Evidence-based Practice Centers
Partner's Guide

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INTRODUCTION

The pace of innovation in health care has never been greater, and this innovation is constantly adding to a broad and complex array of health care interventions and systems. Accompanying this growth in the capacity of health care is an expanding body of evidence regarding safety, effectiveness, appropriate indications, cost-effectiveness, and other attributes of these interventions and existing systems. However, achieving these opportunities to improve health care depends on the ability of clinicians, patients, and policymakers to interpret and apply this body of evidence. As documented in a 2003 study of health care quality by RAND, Americans receive, on average, only about half of recommended health care.[1]

Failure to understand which services work best, under what circumstances, and for which types of patients contributes to the increasing cost of care, threats to patient safety, and avoidable loss of life. Landmark reports of the Institute of Medicine, including *To Err is Human*[2] and *Crossing the Quality Chasm,*[3] have drawn national attention to shortcomings in quality and patient safety. A substantial hurdle to improving quality of care remains the effective translation of research findings into sustainable improvements in patient outcomes. The Agency for Healthcare Research and Quality (AHRQ) works to bridge this gap, not only by contributing to the health care knowledge base itself, but also by identifying priority areas for assembling, intepreting and translating to users findings from this knowledge base.

In the United States and around the world, AHRQ is recognized as a source of well-founded, reliable assessments of scientific evidence in health care. Through its Evidence-based Practice Centers (EPC) program, AHRQ works to improve the quality and effectiveness of health care by facilitating the translation of evidence-based research findings into clinical practice and policy. This program of user-driven research is designed to put information in the hands of the decisionmakers.

The 13 EPCs under contract to AHRQ produce science syntheses—evidence reports and technology assessments—that provide public and private organizations the foundation for developing and implementing their own practice guidelines, performance measures, educational programs, and other strategies to improve the quality of health care and decisionmaking. The evidence reports and technology assessments also may be used to inform coverage and reimbursement policies.

By conducting systematic reviews of the available evidence on a topic, the EPCs serve as a resource for partner organizations that will use the report. The growing number of partners to the EPC program includes private sector organizations and government agencies. Non-governmental partnerinclude health professional organizations, voluntary health (e.g., disease-oriented) organizations, health payers, and others. Evidence reports prepared by

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[1] McGlynn EA, Asch SM, Adams J, et al. The quality of health care delivered to adults in the United States. N Engl J Med 2003;348:2635–45.

[2] Kohn LT, Corrigan JM, Donaldson MS, editors. To Err Is Human: Building a Safer Health System. A Report of the Committee on Quality of Health Care in America. Institute of Medicine. Washington, DC: National Academy Press, 2000.

[3] Institute of Medicine, Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academy Press, 2001.

EPCs have been used in the development of clinical practice guidelines by organizations such as the American Psychiatric Association, the American Academy of Pediatrics (AAP), and the American Heart Association. The AAP, for example, developed a practice guideline based on an EPC report on diagnosis of attention-deficit/hyperactivity disorder.

Partners in government to date include the Centers for Medicare & Medicaid Services (CMS), the Social Security Administration, and the Food and Drug Administration (FDA). Within the National Institutes of Health (NIH), the Office of Medical Applications of Research uses EPC reports to support their consensus development program, the Office of Dietary Supplements uses evidence reports to assist their research agenda setting, and reports have also been requested by others including the National Cancer Institute, National Center for Complementary and Alternative Medicine, and the Office of Research on Women's Health. CMS uses technology assessments prepared by the EPCs to inform decisions about Medicare coverage of new and existing health technologies.

The EPC program can assist the increasing number of health care organizations who are promoting evidence-based medicine with systematic reviews on high priority topics. The EPC program welcomes the opportunity to expand relationships with partners to support their efforts to develop clinical practice guidelines, technology assessments and other evidence-based products.

This guide provides detailed information on the EPC program for current and potential partner organizations. It presents background on the program and the roles and responsibilities of its key participants, including AHRQ, the partners, the EPCs and the EPC Coordinating Center. Also covered are the topic nomination process and specification of evidence questions, topic selection criteria, strategies and expectations for report dissemination and resources on evidence-based health care.

CHAPTER 1: THE PROGRAM

AHRQ

AHRQ is the health services research arm of the U.S. Department of Health and Human Services (DHHS). AHRQ's mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. AHRQ sponsors and conducts research that provides evidence-based information on health care outcomes, quality, cost, and access for use by health care decisionmakers, including patients, clinicians, health system leaders, policymakers and others.

AHRQ's activities are driven by the needs of health care decisionmakers. Through the EPC program, AHRQ applies the analytical capabilities of the EPCs to high-priority topics nominated by its partner organizations. Partners benefit from receiving high-quality systematic reviews from a recognized and credible source. They use EPC report findings to inform or develop evidence-based products and services, including clinical practice guidelines, performance/quality measures, educational materials and knowledge transfer strategies. This relationship allows AHRQ and partner organizations, through focused use of complementary resources, to pursue measurable improvements in health care.

AHRQ expects that partners whose topics are selected for EPC reports will translate the report findings into evidence-based products for their members or other target audiences. Further, they are expected to track the use, outcomes, or other impacts of these products. This information supports the accountability of AHRQ and partner efforts and provides feedback for ongoing program improvement.

The Evidence-based Practice Centers Program

AHRQ launched the EPC program in 1997 as an initiative to promote evidence-based practice in everyday care. The EPC program is a user-driven research partnership with private and public sector organizations to facilitate the translation and dissemination of research findings to the memberships and other target audiences of the partner organizations. These include Federal and State agencies, private sector professional societies, health delivery systems, providers, payers, and others committed to evidence-based health care. Topics of interest identified by these partners may address clinical, social science/behavioral, economic, and other health care organization and delivery issues. They generally are common, expensive, and otherwise significant topics for Medicare, Medicaid, or other special populations.

Since the start of the program in 1997, the EPCs have conducted more than 100 systematic reviews and analyses of the literature on a wide spectrum of topics. The major products of the program are evidence reports, including comprehensive and more focused systematic reviews and technology assessments. These are based on rigorous syntheses and analyses of scientific literature and may include meta-analyses or cost analyses. The reports emphasize explicit and detailed documentation of methods, rationale, and assumptions. EPCs draw upon the expertise and experience of other diverse and representative health care and research organizations to gain the insight needed for well-founded, credible, and practical evidence products. The

evidence reports and technology assessments do not make clinical recommendations or those related to coverage and reimbursement policies.

