treatment effects - Introduction to treatment-effects commands

Description Also see

Description

Title

This manual documents commands that use observational data to estimate the effect caused by getting one treatment instead of another. In observational data, treatment assignment is not controlled by those who collect the data; thus some common variables affect treatment assignment and treatment-specific outcomes. Observational data is sometimes called retrospective data or nonexperimental data, but to avoid confusion, we will always use the term "observational data".

When all the variables that affect both treatment assignment and outcomes are observable, the outcomes are said to be conditionally independent of the treatment, and the teffects estimators may be used.

When not all these variables common to both treatment assignment and outcomes are observable, the outcomes are not conditionally independent of the treatment, and etregress or etpoisson may be used.

teffects offers much flexibility in estimators and functional forms for the outcome models and the treatment-assignment models; see [TE] teffects intro or [TE] teffects intro advanced.

etregress and etpoisson offer less flexibility than teffects because more structure must be imposed when conditional independence is not assumed. etregress is for linear outcomes and uses a normal distribution to model treatment assignment; see [TE] etregress. etpoisson is for count outcomes and uses a normal distribution to model treatment assignment; see [TE] etpoisson.

Endogenous treatment effects

[TE] etpoisson	Poisson regression with endogenous treatment effects
[TE] etregress	Linear regression with endogenous treatment effects

Treatment effects

Augmented inverse-probability weighting
Inverse-probability weighting
Inverse-probability-weighted regression adjustment
Nearest-neighbor matching
Propensity-score matching
Regression adjustment

Also see

- [U] 1.3 What's new
- [TE] teffects intro Introduction to treatment effects for observational data
- [TE] teffects intro advanced Advanced introduction to treatment effects for observational data
- [TE] teffects multivalued Multivalued treatment effects