

The GRADE-CERQual approach: Assessing confidence in findings from syntheses of qualitative evidence

GRADE CERQual



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Systems Research

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GRADE CERQual

**Confidence in the Evidence from
Reviews of Qualitative research**

Why did we develop GRADED-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

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:

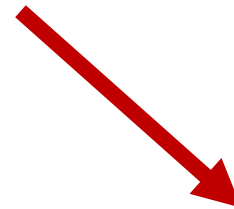
- Could be applied to typical types of qualitative study approaches and data
- Was easy to use
- Allowed judgements to be reported transparently
- Allowed the judgements to be understood



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



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

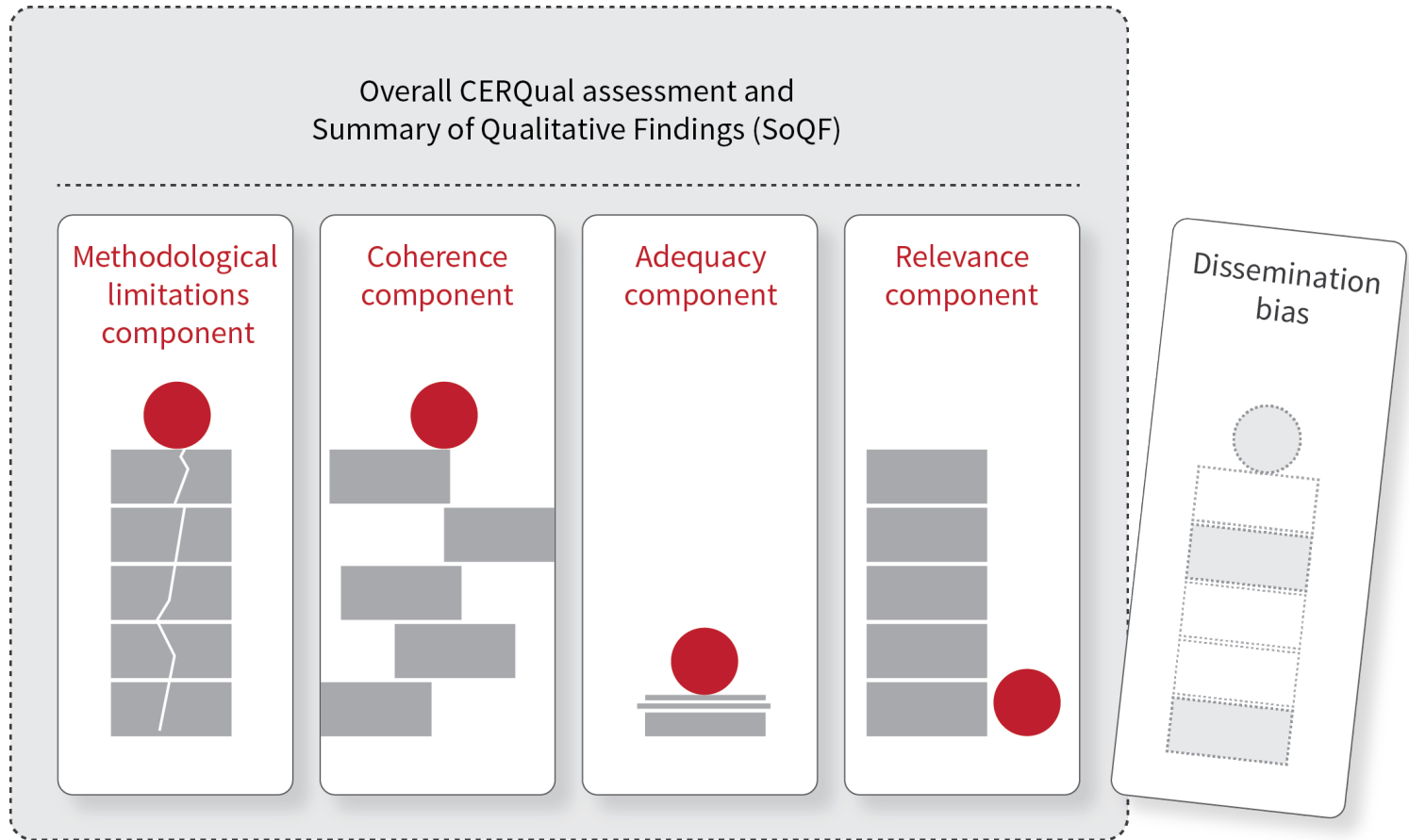
- Findings from qualitative evidence syntheses can be presented as:
 - themes, categories or theories
 - As both descriptive or more interpretive findings

