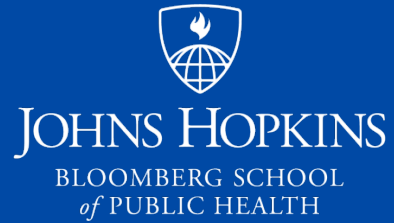


Framing the Question

Kay Dickersin, MA, PhD
Johns Hopkins University





Section A

Resources for How to Frame Your Question

The material in this video is subject to the copyright of the owners of the material and is being provided for educational purposes under rules of fair use for registered students in this course only. No additional copies of the copyrighted work may be made or distributed.

Steps of a Systematic Review

- Frame research question (PICO/PECO)
- Develop search strategy
- Develop protocol
- Run search strategy in at least two databases
- Retrieve and de-duplicate citations
- Develop system for screening titles/abstracts and full-texts
- Screen titles/abstracts
- Retrieve and screen full-texts
- Develop forms for assessing 'risk of bias' and extracting data
- Assess 'risk of bias' and extract data
- Clean and manage data
- Conduct qualitative synthesis
- Conduct meta-analyses (if appropriate)
- Write report of systematic review
- Update systematic review

Typically, at a given time-point, more than one step is carried out

Steps of a Systematic Review

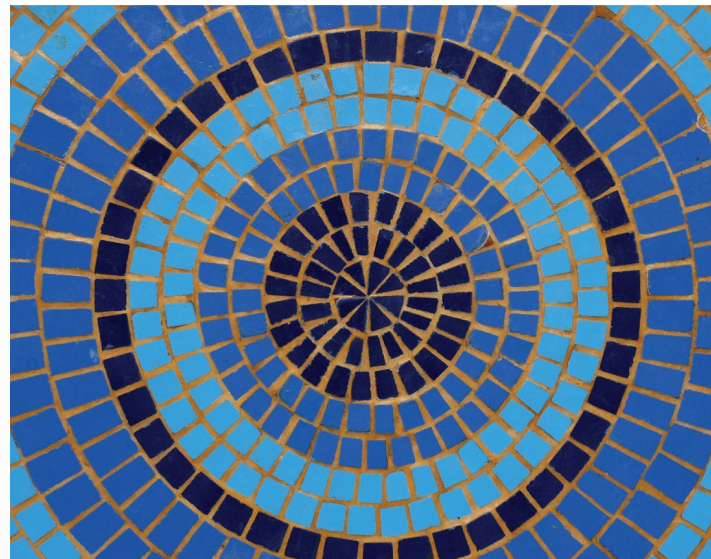
- **Frame research question (PICO/PECO)**
- Develop search strategy
- Develop protocol
- Run search strategy in at least two databases
- Retrieve and de-duplicate citations
- Develop system for screening titles/abstracts and full-texts
- Screen titles/abstracts
- Retrieve and screen full-texts
- Develop forms for assessing 'risk of bias' and extracting data
- Assess 'risk of bias' and extract data
- Clean and manage data
- Conduct qualitative synthesis
- Conduct meta-analyses (if appropriate)
- Write report of systematic review
- Update systematic review

Typically, at a given time-point, more than one step is carried out

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

FINDING WHAT WORKS IN HEALTH CARE

STANDARDS FOR SYSTEMATIC REVIEWS



IOM Standards for Systematic Reviews

2. Initiating a systematic review

- ▶ Establish a review team
- ▶ Manage bias and conflict of interest of the review team
- ▶ Ensure stakeholder input
- ▶ Manage bias and conflict of interest of those providing input
- ▶ **Formulate the topic**
- ▶ Develop the protocol
- ▶ Submit the protocol for peer review
- ▶ Make protocol publicly available

Formulate the Topic

- Confirm the need for a new review
- Develop an analytic framework
- Use a standard format to articulate each question of interest
 - ▶ For example, PICO(TS)
- State a rationale for each question
- Refine each question






Cochrane Community (beta)

Trusted evidence. Informed decisions. Better health.

to cochrane.org
to the [Cochrane Library](http://cochrane.org)

