The science of medicine advanced rapidly through the latter half of the 20th century with advances in pharmaceuticals, surgical techniques, laboratory and imaging technology, and the rapid sub-specialization of medicine itself. This “age of miracles” improved health and lengthened lifespans. In the mid 1960s, the federal government began the Medicare and Medicaid programs, and this new source of funding fueled the growth and expansion of the healthcare delivery system.

Unfortunately, because this growth was so explosive, many new tools and clinical approaches that had little scientific merit were initiated. These clinical approaches were used broadly and became community standards. In addition, many highly effective, simple clinical tools and techniques were not being used consistently.

In response to these problems, a number of courageous clinicians began the movement that has resulted in what is known today as evidence-based medicine (EBM). According to the Centre for Evidence-Based Medicine, “Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients.” In almost all cases, the broad application of EBM not only improves clinical outcomes for patients but reduces costs in the system as well. Chapter 3 in *Healthcare Operations Management* reviews:

- the history and current status of EBM;
- standard and custom care;
- public reporting, pay for performance (P4P), and tiering; and
- issues in the use of P4P and EBM to change clinician behavior.

The chapter explores EBM in depth and examines how payers use these principles to encourage the use of EBM by clinicians. The operations tools included in other chapters of *Healthcare Operations Management* are linked to achieving EBM goals. The chapter concludes with an example of how a relatively simple government policy based on EBM could be implemented to drive significant cost reductions and quality improvements in the U.S. healthcare system.

Because these topics are changing rapidly, this webpage will be updated frequently. The author invites reader’s comments, recommended readings, website suggestions, or any other material to be added to this webpage for this chapter or any other chapters. Click here to send an email. Be sure to include “Healthcare Operations Management” in the subject line.

**Downloadable Resources**

*PowerPoint*
Websites of Interest

Guidelines
Because of the growth of EBM, a number of organizations regularly update clinical guidelines. Here are some of the leading resources:

- National Guideline Clearinghouse
  http://www.guideline.gov

- Institute for Clinical Systems Improvement
  http://www.icsi.org

- The Cochrane Collaboration
  http://www.cochrane.org/index.htm

- AHRQ—Quality Reporting Measures—Prevention Quality Indicators

Public Reporting
Public reporting of healthcare quality is expanding throughout the United States. The URLs below link to the websites of organizations identified as leaders in Chapter 3.

- California Cooperative Healthcare Reporting Initiative, San Francisco, CA
  http://www.cchri.org

- Massachusetts Health Quality Partners, Watertown, MA
  http://www.mhqp.org/default.asp?nav=010000

- Minnesota Community Measurement, St. Paul, MN
  http://www.mnhealthcare.org/~main.cfm

- Wisconsin Collaborative for Healthcare Quality, Madison, WI
  http://www.wchq.org

Another good resource is the AHRQ National Compendium of Report Cards:
http://www.talkingquality.gov/compendium/index.html

P4P
Two interesting examples of P4P are:

Bridges to Excellence
The following link offers more information on the tiered health insurance program provided to Minnesota State employees:

Minnesota Advantage Health Plan
http://www.doer.state.mn.us/ei-segip/health.htm

**Additional and More Current References**

**Evidence-Based Medicine**