In June 2002, AHRQ announced the award of a second round of five-year contracts to the following 13 EPCs:

- Blue Cross and Blue Shield Association Technical Evaluation Center (TEC); Chicago, IL
- Duke University; Durham, NC
- ECRI; Plymouth Meeting, PA
- Johns Hopkins University; Baltimore, MD
- McMaster University; Hamilton, Ontario, Canada
- Oregon Health & Science University; Portland, OR
- RTI International-University of North Carolina; Chapel Hill, NC
- Southern California Evidence-based Practice Center—RAND; Santa Monica, CA
- Stanford University, Stanford, and University of California; San Francisco, CA
- Tufts-New England Medical Center; Boston, MA
- University of Alberta; Edmonton, Alberta, Canada
- University of Minnesota; Minneapolis, MN
- University of Ottawa; Ottawa, Canada

In addition, AHRQ established an EPC Coordinating Center to serve as a resource and support center for AHRQ, the EPCs, partners, researchers, providers and other stakeholders committed to evidence-based health care. The Coordinating Center is operated by The Lewin Group, a health care policy and human services firm based in Falls Church, Virginia. partners are welcomed to contact the Coordinating Center directly for assistance in all phases of the pre- and post-topic nomination process at *partnerTA@lewin.com*. The main telephone number of The Lewin Group is 703-269-5500.

What is a Systematic Review and How are Reviews from the EPC Program Used?

Systematic reviews are conducted to determine whether an intervention for a specific disease or health problem works. The topics of systematic reviews typically are framed by a set of evidence questions. Reviewers must locate, synthesize, and evaluate evidence from available scientific studies that meet predetermined inclusion criteria. Systematic reviews differ from traditional review papers because they adhere to established, transparent, methodologies designed to minimize bias, account for variations in study design, allow consideration of data from multiple studies, and maintain objective analysis and interpretation of available evidence. In answering well-refined evidence questions in a rigorous scientific manner, systematic reviews can be valuable sources of information for diverse groups of healthcare stakeholders.

Systematic reviews are useful in multiple scenarios, including, but not limited to, instances in which (1) conflicting evidence exists, (2) data from only a few studies are available, (3) comparisons of different interventions is necessary, (4) assessment of the net balance of benefits and harms is warranted, and (5) review of the existing evidence base is essential to informing a research agenda or health policy or coverage decision. EPC evidence reports can help answer questions regarding clinical and behavioral health interventions or organizational, financial and economic mechanisms that are poised to significantly influence the quality, effectiveness, and/or cost of health care. EPC reports typically are not conducted where evidence on particular interventions is clearly established in practice.

Systematic reviews are only as complete and useful as the evidence that exists on a particular topic or the scope and nature of the evidence questions that guide the review. To the extent that the body of evidence relevant to a particular topic is limited, the topic may not be appropriate for an EPC systematic review. Even so, a systematic review that identifies only limited relevant evidence pertaining to a topic can be useful in setting research agendas to extend or fill gaps in the relevant body of evidence.

Users of evidence reports and technology assessments include clinicians, health professional associations, health system managers, researchers, consumer organizations, policymakers, and other health stakeholders. Public and private sector organizations use EPC reports as a basis for developing a broad range of products, services and tools, including clinical guidelines, performance measures, quality or operational improvement tools and strategies and educational or knowledge transfer vehicles. These reports and assessments often are used in formulating coverage policies of managed care organizations, insurers, and other payers.

CHAPTER 2: REPORT TOPICS

The topics addressed by the EPCs reflect areas of significant demand for information by partner organizations and their stakeholders. Topics may include the prevention, diagnosis, and/or treatment of particular clinical and behavioral conditions; use of alternative or complementary therapies; and appropriate use of commonly provided services, procedures, or technologies. Topics also may include issues related to the organization and financing of care, such as risk adjustment methodologies, market performance measures, provider payment mechanisms, and insurance purchasing tools as well as measurement or evaluation of provider integration of new scientific findings regarding health care and delivery innovations. The diversity of EPC topics is reflected in the following titles of evidence reports released in 2004:

- Regionalization of Bioterrorism Preparedness and Response
- Measuring the Quality of Breast Cancer Care in Women
- Celiac Disease
- Community-Based Participatory Research
- Pharmacological Treatment of Dementia
- Islet Transplantation in Type 1 Diabetes Mellitus
- Economic Incentives for Preventive Care
- Literacy and Health Outcomes
- Training of Hospital Staff to Respond to a Mass Casualty Incident
- Meta-regression Approaches: What, Why, When, and How?
- Strategies for Improving Minority Healthcare Quality
- Criteria to Determine Disability Related to Multiple Sclerosis,
- Pharmacological and Surgical Treatment of Obesity
- Effects of Omega-3 Fatty Acids on Arrhythmogenic Mechanisms in Animal and Isolated Organ/Cell Culture Studies
- Health Effects of Omega-3 Fatty Acids on Asthma
- Effects of Omega-3 Fatty Acids on Cardiovascular Disease
- Effects of Omega-3 Fatty Acids on Cardiovascular Risk Factors and Intermediate Markers of Cardiovascular Disease
- Health Effects of Omega-3 Fatty Acids on Lipids and Glycemic Control in Type II Diabetes and the Metabolic Syndrome and on Inflammatory Bowel Disease, Rheumatoid Arthritis, Renal Disease, Systemic Lupus Erythematosus and Osteoporosis
- Effectiveness of Adjuncts to Scaling and Root Planing Therapy for Periodontitis
- Effectiveness of Behavioral Interventions to Modify Physical Activity Behaviors in General Populations and Cancer Patients and Survivors

- Closing the Quality Gap: A Critical Analysis of Quality Improvement Strategies, Vol. 1: Series Overview and Methodology
- Preventing Violence and Related Health-Risking Social Behaviors in Adolescents

Topics of evidence reports published to date are listed at *http://www.ahrq.gov/clinic/epcix.htm.*

Nominating a Topic

Professional societies, health systems, employers, insurers, providers, and consumer groups are encouraged to nominate topics. AHRQ is very interested in receiving topic nominations from professional societies and organizations representing members of minority populations as well as topic nominations that have significant impact on AHRQ priority populations. These priority populations include the following:

- Low-income groups
- Minority groups
- Women
- Children
- The elderly
- Individuals with special health care needs, such as those with disabilities or who need chronic care or end-of-life health care or live in inner-city and rural areas.

