

Comparative Effectiveness & The Cochrane Collaboration

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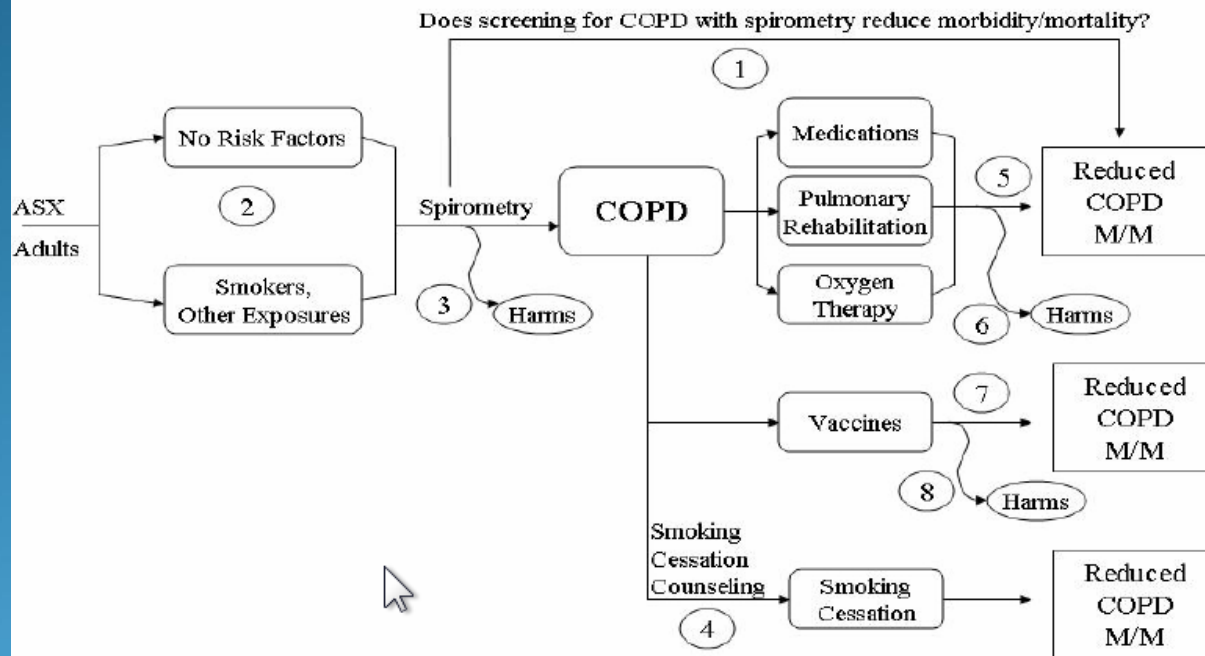
Co-Chair, Cochrane Collaboration Steering Group

What is an “Evidence Synthesis”

