



# Clinical Practice Guidelines and Systematic Reviews: Point of Intersection?

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# Disclosure of Interests (last 3 years)

Lisa Wilson

I certify that, to the best of my knowledge, no aspect of my current personal or professional situation might reasonably be expected to affect significantly my views on the subject on which I am presenting, other than the following\*:

Research grant from the Cystic Fibrosis Foundation



## Some limitations of clinical practice guidelines:

- Limitations in evidence base
- Poor management of conflicts of interest
- Poor coordination with systematic review teams
- Lack of transparency in deriving & rating recommendations



## STANDARD 4

### Clinical practice guideline–systematic review intersection

- 4.1 CPG developers should use systematic reviews that meet standards set by the Institute of Medicine’s Committee on Standards for Systematic Reviews of Comparative Effectiveness Research.
- 4.2 When systematic reviews are conducted specifically to inform particular guidelines, the GDG and systematic review team should interact regarding the scope, approach, and output of both processes.

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**What is intersection?**



# Models of Interaction

Model	Description	Strengths	Limitations
Complete Isolation (synchronous model)	No overlap	Prevents biases from one group influencing the other group	<ul style="list-style-type: none"><li>• GDC limited to questions addressed by SR</li><li>• GDC has no opportunity to learn nuances of SR</li><li>• SR may not optimally structure synthesis and reporting of review</li></ul>
Complete Isolation (asynchronous model)	No overlap, but a SR team member may participate in GDC	Efficiency in using pre-synthesized and rated evidence	<ul style="list-style-type: none"><li>• SR may not fully address GDC's questions</li><li>• SR may be outdated</li><li>• SR may not optimally structure synthesis and reporting of review</li></ul>

Adopted from: IOM (Institute of Medicine). 2011. *Clinical Practice Guidelines We Can Trust*. Washington, DC: The National Academies Press.



# Models of Interaction

Model	Description	Strengths	Limitations
Limited Interaction	GDC members interact with SR team, but SR team does not make recommendations	Ensures that major questions of GDC will be addressed by SR	<ul style="list-style-type: none"><li>• SR may not fully address GDC's questions</li><li>• Persons interacting may be biased, inexperienced</li></ul>
Complete Interaction	Same individuals on SR team and GDC	<ul style="list-style-type: none"><li>• All issues are known in both groups</li><li>• GDC will have better understanding of evidence</li><li>• Efficiency of having same group perform review and guideline</li></ul>	<ul style="list-style-type: none"><li>• May introduce bias into SR</li><li>• Unlikely same individuals have time and skills to do both</li></ul>

Adopted from: IOM (Institute of Medicine). 2011. *Clinical Practice Guidelines We Can Trust*. Washington, DC: The National Academies Press.



# Purpose

To describe our experience with interaction between a systematic review team and a guideline development committee

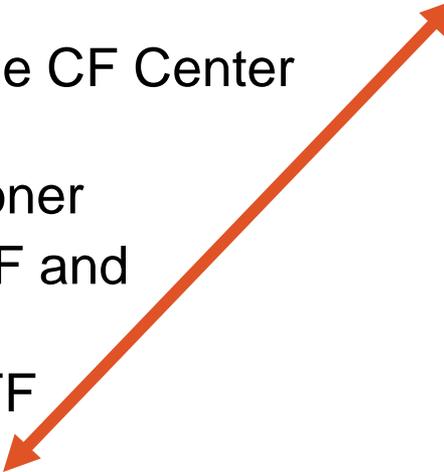


# Context

- In 2005, the Cystic Fibrosis Foundation moved from consensus-based to evidence-based guidelines
- Commissioned systematic reviews to inform guidelines



# Description of Guideline Development Committee and Systematic Review Teams

- Guideline Development Committee
    - Members of the CF Center Committee
    - Nurse practitioner
    - People with CF and their families
    - Staff of the CFF
    - Methodologist
  - Systematic Review Team
    - Task Leader
    - Research coordinator
    - Reviewers
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# Description of Interaction - Defining the Scope

