

# The GRADE-CERQual approach: Assessing confidence in findings from a review of qualitative research

**GRADE** CERQual



Alliance for  
Health Policy and  
Systems Research



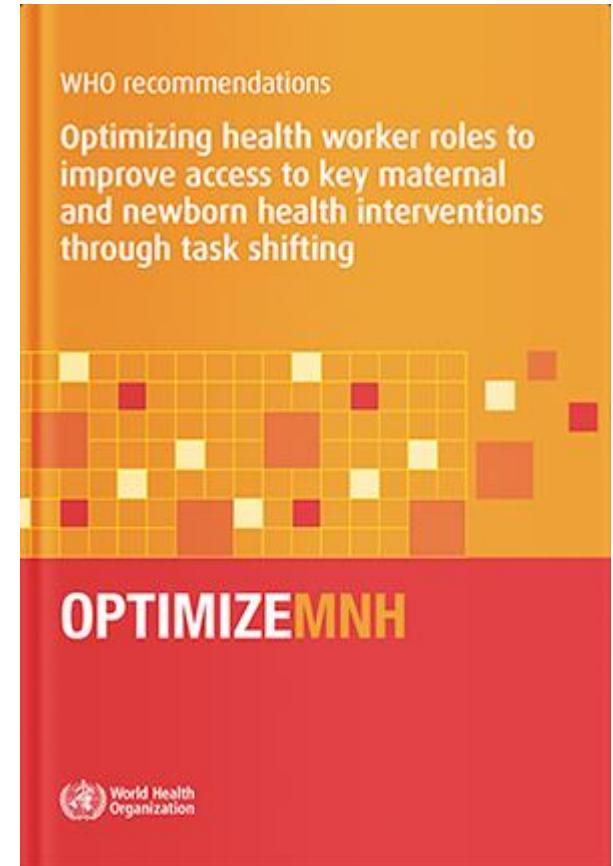
# Why did we develop GRADE-CERQual?

- Systematic reviews of qualitative research (also called qualitative evidence syntheses) becoming increasingly common
- Also increasingly being used in guideline or policy development processes
- Users need methods to assess how much confidence to place in findings from these reviews
- Users likely to make these judgements anyway – it is helpful to provide a systematic and transparent way for doing this

# Originally developed whilst conducting a WHO guideline

Optimizing health worker roles for maternal and newborn health through task shifting (OptimizeMNH)

The guideline focuses on the extent to which tasks can be moved to health workers with lower levels of training (“task-shifting”), for maternal and newborn care



# How was GRADE-CERQual developed?

- Researchers with backgrounds in qualitative research and systematic reviews
- Broad consultation with wide group of stakeholders

Needed an approach that:

- Could be applied to typical types of qualitative study approaches and data
- Was easy to use
- Allowed judgements to be reported transparently
- Allowed the judgements to be understood



# Relationship to GRADE

- CERQual is part of the GRADE Working Group
- CERQual shares the same aim as the GRADE tool used to assess the certainty of evidence of *effectiveness*
- However, CERQual is grounded in the principles of qualitative research

**GRADE** working group



Grading of Recommendations Assessment,  
Development and Evaluation (short GRADE)  
<http://www.gradeworkinggroup.org/>

**GRADE** CERQual

# CERQual is not a tool for:

- Assessing how well an individual qualitative study was conducted
- Assessing how well a systematic review of qualitative studies was conducted
- Assessing quantitative studies of quality of care
- Assessing confidence in ‘narrative’ or ‘qualitative’ summaries of the effectiveness of an intervention, where meta-analysis is not possible



# What does the CERQual approach do?

- CERQual aims to transparently assess and describe how much confidence to place in findings from qualitative evidence syntheses



# CERQual is applied to individual synthesis findings

- In the context of a qualitative evidence synthesis, a finding is...:

...an analytic output that describes a phenomenon or an aspect of a phenomenon

- Findings from qualitative evidence syntheses can be presented as:
  - themes, categories or theories
  - As both descriptive or more interpretive findings