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 phenomenon of interest is unlikely to be substantially different from the review finding

The CERQual approach



What skills do you need to apply CERQual?

- An understanding of systematic review methodology
- An understanding of the principles of qualitative research



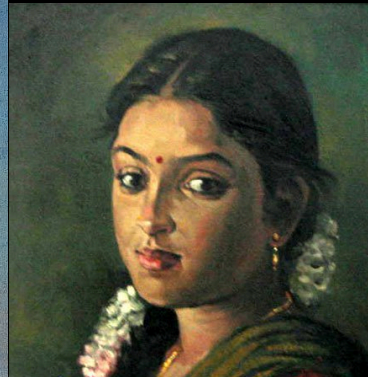
CERQual made easy

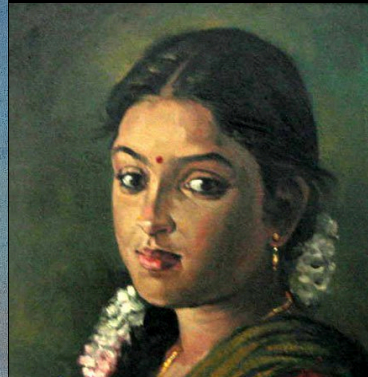
Scenario:

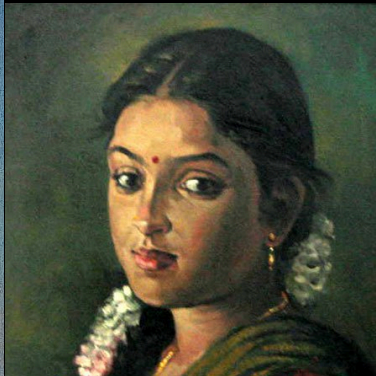
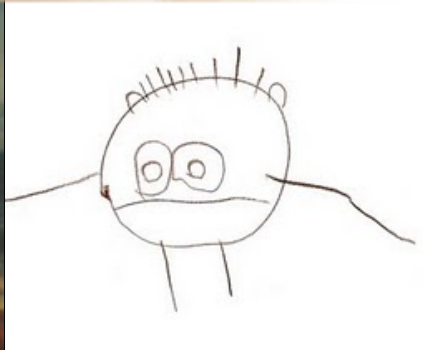
Decision makers are considering a new intervention

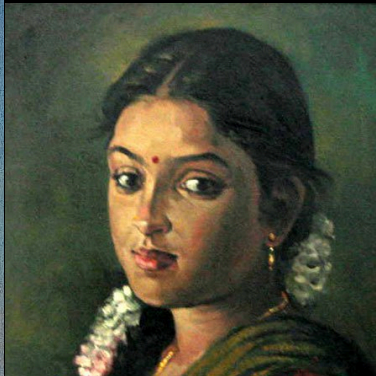
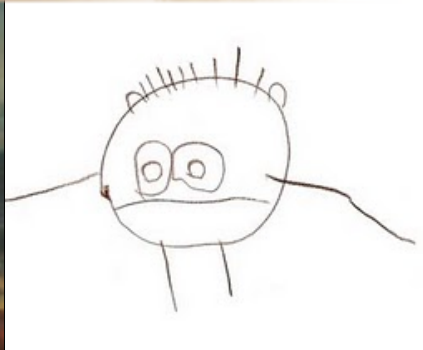
- But how are female patients likely to experience it?