Guideline Development Process

Systematic Review Process

Develop and refine scope

Develop and refine questions

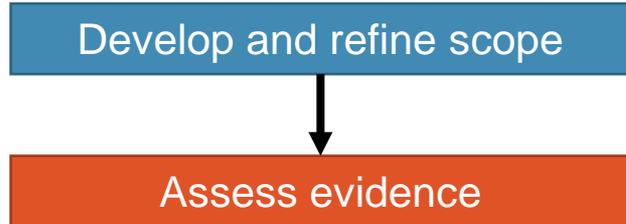


# Description of Interaction - Defining the Scope

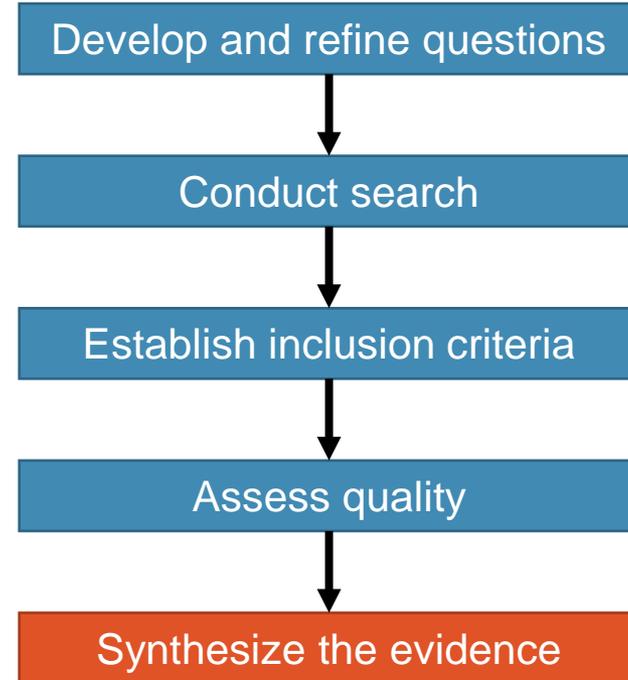
- Initial guideline development meeting
  - Provided training in systematic review processes
  - Participated in developing and refining scope
- Systematic review team
  - Translated scope into review questions
  - Developed PICO document
  - Conducted review of guidelines and systematic reviews
  - Submitted review questions, PICO document and report summarizing guidelines and systematic reviews for feedback
- Point of interaction
  - Systematic review addressed needs of guideline committee
  - Set realistic expectations of the systematic review

# Description of Interaction - Assessing the Evidence

Guideline Development Process



Systematic Review Process





# Description of Interaction - Assessing the Evidence

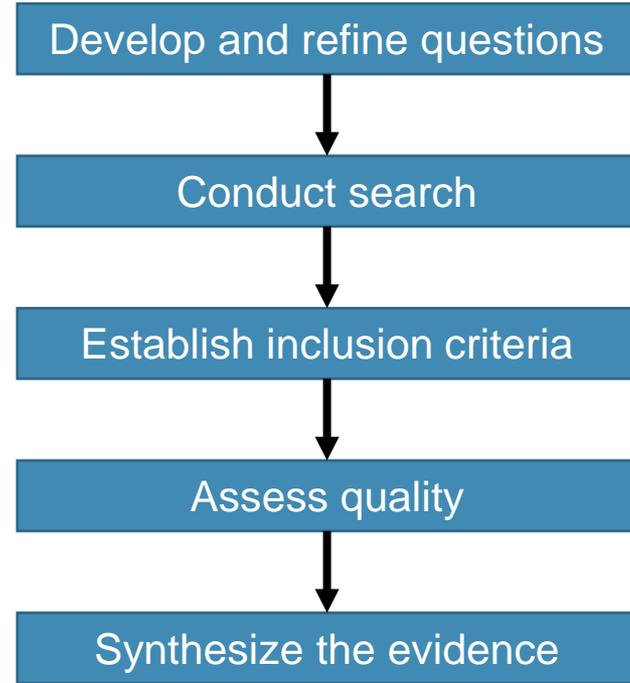
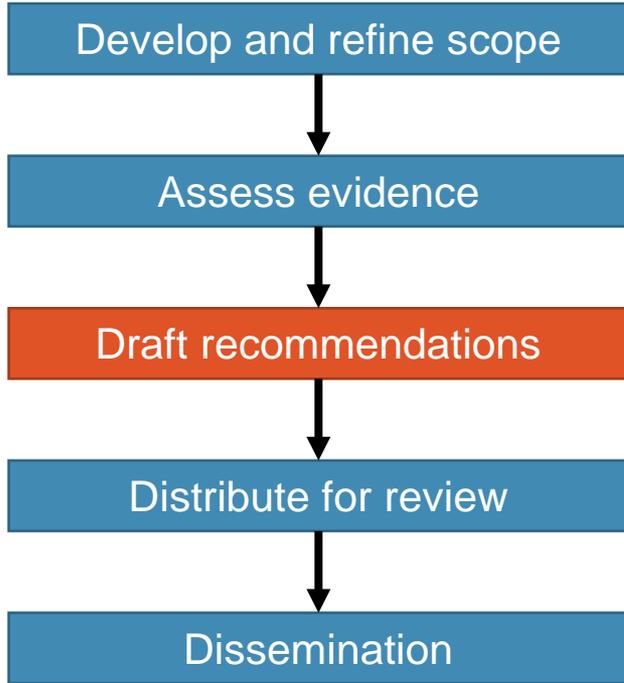
- Systematic review team
  - Conducted search, established inclusion and exclusion criteria, assessed quality, synthesized evidence, drafted report
- Guideline development committee
  - Reviewed report and provided feedback
- Point of interaction
  - Better understanding of the systematic review
  - Provide more meaningful feedback



# Description of Interaction - Developing the Guideline

Guideline Development Process

Systematic Review Process





# Lessons Learned

- One co-chair should be experienced with process
- Orientation meeting early in process
  - Provide training in systematic reviews and their use in developing guidelines



# Limitations

- Not all guideline development committees have resources to commission systematic reviews
- Dependent on the strengths and weaknesses of the methodologist



# Summary

- Implemented in 7 evidence-based guidelines
- Ensured appropriate and timely intersection
  - Ensured systematic review met the needs of the guideline committee
  - Ensured systematic review met IOM standards
  - Helped guideline committee understand the methods and outcomes of the systematic review
  - Provided consistency across guideline committees
- Future Research
  - To determine best practices of interaction