



AHRQ Evidence-based Practice Centers Partners 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 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, interpreting 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. Under its Effective Health Care 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 14 Evidence-based Practice Centers (EPCs) under contract to AHRQ produce scientific syntheses – evidence reports, technology assessments, technical briefs, and comparative effectiveness reviews – that give public and private organizations foundations for developing and implementing their own practice guidelines, performance measures, educational programs and other strategies to improve the quality of health care and decisionmaking. These evidence reports, technology assessments, technical briefs, and comparative effectiveness reviews 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 resources for partner and stakeholder organizations that will use the report. The growing number of partners/stakeholders to the EPC program includes private sector organizations and government agencies. Non-governmental partners include health professional organizations,

¹ McGlynn BA, et al. The quality of health care delivered to adults in the United States. *N Engl J Med* 2003;348:2635-45.

² Institute of Medicine, Committee on Quality of Health Care in America. *To Err Is Human: Building a Safer Health System*. 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.

voluntary health (e.g., disease-oriented) organizations, health payers, and others. Evidence reports prepared by EPCs have been used in the development of clinical practice guidelines by organizations such as the American Psychiatric Association, 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) and the Social Security Administration. Within the National Institutes of Health (NIH), the Office of Medical Applications of Research uses EPC reports to support its consensus development program, the Office of Dietary Supplements uses evidence reports to assist its research agenda setting, and reports have also been requested by others including the National Cancer Institute, the 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, and the EPCs. 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 EVIDENCE-BASED PRACTICE CENTERS (EPC) 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 Evidence-based Practice Center (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. Furthermore, 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 organizations 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. The topics generally relate to widespread, expensive, and otherwise significant diseases or health problems for Medicare or Medicaid beneficiaries or other special populations.

Since the start of the program in 1997, the EPCs have conducted more than 170 systematic reviews and analyses of the scientific literature on a wide spectrum of topics. The major products of the program are evidence reports, including comprehensive and more focused systematic reviews, technology assessments, technical briefs, and comparative effectiveness reviews. 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 reports do not make clinical recommendations or recommendations related to coverage and reimbursement policies.

In 2007, AHRQ announced the award of a third round of five-year contracts to the following 14 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
- Tufts-New England Medical Center; Boston, MA
- University of Alberta; Edmonton, Alberta, Canada
- University of Connecticut, Hartford, CT
- University of Minnesota; Minneapolis, MN
- University of Ottawa; Ottawa, Canada
- Vanderbilt University; Nashville, TN

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) comparison 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 effectiveness review, a comparative effectiveness review, or a technology assessment. In some cases the topic may be appropriate for a Technical Brief. A Technical Brief is an overview of key issues related to an intervention or issue. It provides an early and objective depiction of the state of science and a summary of ongoing research and information on future research needs.

The determination of the type of review to be performed is made at the topic refinement stage of the EPC review. It is important to remember that 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 AHRQ Evidence reports 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 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, treatment and/or comparative effectiveness 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. Topics of evidence reports published to date are listed at <http://www.ahrq.gov/clinic/epcix.htm#clinicalcat>

Nominating a Topic

AHRQ encourages both non-federal partners (i.e., professional societies, health systems, employers, insurers, providers and consumer groups) and federal partners (e.g., the Centers for Disease Control and Prevention, the Health Resources and Services Administration, and the Social Security Administration) to nominate topics.

AHRQ is very interested in receiving topic nominations from professional societies and organizations representing members of minority populations, nominations on topics that have significant impact on AHRQ priority populations, and nominations on topics covering 14 priority conditions established for the Comparative effectiveness program that have been identified through a process involving wide input from public and Federal agencies. AHRQ's priority populations include the following:

- low-income groups
- minority groups
- women
- children
- elderly individuals
- individuals with special health care needs, such as those with disabilities or those who need chronic care or end-of-life health care or who live in inner-city and rural areas.

