

SESSION TITLE:

Health Econometrics of Health Cost, Expenditure and Utilization Data

SESSION TOPICS

1. Skewed outcomes in the absence of censoring at zero:
 - Box-Cox approaches
 - The retransformation problem.
 - Generalized Linear Models (GLM)
 - Extensions that allow selection of both the link and the distribution function for GLM

2. The zeroes issue and skewed outcomes common to many cost and expenditure analyses:
 - Two part and related models
 - Robustness of untransformed least squares
 - Less parametric approaches, such as the Gilleskie-Mroz alternative

3. Counts of health care utilization:
 - Poisson and negative binomial models
 - Latent mixture models.
 - Other count models - zero inflated Poisson and Negative Binomial models, hurdle models

We will provide a tool kit of methods for checking the quality of the fit of the estimated model to the data. The kit will include a range of specification tests and sample statistical software.

We will comment on the robustness of various methods. Some illustrations from real world data would be included.

With the course, we already have a set of prototypical statistical program written in STATA, and a few in SAS. We would do the same for the new material.

This course is targeted toward anyone using cost, expenditure, or count micro data with a basic PhD level of econometrics.

SESSION FACULTY:

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- Willard Manning, University of Chicago
- Edward Norton, University of North Carolina - Chapel Hill