[Home](#)[About us](#)[Cochrane Reviews](#)[News & Events](#)[Training](#)[Multimedia](#)[Contact](#)[Community](#)[go](#)[Home](#) > [Cochrane Handbook for Systematic Reviews of Interventions](#)

Cochrane Reviews

[Browse free summaries](#)[About The Cochrane Library](#)[Cochrane Interventions Handbook](#)[What's new](#)[Updates and corrections](#)[Simplified Chinese](#)[Top 50 Reviews](#)[Proposing new reviews](#)[Evidence Aid](#)[Citing our products](#)[Other Cochrane publications](#)[Glossary of Cochrane terms](#)[Share / Save](#)   [FAQ](#) | [Site index](#) | [Site map](#)

Cochrane Handbook for Systematic Reviews of Interventions

The *Cochrane Handbook for Systematic Reviews of Interventions* is the official document that describes in detail the process of preparing and maintaining Cochrane systematic reviews on the effects of healthcare interventions. The current version of the *Handbook* is 5.1.0 (updated March 2011). It is available in various formats, as detailed below.

Browse the *Handbook* online at handbook.cochrane.org

En Español: Manual Cochrane de revisiones sistemáticas de intervenciones

Simplified Chinese: Cochrane 干预措施系统评价手册 中文翻译版

Please note the following important information about this version.

There is also a *Cochrane Handbook for Systematic Reviews of Diagnostic Test Accuracy*.

Quick links

- [What's new?](#) [PDF]
- [Available formats](#)
- [Updates and corrections](#)
- [Book version](#)
- [Glossary](#)
- [Supplementary material](#)
- [Previous versions](#)
- [Contacts](#)

Chapter 5: Cochrane Handbook Version 5.1

 Contents  Search

Chapter 5: Defining the review question and developing criteria for including studies

Editors: Denise O'Connor, Sally Green and Julian PT Higgins.

Key Points

- A clearly defined, focused review begins with a well framed question. In Cochrane reviews, questions are stated broadly as review 'Objectives', and specified in detail as 'Criteria for considering studies for this review'.
- The review question should specify the types of population (participants), types of interventions (and comparisons), and the types of outcomes that are of interest. The acronym PICO (Participants, Interventions, Comparisons) the additional specification of types of study that will be included, form the basis of the pre-specified eligibility criteria for the review.
- Cochrane reviews should include all outcomes that are likely to be meaningful, and not include trivial outcomes. Primary outcomes should be limited to a very small number and include adverse as well as beneficial outcomes.
- Cochrane reviews can focus on broad questions, or be more narrowly defined. There are advantages and disadvantages of each.

[5.1 Questions and eligibility criteria](#)

[5.2 Defining types of participants: which people and populations?](#)

[Box 5.2.a: Factors to consider for 'Types of participants'](#)

[5.3 Defining types of interventions: which comparisons to make?](#)

[Box 5.3.a: Factors to consider for 'Types of interventions'](#)

[5.4 Defining types of outcomes: which outcome measures are most important?](#)

[Box 5.4.a Factors to consider when developing criteria for 'Types of outcomes'](#)

[5.5 Defining types of study](#)

[5.6 Defining the scope of a review question \(broad versus narrow\)](#)

[Table 5.6.a: Some advantages and disadvantages of broad versus](#)

[5.7 Changing review questions](#)

[5.8 Chapter information](#)

[5.9 References](#)

Chapter 5: Defining the Review Question and Developing Criteria for Including Studies —*Cochrane Handbook*

- Key points
 - ▶ A clearly defined, focused review begins with a well framed question
 - In Cochrane reviews, questions are stated broadly as review ‘Objectives,’ and specified in detail as ‘Criteria for considering studies for this review.’
 - ▶ The review question should specify the types of population (participants), types of interventions (and comparisons), and the types of outcomes that are of interest (PICO)
 - ▶ Cochrane reviews should include all outcomes that are likely to be meaningful, and not include trivial outcomes
 - Primary outcomes should be limited to a very small number and include adverse as well as beneficial outcomes
 - ▶ Cochrane reviews can focus on broad questions, or be more narrowly defined
 - There are advantages and disadvantages of each