidance [TA217] Published date: **March 2011**

Dementia

Canvi en el cost-efectivitat respecte 2001

Next

- Evidence used to create this guideline

This guidance updates and replaces NICE technology appraisal guidance 111 issued in November 2006 (amended September 2007, August 2009).

The review and re-appraisal of donepezil, galantamine, rivastigmine and memantine for the treatment of Alzheimer's disease has resulted in a change in the guidance. Specifically:

- donepezil, galantamine and rivastigmine are now recommended as options for managing mild as well as moderate Alzheimer's disease, and
- memantine is now recommended as an option for managing moderate Alzheimer's disease for people who cannot take AChE inhibitors, and as an option for managing severe Alzheimer's disease.

Tractament farmacològic

- Evidència de cost-efectivitat d'inhibidors acetilcolinestarasa (AChEI) per pacients moderats i memantina per pacients més severs
- Reducció de:
  - Temps del cuidador
  - Institucionalització
  - Hospitalitzacions i atenció infermeria especialitzada
- Estalvi global:
  - En tractament precoç per enraderir principalment la institucionalització
  - Quantificació: 2,5 mesos d'independencia

Impacte diagnòstic precoç

- Reducció institucionalització del 10% (Getsios 2011)
- Demora d'1 any i mig
- Estalvis de 10.000 USD (Wisconsin), 12.400 (United Biosource)

KNOW the 10 SIGNS
EARLY DETECTION MATTERS

Tractament no farmacològic

- Majoria d'estudis amb resultats positius no concluients.
- L'evidencia es concentra en **terapia d'estimulació cognitiva** i **programes d'activitats a mida**
- Poca evidència del **intermediate care**
- Resultats:
  - Demora institucionalització
  - Millora cognitiva i de qualitat de vida de pacient i cuidador
- Programes dirigits al cuidador: reducció d'hores de dedicació

Intervention 1: Prevention – Increase in Physical Activity

The first prevention scenario examines the impact of an intervention that broadly applies evidence that increased physical activity can reduce dementia incidence. The intervention focuses on increasing physical activity by 50% for all Canadians without dementia, over the age of 65, who are already moderately to highly active. This intervention would reduce the number of people diagnosed with dementia, resulting in a reduction in the pressure on long-term care facilities, community care services and informal caregivers. This, in turn, was shown to produce significant savings in direct health costs, unpaid caregiver opportunity costs and indirect costs associated with dementia, and the provision of care by informal caregivers throughout the simulation timeframe.

Intervention 3: Support – Caregiver Development and Support Program

The third scenario examines the impact of an informal caregiver skill-building and support program. In this scenario, the intervention is applied to all informal caregivers and individuals with dementia receiving care within the model. Such a program could reduce the amount of caregiving time provided by informal caregivers, and hence the health and economic burden placed on them. As well, it could delay admission for the person with dementia into a long-term care facility.

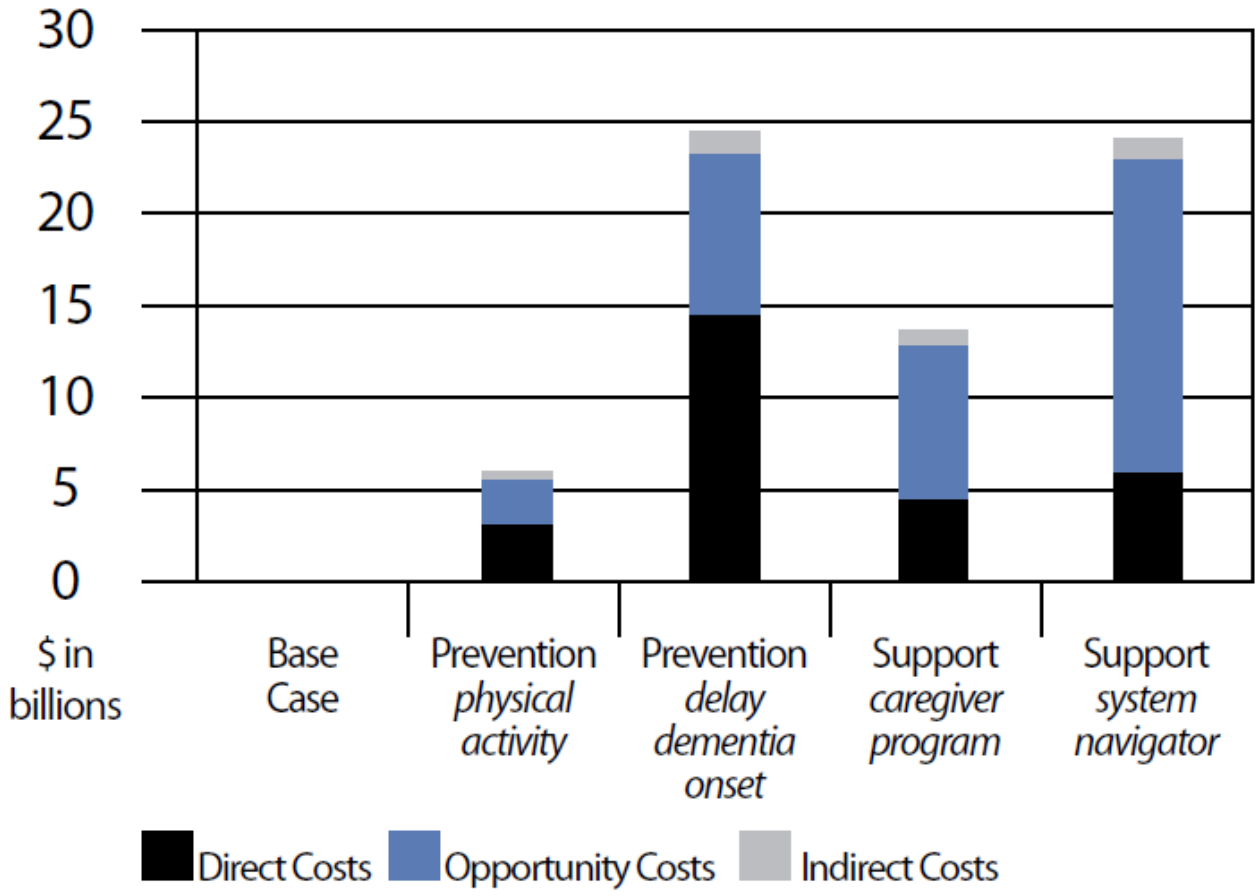
Intervention 2: Prevention – A Program to Delay Dementia Onset