Nominations of topics from non-federal partners are solicited annually through a notice in the *Federal Register*. This notice specifies a due date, approximately 50 to 60 days following the publication date of the notice, for submittal of topics for consideration in the current fiscal year. Topic nominations also are accepted on an ongoing basis. All nominations received in the previous year, as well as topics that were previously submitted but not selected, are considered for the upcoming year. Federal partners that are interested in evidence reports to support their activities are encouraged to contact the EPC Program Director at AHRQ. AHRQ does not reply to individual nominations, but considers all nominations during the selection process.

Nominations of topics for AHRQ evidence reports and technology assessments should focus on specific aspects of prevention, diagnosis, treatment and/or management of a particular condition; an individual procedure, treatment or technology; or a specific health care organizational or financial strategy. Special consideration is given to topics having a significant impact on the health status of priority populations.

Required Nominating Information

For each topic, the nominating organization must provide the following information.

1) Rationale and supporting evidence on the relevance and importance of the topic.

2) Three to five focused questions on the topic to be addressed.

3) Plans for rapid translation of the evidence reports and technology assessments into clinical guidelines, performance measures, educational programs or other strategies for strengthening the quality of health care services, or plans to inform development of reimbursement or coverage policies.

4) Plans for use and/or dissemination of these derivative products, e.g. to organization memberships, if appropriate.

5) Process by which the nominating organization will measure the use of these products and impact of such use.

Where to Submit Topic Nominations

Topic nominations should be submitted to:

Kenneth Fink, MD, MGA, MPH
Director, Evidence-based Practice Centers (EPC) Program
Center for Outcomes and Evidence
Agency for Healthcare Research and Quality
540 Gaither Road
Rockville, MD 20850

Electronic submissions to *epc@ahrq.gov* are preferred.

For further information on the *Federal Register* notice for submission of topics for EPCs, refer to the following Web site: *http://www.gpoaccess.gov/fr.index.html*, and search the current volume using the search terms: AHRQ AND EPC.

Guidance on Framing Evidence Questions for AHRQ Topic Nominations

Topic nominations should include approximately three to five specific, well-defined questions that are appropriate for evidence reports. An appropriate question is one that can be addressed by a review of the available evidence by an EPC. As described below, questions that ask about clinical judgment or appropriate care for certain patients are not suitable for EPC review. Of course, an EPC evidence report may present an evidence base from which another group, such as the nominating partner organization, can derive a practice guideline or policy that would address such questions.

Questions that are vague or otherwise inappropriate for evidence reports can lead to unrealistic expectations among AHRQ, the EPCs, and the nominating partners as well as unnecessary delays. AHRQ encourages prospective and current partners to seek assistance from the EPC Coordinating Center in formulating evidence questions for EPC topics. Requests for such assistance can be made via the AHRQ EPC staff or the EPC Coordinating Center. This section presents common problems with topic questions and provides examples of evidence questions that are appropriate for EPC evidence reports.

Questions on Clinical Topics

Question #1: What are the appropriate indications for [procedure X]?

This type of question is not appropriate for an evidence review because its answer would be:

"The appropriate indications for [procedure X] are a, b and c."

Such an answer calls for moving beyond reviewing evidence to stating a judgment regarding the clinical circumstances under which the procedure should be performed. Doing so would require developing a clinical practice guideline. Although a partner organization may intend to develop a practice guideline based on the EPC evidence report, it is not the role of EPCs to develop such

guidelines. The following examples show how a question of this nature could be transformed into a question that is suitable for an EPC evidence review.

Inappropriate: What are the appropriate indications for arthroscopic surgery?

Appropriate: Does arthroscopic surgery improve [certain outcomes] for [certain types of] patients?

Appropriate: For what types of patients is there strong evidence that arthroscopic surgery improves [certain outcomes]?

Inappropriate: Should [procedure X] be routine in childbirth? If not, what are the indications for the procedure?

Appropriate: What is the strength of the evidence for routine versus restricted use of [procedure X] in childbirth? What is the evidence that [procedure X] improves [certain outcomes] for [particular clinical circumstances of] childbirth?

Question #2: Can [procedure X] be used to treat [general disease Y]?

Questions that ask, "Can/should this be used?" are too vague for discerning the evidence question of interest to a potential partner. It is unclear whether the potential partner is asking if it is possible for the procedure to be used, if it is appropriate for it to be used or about the nature of the evidence that such use is effective.

Inappropriate: Can the [laboratory test Y] be used as a screening test for hypertension?

Appropriate: How effective is the [laboratory test Y] as a screening test for hypertension?

Question 3: What is the role of [procedure Z] in the treatment of pressure ulcers?

This type of question is too vague to be addressed through an evidence review. It does not suggest whether any particular indications, populations, care settings or outcomes are of interest to the partner. It does not specify whether evidence of effectiveness, safety, cost-effectiveness or other outcome or impact is of interest. This type of question could be transformed into an evidence question as follows:

Inappropriate: What is the role of [procedure Z] as a stand-alone therapy and as an adjunct to conventional therapy for pressure ulcers?

Appropriate: In which patient populations does [procedure Z] as stand-alone therapy improve healing of pressure ulcers? In which patient populations does [procedure Z] as an adjunct to conventional therapy improve healing of pressure ulcers?