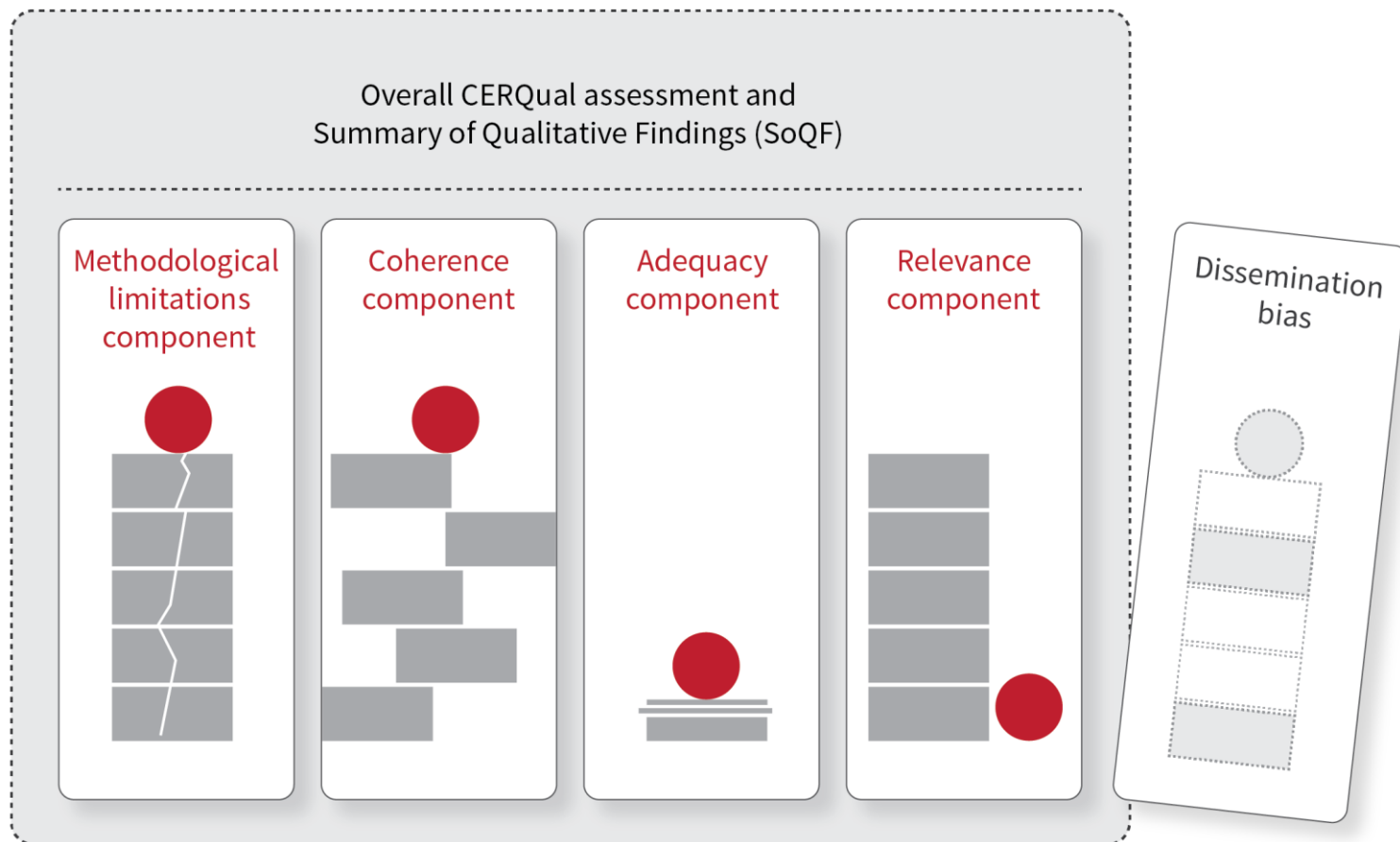


# What do we mean by 'confidence in the evidence'?

An assessment of the extent to which a review finding is a reasonable representation of the phenomenon of interest

- i.e. the extent to which the phenomenon of interest is likely to be substantially different from the review finding

# The CERQual approach





CERQual made easy

## Scenario:

Decision makers are considering a new intervention

- But how are female patients likely to experience it?

Review of qualitative research is carried out –findings describe women's experiences of the intervention

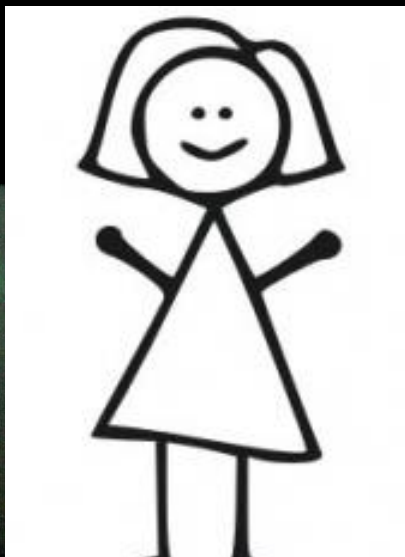
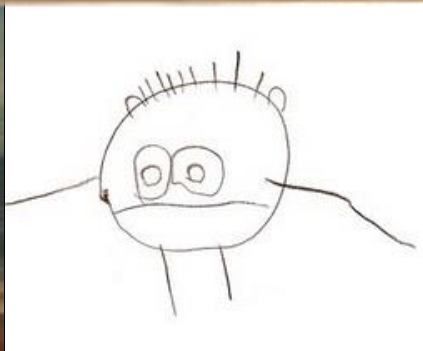




