### 1. Theoretical or conceptual underpinning to the research

- 0 No mention at all
- 1 General reference to broad theories or concepts that frame the study
- Identification of specific theories or concepts that frame the study and how these informed the work undertaken
- 3 Explicit discussion of the theories or concepts that inform the study, with application of the theory or concept evident through the design, materials and outcomes explored
- e.g. key concepts were identified in the introduction section
- e.g. key concepts were identified in the introduction section and applied to the study
- e.g. key concepts were identified in the introduction section and the application apparent in each element of the study design

#### 2. Statement of research aim/s

- 0 No mention at all
- 1 Reference to what the sought to achieve embedded within the report but no explicit aims statement
- 2 Aims statement made but may only appear in the abstract or be lacking detail
- 3 Explicit and detailed statement of aim/s in the main body of report

## 3. Clear description of research setting and target population

- 0 No mention at all
- 1 General description of research area but not of the specific research environment
- 2 Description of research setting is made but is lacking detail
- 3 Specific description of the research setting and target population of study
- e.g. 'in primary care'
- e.g. 'in primary care practices in region [x]'
- e.g. 'nurses and doctors from GP practices in [x] part of [x] city in [x] country'

## 4. The study design is appropriate to address the stated research aim/s

- 0 No research aim/s stated or the design is entirely unsuitable
- 1 The study design can only address some aspects of the stated research aim/s
- 2 The study design can address the stated research aim/s but there is a more suitable alternative that could have been used or used in addition
- 3 The study design selected appears to be the most suitable approach to attempt to answer the stated research aim/s
- e.g. a Y/N item survey for a study seeking to undertake exploratory work of lived experiences
- e.g. use of focus groups to capture data regarding the frequency and experience of a disease
- e.g. addition of a qualitative or quantitative component could strengthen the design

## 5. Appropriate sampling to address the research aim/s

- 0 No mention of the sampling approach
- 1 Evidence of consideration of the sample required
- 2 Evidence of consideration of sample required to address the aim
- 3 Detailed evidence of consideration of the sample required to address the research aim/s
- e.g. the sample characteristics are described and appear appropriate to address the research aim/s
- e.g. the sample characteristics are described with reference to the aim/s e.g. sample size calculation or discussion of an iterative sampling process with reference to the research aims or the case selected for study

## 6. Rationale for choice of data collection tool/s

- 0 No mention of rationale for data collection tool used
- 1 Very limited explanation for choice of data collection tool/s
- 2 Basic explanation of rationale for choice of data collection tool/s
- 3 Detailed explanation of rationale for choice of data collection tool/s
- e.g. based on availability of tool
- e.g. based on use in a prior similar study
- e.g. relevance to the study aim/s, co-designed with the target population or assessments of tool quality

### 7. The format and content of data collection tool is appropriate to address the stated research aim/s

- O No research aim/s stated and/or data collection tool not detailed
- 1 Structure and/or content of tool/s suitable to address some aspects of the research aim/s or to address the aim/s superficially
- 2 Structure and/or content of tool/s allow for data to be gathered broadly addressing the stated aim/s but could benefit from refinement
- 3 Structure and content of tool/s allow for detailed data to be gathered around all relevant issues required to address the stated research aim/s
- e.g. single item response that is very general or an open-response item to capture content which requires probing
- e.g. the framing of survey or interview questions are too broad or focused to one element of the research aim/s

# 8. Description of data collection procedure

- 0 No mention of the data collection procedure
- 1 Basic and brief outline of data collection procedure
- 2 States each stage of data collection procedure but with limited detail or states some stages in detail but omits others
- Detailed description of each stage of the data collection procedure, including when, where and how data was gathered such that the procedure could be replicated
- e.g. 'using a questionnaire distributed to staff'
- e.g. the recruitment process is mentioned but lacks important details

### 9. Recruitment data provided

- 0 No mention of recruitment data.
- 1 Minimal and basic recruitment data
- 2 Some recruitment data but not a complete account
- 3 Complete data allowing for full picture of recruitment outcomes
- e.g. number of people invited who agreed to take part.
- e.g. number of people who were invited and agreed.
- e.g. number of people approached, recruited, and who completed with attrition data explained where relevant.

### 10. Justification for analytic method selected

- 0 No mention of the rationale for the analytic method chosen.
- 1 Very limited justification for choice of analytic method selected.
- 2 Basic justification for choice of analytic method selected.
- 3 Detailed justification for choice of analytic method selected.
- e.g. previous use by the research team.
- e.g. method used in prior similar research.
- e.g. relevance to the study aim/s or comment around of the strengths of the method selected

### 11. The method of analysis was appropriate to answer the research aim/s

- 0 No mention at all.
- 1 Method of analysis can only address the research aim/s basically or broadly.
- 2 Method of analysis can address the research aim/s but there is a more suitable alternative that could have been used or used in addition to offer a stronger analysis.
- 3 Method of analysis selected is the most suitable approach to attempt answer the research aim/s in detail

e.g. for qualitative interpretative phenomenological analysis might be considered preferable for experiences vs. content analysis to elicit frequency of occurrence of events.

## 12. Evidence that the research stakeholders have been considered in research design or conduct.

- 0 No mention at all.
- 1 Consideration of some the research stakeholders
- 2 Evidence of stakeholder input informing the research.
- 3 Substantial consultation with stakeholders identifiable in planning of study design and in preliminary work.
- e.g. use of pilot study with target sample but no stakeholder involvement in planning stages of study design.
- e.g. use of pilot study with feedback influencing the study design/conduct or
- reference to a project reference group established to guide the research.
  e.g. consultation in the conceptualisation of the research, a project advisory group or evidence of stakeholder input informing the work.

## 13. Strengths and limitations critically discussed

- 0 No mention at all.
- 1 Very limited mention of strengths and limitations with omissions of many key issues.
- 2 Discussion of some of the key strengths and weaknesses of the study but not complete.
- 3 Thorough discussion of strengths and limitations of all aspects of study including design, methods, data collection tools, sample & analytic approach.
- e.g. one or two strengths/limitations mentioned with limited detail.

### References

1. Harrison R, Jones B, Gardner P, Lawton R. Quality assessment with diverse studies (QuADS): an appraisal tool for methodological and reporting quality in systematic reviews of mixed- or multi-method studies. BMC Health Serv Res. 2021 Feb 15;21(1):144.