Bayesian Methods in Health Economics (Chapman Hall/CRC Biostatistics Series)

Gianluca Baio
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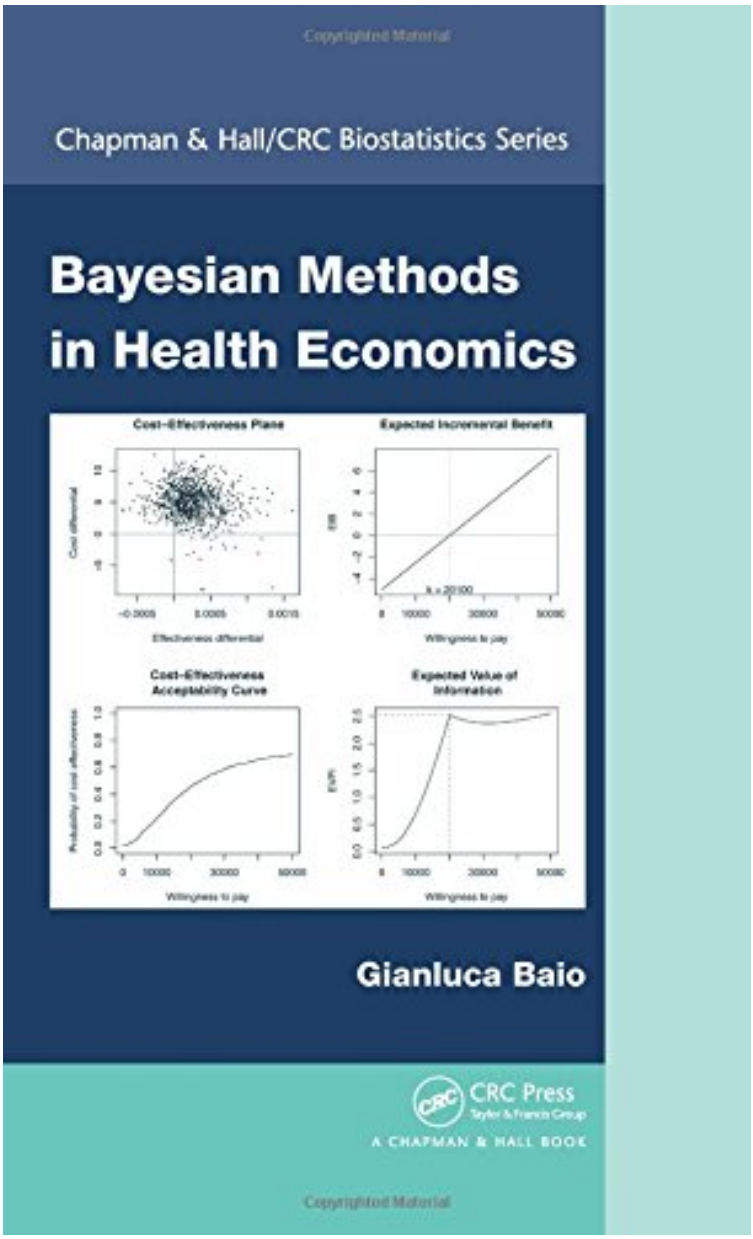

#1600022 in Books 2012-11-12Original language:EnglishPDF # 1 9.21 x .56 x 6.14l, 1.10 #File Name: 1439895554244 pages | File size: 48.Mb

Gianluca Baio : Bayesian Methods in Health Economics (Chapman Hall/CRC Biostatistics Series) before purchasing it in order to gage whether or not it would be worth my time, and all praised Bayesian Methods in Health

Economics (Chapman Hall/CRC Biostatistics Series):

Health economics is concerned with the study of the cost-effectiveness of health care interventions. This book provides an overview of Bayesian methods for the analysis of health economic data. After an introduction to the basic economic concepts and methods of evaluation, it presents Bayesian statistics using accessible mathematics. The next chapters describe the theory and practice of cost-effectiveness analysis from a statistical viewpoint, and Bayesian computation, notably MCMC. The final chapter presents three detailed case studies covering cost-effectiveness analyses using individual data from clinical trials, evidence synthesis and hierarchical models and Markov models. The text uses WinBUGS and JAGS with datasets and code available online.

"Gianluca Baios book is a welcome account of recent developments in methodology for cost-effective analysis in health care. The book may well be the first book-length account of a fully Bayesian approach to cost-effective analysis. a great book for its intended audience of students in an advanced course on statistical methods for health economics. The book would also be suitable for self-study for at least two groups: Bayesian statisticians moving into health economics applications; practicing health economists and epidemiologists keen to learn more about Bayesian methods."Australian New Zealand Journal of Statistics, 57, 2015 "It is well presented and pleasing to read. One of the strengths of the book is the use of real practical motivating examples, which then serve as vehicles for explaining methods. As each story unfolds, the reader is presented with the right level of mathematical detail to appreciate the problem and the analysis, followed by a full description of the R and JAGS code necessary to replicate the analysis. All the code in the book is also available from the authors website, and the authors associated R package (BCEA) contains useful post-processing functions I would recommend the book to anyone engaged in mathematical modeling for health economic decision making. The book would be particularly useful either for someone who is familiar with R but not with Bayesian methods in health economics, or for an experienced modeler who wants to migrate to R from a different software package. It also would not be hard to use the book as the basis for either a short course on Bayesian methods for health economic modeling, or perhaps a masters-level module. a nice addition to the literature on health economics from a statistical perspective."Journal of the American Statistical Association, December 2014 "This book is apparently the first book devoted to Bayesian statistical methods in health economics, which is a relatively new discipline. suitable for researchers and practitioners who want to learn and apply statistical methods to health economics. Also it can be a good text for graduate courses in statistical analysis of health economic data. The author tries to keep mathematics at a low level and provides many interesting figures and tables for readers with weak mathematical/statistical background. He provides step-by-step guidance to practical application of the Bayesian methods by using popular statistical software R and BUGS/JAGS. This would be very attractive to practitioners for they can easily implement Monte Carlo simulation methods necessary for Bayesian inference without fear."Man-Suk Oh, Biometrics, March 2014