The 14 priority conditions identified for 2009 are:

- arthritis and nontraumatic joint disorders
- cancer
- cardiovascular disease, including stroke and hypertension
- dementia, including Alzheimer's disease

- depression and other mental health disorders
- developmental delays, attention-deficit hyperactivity disorder, and autism
- diabetes mellitus
- functional limitations and disability
- infectious diseases including HIV/AIDS
- obesity
- peptic ulcer disease and dyspepsia
- pregnancy including preterm birth
- pulmonary disease/asthma
- substance abuse

Nominations of topics for AHRQ evidence reports 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 and priority conditions.

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 health care programs.
- 7) 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.

Nominations of topics may be submitted on an ongoing basis. AHRQ does not reply to individual nominations, but considers all nominations during the selection process.

How to Submit a Nomination

For each topic, the nominating organization must complete and submit on-line the required form available at: <http://effectivehealthcare.ahrq.gov/getInvolved.cfm?involvetype=sr>.

The form is designed to help AHRQ understand the topic the nominating organization is interested in, the populations to whom it applies, what benefits or harms are of greatest interest, and what health care services should be assessed and compared.

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 an EPC by a review of the available evidence. As described below, questions that ask about clinical judgment or appropriate care for certain patients are not suitable for EPC review. However, 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. This section presents common problems with topic questions and provides examples of evidence questions that are appropriate for EPC evidence reports.

Problem 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 entails moving beyond reviewing evidence to state 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; they do not reveal 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 or if it is appropriate for it to be used, or whether the partner is asking 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 are 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 population 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?

Problem 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?

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

Answering this question entails moving beyond reviewing evidence to state 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.

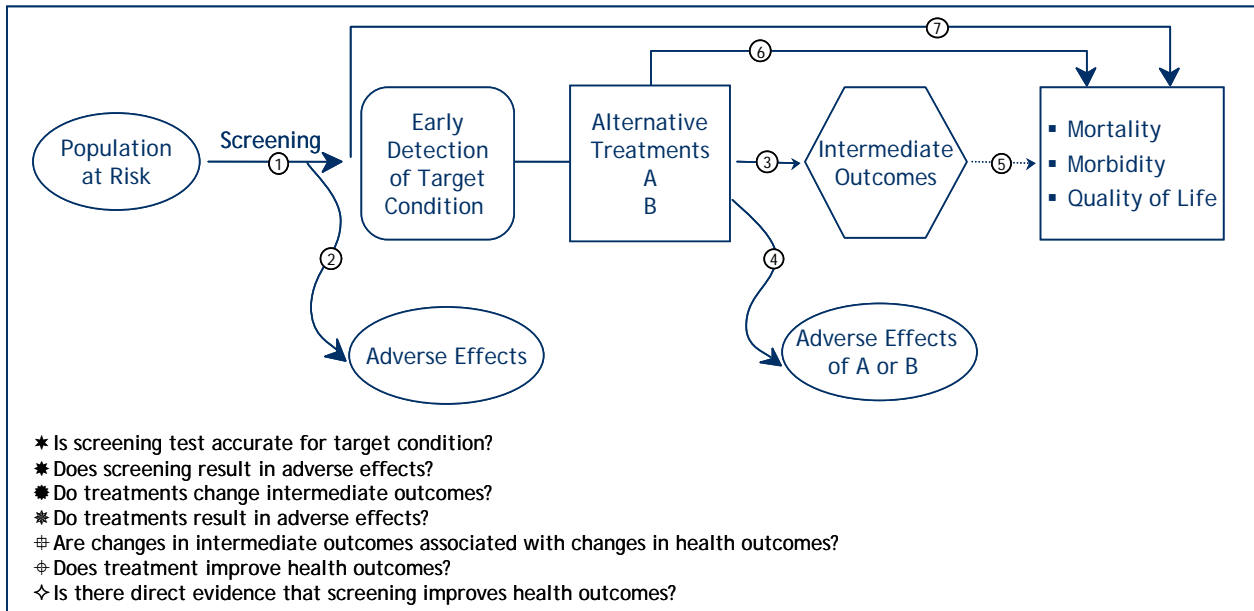
Inappropriate: Do high-volume hospitals provide superior cardiac care?

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?

