

## Health Years in Total (HYT): A new health objective function for costeffectiveness analysis

## **ANIRBAN BASU**, THE CHOICE INSTITUTE, UNIVERSITY OF WASHINGTON, SEATTLE

12:00-14:00

24th July 2019

Sir Alexander Fleming Room Southside, 7th Floor, 105 Victoria Street, London, SW1E 6QT A buffet lunch will be available from 12:00 noon.

The seminar will start promptly at 12:30 pm and finish promptly at 14:00

The standard effectiveness measure in cost-effectiveness (CEA) or cost-utility analysis is the quality-adjusted life-year (QALY). QALY attempts to capture both life expectancy and health-related quality of life impacts to enable comparisons across interventions and disease areas. However, distribution issues generated by the use of QALY present a critical challenge that has resulted in the exclusion of its use in some US public decision making on health care (e.g. Medicare). Alternatives to QALY (such as Equal Value of Life, EVL) have not gained traction as their use raises other efficiency issues. For example, EVL fails to recognize quality of life gains during added years of life.

Anirban will present a new metric for effectiveness for CEA, Health Years in Total (HYT), that overcomes both the distributional issues raised by QALYs and the efficiency challenges of EVL. The HYT framework fundamentally separates life-expectancy changes and quality of life changes in an additive scale. The seminar will examine conceptual and theoretic arguments for use of HYT and illustrate their performance against QALYs and EVL. Methods to calculate HYT in a CEA model, to derive CEA thresholds for HYT corresponding to the QALY-based thresholds in the US and policy implications for the use of HYT using recently published technology evaluations will also be presented.

Anirban Basu, PhD, MS, is a health economist and a statistician specializes in research on comparative and cost effectiveness analyses, causal inference methods, program evaluation, and outcomes research. Anirban is Director of The Comparative Health Outcomes, Policy, and Economics (CHOICE) Institute at the University of Washington, Seattle, with appointments in the departments of Pharmacy, Health Services, and Economics at the university. He is a Faculty Research Fellow at the National Bureau of Economic Research, and a Fellow of the American Statistical Association. He was one of the panellists for the Second Panel on the Cost-Effectiveness Analysis in Health and Medicine. Anirban's research interests include heterogeneity in clinical and economic outcomes, micro behaviour with respect to heterogeneous information, and the value of individualized care. He received his PhD in Public Policy (Health Economics Specialization) from The University of Chicago and an MS in Biostatistics from the University of North Carolina at Chapel Hill.

If you would like to attend this seminar, please send an email to <a href="mailto:ohegeneral@ohe.org">ohegeneral@ohe.org</a> to secure your place. If you are unable to attend but think that a colleague might like to, please pass on this letter to them.

Yours faithfully,

Graham Cookson Chief Executive, OHE