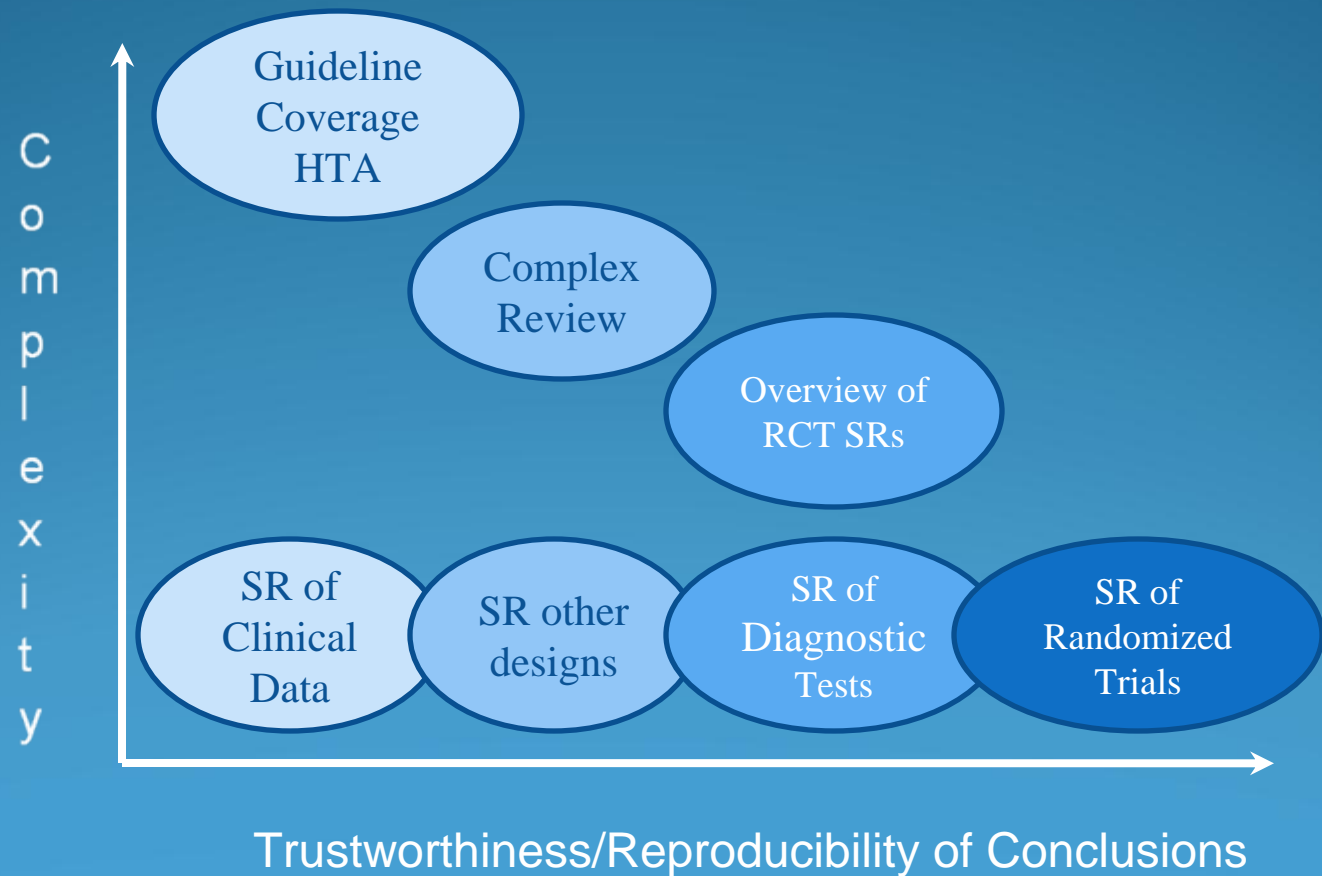
- Many different types
- Vary in
 - Complexity
 - Trustworthiness of conclusions

A Complex Review Question

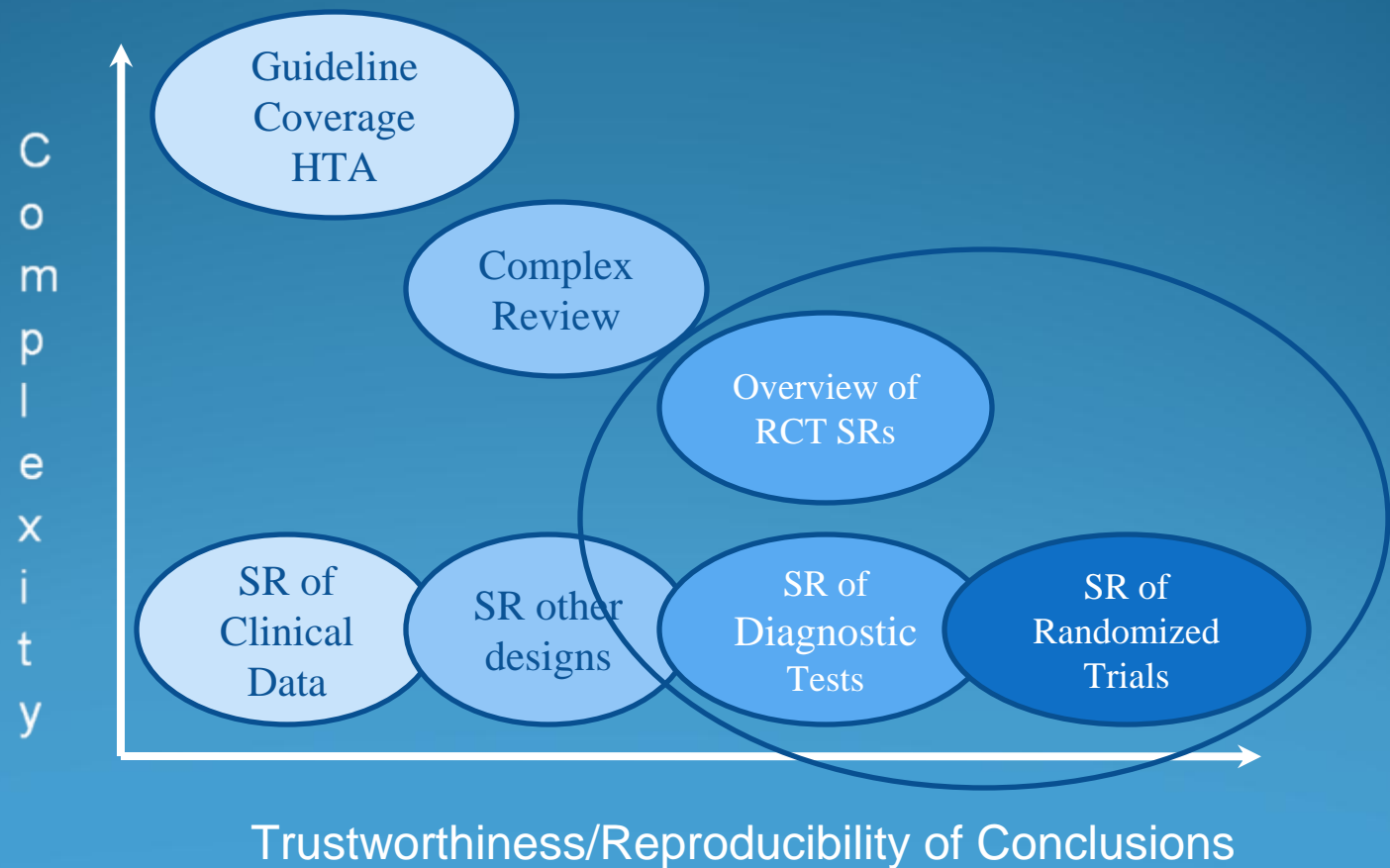
Figure 1. Analytic Framework for COPD Screening using Spirometry



