

Developing a methodological framework for organisational case studies: protocol for a rapid review and consensus development process

Objective

To synthesise existing literature on methods of case study research and identify common quality and publication standards for organisational case study research, with particular application to the NHS.

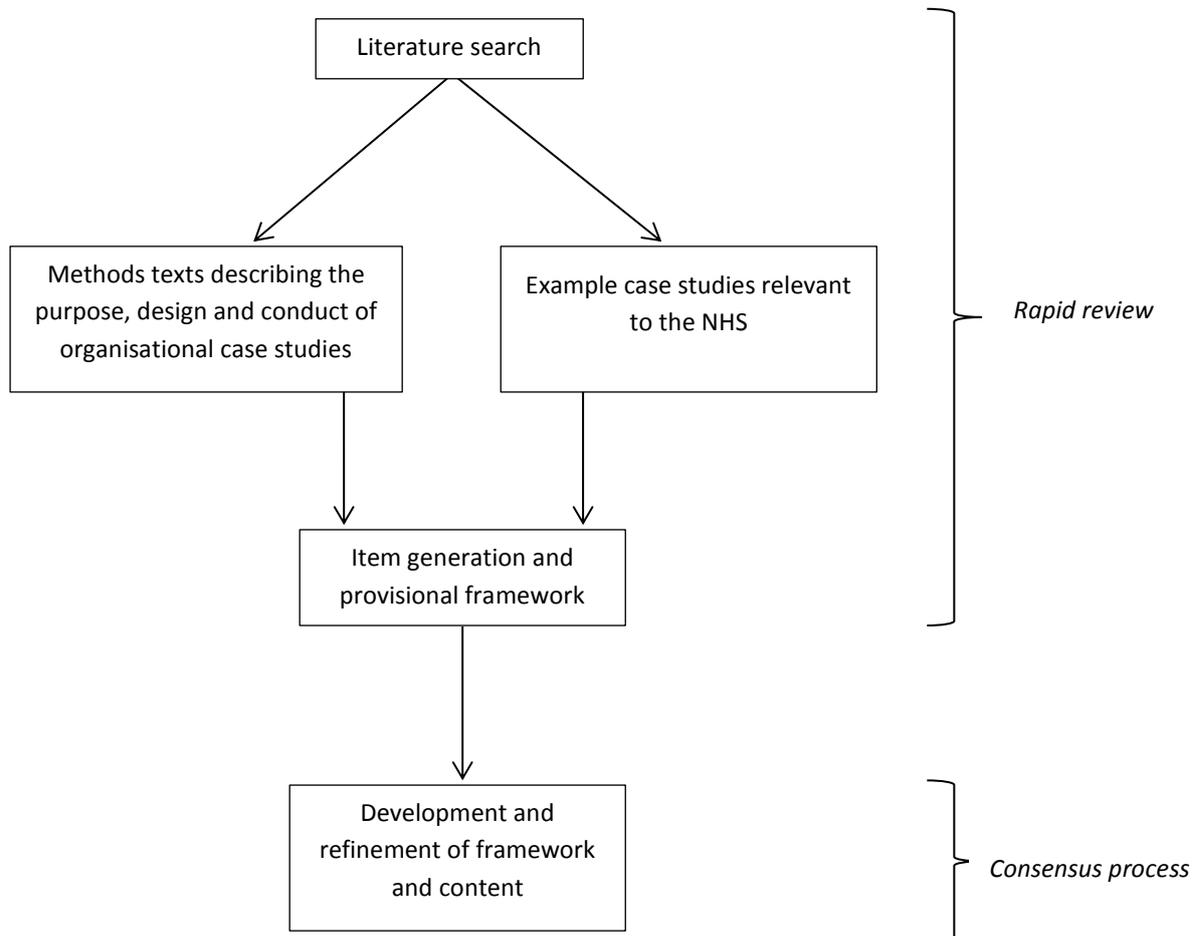
Methods

The standards will be developed in two stages:

1. A rapid review of the existing literature to identify content
2. A consensus process to develop the final set of standards

The rapid review will generate items to populate a provisional framework for organisational case studies that will be refined and developed through the consensus process (Figure 1).

