

Session Title

Data Envelopment Analysis

Workshop Overview

Data Envelopment Analysis (DEA) has become a popular tool in the field of health economics. Some individuals, however, remain unfamiliar with how the methodology and its extensions can be used to study a wide variety of health care issues. In this workshop we will present a step by step approach to using DEA:

- A brief overview of the theory behind DEA
- The derivation of efficiency scores
 - The choice of an input- vs. output-orientations
 - Returns to scale
 - The decomposition of efficiency scores into pure technical, scale, and allocative efficiency
- The derivation of the Malmquist Productivity Index and its components
- Data needs and issues
- Extensions of DEA

We will provide examples of DEA applications from both developed and developing countries in order to appeal to a wider audience. We will also demonstrate DEA software, some of which can be obtained at zero out of pocket expense making it relevant to health policy makers/economists with limited budgets. Finally, we will provide participants with a bibliography of recent works in health and DEA.

Workshop Faculty:

Gary D. Ferrier, Ph.D., and Vivian G. Valdmanis, Ph.D.

Dr. Ferrier is the Louis Eppley Professor of Economics at the University of Arkansas and Dr. Valdmanis is an Associate Professor of Health Policy at the University of the Sciences in Philadelphia. Both faculty members have over 15 years experience in the uses of DEA applied to several service sectors including health and banking. In addition, both Drs. Ferrier and Valdmanis have collaborated on numerous publications studying the US hospital systems and the French/US hospital system.

Expected Audience:

We anticipate a workshop for both practitioners and students of about 50 individuals if not more.