# We11-15 Quality Assessment (Introduction and Practical)

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## Before You Begin...

- Consider how you will use judgements of quality (cp. 50% of published Cochrane Quantitative Reviews performed quality appraisal but did not make it clear how judgements were used!)
  - To exclude or to moderate?
- Will chosen instrument militate against certain types of research?
- Quality of <u>reporting</u> or quality of <u>study</u>?

# Variability in Practice - 1

- 21 papers did not describe appraisal of candidate studies
- 6 explicitly mentioned not conducting formal appraisal of studies
- 5 papers did a critical appraisal, but did not use a formal checklist
- 7 described modifying existing instruments
- 1 used an existing instrument without modification

Dixon-Woods, Booth & Sutton (2007)

## Variability in Current Practice - 1

- 23 papers did not describe critical appraisal
- 5 papers explicitly pleaded against quality assessment of papers or provided valid reason for not conducting quality appraisal.
- Criteria used varied between detailed descriptions of relevant items in existing or modified checklists to a set of broad criteria evaluating, for example, rich description of data, credibility or relevance of the original study.

Hannes and Macaitis (2012)

## Variability in Current Practice - 2

One team used overall judgement (Smith et al., 2005).

Five opted for self-developed assessment instrument

Three used previously developed checklists to create own.

Two mentioned critical appraisal, but did not specify tool.

Most used existing instruments/frameworks. 24 different assessment tools identified:

Critical Appraisal Skills Programme (CASP) (n = 18)

Mays and Pope criteria (n = 6)

Popay criteria (n = 6)

Joanna Briggs Institute (n = 4).

Hannes and Macaitis (2012)

# Appraising research quality

- **1. Epistemological criteria:** Judgement of 'trustworthiness' requires criteria tailored to different research 'paradigms'.
- 2. Theoretical Criteria: Explicit theoretical framework shaping the design of the study and informing claims for generalisability
- 3. Prima facie 'Technical' criteria: Used to assess 'quality' common to all research traditions e.g.:

Sufficient explanation of background;

Method appropriate to question;

Succinct statement of objectives/research questions;

Full description of methods include approach to analysis;

Clear presentation of findings including justification for interpretation of data etc.

# Two dimensional approach to appraising qualitative research

Technical markers – CASP	Epistemological and theoretical markers – Popay et al
Technical Quality High	Description – thicker
	•Privileges Subjective experience and meanings
	•Use of theory to build explanations
Technical Quality Low	Description - thinner
	•Imposed pre-determined framework on respondents narratives.
	•Limited/no/inappropriate use of theory, little explanatory insight

