

## Multi-state models in chronic disease epidemiology

Ralph Brinks (Deutsches Diabetes-Zentrum, Universität Düsseldorf)

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The classical illness-death model (IDM) is a straightforward extension of the two-state model underlying Kaplan-Meier estimation and Cox regression. The IDM gains fundamental insights about relations between the prevalence and incidence of chronic diseases (Brinks & Hoyer, Lifetime Data Analysis, 2018). A variety of applications from the field of diabetes, rheumatic diseases and dementia is presented. With a simple extension, the IDM is helpful in studying diseases with a prolonged state of undiagnosed disease such as hypertension or cancer.