Additional EBM Resource Suggestions

This list contains suggestions for further reading. The resources are broken down into Journal Articles, Books, and Websites and Online Resources.

**Journal Articles**

Discusses the sequence, contents and essential sections for a scientific research paper.

Evaluates critical appraisal tool (CAT) development. Offers advice about how professionals can best use CATs.

Explores the relationship between evidence and knowledge. Offers a brief history of evidence-based medicine (EBM). Places EBM within the concept of philosophical thought.

Discusses applications of reliability in assessment methods in medical education. Includes a section on improving the reliability of assessments. This author has written well-regarded papers on validity.

This classic JAMA article introduces the concept of EBM as well as the paradigm shift that EBM demands.

Discusses the importance of statistical literacy.


Provides a summary of EBM and the skills necessary to practice it.

An instrument designed to assess the methodological quality of systematic reviews.
User Guides to the Medical Literature
The following series of Journal of the American Medical Association (JAMA) articles provides a foundation for how to use medical literature:

Guyatt GH, Rennie D. Users' guides to the medical literature. JAMA. 1993 Nov 3;270(17):2096-2097. [Introduction]


Guyatt GH, Sackett DL, Cook DJ. Users' guides to the medical literature: II. How to use an article about therapy or prevention. A. Are the results of the study valid? JAMA. 1993 Dec 1; 270(21):2598-2601.

Guyatt GH, Sackett DL, Cook DJ. Users' guides to the medical literature: II. How to use an article about therapy or prevention. B. What were the results and will they help me in caring for my patients? JAMA. 1994 Jan 5;271(1):59-63.


Jaeschke R, Guyatt GH, Sackett DL. Users' guides to the medical literature: III. How to use an article about a diagnostic test. B. What are the results and will they help me in caring for my patients? JAMA. 1994 Mar 2;271(9):703-707.


Oxman AD, Cook DJ, Guyatt GH. Users' guides to the medical literature: VI. How to use an overview. JAMA. 1994 Nov 2;272(17):1367-1371.

Richardson WS, Detsky AS. Users' guides to the medical literature: VII. How to use a clinical decision analysis. A. Are the results of the study valid? JAMA. 1995 Apr 26;273(16):1292-1295.

Richardson WS, Detsky AS. Users' guides to the medical literature: VII. How to use a clinical decision analysis. B. What are the results and will they help me in caring for my patients? JAMA. 1995 May 24-31;273(20):1610-1613.


Naylor CD, Guyatt GH. Users guides to the medical literature: X. How to use an article reporting variations in the outcomes of health services. JAMA. 1996 Feb 21;275(7):554-558.

Naylor CD, Guyatt GH. Users' guides to the medical literature: XI. How to use an article about a clinical utilization review. JAMA. 1996 May 8;275(18):1435-1439.


O'Brien BJ, Heyland D, Richardson WS, Levine M, Drummond MF. Users' guides to the medical literature: XIII. How to use an article on economic analysis of clinical practice. B. What are the results and will they help me in caring for my patients? JAMA. 1997 Jun 11;277(22): 1802-1806.

Dans AL, Dans LF, Guyatt GH, Richardson S. Users' guides to the medical literature: XIV. How to decide on the applicability of clinical trial results to your patient. JAMA. 1998 Feb 18;279(7): 545-549.


McAlister FA, Straus SE, Guyatt GH, Haynes RB. Users' guides to the medical literature: XX. Integrating research evidence with the care of the individual patient. JAMA. 2000 Jun 7;283(21): 2829-2836.


Giacomini MK, Cook DJ. Users' guides to the medical literature: XXIII. Qualitative research in health care. A. Are the results of the study valid? JAMA. 2000 Jul 19; 284(3):357-362.

Giacomini MK, Cook DJ. Users' guides to the medical literature: XXIII. Qualitative research in health care. B. What are the results and how do they help me care for my patients? JAMA. 2000 Jul 26;284(4):478-482.


Books


Fletcher, Robert W., and Suzanne W. Fletcher. Clinical Epidemiology: The Essentials. Fourth ed. Maryland: Lippincott Williams & Wilkins, 2005. A single research strategy such as risk, prognosis, treatment, and prevention, is the focus of each chapter. Essential keywords, definitions, examples, basic principles, and review questions are included. Answers to review questions are included in the Appendix, and a second Appendix offers further readings organized according to topic.

Harris, Michael, and Gordon Taylor. Medical Statistics Made Easy. Second ed. Bloxham, Oxfordshire: Scion, 2008. Offers a brief introduction to statistical terms used in medical literature. Each term is rated by stars which indicate how often the term is found in papers and how important it is. The number of smiley faces assigned tells how easy it is to understand. Also included are definitions and examples.


A good introductory guide to the principles of EBP. It contains exercises, with answers, for further practice and study.


Assists the clinician in translating and applying the principles of EBM into daily practice.