Developing a Causal Pathway or Analytic Framework

A "causal pathway" or "analytical framework" is a useful means of specifying evidence questions for many topics. These graphic displays 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
<i>Patient Population or Problem</i>	"How would I describe this group of patients?" <i>Balance precision with brevity.</i>	"In patients with heart failure from dilated cardiomyopathy who are in sinus rhythm..."
<i>Intervention (a cause, prognostic factor, treatment, etc.)</i>	"Which main intervention is of interest?" <i>Be specific.</i>	"...would adding anticoagulation with warfarin to standard heart failure therapy..."
<i>Comparison Intervention (if necessary)</i>	"What is the main alternative to compare with the intervention?" <i>Be specific.</i>	"...when compared with standard therapy alone..."
<i>Outcomes</i>	"What do I hope the intervention will accomplish?" "What could this exposure really affect?" <i>Be specific.</i>	"...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

Chapter 3

Roles and Responsibilities of EPC Program Collaborators

The EPC program is a collaborative effort. If the collaboration is to work as intended, all participants – the Partners, AHRQ, the EPCs, and the expert panels – need to understand their respective roles and the expectations entailed in these roles.

Partners

Organizations that nominate topics selected for EPC evidence reports 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 responsibilities:

- 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 draft EPC report.
- 2) Once an AHRQ evidence report 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. AHRQ will collect and organize information about these activities from partners through routine telephone communication.

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.
- 3) 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.

Federal partners interested in evidence reports to support their activities are encouraged to contact the EPC Program Director at AHRQ, Beth Collins Sharp, at:
Beth.CollinsSharp@AHRQ.HHS.gov.

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, these are the responsibilities of AHRQ's Center for Outcomes and Evidence (COE). 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 task order officers (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 TOO. Any communication not conducted directly through the AHRQ TOO should be reported to the 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 facilitate 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 protocol 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 five to eight qualified individuals to comprise a Key Informant group for refinement of the topic and a technical expert panel. The EPC will consult with these individuals, 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.
- 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 the reports they author, and/or measure the impact of those reports.

Expert Panels

A. Key Informants provide guidance to the EPCs during the topic refinement stage of the evidence review. The Key Informant Panel is composed of five to eight members, including patients and consumers, practicing clinicians, relevant professional and consumer organizations, purchasers of health care and others with experience relevant to the topic under development. These Key Informants are distinct from the Technical Expert Panel, which is constituted to inform the scientific processes of the full review. Key Informants provide information on the relevance to health care practice of the questions under development.

B. Technical Expert Panels provide guidance to the EPCs throughout the evidence review process, as needed. Typically composed of 5 to 8 members, the Technical Expert Panels usually include one or more physicians (e.g., a primary care physician and a specialist), professional society representative, health care purchaser representative, Partner representative, and other content and methods experts. The size and composition of the technical expert panel are intended to create a balance between content and methodology expertise and the user's perspective. During the course of developing evidence reports, Technical Expert Panels may assist the EPCs by doing the following:

- 1) Help to focus key questions, as needed.
- 2) Help to focus and complete the literature search by helping to identify search strategies and relevant grey literature.
- 3) Help to identify inclusion/exclusion criteria to evaluate the quality of studies and rate the strength of the overall body of evidence, etc.
- 4) Provide peer review of the draft evidence report.

CHAPTER 4

TIMELINE FOR TOPIC NOMINATION, EVIDENCE REVIEW, AND 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 topic nomination, the benchmarks in the EPC report process are as follows:

- **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.
- **Topic refinement:** One of the first tasks of the EPC is to consult with the Key Informants and to assess the current state of the literature to inform the scope of the review. A summary document is prepared and submitted to AHRQ. After review, the key questions are posted to AHRQ's Website for public comment.
- **Report completion:** Completion depends on type of evidence report. Most comprehensive evidence reports entail 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 their roles and responsibilities as defined above. In determining partners' past performance, AHRQ will consider their efforts to translate and disseminate products derived from EPC evidence reports, as well as successes in using these products, and, finally, their impact on the quality of health care.

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 partners' members and other target groups, and their 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 other considerations, partners nevertheless 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 AHRQ TOO will contact the partner organization to ask about the status of plans for translation and dissemination and will periodically inquire about the partner's dissemination 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.