Figure 1: Outline of research process



Rapid review

Searches

A search strategy will be developed to identify material relating to organisational case study methods. Initial database test searches have revealed difficulties in locating case study methodology literature efficiently without retrieving large numbers of irrelevant results. It is also anticipated that the material on case study methods will be found in books and books chapters as well as journal articles and existing research methods guidance. Therefore, the search strategy will concentrate on searches of library catalogues, key author searches, forward citation searches of key texts and targeted website searches. In addition, some highly focused searching of databases will be performed. An outline of the searching to be carried out is given below. However, it is likely that the searches will be iterative in nature and further follow-up searches may be utilised depending on the material found.

The following library catalogues specialising in health management literature will be searched to locate books on case study methods:

Health Services Management Centre ONLINE (University of Birmingham)
(<https://cssfs8.bham.ac.uk/HeritageScripts/Hapi.dll/search1>)

Health Management Online (NHS Scotland) (<http://www.shelcat.org/nhml>)

King's Fund Library Database (<http://kingsfund.koha-ptfs.eu/>)

Searches of key authors, including Robert K Yin, Brent Flyvbjerg, Charles Ragin, David Byrne and Roger Gomm, will be carried out to identify key texts on case study methods. The key texts from these authors will be used for forward citation searches in the Web of Science and PsycINFO to identify journal articles, books and book chapters on organisational case study methods.

In addition to the citation searches, focused searches of databases covering the fields of health, health management and social science will be carried out. A draft search strategy for MEDLINE can be found in Appendix 1. Searches will be restricted to English language. The following databases will be searched: MEDLINE (including MEDLINE in process), Health Management Information Consortium, PsycINFO, ASSIA and Social Science Citation Index.

To identify any guidance documents on case study methodology, the following websites will be searched:

ESRC National Centre for Research Methods (<http://www.ncrm.ac.uk/>)

ESRC Research Methods Programme (<http://www.ccsr.ac.uk/methods/>)

The Social Research Association (<http://the-sra.org.uk/>)

References of included methods texts and examples will also be examined to identify further relevant evidence.

Selection of relevant evidence

Yin (Yin, 2014) describes case study to be a preferred research design when: (1) the main research questions are 'how' or 'why' questions; (2) a researcher has little or no control over behavioural events; and (3) the focus of the study is a contemporary (as opposed to historical) phenomenon. An organization will be defined as "An organized body of people with a particular purpose, as a business, government department, charity, etc." (Oxford English Dictionary).

Two types of article will be eligible for inclusion in the rapid review: methods texts and example case studies. Methods texts pertaining to case study research and case study examples that meet the Yin criteria will be included in the rapid review. Individual case studies (i.e. those describing a single patient) will be excluded but case studies relating to a group, team, department, or organization will be included. Purely descriptive texts will be excluded; all publications must refer to *research* as defined in the Frascati manual (Frascati, 2002).

To select relevant 'real-world' examples, case studies will be included if they are conducted in a UK NHS or social services setting. The number of example case studies will be determined by the balance between available resources and the extent of additional material gleaned from each additional example. Emphasis will be placed on examples that raise questions additional to those identified from the review of methods texts. Where possible, priority will be given to case studies funded by the HS&DR programme and/or those that highlight HS&DR concerns about case study research standards.

Two reviewers will independently screen articles for inclusion, with any disagreements resolved by consensus.

Provisional framework and item generation

Key components of organizational case studies will be identified and extracted from the retrieved literature as separate items. Identical duplicate items identified from different sources will not be extracted, but similar components will be retained as separate items.

Items will be extracted by one reviewer and checked by a second.

A provisional framework will be created by broadly grouping items by research stage, for example:

- Planning and study design
- Data collection
- Data analysis
- Reporting

The final framework and constituent items will be refined and developed through the consensus process, with the aim of producing a set of reporting standards for organizational case studies.