Each chapter covers one mathematical concept and includes a pre-test, discussion with explanatory exercises, and a posttest. Unfortunately, this book is no longer in print, but it is available through used bookstores on the web.

**Websites and Online Resources**

**EBM and Clinical Support Librarians@UCHC** [http://creakysites.wordpress.com/](http://creakysites.wordpress.com/)
Crea, Kathleen, blog editor, University of Connecticut Health Center
A blog for medical students, faculty and librarians about their use of evidence based medicine, clinical literature, Web 2.0, sources, and search strategies.

**EBM and Decision Tools by Alan Schwartz.** [http://araw.med.uic.edu/~alansz/tools.html](http://araw.med.uic.edu/~alansz/tools.html)
This site has decision-making tools and exercises that may be used in evidence-based medicine or medical decision making. Includes a diagnostic test calculator that computes sensitivity, specificity, likelihood ratios, and confidence intervals and a number needed to treat calculator. Exercises include diagnostic test cutoffs, statistical testing thresholds, and utility assessments.

**EBM Librarian.** [https://sites.google.com/site/ebmlibrarian/](https://sites.google.com/site/ebmlibrarian/)
Schardt, Connie Duke University Medical Center Library, and Odato, Karen, Dartmouth College
Originally sponsored by Connie Schardt, Karen Odato, and Lindsey Glynn, this site has been developed so that librarians can share information about evidence-based medicine and practice.

A 28-page copyrighted workbook prepared by The Centre for Clinical Effectiveness. Notable for its ease of use and clarity of presentation.

Find links to full-text of major EBM articles on dentistry, mental health, pediatrics, orthopedics, statistics and quality improvement. Includes the BMJ series “Statistics Notes,” single-page explanations of the use of statistics in medical literature.
Contains fundamental tools for understanding and applying the medical literature and making clinical diagnoses. Includes online version of the Users' Guide to the Medical Literature (2008) and The Rational Clinical Examination (2009).

A database of explanatory essays and historical material describing what comprises a fair test, defined on the homepage as “tests that take steps to obtain reliable information about treatment effects by reducing the misleading influence of biases and the play of chance. When the need for fair tests of treatments is ignored, people suffer and die unnecessarily.”

Introduction to Evidence-Based Practice.  [http://www.hsl.unc.edu/services/tutorials/ebm/welcome.htm](http://www.hsl.unc.edu/services/tutorials/ebm/welcome.htm)
Schartd, Connie, Duke University Medical Center Library, and Mayer, Jill, University of North Carolina at Chapel Hill
An online tutorial developed by Connie Schardt and Jill Mayer and intended for health care practitioners and students who seek a basic introduction to the principles of Evidence-Based Practice

Novella, Steven, MD, executive editor, ale University School of Medicine
A blog that explores issues and controversies in the relationship between science and medicine. From the Editors page of the website: “The editorial staff of Science-Based Medicine is composed of physicians who, alarmed at the manner in which unscientific and pseudoscientific health care ideas have increasingly infiltrated academic medicine and medicine at large, have decided to do their part to examine these claims in the light of science and skepticism.”

SUMSearch:  [http://sumsearch.uthscsa.edu/](http://sumsearch.uthscsa.edu/)
Badgett, Bob – MD. Associate Professor of Medicine. Director of Clinical Informatics, Department of Medicine. UTHSCSA, and Levy, Linda – MLS, AHIP. Briscoe Medical Library.
A free search engine that queries PubMed and the Internet for medical evidence and then organizes retrievals according to breadth of discussion, from broad overview to specific studies. Supported by the University of Texas Health Science Center.

A website that summarizes the evidence (taken mostly from systematic reviews like those from the Cochrane Collaboration) behind a range of treatments and therapies. From their Methods page: “At TheNNT.com we believe that the traditional peer review process, while effective in some ways, has led to important problems in the way evidence is presented, interpreted, and implemented. In particular the methods of results reporting in peer-reviewed medical journals have not been consistent, clear, or understandable. TheNNT.com is designed to address this gap.” The name comes from the number needed to treat (NNT).

Heneghan Carl, Editor, Centre of Evidence-Based and Programs in Evidence-Based Health Care Medicine, University of Oxford, and Banerjee, Ami, Editor, University of Birmingham.
A blog which sources up-to-date relevant material from multiple sources of evidence as well as horizon scanning for information likely to change practice today. Per their website, it is “is intended for anyone interested in evidence-based medicine (EBM) - and our opinions on it! This might include health professionals, but extends to policy makers and the general public. The site is funded by the Centre for Evidence Based Medicine.”

Resources compiled by instructors in the Evidence-based Practice Online Course offered by the University of Illinois at Chicago Library of the Health Sciences whose permission we gratefully acknowledge.
For further information regarding this course, please contact Jo Dorsch at jod@uic.edu.

Updated September 2013 – Cleo Pappas and Holly Ann Burt