



Indirect estimation of a simultaneous limited dependent variable model for patient costs and outcome

Per Hjertstrand
Research Institute of Industrial Economics (IFN), Stockholm, Sweden Per.Hjertstrand@ifn.se

Gunnar Rosenqvist*
Hanken School of Economics, Helsinki, Finland gunnar.rosenqvist@hanken.fi

Abstract

This paper proposes applying indirect inference to estimate simultaneous equation limited dependent variable models. The model under study is motivated by the important problem of studying cost and quality, their determinants and their interrelationship in health care with patient level data. Models of this type are commonly estimated by two-step estimators suggested in the literature. In our simulations the indirect inference estimator outperforms its two-stage competitors.

Keywords: indirect inference; health economics; simultaneous equation system.