EPCs

EPCs may engage in efforts to translate and disseminate their reports and measure their use and impact.

Resources for Effective Translation and Dissemination

Figure 3 provides examples of translation and dissemination activities and methods or indicators for monitoring their use.

Figure 3:
Framework for Considering Translation, Dissemination and Use

	Activity		
	Translation	Dissemination	Use and Impact
<i>Clinical Practice Guidelines</i>	<ul style="list-style-type: none"> ▪ Develop a process for generating guidelines ▪ Convene an internal workgroup ▪ Develop target group-specific guidelines ▪ Collaborate with other organizations 	<ul style="list-style-type: none"> ▪ Distribute via Internet, CD, or hard copy to clinicians, patients, payers, and others ▪ Publish in peer-reviewed journals ▪ Publicize in popular press ▪ Describe at conferences ▪ Make posters for sites of care 	<ul style="list-style-type: none"> ▪ Clinical practice patterns ▪ Patient compliance, adoption of health behaviors ▪ Changes in payer coverage policies ▪ Community feedback ▪ Changes in health outcomes
<i>Performance Measures</i>	<ul style="list-style-type: none"> ▪ Develop/validate a new measure ▪ Test skills ▪ Create scale of acceptable performance ▪ Collaborate with other organizations 	<ul style="list-style-type: none"> ▪ Distribute via Internet, CD, or hard copy to clinicians, patients, payers, and standards-setting organizations ▪ Publish in peer-reviewed journals ▪ Distribute information about new measures to providers and patients 	<ul style="list-style-type: none"> ▪ Routine schedule for use of measures ▪ Announcement of results ▪ Procedure for unsatisfactory performance ▪ Scores on measures ▪ Assessment activities implemented
<i>Educational Curricula</i>	<ul style="list-style-type: none"> ▪ Develop course materials ▪ Identify faculty to help develop and present curricula ▪ Collaborate with other groups in curriculum development 	<ul style="list-style-type: none"> ▪ Publish in hard copy, video, or other formats ▪ Publish as CME material in clinical journals ▪ Present at professional meetings ▪ Incorporate into academic programs ▪ Advertise curriculum in various media 	<ul style="list-style-type: none"> ▪ Courses and participants in curriculum-based programs ▪ Changes in clinical practice, patient compliance/health behaviors ▪ Changes in health outcomes
<i>Policy Change</i>	<ul style="list-style-type: none"> ▪ Payer coverage policy ▪ Health care product or service regulation ▪ New or revised legislation 	<ul style="list-style-type: none"> ▪ Implement or enact policy change ▪ Provide information on change to providers and/or patients ▪ Publish/post articles, FAQs explaining new policy 	<ul style="list-style-type: none"> ▪ Compliance with policy ▪ Changes in clinical practice, patient compliance/health behaviors ▪ Change in utilization patterns, costs

APPENDIX

RESOURCE PUBLICATIONS AND WEBSITES

The following publications and websites 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.
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- 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.
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- 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.
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- Haynes RB, Sackett DL, Gray JM, Cook DJ, Guyatt GH. 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.
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Lyles A. Direct marketing of pharmaceuticals to consumers. *Annu Rev Public Health* 2002;23:73-91.

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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, Cook DJ, Guyatt GH. 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).

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RTI International-University of North Carolina Evidence-based Practice Center. Systems to Rate the Strength of Scientific Evidence. Evidence Report/Technology Assessment Number 47. AHRQ Publication No. 02-E016, Rockville, Md: Agency for Healthcare Research and Quality, April 2002.

Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. 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.

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/archive//2060905/nichsr/ehta/ehta.html>

Evidence-Based Medicine and Health Technology Assessment

<http://www.nlm.nih.gov/hsrinfo/hsrsites.html>

Health Information Research Unit, Evidence-Based Health Informatics

<http://hiru.mcmaster.ca/>

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. Mount Sinai School of Medicine, Division of Evidence-based Medicine

<http://www.mssm.edu/medicine/general-medicine/ebm/>