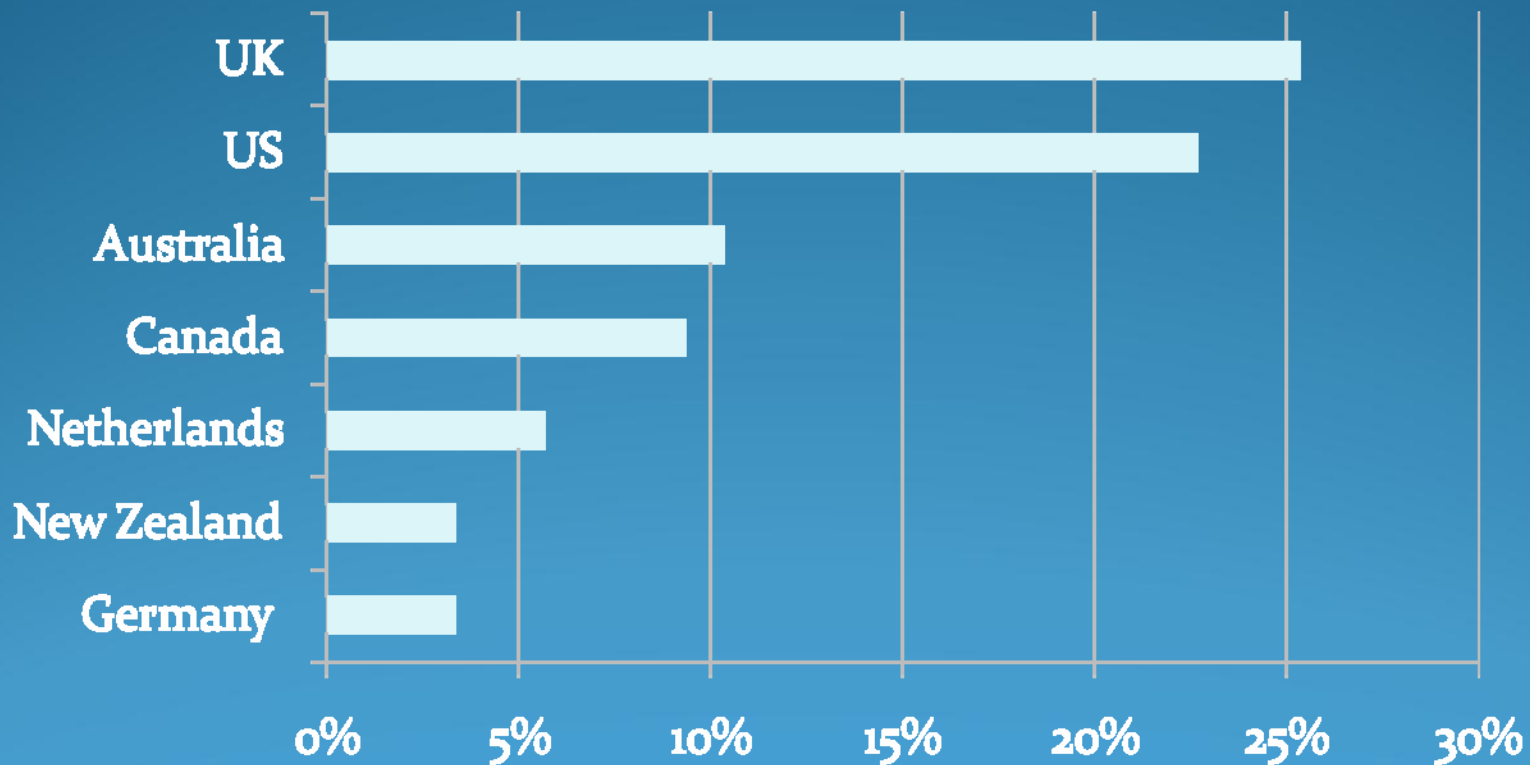
What is an “Evidence Synthesis”