The second intervention scenario examines the impact of a hypothetical prevention program that would delay the onset of dementia by approximately two years. The prevention program targets the entire dementia-free adult Canadian population and would combine a variety of promising, evidence-based strategies such as following a healthy diet and lifestyle. Delaying the onset of dementia by two years would result in fewer people living with dementia and would significantly reduce the pressures placed on health care resources.

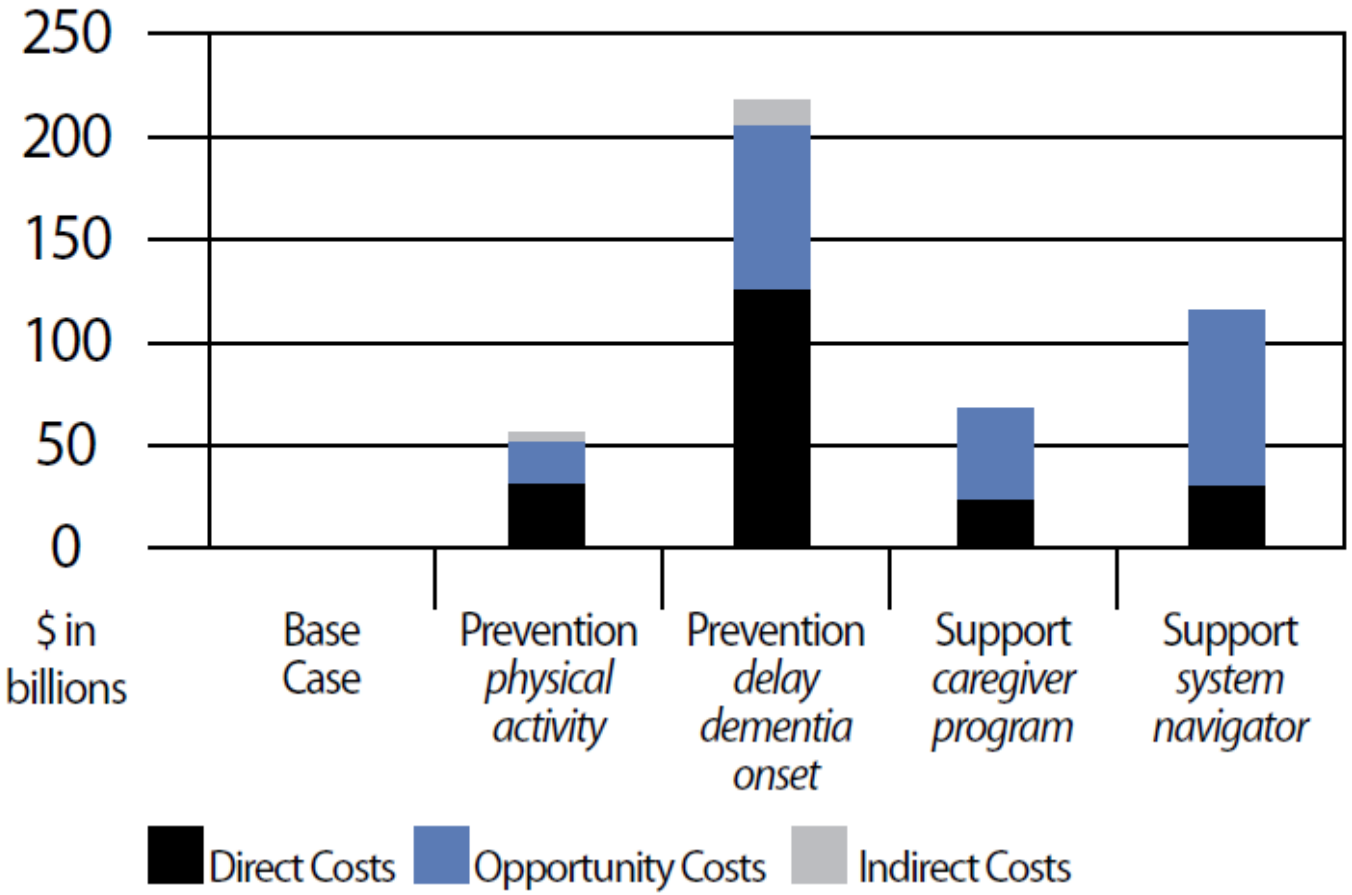
Intervention 4: Support – System Navigator