The following is an example of a topic with accompanying questions that are well-defined and can be answered by an evidence review:

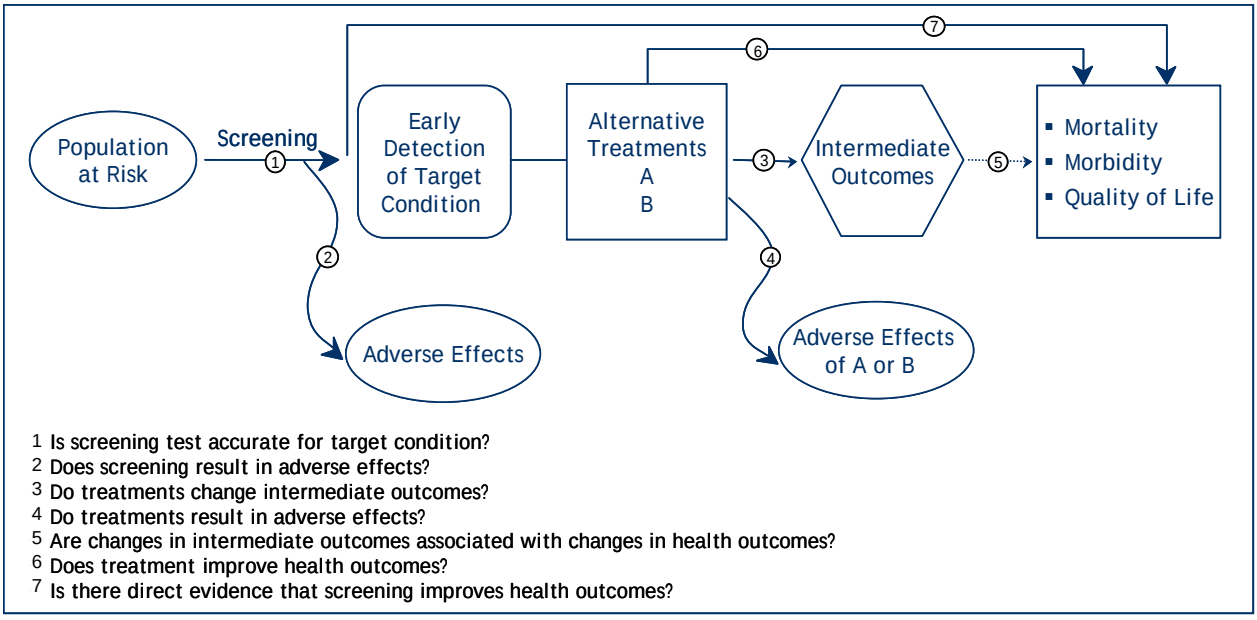
Topic: Uterine Artery Embolization (UAE) for Treatment of Fibroids

Questions:

1) What are the health risks and benefits of UAE in relation to other surgeries (e.g., hysterectomy, myomectomy)?
2) What are the effects of UAE on future fertility and pregnancy-related outcomes?
3) What are the complications associated with UAE?

A "causal pathway" or "analytical framework" is a useful means of specifying evidence questions for many topics. These depict direct and indirect linkages between interventions and outcomes. They can be particularly useful for topics involving a chain of events or decisions, each of which could be the subject of an evidence question. Examples are screening or diagnostic interventions, which may affect health outcomes indirectly, i.e., via the use of treatments indicated by the results of a screening or diagnostic test. Although typically used to present clinical problems, they can be used as well for organizational, financing and other types of interventions or programs in health care. Graphing a topic of interest can help a prospective partner formulate evidence questions of interest. A sample causal pathway is shown in Figure 1.

Figure 1:
A General Causal Pathway – Screening Procedure and Alternative Treatments



Source: Adapted from Harris 2001.

The literature on evidence-based health care provides other guidance that may be useful in formulating questions for the EPC program. For example, specific, well-defined clinical questions can be formed using the approach shown in Figure 2.

Additional resources with guidance on formulating clinical questions that can be addressed by evidence reviews follow:

- Sackett DL, et al. Evidence-based medicine: how to practice and teach EBM. London: Churchill Livingstone; 2000:2.
- Richardson WS, Wilson MC, Nishikawa J, Hayward RSA. The well-built clinical question: a key to evidence-based decisions. ACP J Club 1995;123:A12–3.
- UK Centre for Evidence-Based Medicine: http://www.cebm.net/focus_quest.asp

Figure 2:
Formulating an Evidence Question

	Tips for Building Question	Example
Patient Population or Problem	"How would I describe this group of patients?" *Balance precision with brevity.*	"In patients with heart failure from dilated cardiomyopathy who are in sinus rhythm…"
Intervention (a cause, prognostic factor, treatment, etc.)	"Which main intervention is of interest?" *Be specific*	"…would adding anticoagulation with warfarin to standard heart failure therapy…"
Comparison Intervention (if necessary)	"What is the main alternative to compare with the intervention?" *Be specific*	"…when compared with standard therapy alone…"
Outcomes	"What do I hope the intervention will accomplish?" "What could this exposure really affect?" *Be specific*	"…lead to lower mortality or morbidity from thromboembolism? Is this enough to be worth the increased risk of bleeding?"

Source: Adapted from Centre for Evidence-Based Medicine, University Department of Psychiatry, Warneford Hospital, Headington, Oxford, UK

Questions on Organization, Financing and Delivery Topics

Question #1: What are the effects on health care of [financing mechanism X]?

This question is vaguely worded. It is unclear what aspect of health care is of interest to the potential partner.

Inappropriate: What are the effects on health care of defined contribution models?

Appropriate: How does utilization of previously covered health care services change when employers offer defined contribution models to their employees?

Problem Question #2: Should [patient type X] be treated in [practice setting Y]?

Answering this question calls for moving beyond reviewing evidence to stating a judgment regarding the practice setting in which the patient should be treated.

Inappropriate: Should patients with severe mental illness be placed in community-based care or treated in inpatient settings?

Appropriate: What is the evidence that placing patients with severe mental illness in community-based care yields same or better access, effectiveness [on certain outcomes], and costs compared to placement in inpatient treatment settings?

Question #3: Is [provider type P] superior to [provider type Q] in providing [a certain type of care]?

This question does not provide a basis for determining relative performance. Further, what constitutes "superior" may be subject to judgments of value, not just evidence.

Inappropriate: Do high-volume hospitals provide superior cardiac care?

Appropriate: Are physicians practicing at academic medical centers or hospitals designated as "centers of excellence" for cardiac care more likely than other acute care hospitals to provide beta-blockers to patients who have had heart attacks?