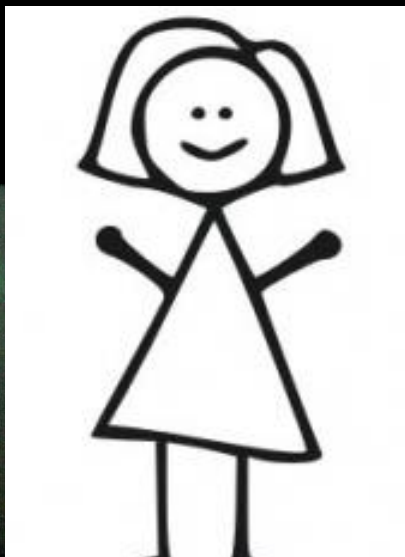
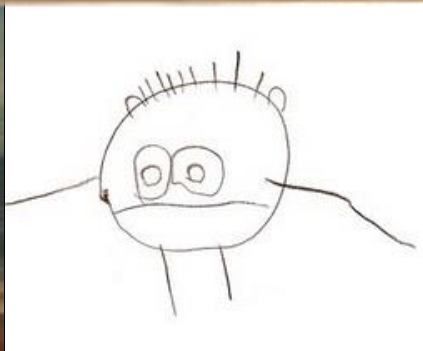








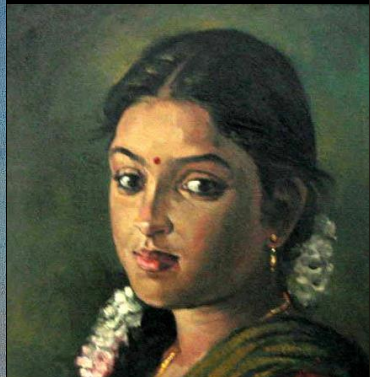














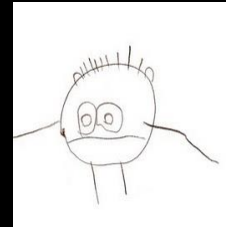






For each component, we make an assessment.  
expressed as:

- No or few concerns
- Minor concerns
- Moderate concerns
- Serious concerns

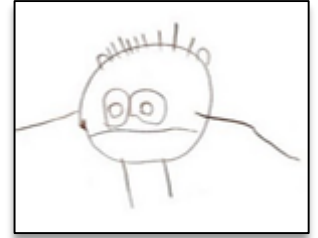




After assessing all four components an overall assessment is made, expressed as either:

- High confidence
- Moderate confidence
- Low confidence
- Very low confidence

# Component 1: Methodological limitations



The extent to which there are *problems in the design or conduct* of the primary studies supporting a review finding

# Concerns about methodological limitations

- We are less confident that the finding reflects the phenomenon of interest when:

the primary studies underlying a review finding are shown to have **problems in the way they were designed or conducted**



- A critical appraisal tool for qualitative studies should be used to make this assessment
  - Typically includes appraisals of how the participants and settings were selected, how data was collected and analysed, researcher reflexivity etc.
- Currently no widespread agreement about the best tool – research agenda in place



# Component 2: Relevance



The extent to which the body of evidence from the primary studies supporting a review finding is *applicable to the context* specified in the review question

# Concerns about relevance

We are less confident that the finding reflects the phenomenon of interest when:

the contexts of the primary studies underlying a review finding are **substantively different from the context** of the review question



# Assessing relevance - examples

- **Example of *indirect relevance*:** In a synthesis focusing on children and publicly funded care, one study focused on children age 9-18 years in private foster homes.
- **Example of *partial relevance*:** Several of the included studies focused on girls only, while the synthesis was interested in all children.
- **Example of *uncertain relevance*:** In the same synthesis, the type of foster care in some of the studies was unclear.

