

# Evidence Based Medicine: EBM Resources

## From the Levy Library

<http://www.mssm.edu/libray>

“Inexpensive electronic databases and widespread computer literacy now give doctors access to enormous amounts of data. Evidence based medicine is about asking questions, finding and appraising the relevant data, and harnessing that information for everyday clinical practice.”  
Rosenberg W., Donald A. (1995) *Evidence based medicine: an approach to clinical problem-solving*. BMJ 310(6987) 29 April, 1122.

### Finding the Relevant Data

Finding information starts with knowing where to look. The rapid growth of EBM practice over the last two decades has generated a corresponding growth in specialized publications and databases, all developed to make it easier to find and apply the best evidence. The search for an evidence-based solution begins with the selection of the most appropriate resource. This guide is designed to help you make that selection.

### Access Levy Library's EBM Resources

The resources discussed below are available via the Levy Library home page at <http://www.mssm.edu/library> .

- Link to databases such as *PubMed*, *UpToDate*, *Clinical Evidence*, *eMedicine*, *The Cochrane Library*, and *EBM Reviews* from the library's **Databases** page.
- Link to all other EBM journals through the **E-journals** page.
- *ACP Journal Club* is available through both the **Databases** and **E Journals** pages.

## Research into Practice: Synthesis of Clinical Research Findings

### Clinical Topic Reviews

#### ■ UpToDate

Topic reviews in internal medicine and subspecialties, ob/gyn, and pediatrics. Integrates the latest evidence with the authors' clinical experience to provide recommendations for diagnosis and treatment. Authored and edited by physician experts. Updated every 4 months.

#### ■ eMedicine

Evidence based topic reviews of 7,000 diseases and disorders. Coverage includes emergency medicine, surgery, radiology and psychiatry, as well as internal medicine, pediatrics, and ob/gyn. Contains nearly 30,000 images. Authored and edited by physician experts. Updated daily.

#### ■ Clinical Evidence

Addresses questions about interventions in over 20 specialty areas, including internal medicine, mental health, ob/gyn, pediatrics, and mental health. Summarizes the best available evidence, and identifies research gaps. Published by the BMJ Publishing Group; updated monthly.

#### ■ PIER

Practice recommendations on over 400 diseases and disorders. Supporting references are given a level of evidence rating. Published by the American College of Physicians. Updated at least quarterly.

### Clinical Practice Guidelines

#### ■ National Guideline Clearinghouse (NGC)

A comprehensive database of evidence-based clinical practice guidelines. Search or browse by sponsoring agency or topic, or select sets of guidelines to compare. A key component of NGC is structured abstracts of guidelines. These structured abstracts include summaries of the methodology used to develop the guidelines. Produced by the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services, in partnership with the American Medical Association (AMA) and the American Association of Health Plans-Health Insurance Association of America

## Appraisals of Clinical Research Reports

### Systematic Reviews

#### ■ Cochrane Database of Systematic Reviews (CDSR)

The *Cochrane Database of Systematic Reviews* contains over 1,500 completed systematic reviews and over 1,200 review protocols. Cochrane Reviews address specific questions about effects of clinical interventions, i.e., treatments, prevention, and rehabilitation. Teams of experts complete comprehensive literature reviews, evaluate the literature, and summarize the findings of the best evidence. Meta-analysis may be used.

### Structured Abstracts

#### ■ Database of Abstracts of Reviews of Effects (DARE)

A full text database providing over 4,000 structured abstracts of systematic reviews. *DARE* appraises systematic reviews published in a variety of journals, but not those in the *Cochrane Database*. The systematic reviews evaluated may be on questions of diagnosis, screening, or clinical interventions. The National Health Services' Centre for Reviews and Dissemination at the University of York produces *DARE*.

#### ■ ACP Journal Club

The American College of Physicians-American Society of Internal Medicine publishes *ACP Journal Club* bimonthly. The editors screen 100+ top clinical journals to identify methodologically sound and clinically relevant research reports. They provide an enhanced abstract, clearly stated conclusions, and a commentary for each selected article.

#### ■ Other journals of structured abstracts

- *Evidence-Based Cardiovascular Medicine*
- *Evidence-Based Eye Care*
- *Evidence-Based Gastroenterology*
- *Evidence-Based Healthcare*
- *Evidence-Based Medicine*
- *Evidence-Based Mental Health*
- *Evidence-Based Nursing*
- *Evidence-Based Obstetrics and Gynecology*
- *Evidence-Based Oncology*

## Tools to Find Clinical Research Reports

### PubMed/MEDLINE Filters

#### ■ Publication Types

MEDLINE is the U.S. National Library of Medicine's premier bibliographic database, with over 11 million references to journal articles.