Selection Factors for Nominated Topics

In selecting topics for assignment to EPCs, AHRQ will consider the extent to which a nominated topic addresses the following factors:

1) Burden of disease, including severity, incidence and/or prevalence or relevance of organizational/financial topic to the general population and/or AHRQ's priority populations, which include:
   - low-income groups, minority groups, women, children, the elderly and individuals with special health care needs, such as those with disabilities or who need chronic care or end-of-life health care or live in inner-city and rural areas.
2) Controversy or uncertainty about the topic and availability of scientific data to support the systematic review and analysis of the topic.
3) Total costs associated with a condition, procedure, treatment, technology, or organizational/financial topic, whether due to the number of people needing care, the unit cost of care or indirect costs.
4) Potential impact for reducing clinically significant variations in the prevention, diagnosis, treatment or management of a disease or condition, or in the use of a procedure or technology;
5) Potential for informing and for improving patient and/or provider decisionmaking; improving health outcomes; and/or reducing costs.
6) Relevance to the needs of the Medicare, Medicaid, or other Federal healthcare programs.
7) The organization's plan to disseminate derivative products and measure use and impact of these products on outcomes or otherwise incorporate the report into its managerial or policy decisionmaking.

For topic nominations from previous partners, AHRQ also will consider partner efforts in translation and dissemination of products derived from EPC evidence reports, as well as successes in use and impact of these products.

For many nominated topics, AHRQ will request that the EPC Coordinating Center conduct preliminary reviews (not evidence reports) of the quality and relevance of the available literature and related information pertaining to the topic. AHRQ uses these preliminary reviews to help inform its determination of the suitability of the topic.

Chapter 3:
Roles and Responsibilities

Partners

Organizations that nominate topics that are selected for EPC evidence reports and technology assessments assume the role of partners of AHRQ and the EPCs. In some instances, there may be multiple partners for a given topic. AHRQ places high value on its relationships with partners. Partners have defined roles and reponsibilities:

1) Once a topic is selected, a partner must:
   - Participate in conference calls to discuss the goals and objectives for the topic with the AHRQ Task Order Officer (TOO) and EPC assigned to the topic.
   - Be available to the EPC as a source of information and expertise as it develops the evidence report or technology assessment.
   - Appoint one representative to the technical expert panel designated for an EPC report. This partner representative will be available for consultation on the scope of the topic and questions, literature sources, identification of experts and, if requested by the EPC, serve as an external peer reviewer of the draft EPC report.

2) Once an evidence report or technology assessment is published, partners are expected to:
   - Commit to the timely translation of the EPC report into their own quality improvement products (e.g., clinical practice guidelines, performance measures), educational programs or coverage and reimbursement policies, as appropriate.
   - Disseminate these partner-developed products to appropriate members, populations or other target audiences.
   - Participate in efforts to measure the use and impact of the products, programs or policies derived from EPC reports.
   - Provide data regarding translation, dissemination, use and impact measurement activities to AHRQ so that the EPC program can be assessed and improved. The EPC Coordinating Center will collect and organize information about these activities from partners using a Web-based survey and routine telephone communication.

   Partner organizations may seek technical assistance from the EPC Coordinating Center throughout this process by submitting a request via e-mail to *partnerTA@lewin.com.*

3) Partners may *not:*
   - Seek to alter the scope of work for an EPC report without consulting the AHRQ TOO.
   - Determine the composition of an EPC's technical expert panel or manage the panel's deliberations. The technical expert panel, of which the partner representative is an equal member, may be asked by the EPC to provide substantive input from time to time. Consistent with its objective search strategy and review of relevant evidence, EPCs may exclude articles that partners may have published or cited (e.g. in their original topic nomination).

- Communicate directly with the EPC while the project is ongoing. All communication from the partner should go to the AHRQ TOO and communication throughout the process is important to ensure that the report meets the partner's needs. However, partner organizations may contract directly with an EPC after the report has been published. This may allow partner organizations to tap EPC content expertise as they develop guidelines, quality measures or other products based upon the findings of the reports.
- Edit the content of the final report produced by the EPC. The partner representative appointed to the technical expert panel may review the draft report as a member of the larger external peer review group and provide review comments. The EPC is responsible for considering all review comments and modifying the final report to incorporate substantive comments, as appropriate. AHRQ reviews peer review comments and the disposition of those comments.

4) One of the key attributes of the EPC program is ensuring that partners plan for and actively participate in translation and dissemination of EPC reports on their nominated topics. When AHRQ is considering whether to designate a new topic for EPC review, it will review the past performance (if any) of the nominating partner with regard to translation and dissemination of any previous EPC reports.

AHRQ

AHRQ selects topics from the pool of nominated topics, funds the EPCs and acts as a bridge between the partners and EPCs. In particular, this is the responsibility of AHRQ's Center for Outcomes and Evidence (COE), with assistance from the EPC Coordinating Center. AHRQ has contractual relationships with the EPCs to produce the evidence reports. As AHRQ contractors, the EPCs are accountable to AHRQ under the scope and terms of these contracts. AHRQ Project Officers (POs) and TOOs are responsible for the technical monitoring of the EPC contracts, including facilitating communication between partners and EPCs. All partner communication with EPC staff is conducted through the appropriate AHRQ PO and/or TOO. Any communication not conducted directly through the AHRQ PO or TOO should be reported to the PO or TOO.

EPCs

EPCs conduct evidence reviews based on topics nominated by partners and funded by AHRQ. They also may update prior evidence reports, provide technical assistance to faciliate translation of reports and undertake methods research for the EPC program. During the course of developing evidence reports, EPCs may do the following:

1) Participate in conference calls to discuss goals and objectives of work assignment, proposed search strategy, etc. At least one of these calls will be conducted at the inception of a topic assignment and will include AHRQ staff and representation from the partner organization. The EPC will submit a summary of the discussion and decisions to the call participants.
2) Submit a comprehensive work plan covering the assessment and refinement phase, proposed literature search and review (abstracts and full text), inclusion/exclusion criteria,

criteria for evaluating the quality of studies and rating the strength of overall body of evidence, etc.

