

Pre-Congress TRAINING Session (Half-Day): Using the Net Benefit Regression Framework to Analyze Person-level Cost-effectiveness Data

Saturday, July 7, 1:00pm-5:00pm
Lund, Sweden

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Analyzing person-level data (e.g., from a clinical trial) is a popular way to provide evidence of cost-effectiveness. The net benefit regression framework simplifies this process and is covered in standard textbooks on economic evaluation (e.g., the 3rd edition of Drummond et al.'s "blue" book). The Hoch, Briggs and Willan (2002) article that introduced net benefit regression was awarded the International Society for Pharmacoeconomics and Outcomes Research's Research Excellence Award for Methodology Excellence in 2003 and has been cited over 45 times. This short course will take learners step by step through the process of using net benefit regression to analyze person-level cost-effectiveness data.

We will discuss the economic meaning of the regression results and introduce techniques to characterize uncertainty and perform sensitivity analysis. Lastly, we will point out how net benefit regression facilitates using regression methods available to handle challenges (e.g., skewed costs, observational data, patient heterogeneity, etc.). Participants may wish to revisit these advanced topics in greater depth at a later date.

Regression analysis has many important tools that can be used in the analysis of cost-effectiveness data. This short course will introduce learners to this potential using net benefit regression. Participants are encouraged to bring their own laptop computer on which they can follow along by running regressions. Examples of software that can run regressions are Excel, SAS and Stata. Although this course will be taught at a Beginner level, learners will be expected, as a prerequisite, to know how to "run a regression". Brief "theory bursts" will be followed by "hands on" exercises to reinforce how to use net benefit regression.