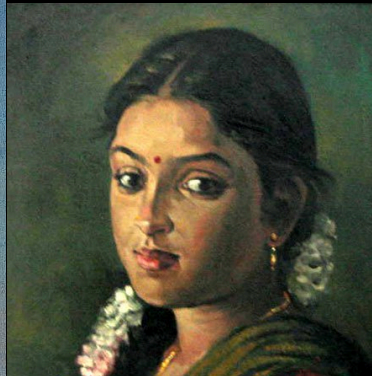
Review of qualitative research is carried out –findings describe women's experiences of the intervention

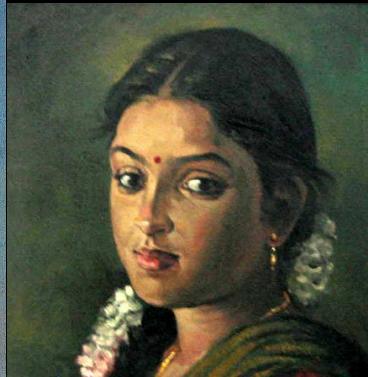


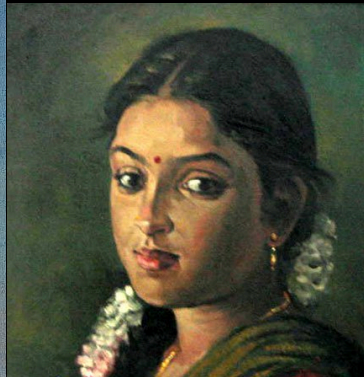


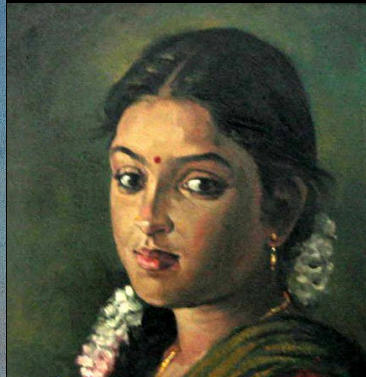


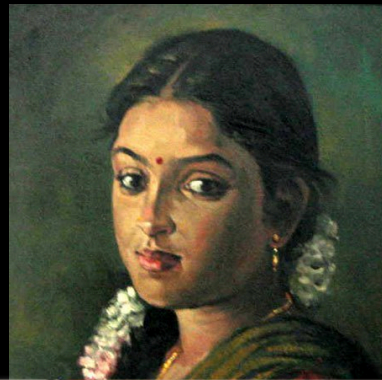








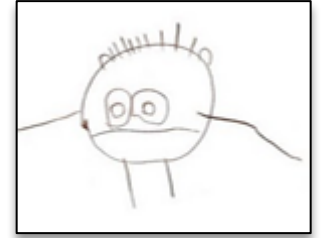




After assessing all four components an overall assessment is made, expressed as either:

- 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, one included study focused on children from 3-5 years while the synthesis was interested in the age group 10-18 years
- **Example of *partial relevance***: In the same synthesis, 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 ages of the children 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*