3) In consultation with the AHRQ TOO, identify a set of qualified individuals (e.g., 5 to 8) to comprise a technical expert panel. These typically include one or more physicians (e.g. primary care and specialist), professional society representatives, health care purchaser representatives, partner representatives, and other content and methods experts. The EPC will consult with these panelists, as needed, in developing its evidence report.
4) Conduct a preliminary assessment of the scientific literature for Federal partners to ascertain whether there is sufficient evidence to support a comprehensive systematic review and analysis.
5) Refine the preliminary questions and identify any necessary additional questions (However, such preliminary reviews usually are undertaken by the EPC Coordinating Center).
6) Systematically search, abstract, review, and analyze the scientific evidence for each question.
7) Identify peer reviewers to ensure input from a broad range of clinical and professional interests for a particular topic and submit a draft report to these individuals. The EPC will invite the partner organization to review and comment on the draft evidence report via a member of this external peer review group.
8) Produce a final evidence report and appendices in compliance with the format provided by AHRQ.
9) Engage in translation and dissemination activities related to reports they author, and/or measure the impact of those reports.

EPC Coordinating Center

The EPC Coordinating Center works closely with AHRQ and the partners. Operated by The Lewin Group as a contractor to AHRQ, the Coordinating Center has several responsibilities related to supporting partners' involvement in the EPC program. Among these, it is available to provide technical assistance to partners, as noted below.

1) Conducts preliminary reviews (not evidence reports) of the quality and relevance of the available literature and related information pertaining to most nominated topics. AHRQ uses this information to help select topics for assignment to EPCs.
2) Supports AHRQ in setting priorities for updating prior EPC reports. This includes examining changes in available evidence, the quality and relevance of that evidence and other developments that would merit updating a report.
3) Collects information from partners, EPCs and non-Partner organizations on translation of EPC reports into guidelines, performance measures, educational curricula and other products; dissemination of these products; and the use and impact of these products.
4) Provides technical assistance to partners in such areas as:
   - framing evidence questions for topic nominations.
   - translating EPC reports into partner-developed products.
   - disseminating partner-developed products to memberships and other target groups.

- measuring the use of partner-developed products and the impact of these on practice and policy.

Partners and potential partners may submit requests for technical assistance directly to the EPC Coordinating Center via e-mail to *partnerTA@lewin.com.*

5) In cooperation with AHRQ, organizes an annual conference on Translating Research Into Practice (TRIP).

6) Provides other assistance as needed to AHRQ in support of the EPC Program.

7) The EPC Coordination Center does *not* engage in the following activities*:*

- Select EPCs.
- Contract with EPCs.
- Manage EPC contracts.
- Select or assign topics for evidence reports.
- Conduct systematic reviews or produce evidence reports in the manner of EPCs.
- Evaluate the performance of the EPCs or partners.

CHAPTER 4: TIMELINE FOR TOPIC NOMINATION, EVIDENCE REVIEW, REPORT COMPLETION

The timeline for completion of an EPC report varies, depending on factors such as the type of report required, the number and clarity of questions, the volume of relevant evidence and the current workload of the EPC to which a topic is assigned. Topics with well-defined questions are likely to be produced in less time than those with broad and/or vague questions.

From the time of the publication of the annual *Federal Register* notice solicitation the benchmarks in the EPC report process are as follows.

- **Topic nomination due date:** The due date is specified in the *Federal Register* and is approximately 50 to 60 days after publication of the notice. Topic nominations also are accepted on an ongoing basis for future years.
- **Topic selection and EPC assignment announcement:** After preliminary reviews on nominated topics are completed, the topics are evaluated according to established criteria, selected, approved, and then assigned to the EPCs. The amount of time required for these steps can vary and depends on many factors including the number of nominations, quality of proposed key questions, and other ongoing agency activities. Other topics that are nominated and funded by Federal partners are assigned at other times throughout the year.
- **Report completion:** Completion depends on the type of evidence report. Most comprehensive evidence reports take about 12 months from the time of topic assignment to completion.

When nominating a topic, partners may state a need for the information by a specific time. AHRQ will consider this as it reviews the topic nomination and defines the type of report that is most appropriate.

Considering Past Performance for partner Organizations

Partners are expected to fulfill all of their roles and responsibilities as defined above. In determining partners' past performance, AHRQ will consider partner efforts in translation and dissemination of products derived from EPC evidence reports, as well as successes in use and impact of these products. Partners may seek technical assistance from the EPC Coordinating Center concerning strategies for translation, dissemination and impact measurement for partner-developed products based on EPC evidence report findings, as noted above.

Translation, Dissemination and Impact Measurement

Partners

Partners' efforts to take the following steps are essential to the success of the EPC program:

- Translate EPC evidence reports into practice guidelines, quality improvement products, educational curricula and/or health care policies.
- Disseminate partner-developed products to their members and other appropriate target audiences.

- Measure the use of these products by partner organization members and other target groups, and the products' impact on quality of care.

As noted above, the partners' topic nominations must include plans to translate and disseminate the findings of evidence reports and technology assessments. While these plans may change based on the findings of an EPC report and otherwise evolve, partners still should describe at the time of the nomination how they intend to make use of the EPC report findings.

Upon completion of an evidence report, the EPC Coordinating Center will contact the partner organization to ask about the status of plans for translation and dissemination. Periodically, the Coordinating Center will inquire about the partner's dissemination efforts. The Coordinating Center has developed a focused Web-based questionnaire to be completed by partners following release of the EPC report on their nominated topic and periodically for several years thereafter. This questionnaire requests information about partners' efforts to: (1) translate the evidence reports and technology assessments into clinical practice guidelines, performance measures, educational curricula, etc.; (2) disseminate the resultant derivative products; and (3) measure use of these products and their impact on clinical care, health behaviors, or policies.

Partners may seek technical assistance from the EPC Coordinating Center concerning approaches for translation, dissemination, and impact measurement by sending requests via e-mail to *partnerTA@lewin.com*.

EPCs

EPCs may engage in efforts to translate and disseminate their reports and measure their use and impact. The Coordinating Center works with EPCs to collect information about any activities in which the EPC has engaged related to the publication of evidence reports.

The Coordinating Center will ask the EPCs to identify a contact person or persons to communicate with the Coordinating Center about translation and dissemination efforts subsequent to release of reports. The Coordinating Center also seeks to track inquiries by other organizations to EPCs about forthcoming or previously published reports. The Coordinating Center will provide a log for the EPC contact person to record basic information about these inquiries and the contact person will transmit it to the Coordinating Center.