# Component 3: Coherence



An assessment of how clear and cogent the fit is between the data from the primary studies and the review finding\*

# Concerns about coherence

We are less confident that the finding reflects the phenomenon of interest when:

- Some of the data contradict the finding
- Some of the data are ambiguous



# Assessing coherence of the review finding: Dealing with variation or ambiguity in the data

Review finding

## Option 1:

*Most children preferred staff to have week-long shifts because they liked the stability and structure and the opportunity to form attachment. Children in one study preferred short shifts, but these children had poor relationships with their caregivers. In one study the experiences of the children were unclear.*

## Option 2:

*In situations where children have good relations with their caregivers, they prefer longer shifts because these provide stability and structure and opportunities to form attachment.*

Coherence

**No** concerns about coherence

Minor concerns about **coherence**. The finding is broadly supported by the data. However, one study gave a contradictory account of children's experiences, although this may be explained by their poor relationship with caregivers. In another study, children's experiences were unclear.

# Component 4: Adequacy of data



The degree of *richness* and *quantity of data* supporting a review finding

# Concerns about adequacy of data

We are less confident that the finding reflects the phenomenon of interest when:

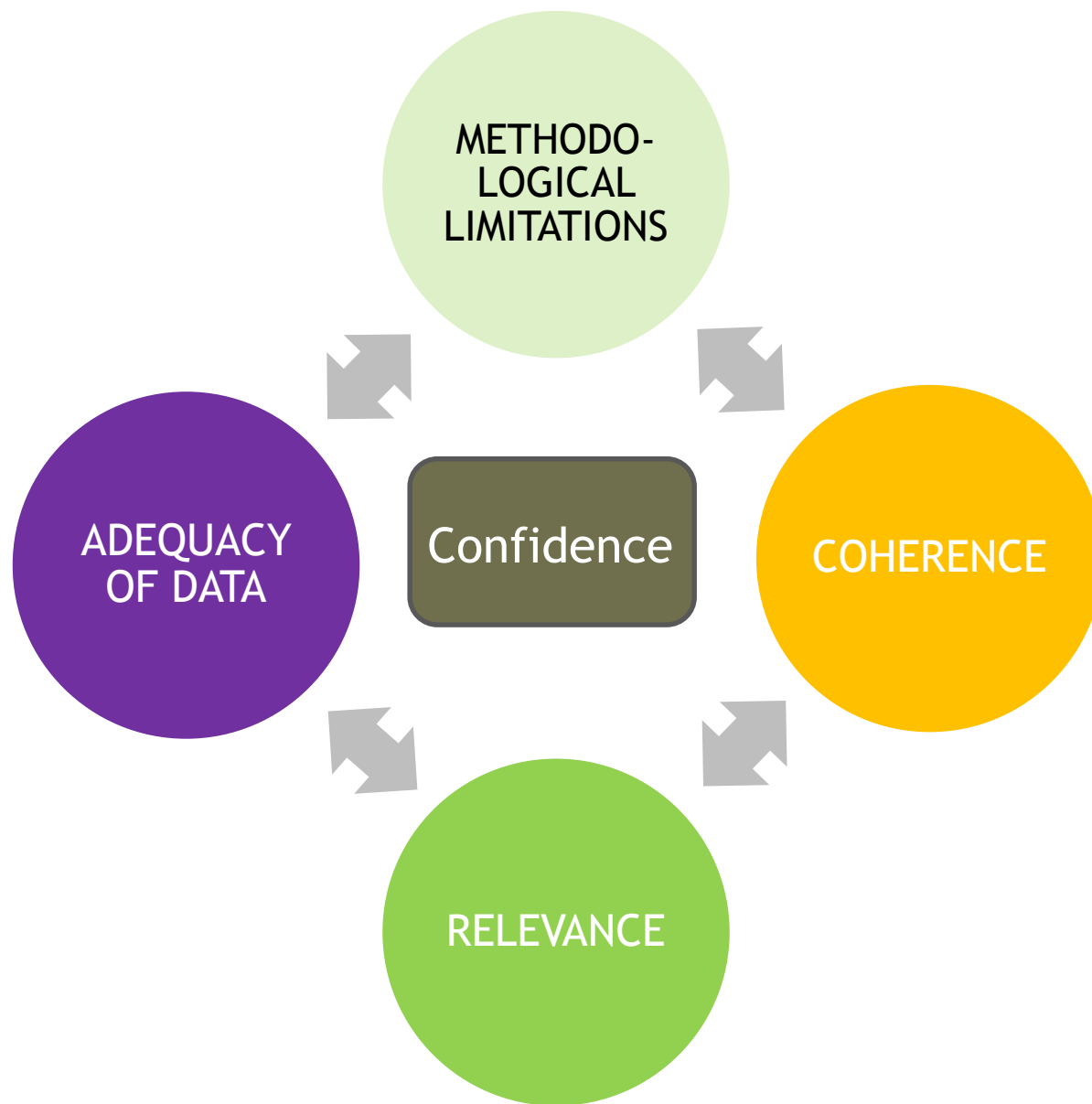
the data underlying a review finding are not sufficiently rich or only come from a small number of studies or participants

