Module 1: Introduction

Category 11: Systematic Reviews

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What Is a Systematic Review?

- Define question
- Establish eligibility criteria
- Search literature and review citations
- Extract data
- Evaluate study quality and applicability
- Summarize and synthesize
Anyone who wants to use a systematic review of evidence to guide decisions about clinical practice, health education, medical research, or health policy—e.g.:

- Clinicians
- Educators
- Investigators
- Policy makers
For Whom Are These Modules Designed?

Mainly for those who want to perform a systematic review as part of a program of patient-centered research

Also for:
- New systematic reviewers
- Readers and reviewers of systematic reviews
- PCORI grant reviewers
What Is an Appropriate Source of Up-to-Date Standards for Systematic Reviews?

- Evidence-Based Practice Center Program (AHRQ)
- The Cochrane Collaboration
What Are the Institute of Medicine (IOM) Standards for Systematic Reviews?

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<td>Establish team with appropriate expertise</td>
<td>Conduct and document comprehensive search</td>
<td>Use prespecified method to evaluate evidence</td>
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**Initiating a systematic review**

- Establish team with appropriate expertise
- Ensure user and stakeholder input
- Manage bias and conflict of interest

**Finding and assessing studies**

- Conduct and document comprehensive search
- Screen and select studies
- Consider biased reporting
- Manage data collection
- Critically appraise each study

**Synthesizing evidence**

- Use prespecified method to evaluate evidence
- Conduct qualitative and quantitative synthesis

**Reporting**

- Use structured format and peer review
- Ensure free public access
PCORI is flexible about some standards:

- Searches for studies reported in non-English languages may be appropriate for some topics but are not routinely recommended.
- Dual screening and data abstraction are desirable, but fact-checking may be sufficient, and quality control procedures are more important than dual review per se.
- Independent librarian peer review of the search strategy is not required if internal review is done by experienced researchers.