To filter *MEDLINE* for citations to reports of randomized controlled trials, clinical trials, and meta-analysis, select the appropriate **Publication Types** from PubMed's **Limits** feature.

#### ■ Clinical Queries

The **Clinical Queries** service allows you to search *MEDLINE* with built in EBM filters. The filters are designed to retrieve research studies using the best research methodologies for selected clinical question types (i.e., therapy, diagnosis, etiology, prognosis). A separate *Clinical Queries* filter identifies systematic reviews.

To use this service, connect to PubMed and then select '**Clinical Queries**' from the left side bar (under '**PubMed Services**').

### Clinical Trial Registries

#### ■ The Cochrane Central Register of Controlled Trials (CENTRAL)

*CENTRAL* is a bibliography of over 360,000 reports of controlled trials. Members of the Cochrane Collaboration and others have contributed the citations in the bibliography, but they have not evaluated the validity, reliability, or clinical value of these reports. *CENTRAL* is a small, easily searched database. Moreover, it includes citations to reports published in conference proceedings and other sources that *MEDLINE* and many other databases do not index.

## EBM Collections: Searching Multiple Databases

- Cochrane Library** The Cochrane Library allows simultaneous searching of 4 databases important to U.S. clinicians:
- *Cochrane Database of Systematic Reviews* (CDSR)
  - *Database of Abstracts of Reviews of Effectiveness* (DARE)
  - *Cochrane Central Register of Controlled Trials* (CENTRAL)
  - *Health Technology Assessment Database*
- The complete *Cochrane Library* is available from the Levy Library Databases page under the Evidence Based Medicine category.
- EBM Reviews** Ovid's *EBM Reviews* allows simultaneous searching of key databases from the *Cochrane Library* and from *ACP Journal Club*, i.e.:
- *ACP Journal Club*
  - *Cochrane Database of Systematic Reviews* (CDSR)
  - *Database of Abstracts of Reviews of Effectiveness* (DARE)
  - *Cochrane Central Register of Controlled Trials* (CENTRAL)
- Note: In Ovid, click on "Topic Reviews" (and not "Complete Reference" ) to link to the full text of Cochrane Reviews.
- TRIP Database Plus** Searches over 70 Web sites, journals and databases known to have evidence based clinical content. Publications searched include:
- Evidence based databases and Web sites such as the *Cochrane Library* and the Agency for Healthcare Research and Quality.
  - Tables of contents and abstracts of peer reviewed journals such as *BMJ* and *Heart*
  - Databases of practice guidelines
  - E-books such as *e-MEDICINE*
  - Query answering services
  - Patient education leaflets
  - Collections of medical images

## Evidence Based Medicine: Some Definitions

**Evidence Based Medicine** “The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research.” Sackett, D.L. et al. (1996) *Evidence based medicine: what it is and what it isn't*. BMJ 312 (7023), 13 January, 71.

**Cochrane Collaboration** An international voluntary organization that prepares, maintains and promotes the accessibility of systematic reviews of the effects of healthcare. Fifty *Collaborative Review Groups*, each focused on a particular topic area, produce and maintain systematic reviews. Many consider the methodology used in Cochrane Reviews to be the gold standard for systematic reviews.

**Systematic Review** A review of a clearly formulated question that uses *systematic and explicit methods* to identify, select and appraise relevant research, and to collect and analyze data from the studies that are included in the review. To minimize bias, a systematic review includes or excludes evidence on the basis of explicit quality criteria. Systematic reviews may incorporate meta-analysis.

**Meta-Analysis** An analytic technique using statistical methods to combine the results of research studies on the same general topic. Meta-analysis can increase the power of the findings of numerous studies, each too small to produce reliable results by themselves.

**Structured Abstract** A summary of a research report or of a systematic review. Structured abstracts use *systematic and explicit methods* to describe a study's objectives, methods, results and conclusions. They usually include a brief comment on the context of the research topic, and discuss clinical applications of the findings.

## Have a Question?...Ask

For help using the library's resources, please call the Reference Desk at (212) 241-7793 from 9-5 Mon-Fri. You may also use our email reference service. Submit a question using the [Ask a Librarian](#) link on the library's home page, or directly at <http://www.mssm.edu/library/services/askalibrarian.shtml>.