*Has been updated since PLOS article

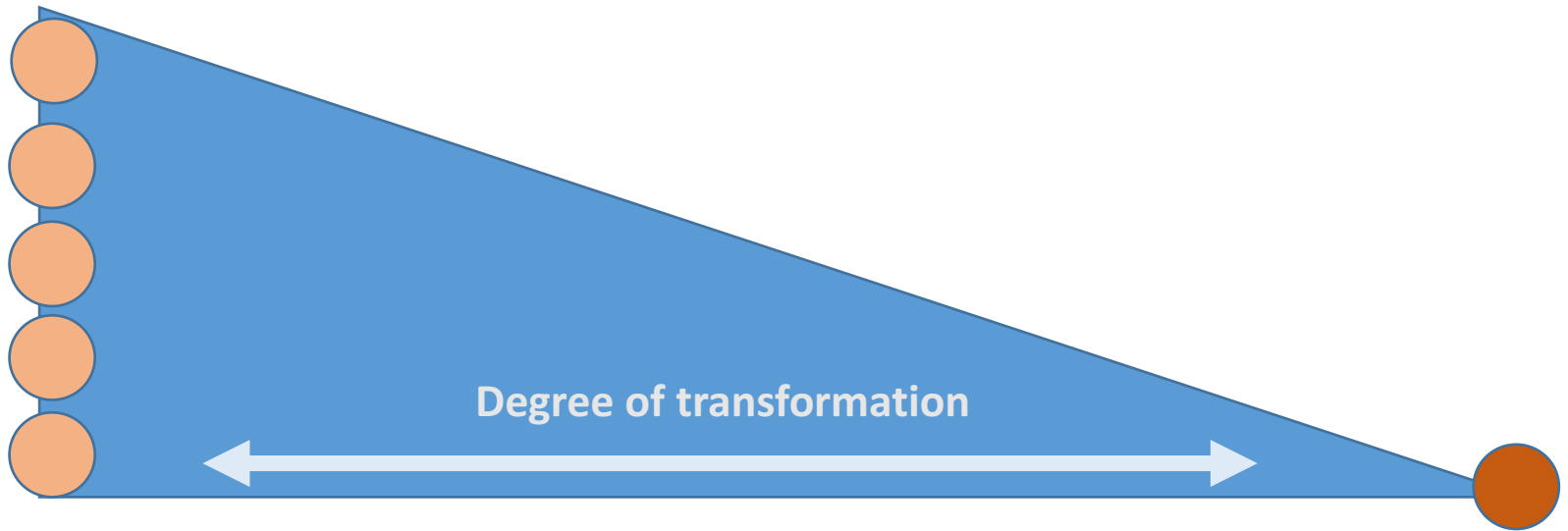
Concerns about coherence

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 – transformation of the data



Component 4: Adequacy of data



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

Concerns about adequacy of data

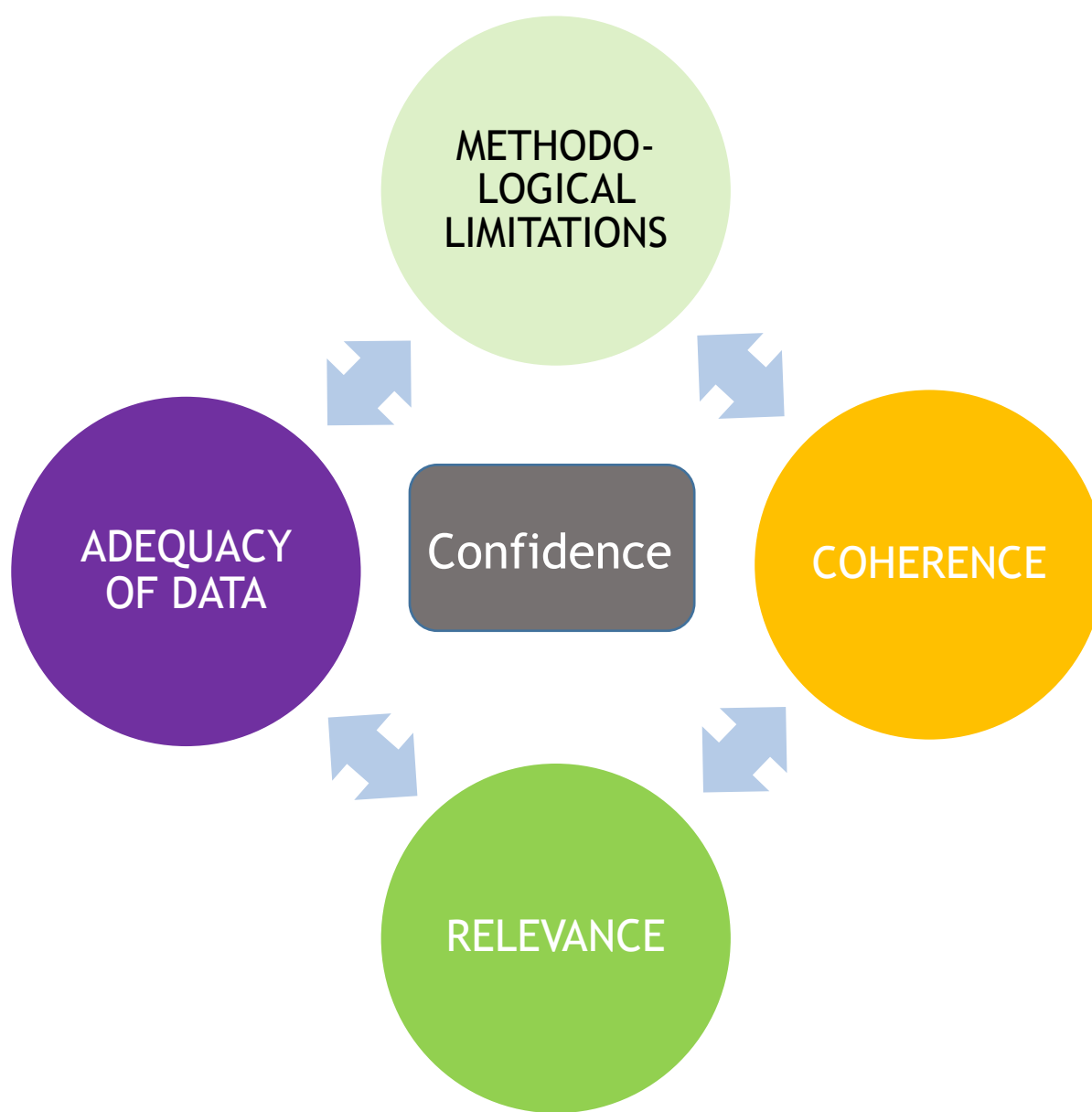
We are less confident that the finding reflects the phenomenon of interest when:

