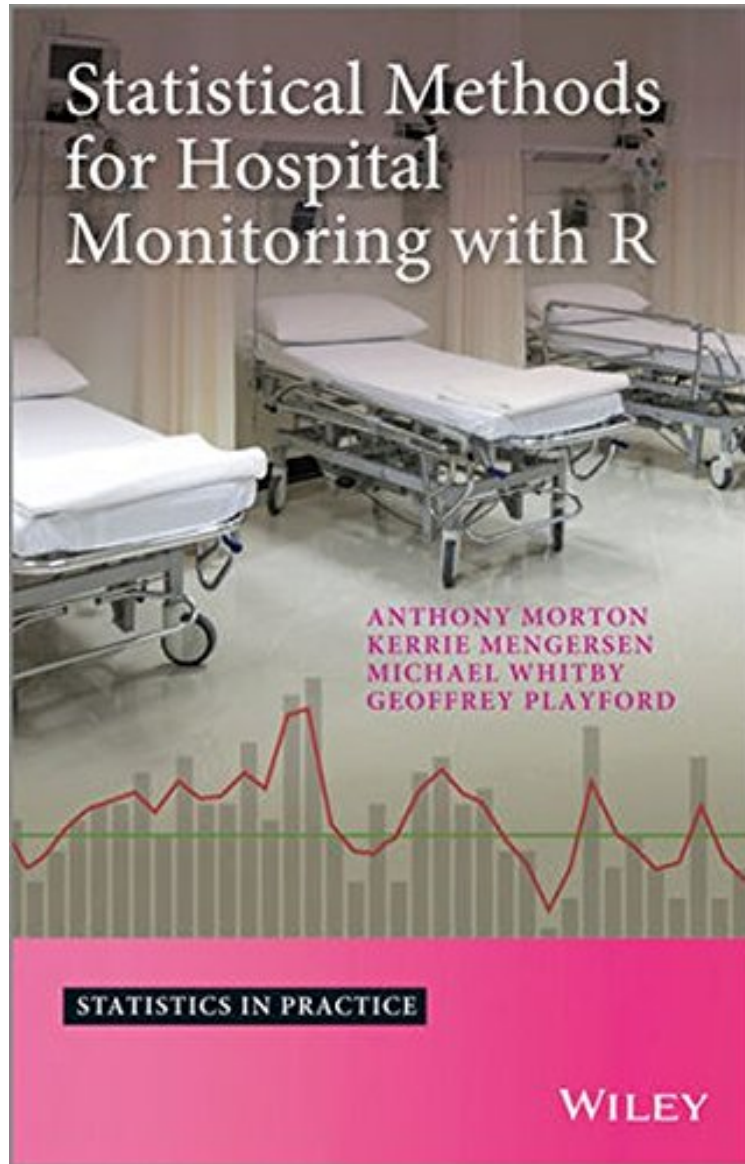


[Read ebook] Statistical Methods for Hospital Monitoring with R

## Statistical Methods for Hospital Monitoring with R

*Anthony Morton, Kerrie L. Mengersen, Geoffrey Playford, Michael Whitby*  
audiobook / \*ebooks / Download PDF / ePub / DOC



[Download](#)

[Read Online](#)

#2779196 in Books 2013-09-10Original language:EnglishPDF # 1 9.90 x 1.00 x 6.90l, 1.81 #File Name:  
1118596307426 pages | File size: 48.Mb

**Anthony Morton, Kerrie L. Mengersen, Geoffrey Playford, Michael Whitby : Statistical Methods for Hospital Monitoring with R** before purchasing it in order to gage whether or not it would be worth my time, and all praised Statistical Methods for Hospital Monitoring with R:

2 of 2 people found the following review helpful. Delivers the goodsBy SussmanA book that gives an easy-to-understand outline framework to the use and methodologies of statistical methods using R, there is a clear emphasis on

the needs of those people with responsibilities in various Hospital departments that produce an array of reports, and those involved in improving safety. The book allows and takes into consideration that the end user may have limited statistical know-how. The book does employ complex methods, such as the Bayesian random-effects model; however, these are kept to simple form. This is a good guide that delivers the goods.

Hospitals monitoring is becoming more complex and is increasing both because staff want their data analysed and because of increasing mandated surveillance. This book provides a suite of functions in R, enabling scientists and data analysts working in infection management and quality improvement departments in hospitals, to analyse their often non-independent data which is frequently in the form of trended, over-dispersed and sometimes auto-correlated time series; this is often difficult to analyse using standard office software. This book provides much-needed guidance on data analysis using R for the growing number of scientists in hospital departments who are responsible for producing reports, and who may have limited statistical expertise. This book explores data analysis using R and is aimed at scientists in hospital departments who are responsible for producing reports, and who are involved in improving safety. Professionals working in the healthcare quality and safety community will also find this book of interest

**Statistical Methods for Hospital Monitoring with R:** Provides functions to perform quality improvement and infection management data analysis. Explores the characteristics of complex systems, such as self-organisation and emergent behaviour, along with their implications for such activities as root-cause analysis and the Pareto principle that seek few key causes of adverse events. Provides a summary of key non-statistical aspects of hospital safety and easy to use functions. Provides R scripts in an accompanying web site enabling analyses to be performed by the reader [http://www.wiley.com/go/hospital\\_monitoring](http://www.wiley.com/go/hospital_monitoring) Covers issues that will be of increasing importance in the future, such as, generalised additive models, and complex systems, networks and power laws.

From the Back Cover Hospitals monitoring is becoming more complex and is increasing both because staff want their data analysed and because of increasing mandated surveillance. This book provides a suite of functions in R, enabling scientists and data analysts working in infection management and quality improvement departments in hospitals, to analyse their often non-independent data which is frequently in the form of trended, over-dispersed and sometimes auto-correlated time series; this is often difficult to analyse using standard office software. This book provides much-needed guidance on data analysis using R for the growing number of scientists in hospital departments who are responsible for producing reports, and who may have limited statistical expertise. This book explores data analysis using R and is aimed at scientists in hospital departments who are responsible for producing reports, and who are involved in improving safety. Professionals working in the healthcare quality and safety community will also find this book of interest

**Statistical Methods for Hospital Monitoring with R:** Provides functions to perform quality improvement and infection management data analysis. Explores the characteristics of complex systems, such as self-organisation and emergent behaviour, along with their implications for such activities as root-cause analysis and the Pareto principle that seek few key causes of adverse events. Provides a summary of key non-statistical aspects of hospital safety and easy to use functions. Provides R scripts in an accompanying web site enabling analyses to be performed by the reader [http://www.wiley.com/go/hospital\\_monitoring](http://www.wiley.com/go/hospital_monitoring) Covers issues that will be of increasing importance in the future, such as, generalised additive models, and complex systems, networks and power laws.

About the Author Anthony Morton and Geoffrey Playford, Princess Alexandra Hospital, Brisbane, Australia Kerrie Mengersen, Science and Engineering Faculty, Queensland University of Technology, Australia Michael Whitby, Greenslopes Specialist Centre, Queensland, Australia