

Unraveling the Future Burden of Dementia

Development and Application of a Microsimulation Model

1. The development of a novel simulation model to project dementia outcomes requires good quality population-based data, expertise on the natural history and courage to make assumptions amidst the many uncertainties that persist in the dementia field. (this thesis)
2. Projections of the future burden of dementia are highly susceptible to observed changes in age-specific incidence. Projections assuming an unchanged incidence are overestimating the burden in Europe and North America. (this thesis)
3. The prevention of dementia is urgently needed to limit quality of life losses and healthcare costs. Until prevention is feasible, prioritizing efforts to limit progression to severe stages and reduce care dependency are essential. (this thesis)
4. The impact of risk factor reductions on dementia prevalence varies significantly with age. Reducing smoking and hypertension prevents dementia cases in individuals under 90, but results in an increase among the oldest-old. (this thesis)
5. While differences in model assumptions are desirable in comparative modeling, too large differences arising from underlying uncertainties hinder the ability to draw meaningful conclusions. (this thesis)
6. Under the right conditions, screening is an admirable method of combating disease, since it helps detect it in its early stages and enables it to be treated adequately before it obtains a firm hold on the community. (Wilson & Jungner, 1968)
7. Transfer of different work styles and diffusion of skills, insights, and experiences among peers with different cultures and backgrounds is possible, and can boost organizational performance. (Amodio, Hoey & Schneider, 2023)
8. Economic productivity measures, like the GDP, should account for unpaid labor. (Cook & Kabeer, 2023)
9. Women's health is a historically under-researched field and requires the equivalent of the revolution that has taken place in the field of oncology in recent years. (Johnson, 2024)
10. Statisticians, like artists, have the bad habit of falling in love with their models. (George E. P. Box)
11. Traveling is education. (Melanie Brück)