
Regular readers of JAMA will have noted an on-going series with the catchy title “Users’ Guide to the Medical Literature” emanating from the Evidence-Based Medicine Working Group. One article from the series [Jaeschke R, Guyatt GH, Sackett DL. Users guide to the medical literature. JAMA 1994;271:703–7] would be of particular interest to readers of Clinical Chemistry and has important implications for all clinical laboratory workers who interface with clinicians. If a Bayesian cardiologist were to inquire about the likelihood ratio for different concentrations of CK-MB or troponin following an infarction, could the laboratory scientist provide this information or know how to seek this information from a review of the medical literature?

Those who search MEDLINE and use one of the many competing MEDLINE systems such as SilverPlatter, Knowledge Index, or PaperChase may not be aware that these systems vary substantially in their performance in regard both to relevance and irrelevance of retrieved citations. Moreover, the National Library of Medicine indexers do not always consistently index terms such as sensitivity, specificity, and likelihood ratios, so searches seeking the most current citations on the diagnostic use of a new test may not retrieve relevant citations. Optimized search strategies through either textword or MeSH headings should be used, but many individuals do not know what these are.

These and many other topics are covered in Evidence-Based Medicine—How to Practice and Teach EBM, written by four authors from Oxford, Rochester, and McMaster Universities. EBM stresses the examination of evidence from clinical research and its application to a defined clinical problem. Although it does not solve all problems in the practice of medicine [Naylor C. Grey zones of clinical practice: some limits to evidence-based medicine. Lancet 1995;345:840–2; Maynard A. Evidence-based medicine: an incomplete method for informing treatment choices. Lancet 1997;349:126–8], EBM is an attempt to rigorously examine current evidence and assess its worth. In one sense this new volume is a natural sequel to Sackett and colleagues’ very successful Clinical Epidemiology—a Basic Science for Clinical Medicine, previously reviewed in Clinical Chemistry (1986;32:411–3), and now in its second edition (1991). A companion volume from Oxford is Muir Gray’s Evidence-Based Healthcare—How to Make Health Policy and Management Decisions (1997), which covers more extensive grounds in healthcare.

The book has five chapters: How to ask clinical questions you can answer; Searching for the best evidence: Critically appraising the evidence; Can you apply this valid, important evidence in caring for your patient?; and Evaluation (of your own performance). It has an Appendix on the calculation of confidence intervals and six, sturdily coated, two-sided crib sheets on such topics as calculating sensitivity and specificity, the five levels of a test result, Fagan’s likelihood ratio nomogram, how to do a good MEDLINE search, and many other useful guides. It is a user-friendly book with edge-marked icons on diagnosis, prognosis, therapy, harm, economic analysis, decision analysis, and quality so that one can easily follow a topic throughout the entire book. My one complaint is of the binding, which makes it impossible to lay the book open on your desk unless you break the spine.

While it is largely directed towards physicians, there is much that the laboratory scientists can use. It will tell you things not found in Tietz, such as web sites to the Cochrane Collaboration and the York Centre for Reviews and Dissemination, the use of SpPin and SnNOut, the journals ACP Journal Club and Evidence-Based Medicine, and many other goodies. It is my firm conviction that good clinical chemists have always practiced “evidence-based clinical chemistry.” But get the book! Improve your EBCC!