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 on what constitutes data that are not sufficiently rich or too small a number in the context of a specific review finding



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

CERQual qualitative evidence profile

Review Finding	Studies Contributing to the Review Finding	Assessment of Methodological Limitations	Assessment of Relevance	Assessment of Coherence	Assessment of Adequacy	Overall CERQual Assessment of Confidence	Explanation of Judgement
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.	Studies 2; 5; 11; 12; 22; 29	Minor methodological limitations (five studies with minor and one study with moderate methodological limitations)	Minor concerns about relevance (studies of lay health worker programmes from five countries and three continents: United States, Uganda, Nepal, Kenya, and India)	Minor concerns about coherence (data reasonably consistent within and across all studies)	Minor concerns about adequacy (six studies that together offered moderately rich data overall)	Moderate confidence	This finding was graded as moderate confidence because of minor concerns regarding methodological limitations, relevance, coherence, and adequacy.

- Transparency of the process of assessing each component is enhanced through the use of a qualitative evidence profile like this one
- In this profile, review authors should indicate:
 - Whether they have no, minor, moderate or substantial concerns regarding each CERQual component and what these concerns are
 - Their overall CERQual assessment and their explanation of this
- The Qualitative Evidence Profile can be included as an appendix to a qualitative evidence synthesis

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 (could be included as footnotes)
4. Reference to the studies contributing data to the review finding, including clarification of the contexts in which those studies were conducted

Operationalising the CERQual approach

- Our recently published PLOS Medicine paper provides some guidance on operationalizing each CERQual component – *please have a look at this paper before you try to apply CERQual!*
- We are not recommending any specific tools to assess each CERQual component. Rather, we have identified a range of issues that should be considered for each component
- More detailed guidance and prompts are being developed this year and will be published as a series of papers
- Members of the CERQual Project Group are available to mentor new users

In summary: CERQual has the potential to:

- 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

Getting involved in GRADE-CERQual

- You are invited to join our mailing list and the GRADE-CERQual Project Group via our website: www.cerqual.org
- You can make an important contribution by:
 - Piloting CERQual in your qualitative evidence synthesis
 - Recording what worked well and what was more difficult in the process
 - Sharing this feedback with us, so that we can use this to improve our guidance for undertaking CERQual assessments
- Practical resources (e.g. templates) are available and we can also link new CERQual users with a mentor. Please contact us to request access to these
- The GRADE-CERQual Project Group will hold meetings and training sessions during the year – information on these will be sent out via our mailing list

To learn more about CERQual

- Join the mailing list
- Join the project group
- Join a webinar or further face-to-face training
- Forthcoming series of papers, probably in Implementation Science

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