

Structural Estimation of Psychiatric Hospital Stays

Gordana Paric
Paul Rilstone

This paper develops a structural model for explaining lengths of stay of psychiatric patients as the joint decision of patients and caregivers. We show that the hazard rates of both the patients and caregivers can be nonparametrically identified by extending established results on identification of the Roy model to the case of multivariate duration models. The hazard rates are estimated semiparametrically using multivariate Weibull specifications for the duration dependence and a new multivariate version of the Heckman-Singer estimator to allow for unobserved heterogeneity. The main results indicate that the hazard rate for the caregivers' is increasing while that for the patients' is decreasing.

Correspondence:

Paul Rilstone
Department of Economics
York University
4700 Keele Street
North York Ontario
Canada M3J 1P3
PRIL@YORKU.CA