#### (Noyes, 2005)

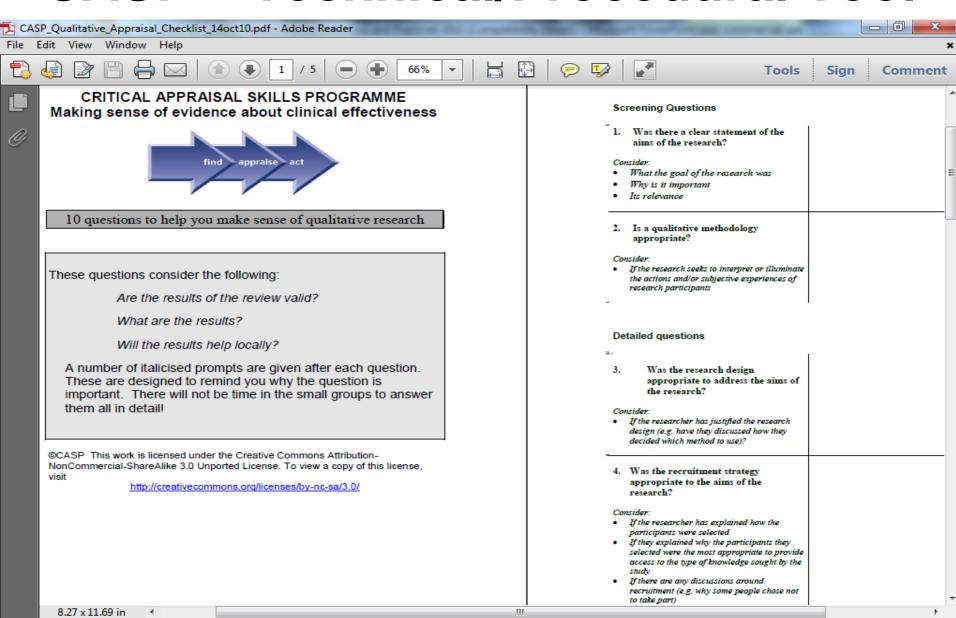
## Available Tools - 1

- CASP 10 questions to help you make sense of qualitative research <a href="http://www.casp-uk.net/wp-content/uploads/2011/11/CASP\_Qualitative\_Appraisal\_Checklist\_14oct10.pdf">http://www.casp-uk.net/wp-content/uploads/2011/11/CASP\_Qualitative\_Appraisal\_Checklist\_14oct10.pdf</a>
- Joanna Briggs Institute Critical Appraisal Checklist for Interpretive & Critical Research <a href="http://www.jbiconnect.org/agedcare/downloads/QARI\_crit\_apprais.pdf">http://www.jbiconnect.org/agedcare/downloads/QARI\_crit\_apprais.pdf</a>
- National Centre for Social Research. Quality in Qualitative Evaluation: A Framework for Assessing Research Evidence. London: National Centre for Social Research/UK Cabinet Office, 2003 <a href="http://www.civilservice.gov.uk/wp-content/uploads/2011/09/a\_quality\_framework\_tcm6-38740.pdf">http://www.civilservice.gov.uk/wp-content/uploads/2011/09/a\_quality\_framework\_tcm6-38740.pdf</a>

## Available Tools - 2

- Dixon-Woods M, Shaw RL, Agarwal S & Smith JA (2004)
   The problem of appraising qualitative research. Quality & Safety in Health Care, 13, 223-5.
- Hannes K, Lockwood C, Pearson A (2010). A
  comparative analysis of three online appraisal
  instruments' ability to assess validity in qualitative
  research. Qualitative Health Research. 20(12):1736-43.
- Popay J, Rogers A & Williams G (1998) Rationale & standards for the systematic review of qualitative literature in health services research. Qualitative Health Research, 8, 341-51.
- Seale C & Silverman D (1997) Ensuring rigour in qualitative research. European Journal of Public Health, 7, 379-84.

## **CASP – Technical/Procedural Tool**



























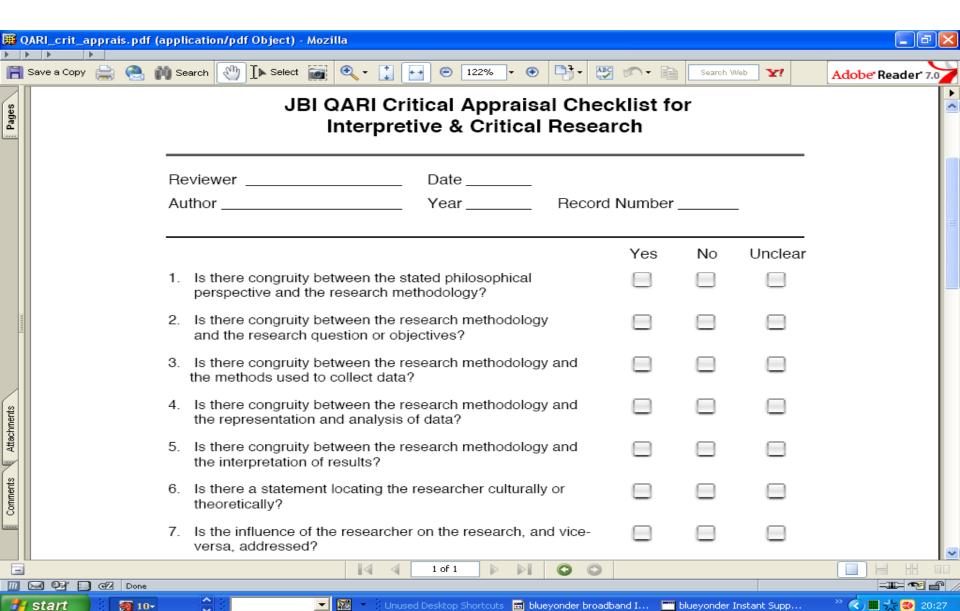








## JBI – Theoretical Tool



## Key Issue

- How are you going to use the quality assessment?
  - From quantitative assessment we know authors frequently say they do it – but they don't incorporate it into results
  - Is it technical proceduralism gone mad?
  - Or can we use the assessments to improve our synthesis and subsequent interpretation?

## Workshop - Approaches

	Quality assessment of reporting instrument	CASP Checklist
Article 1 (Carnes et al, 2008) [BMJ Qualitative Study]	Group A	Group B
Article 2 (Milder et al, 2011) [Age & Ageing Qualitative Study]	Group C	Group D

NB. All Participants also receive Handout 3 – Dixon-Woods "Prompts" and Extract from Cabinet Office Framework