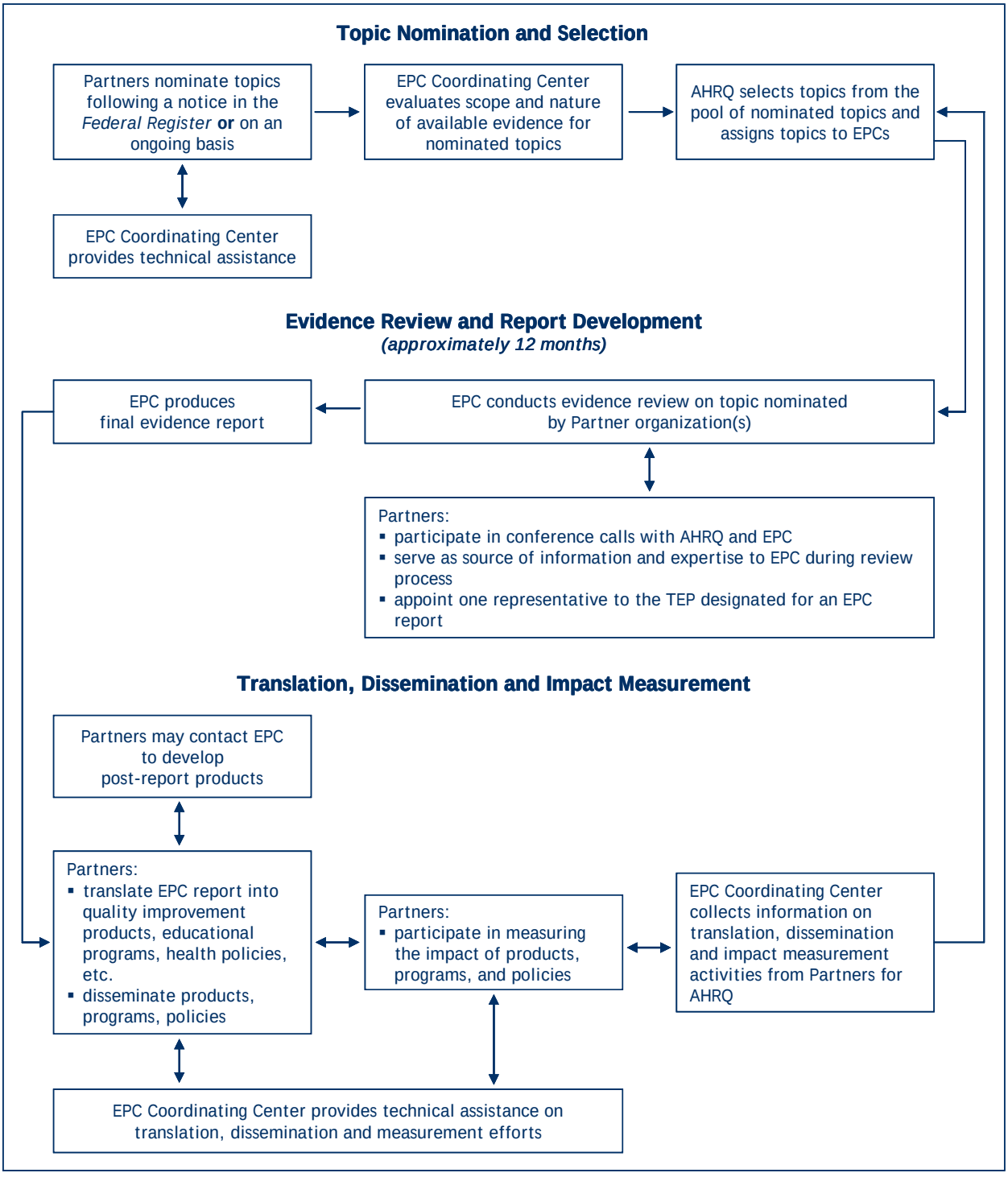
Resources on Effective Translation and Dissemination

Figure 3 provides examples of translation and dissemination activities and methods or indicators for monitoring their use. Partners may seek technical assistance from the Coordinating Center in these areas.

Figure 3:
Framework for considering translation, dissemination, and use

	Activity		
	Translation	**Dissemination**	**Use and Impact**
Clinical Practice Guidelines	▪ Develop a process for generating guidelines ▪ Convene an internal workgroup ▪ Develop target group-specific guidelines ▪ Collaborate with other organizations	▪ Distribute via Internet, CD, or hard copy to clinicians, patients, payers, others ▪ Publish in peer-reviewed journals ▪ Publicize in popular press ▪ Describe at conferences ▪ Make posters for sites of care	▪ Clinical practice patterns ▪ Patient compliance, adoption of health behaviors ▪ Changes in payer coverage policies ▪ Community feedback ▪ Changes in health outcomes
Performance Measures	▪ Developed/validate a new measure ▪ Test skills ▪ Create scale of acceptable performance ▪ Collaborate with other organizations	▪ Distribute via Internet, CD, or hard copy to clinicians, patients, payers, standards-setting organizations ▪ Publish in peer-reviewed journals ▪ Distribute information of new measures to providers, patients	▪ Routine schedule for use of measures ▪ Announcement of results ▪ Procedure for unsatisfactory performance ▪ Scores on measures ▪ Assessment activities implemented
Educational Curricula	▪ Develop course materials ▪ Identify faculty to help develop and present curricula ▪ Collaborate with other groups in curriculum development	▪ Publish in hard copy, video, other formats ▪ Publish as CME material in clinical journals ▪ Present at professional meetings ▪ Incorporate into academic programs ▪ Advertise curriculum in various media	▪ Courses and participants in curriculum-base programs ▪ Changes in clinical practice, patient compliance/health behaviors ▪ Changes in health outcomes
Policy Change	▪ Payer coverage policy ▪ Health care product or service regulation ▪ New or revised legislation	▪ Implement or enact policy change ▪ Provide information on change to providers and/or patients ▪ Publish/post articles, FAQs explaining new policy	▪ Compliance with policy ▪ Changes in clinical practice, patient compliance/health behaviors ▪ Change in utilization patterns, costs

APPENDIX A:
GRAPHIC OVERVIEW OF THE EPC PROCESS



APPENDIX B: RESOURCE PUBLICATIONS AND WEB SITES

The following publications and Web sites provide guidance on the development and use of evidence-based reviews in health care, including for translation, dissemination, and impact measurement of products derived from evidence reports.

