Statistics

Multistate Models for the Analysis of Life History Data provides the first comprehensive treatment of multistate modeling and analysis, including parametric, nonparametric and semiparametric methods applicable to many types of life history data. Special models such as illness-death, competing risks and progressive processes are considered, as well as more complex models. The book provides both theoretical development and illustrations of analysis based on data from randomized trials and observational cohort studies in health research.

Features

- Discusses a wide range of applications of multistate models
- Presents methods for both continuously and intermittently observed life history processes
- Gives a thorough discussion of conditionally independent censoring and observation processes
- Discusses models with random effects and joint models for two or more multistate processes
- Discusses and illustrates software for multistate analysis that is available in R
- Target audience includes those engaged in research and applications involving multistate models

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"The authors of the book are internationally renowned experts in the field of multistate modeling and have written an extremely clear and comprehensive book on the topic that covers many different aspects, from the fundamental theory to the practical side of analyzing data and interpreting results. The examples are well chosen to represent the most common types of multistate processes that public health researchers could encounter. The inclusion of software code to illustrate how the models can be fit and interpreted is especially helpful to readers." (Mimi Kim, Albert Einstein College of Medicine)



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