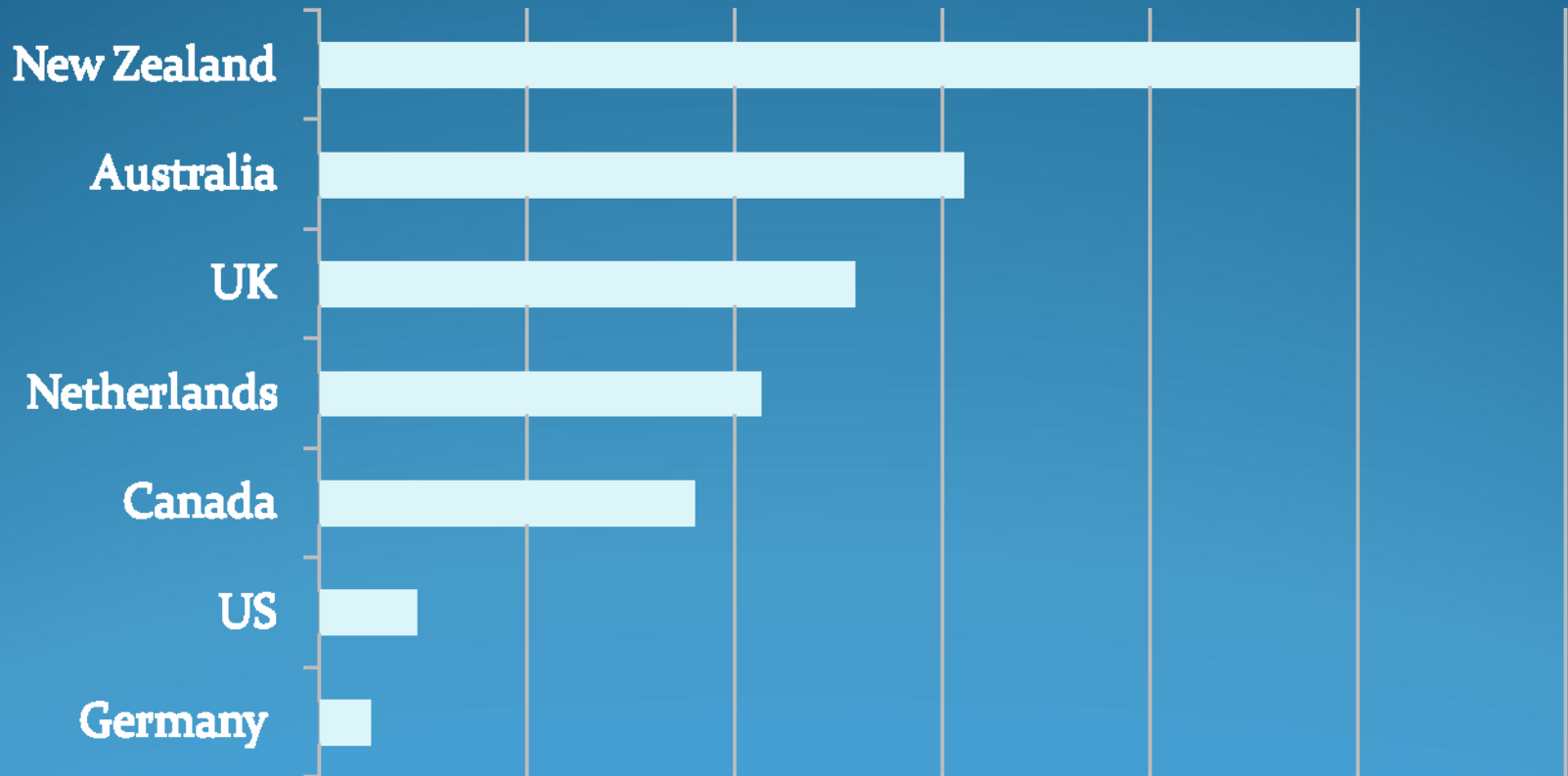
Cochrane Reviews



Systematic Review Production by Country (2004)