- Review authors need to make a judgement in the context of a specific review finding on what constitutes data that are not sufficiently rich or are drawn from too small a number of studies





Making an overall assessment



After assessing each of the separate components, we make an overall judgement of the confidence in each review finding

# Confidence can be assessed as high, moderate, low or very low

- **High confidence:** It is highly likely that the review finding is a reasonable representation of the phenomenon of interest
- **Moderate confidence:** It is likely that the review finding is a reasonable representation of the phenomenon of interest
- **Low confidence:** It is possible that the review finding is a reasonable representation of the phenomenon of interest
- **Very low confidence:** It is not clear whether the review finding is a reasonable representation of the phenomenon of interest

# Summary of Qualitative Findings tables

**Objective:** To identify, appraise, and synthesise qualitative research evidence on the barriers and facilitators to the implementation of lay health worker programmes for maternal and child health\*

**Perspective:** Experiences and attitudes of stakeholders about lay health worker programmes in any country

**Included programmes:** Programmes that were delivered in a primary or community health care setting, that intend to improve maternal or child health, and that had used any type of lay health worker, including community health workers, village health workers, birth attendants, peer counsellors, nutrition workers, and home visitors

Review Finding	CERQual Assessment of Confidence in the Evidence	Explanation of CERQual Assessment	Studies Contributing to the Review Finding
While regular salaries were not part of many programmes, other monetary and nonmonetary incentives, including payment to cover out-of-pocket expenses and “work tools” such as bicycles, uniforms, or identity badges, were greatly appreciated by lay health workers.	Moderate	This finding was graded as moderate confidence because of minor concerns regarding methodological limitations, relevance, coherence, and adequacy.	Studies 2; 5; 11; 12; 22; 29
Some unsalaried lay health workers expressed a strong wish for regular payment.	Low	This finding was graded as low confidence because of moderate concerns regarding relevance and substantial concerns regarding adequacy of data.	Studies 5; 13

A SoQF table is the final output of the process of making a CERQual assessment, and includes four elements:

1. A summary of each review finding
2. An overall CERQual assessment for each review finding
3. An explanation of the overall assessment
4. Reference to the studies contributing data to the review finding, including clarification of the contexts in which those studies were conducted

**Factors that influence the provision of intrapartum and postnatal care by skilled birth attendants in low- and middle-income countries: a qualitative evidence synthesis**  
Cochrane review

Staff shortages and work overload could jeopardise health workers' ability to display support, empathy, and friendliness to women in labour.	
<b>Assessment for each CERQual component</b>	
<i>Methodological limitations</i>	Minor concerns because reflexivity was not reported in 2 studies; ethical considerations were not reported in 1 study; and sampling strategy was not clear in 2 studies. However these may not influence the finding.
<i>Coherence</i>	No to very minor concerns
<i>Relevance</i>	Moderate concerns because data were from a limited number of regions and level-of-care settings.
<i>Adequacy</i>	Moderate concerns because data were from 3 studies with very thin data.
<b>Overall CERQual assessment</b>	
Very low confidence	Due to minor concerns about methodological limitations; and moderate concerns about relevance and adequacy
<b>Contributing studies/setting</b>	
<p><b>Africa (2), Latin America &amp; Caribbean (1)</b></p> <p>Maputle 2010: South Africa, tertiary care hospital</p> <p>Conde-Agudelo 2008: Colombia, public and private hospitals, 44% were university teaching hospitals</p> <p>VSO 2012: Uganda, hospitals and health centres</p>	

# In summary, CERQual can

- Provide an assessment of confidence in findings from qualitative evidence syntheses
- Facilitate reflection on findings from qualitative evidence syntheses
- Make more explicit:
  - where there are gaps or insufficient evidence in relation to a review question
  - where only poor quality studies are available
- Prompt the generation of new explanations or concepts to explain patterns in findings

Applying CERQual involves judgements. CERQual attempts to make these judgements transparent and increase the contribution of qualitative research to decision making

Questions?



# Many thanks!

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To learn more about **GRADE CERQual**

- Join the mailing list
- Join the project group
- Join a webinar or face-to-face training

[GRADECERQual@gmail.com](mailto:GRADECERQual@gmail.com)

[www.cerqual.org](http://www.cerqual.org)

To learn more about the GRADE Evidence to Decision frameworks:

<http://www.bmj.com/content/353/bmj.i2016.long>