Carrying out a qualitative evidence synthesis –

Choosing a methodology/method(s)

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Acknowledgement Ruth Garside QIMG – sharing slides

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Approaches to synthesis (I)

• Aggregative
  – More “additive” approach
  – Summation/ aggregation of the existing themes
  – Concepts clearly pre defined
  – More deductive
Approaches to synthesis (II)

• Interpretative
  – Interpretation of existing findings
  – Develops concepts and theories to explain evidence base
  – Inductive
Methods of evidence synthesis

Figure 1. Methodological continuum of synthesis approaches and methods. Source: Adapted from Thomas et al. (2012).
Methods for the synthesis of qualitative research: a critical review.

Barnett-Page E, Thomas J. BMC Research Methodology 2009

**FIGURE 1: Dimensions of difference**

Ranging from subjective idealism through objective idealism and critical realism to scientific realism to naïve realism [41, p45-46].

- Subjective idealism: there is no single shared reality independent of multiple alternative human constructions
- Objective idealism: there is a world of collectively shared understandings
- Critical realism: knowledge of reality is mediated by our perceptions and beliefs
- Scientific realism: it is possible for knowledge to approximate closely an external ‘reality’
- Naïve realism maintains that reality exists independently of human constructions and can be known directly.

Epistemology

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<th>Realist</th>
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<th>Meta-narrative</th>
<th>CIS</th>
<th>Meta-study</th>
<th>Meta-ethnography</th>
<th>Grounded theory</th>
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<th>Textual narrative synthesis</th>
<th>Framework synthesis</th>
<th>Ecological triangulation</th>
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Methods share many common aspects……

- …… but may also differ in:
  - Purpose
  - Sampling
  - Analysis
  - Output

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Choosing a methodology/method

• Experience
• Time & resources
• Purpose of review
• Audience and purpose
• Type of evidence available
• Appropriateness for a Cochrane context

• We have more experience of applying CERQual to a limited number of methodologies/methods such as Framework synthesis

Decision to conduct a qualitative evidence synthesis

Purpose of the additional qualitative synthesis

To aggregate/summarise/integrate qualitative data to address questions in relation to a specific intervention review

Thematic analysis without theory generation
Meta-aggregation
Meta-summary

Product: Aggregated findings from source papers

To interpret synthesised qualitative evidence and develop explanatory theory or models

Framework synthesis
Meta-ethnography
Grounded theory
Thematic analysis with theory generation
Best fit synthesis

Product: Explanatory theory, analytical or conceptual framework or interpretative framework/mechanism

Primarily to integrate and interpret qualitative and quantitative evidence within a single approach. Can be used to develop explanatory theory.

Realist Review
Matrix Method
Narrative Synthesis (Popay)
Bayesian Synthesis - QCA
Critical Interpretive synthesis

Product: Explanatory theory, analytical or conceptual framework or interpretative framework/mechanism

Choice of Synthesis (Adapted from Noyes & Lewin, 2011)