Consensus process

Design

A Delphi exercise will be used to refine the content and structure of the framework. The Delphi technique is a structured and iterative way method for collecting anonymous individual opinions of a

panel with relevant expertise in the topic where a consensus is required. The basic principle is for the panel to receive successive questionnaires, each one containing the anonymous responses to the previous round, and for them to modify their responses until a consensus is reached.

The proposed Delphi exercise will obtain opinions from international experts in order to identify a minimum set of reporting criteria that will form the basis of a set of standards for the conduct of future organizational case studies.

The minimum dataset will be identified over two rounds:

- In the first round, participants will be presented all unique items identified from the rapid review. They will be asked to rate each item as being 'Essential', 'Desirable', or 'Not necessary'. Participants will also be asked whether the provisional framework in which items are presented is appropriate, and given the opportunity to adapt this alongside the minimum dataset.
- In the second round, participants will be sent suggestions of which items should be mandatory in the final set of reporting standards, and which should be optional. The categorization will be based on the ratings collected in the first round. Participants will be given the option to agree or disagree with the categorization of each item, and where they disagree, will be asked in whether the item should be upgraded or downgraded in importance.

Each round will be open for two weeks, with a reminder sent to non-responders at one week. Should time and resources allow, a third round may be conducted to share the draft reporting standards derived from the results of the previous round with respondents and to identify any outstanding areas of development.

Participants

Experts and parties interested in the conduct of OCS research (methodologists, research funders, journal editors, interested policymakers and practitioners) will be approached to participate. Individuals will be identified through the rapid review, personal contacts, and through relevant organisations such as the Health Services Research Network, the Social Research Association, the UK Evaluation Society and the National Centre for Research Methods.

All contacts will be assured confidentiality, with the aim of encouraging participation and openness, and all will be invited to each round of the survey, including previous-round non-responders (unless they choose the option to withdraw from further contact).

In order to assess representation of different stakeholder groups and identify any important differences in their responses, simple demographic details will be requested in each questionnaire. These will include: designation; membership of organisations; topic area of interest; research method of interest; proportion of work that relates to methodology; country; and English as a first language.

Instrumentation

Questionnaires will be administered electronically using on-line survey software Qualtrics (<http://www.qualtrics.com/>) and all questionnaires will be piloted before distribution.

Analysis

All responses will be collected in Qualtrics for initial tabulation and analysis. Subsequent analyses and outputs will be produced in Excel. Where a respondent did not provide a score, this value will be recorded as missing; there will not be any imputation of missing values.

Ethical approval

Invitees will be promised anonymity and submission of completed questionnaires will be taken as implied consent. Ethics approval for the consensus process will be obtained from the University of York Health Sciences Research Governance Committee.

Outputs

In addition to the final set of reporting standards, a supporting report will be submitted to HS&DR, and a summary article will be submitted to a peer-reviewed academic journal; we will also explore other formats to disseminate the findings. Journal editors involved in the consensus process will be encouraged to promote the final reporting standards among their peers and audiences.

Draft timelines

	June	July	August	September	October	November	December	January	February
Protocol development / advisory group recruitment									
Searching									
Screening/data extraction									
Develop item pool and provisional framework									
Design and pilot questionnaires in survey software									
Recruit participants for Delphi process									
Delphi consultation process									
Analysis									
Finalise reporting standards and report to funder									
Dissemination and knowledge transfer activities									

References

Frascati Manual (2002). *Proposed Standard Practice for Surveys on Research and Experimental Development*. OECD Publishing.

Yin RK (2014). *Case study research : design and methods*. 5th ed. London: Sage.

Appendix 1

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:

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- 1 *Organizational Case Studies/ (191)
 - 2 Organizational Case Studies/mt, st [Methods, Standards] (29)
 - 3 1 or 2 (203)
 - 4 (organizational\$ adj5 case adj (study or studies)).ti,ab. (215)
 - 5 3 or 4 (413)