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Intelligent Technology for Dementia Care: Promises and Challenges

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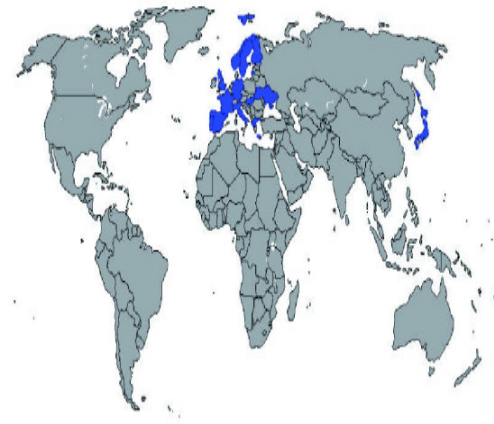


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Background

- Global Ageing
- Global Burden of Dementia

(a) Today

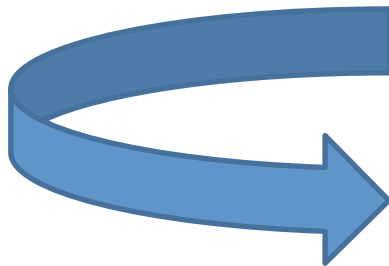


(b) 2050



■ > 20% of population over age 65

- Need for Institutionalized long-term care
- Burden on the Healthcare System
- Burden on Informal Caregivers
- Financial burden on Public Finances
- Reduced quality of life for patients

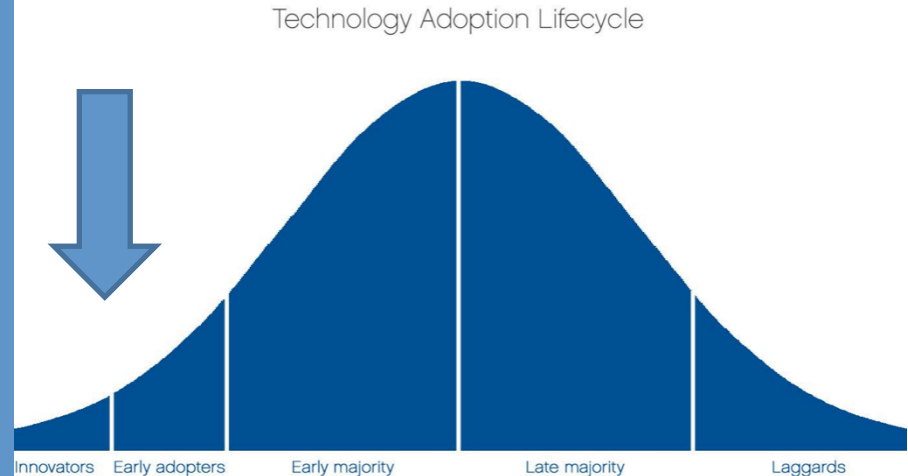


Intelligent Assistive Technology (IAT)

- Delay/obviate the need for institutionalized long-term care
- Reduce the burden on the Healthcare System
- Reduce the burden on Informal Caregivers
- Reduce the financial burden on Public Finances
- Increase quality of life of patients

Challenges

- ❑ Low-Societal uptake
- ❑ Limited introduction into healthcare



Recommendations

- Technical limitations
 - Limited dissemination of information among relevant stakeholders (Information Gap)
 - Limited data from target users
 - Insufficient legal coverage: privacy, data protection, information security, legal responsibility/culpability
 - Unaddressed ethical issues: distributive justice, informed consent, personal autonomy
- Incentives for research
 - Collaborative strategies for knowledge dissemination
 - User-centered and participatory approaches in design, development and assessment
 - Regulation and Policy: expanding legal coverage
 - Ethical guidelines:
 - Reimbursement plans to increase fair distribution
 - Special standards for informed consent with mentally incompetent patients
 - Protecting privacy, security and personal autonomy