The fourth scenario examines the impact of assigning a system navigator (case manager) to each newly diagnosed dementia patient to provide care coordination to people with dementia and caregiver support to informal caregivers. In this scenario, the intervention is targeted to all people with dementia and their informal caregivers. It is anticipated that providing a system navigator would both reduce caregiving time and delay admission into a long-term care facility, thereby lessening the pressure placed on long-term care resources and producing significant savings in health costs.

Cumulative **10-year** Impact of Interventions on Total Economic Burden (2008 dollars)

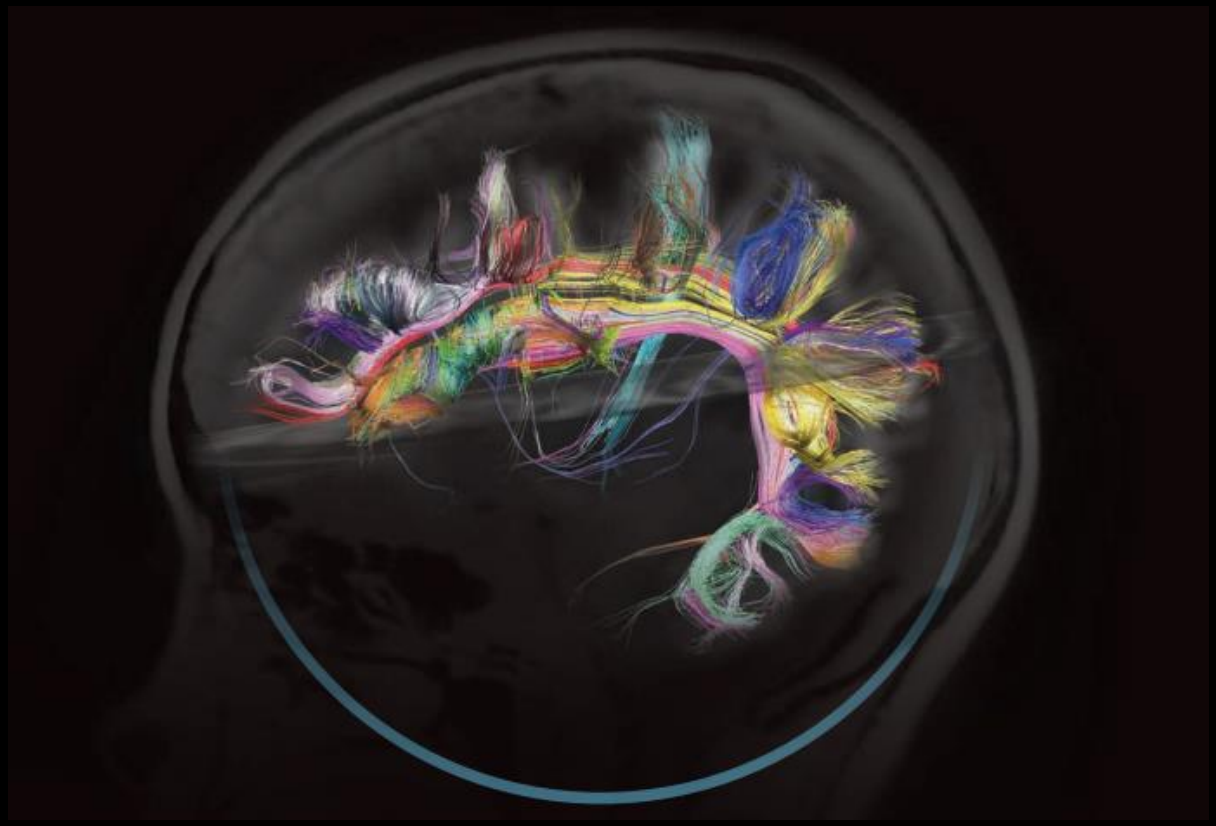


Cumulative **30-year** Impact of Interventions on Total Economic Burden (2008 dollars)



Conclusions

- Al principi més despesa indirecta (80%) que recau en **la família**
- A la llarga més despesa directa (**institucionalització**)
- Factor **mediterrani**: més familia, menys institucionalització
- Hi ha més **evidència** en els tractaments farmacològics que en altres intervencions sanitàries
- Per reduir la despesa:
  - Prevenció
  - Diagnòstic precoç
  - Tractament en fases lleus
  - Alternatives no farmacològiques
  - Deprescribing de comorbilitats en fase avançada



Gràcies