Publications

- Bero L, Grilli R, Grimshaw J, et al. Closing the gap between research and practice: an overview of systematic reviews of interventions to promote the implementation of research findings. The Cochrane Effectiveness Practice and Organization of Care Research Group. BMJ 1998;317(7156):456-8.
- Berwick DM. Disseminating innovations in health care. JAMA 2003;289(15):1969-75.
- Busse R, Orvain J, Velasco M, et al. Best practice in undertaking and reporting health technology assessments. Int J Technol Assess Health Care 2002;18:361-422.
- Deeks JJ. Systematic reviews in health care: systematic reviews of evaluations of diagnostic and screening tests. BMJ 2001;323:157-62.
- Egger M, Davey Smith G, Altman DG, editors. Systematic reviews in health care: meta-analysis in context. 2nd ed. London, England: BMJ Books; 2001.
- Ferguson JH. NIH consensus conferences: dissemination and impact. Ann N Y Acad Sci 1993;703: 180-98.
- Ferguson JH, Sherman CR. Panelists' views of 68 NIH consensus conference. Int J Technol Assess Health Care 2001;17(4):542-58.
- Glanville J, Lefebvre C. Identifying systematic reviews: key resources. Evidence-based Medicine 2000;5:68-9.
- Glanville J, Wilson P, Richardson R. Accessing the online evidence: a guide to key sources of research information on clinical and cost effectiveness. Qual Saf Health Care 2003;12:229-31.
- Goldberg HI, Cummings MA, Steinberg EP, et al. Deliberations on the dissemination of PORT products: translating research findings into improved patient outcomes. Med Care 1994;32(suppl. 7):JS90-110.
- Grol R. Beliefs and evidence in changing clinical practice. BMJ 1997;315:418-21.
- Haines A, Jones R. Implementing findings of research. BMJ 1994;308:1488-92.
- Harris RP, Helfand M, Woolf SH, et al. Current methods of the US Preventive Services Task Force. A review of the process. Am J Prev Med 2001;20(3S):21-35.
- Haynes B, Haines A. Barriers and bridges to evidence based clinical practice. BMJ 1998;317(7153):273-6.
- Haynes RB, Sackett DL, Gray JM, et al. Transferring evidence from research into practice: 1. The role of clinical care research evidence in clinical decisions. ACP J Club 1996;125(3):A14-6.

- Haynes RB, Sackett DL, Gray JA, et al. Transferring evidence from research into practice: 2. Getting the evidence straight. ACP J Club 1997;126(1):A14-6.
- Haynes RB, Sackett DL, Guyatt GH, et al. Transferring evidence from research into practice: 4. Overcoming barriers to application. ACP J Club 1997;126(3):A14-5.
- Kahan JP, Kanouse DE, Winkler JD. Stylistic variations in National Institutes of Health consensus statements, 1979-1983. Int J Technol Assess Health Care 1988;4(2):289-304.
- Lyles A. Direct marketing of pharmaceuticals to consumers. Annu Rev Public Health 2002;23:73-91.
- Mittman BS, Siu AL. Changing provider behavior: applying research on outcomes and effectiveness in health care. In: Shortell SM, Reinhardt UE, editors. Improving health policy and management: nine critical research issues for the 1990s. Ann Arbor, MI: Health Administration Press; 1992. 195-226.
- Mittman BS, Tonesk X, Jacobson PD. Implementing clinical practice guidelines: social influence strategies and practitioner behaviour change. Qual Rev Bull 1992;18:413-21.
- Muir Gray JA, Haynes RB, Sackett DL, et al. Transferring evidence from research into practice: 3. Developing evidence-based clinical policy. ACP J Club 1997;126(2):A14-6.
- NHS Centre for Reviews and Dissemination. Accessing the evidence on clinical effectiveness. Effectiveness Matters 2001;5(1).
- Oxman A, Davis D, Haynes RB, et al. No magic bullets: a systematic review of 102 trials of interventions to help health professionals deliver services more effectively or efficiently. Can Med Assoc J 1995;153:1423-43.
- Oxman AD, Sackett DL, Guyatt GH. Users' guides to the medical literature. I. How to get started. The Evidence-Based Medicine Working Group. JAMA 1993;270:2093-5.
- Randall G, Taylor DW. Clinical practice guidelines: the need for improved implementation strategies. Healthc Manage Forum 2000;13(1):36-42.
- Rogers EM. Diffusion of innovations. New York: Free Press; 1983.
- Sackett DL, Rosenberg WM, Gray JA, et al. Evidence based medicine: what it is and what it isn't. BMJ 1996;312: 71-2.
- Solberg LI. Guideline implementation: what the literature doesn't tell us. Jt Comm J Qual Improv 2000;26:525-37.
- West S, King V, Carey T, et al. Systems to rate the strength of scientific evidence. Evidence Report/Technology Assessment Number 47. (Prepared by the RTI International-University of North Carolina Evidence-based Practice Center.) AHRQ Publication No. 02-E016, Rockville, MD: Agency for Healthcare Research and Quality. April 2002.

Web Sites

- Agency for Healthcare Research and Quality (AHRQ)
  http://www.ahrq.gov/
- Centre for Evidence-Based Medicine (UK)
  http://www.cebm.net/
- Cochrane Collaboration
  http://www.cochrane.org/
- Etext on Health Technology Assessment (HTA) Information Resources
  http://www.nlm.nih.gov/nichsr/ehta/
- Evidence-based Medicine and Health Technology Assessment
  http://www.nlm.nih.gov/nichsr/hsrsites.html#ebmhta
- Health Information Research Unit, Evidence-Based Health Informatics
  http://hiru.mcmaster.ca/
- Health technology assessment on the Net: a guide to Internet sources of information
  http://www.ahfmr.ab.ca/publication.html
- National Guideline Clearinghouse
  http://www.ngc.gov
- Science.gov FirstGov for Science – Government Science Portal
  http://www.science.gov/
- World Wide Web-based EBM Hedges
  http://www.mssm.edu/medicine/general-medicine/ebm/