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CAMPBELL, M. J., MACHIN, D., and WALTERS, S. J.
Medical Statistics: A Textbook for the Health Sciences, 4th edition. John Wiley and Sons, Chichester, England, 2007. ix + 331 pp. $37.50/€24.90. ISBN 9780470025192.

Previous editions of this book were reviewed in *Biometrics* **47,** p. 348 (1st edition) and *Biometrics* **49,** p. 1286 (2nd edition).
The book is intended for a target audience of students (and some professionals) in the health sciences. The authors obviously do not intend their readers to become self-sufficient statisticians just by reading this book: Chapter 1 includes a section entitled, “Howa statistician can help.” Instead the authors apparently hope for their readers to be able to think statistically in the contexts of their own work. This is a far more sensible goal, with a far greater chance of success.

The authors state that this new edition is a “total revamp” of the textbook, although it is intended to retain the low technical level of its predecessors. Indeed, I found that the book places very little emphasis on calculations. The authors instead stress general statistical understanding, appropriate uses of techniques, and interpretation of results. For example, there is a “Points when reading the literature” section in most chapters, a great idea that recognizes that the most common opportunity for their target audience to use statistical thinking is in the interpretation of someone else’s published analysis.

Coverage of individual statistical methods is brief and shallow, but considering the scope of topics introduced within the book, the alternative would be an 800-page tome. The authors focus on the most simplified forms of analysis of categorical and numerical data, including touching on linear and logistic regression, survival analysis, and reliability of diagnostic tests. I suspect that individual instructors will often have a quibble with one or another of these simplified presentations, but again, the authors would have that the readers understand the principles of an analysis rather than the details. Chapters on observational studies, randomized trials, and sample size issues similarly give readers something to think about, without providing a wealth of solutions. Provided that the lesson on “Howa statistician can help” is repeated often throughout a course, this book seems to me to be a very useful course text for an audience of students in the health sciences.