

Cost-Benefit Analysis of Dementia Interventions

Robert J Brent

Fordham University, USA



Abstract

Cost-Benefit Analysis (CBA) is the way to ascertain whether any kind of health care intervention is to be judged socially worthwhile. A worthwhile intervention is one where the benefits (the outcomes of everyone affected valued in monetary terms), exceeds the costs, also valued in monetary terms. Since the costs of interventions are reasonably well understood, the main challenge for CBA is to obtain a method for estimating the benefits that recognizes the reality of the scarcity of economic resources, yet also incorporates principles of fairness and justice.

In this talk, a number of different benefit methods will be presented. Each method will be applied to a particular dementia intervention that has been evaluated using CBA. The expectation is that there will be at least one benefit method that someone would feel comfortable adopting for use in the CBA of any dementia intervention. There will be four main dementia CBAs presented: years of education, Medicare eligibility, hearing aids, and corrective lenses (glasses).

All four dementia CBAs relied on a very large US panel data set provided by the National Alzheimer's Coordination Center (NACC). The main strengths and weaknesses of the data will be explained. The instrument that is used to measure dementia in this data set is the Clinical Dementia Rating (CDR) scale, which covers six main domains: memory, orientation, judgment and problem solving, community affairs, home and hobbies, and personal care. The advantages of using the CDR, which focuses on dementia symptoms (cognitive functioning) rather than dementia brain pathology (plaques, fibers, etc.) are then highlighted.

The talk will conclude by showing how the four CBA interventions, that focus on dementia symptoms, are complementary with efforts in Europe and the US that seek to evaluate Dementia rehabilitation also on the basis of dementia behavior, especially TAP (the Tailored Activity Program).

Biography

Robert J. Brent is a Professor of Economics at Fordham University in New York and he is currently teaching Public Finance and Policy courses, and Statistics. He has lived and worked at Universities in the US, UK and Africa, and was Coordinator of the Strategic Planning and Governance Program at the Asian Development Bank Institute in Tokyo, Japan in 1998. His area of specialism is Cost-Benefit Analysis (CBA) and he has written four textbooks, edited a fifth, and has had published over two-dozen articles on the subject related to health, mental health, transport, education and agriculture, covering both Developed and Developing countries. In 2003 Robert was given a Fulbright Research award to evaluate HIV/AIDS interventions in Tanzania and he lived there for 7 months. He has been working on HIV/AIDS interventions ever since then. His published articles cover condoms, female education, voluntary counseling and testing and anti-retroviral drugs in Africa. His recently completed research involves putting a value on stigma prevention and evaluating ARVs, both studies related to older adults with HIV in NYC.

Publications

1. Brent, R. J. 2014. Cost-Benefit Analysis and Health Care Evaluations. 2nd ed ed. Cheltenham, UK: Edward Elgar.
2. Brent, R. J. 2018a. "The Value of a Year's General Education for Reducing the Symptoms of Dementia." *Applied Economics* 50: 2812–2823.
3. Brent, R. J. 2018b. "Estimating the Monetary Benefits of Medicare Eligibility for Reducing the Symptoms of Dementia." *Applied Economics* 50: 6327–6340.
4. Abrams, H., T. H. Chisolm, and R. McArdle. 2002. "A Cost-Utility Analysis of Adult Group Audiologic Rehabilitation: Are the Benefits Worth the Costs?" *Journal of Rehabilitation Research and Development* 39: 549–558.
5. Aldy, J. E., and W. K. Viscusi. 2008. "Adjusting the Value of a Statistical Life for Age and Cohort Effects." *Review of Economics and Statistics* 90: 573–581.



[11th International Conference on Dementia and Dementia Care](#) | Paris, France | February 19-20, 2020

Citation: Robert J Brent, Cost-Benefit Analysis of Dementia Interventions, *Dementia Care 2020: 11th International Conference on Dementia and Dementia Care*, Paris, 19-20 February 2020, pp. 04