AHRQ Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

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Organization & Purpose

- 1 of 14 EPCs in US & Canada
  - Organized and funded via AHRQ
  - Program beginning its 3rd 5-year cycle
- Produce
  - General topic systematic reviews
  - Technology assessments for CMS and other agencies
  - Comparative Effectiveness Reviews (MMA Section 1013)
- Purpose
  - Synthesize literature on clinical, behavioral, organizational, and financing topics
  - Promote improvements in health and healthcare
  - Provide data for others to
    - make coverage decisions
    - develop quality measures, educational materials, and guidelines
    - set research agendas

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Selection of Topics

- AHRQ solicits topics from
  - Public: professional organizations, industry, payers, etc.
  - Gov't agencies: NIH, CMS, FDA, etc.
- AHRQ vets and chooses topics based on agency and other government priorities, impact of disease and/or intervention, unanswered questions
- EPCs compete based on interest, experience, local expertise, equitable distribution

Selection of Team Members

- Teams of ~3-7 EPC core members
  - 6 MD methodologists, 1 PhD candidate methodologist
    - Internal medicine, pediatrics, anesthesia, nutrition
  - No conflicts of interest
  - Organize, perform and write systematic reviews
- 1-2 local (Tufts) clinical domain experts
  - Provide advice, guidance, background material
    - No conflicts of interest
- Technical Expert Panels: ~4-8 clinical and other experts
  - Assist with question refinement, provide advice etc.
    - Disclose potential conflicts of interest
- AHRQ Task Order Officers
  - Assist with question/topic refinement
  - Organizational support

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Systematic Review Methodology

- Refine Topics and Questions with PICO criteria
  - With clinical experts, AHRQ, Agency representatives
  - +/- Analytic framework
- Perform structured systematic review
  - Include grading of study quality: Good / Fair / Poor (A/B/C)
  - +/- Applicability: High / Moderate / Low
  - Summarize evidence
    - Every study summarized in tables, but not necessarily described
  - +/- Meta-analysis and other statistical approaches
- Evaluate future research needs
- Draft reports reviewed by experts and users
- AHRQ and EPCs working toward standard approaches to systematic review steps and presentation

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Other Projects, Caveats, and Examples

- Other Projects
  - Methodological research
  - Disseminate evidence-based methodology
    - eg, Expanding EBM to EBN (nutrition)
  - Occasional systematic reviews of basic research (animals, in vitro)
- Caveats
  - Do not produce guidelines
    - Do not provide guidance/opinion on what should be done (clinical recommendations)
  - Defer to clinical/research experts and others on how to implement findings or interpret conclusions
    - Generally do not evaluate (or come to final conclusions about) different perspectives (society vs provider vs patient, cross-cultural, etc.
  - Generally EPC not asked to consider costs (esp. for Technology Assessments-CMS), though occasionally produce cost-effectiveness analyses
- Examples
  - Small, focused topics: routine Swan-Ganz catheter use
  - Horizon scans: chronic wounds, PAD interventions
  - Broad topics: Soy and health, n-3 and CVD

Methodology (Additional Grading)

- Comparative Effectiveness Reviews (MMA)
  - Grade strength of evidence / Confidence in evidence
  - Specifics still evolving
    - High ●●● "There are consistent results from good quality studies"
    - Medium ●●○ "Findings are supported, but further research could change the conclusions"
    - Low ●○○ "There are very few studies, or existing studies are flawed"
    - Insufficient evidence
  - Low and Insufficient evidence is not presented in guides
  - Levels not presented in consumer guides
  - Language continually being tested in focus groups of "consumers" and clinicians
  - Not guidelines or recommendations, but evaluation of evidence

Dissemination

- Reports made available at www.ahrq.gov
- AHRQ press releases (esp for CERs)
- Technology assessments presented to CMS Evidence Forum and at Medicare Evidence Development and Coverage Advisory Committee (MedCAC) panel meetings
- Journal publications
- Presentations at scientific meetings
- Presentations to and participation in advisory panels (on recommendations for future research)
- Not Guidelines

Strengths and Challenges

- Well-established methodology for systematic review
- Positive impacts on CMS, NIH (ODS), and other agencies' approach toward and use of evidence

- Unclear impact on clinical practice or ongoing/future research
- Resource intensive processes
  - Article screening, Data extraction
- Implementing and understanding assessment of study quality and applicability – still evolving

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Compared to KDIGO ERT Process

- Different goal: evidence synthesis vs clinical guidance
  - "No evidence" that meet criteria is an acceptable final synthesis
- Applicability usually related to US population and health care
- Generally more focused & fewer topics & questions
  - Specific initial questions determined by AHRQ prior to award
- Broader range of topics, not all aimed at providing answers to clinical management questions
  - eg, B vitamin animal studies, range of tests being investigated
- Shorter timeframe (~6-12 mo)
- Less intensive involvement of clinical experts and users of systematic reviews. EPC controls more decisions.
  - Question formulation, draft review
- Fewer a priori eligibility restrictions based on "strength of evidence"; evaluation of strength of evidence uncommon
- Only occasional involvement of trainees (fellows)

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Future

- Beginning 3rd 5-year cycle
- Continuing great interest from CMS, FDA, NIH, Congress, Professional societies, Insurers, etc.
- Shift to more translation of evidence into improved patient care and health
  - Including development of consumer and clinician guides
  - Not guideline development
- Increasing focus on improving and guiding future research
- Methodology
  - Improving consistency across reports and EPCs
  - Methods manual
  - Improve efficiency of process