SRs per Million Population

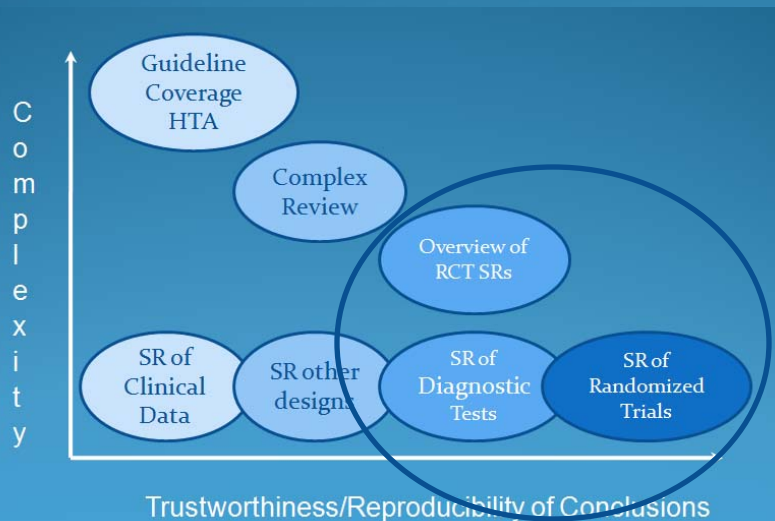


What's Needed for an Evidence Synthesis Program

- Commissioned syntheses
- Investigator-initiated syntheses
- Support for updating
- Infrastructure
 - Editorial
 - Methods development
 - Tools
- Capacity building

Building on Cochrane Activities

- Commissioned syntheses
- Investigator-initiated syntheses
- Updating
- Infrastructure
- Capacity building



Cochrane Process

- Authors identify topic of interest
- Editorial oversight & mentoring throughout the process of review planning & completion
- Procedures & standards laid out in the Cochrane Handbooks
 - Produced by Methods Groups
- Tools
 - CENTRAL – Cochrane database of trials
 - RevMan – Review authoring software

Mentoring and training authors

- Review groups
 - Commit to authors from title registration
 - Peer review and shaping of protocols
 - Peer review & extensive comments on completion
 - Assistance with updating
- Centres
 - Author training workshops
 - Contributors meetings

Developing Methods

- Statistical Methods Group
- Bias Methods Group
- Adverse Effects
- Screening and Diagnostic Tests
- Non-Randomised Studies
- Patient Reported Outcomes
- Prognosis
- 6 others

Quality of Cochrane Reviews

- Culture of continuous improvement
- Active role for methodologists
 - Studies of Cochrane reviews
 - Cochrane Handbooks
 - Reviews of Interventions
 - Diagnostic Test Accuracy Reviews
 - Role in peer review (protocol & review)
- Stringent conflict of interest policy

The Cochrane Multiplier Effect

- Funding comes primarily from national government sources
 - Supports infrastructure
 - Editorial bases
 - Centres
- Authors are not paid for their work
- Methodologists are not paid for their contributions
- Most work in academic institutions – integrate Cochrane activities with academic roles

UK Cochrane Funding

- Annual NHS budget - £100 billion
- Annual UK R&D budget - £1.5 billion
- Annual Cochrane Funding - £4.5 million
 - Review Groups
 - UK Cochrane Centre
 - NHS Cochrane Award Scheme

UK Cost per Review

- Commissioned non-Cochrane - £140,000
- Cochrane review - £10,000

Cochrane Impact on non-Cochrane Systematic Reviews

- Cochrane developed tools are widely used
 - CENTRAL searched for most SRs
 - NLM Indexing of RCTs – universally useful
 - Cochrane Handbooks for methodological guidance
 - RevMan software to support review authorship and data analysis
- Growing acceptance by medical journals
- Growing recognition by promotion committees
- Cochrane trained authors often publish elsewhere

How the USA Could Participate More Effectively

- Coordination of Funding
 - Which Review Groups?
 - Coordination by Cochrane Center
- Diagnostic test reviews
 - Author & review group support
 - Methods development
 - Register of studies
- Methods development for non-randomized studies
- NLM related Cochrane activities

