



## King's Research Portal

DOI:

[10.1177/1049732316654870](https://doi.org/10.1177/1049732316654870)

*Document Version*

Peer reviewed version

[Link to publication record in King's Research Portal](#)

*Citation for published version (APA):*

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: a tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802-1811.  
<https://doi.org/10.1177/1049732316654870>

### **Citing this paper**

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

### **General rights**

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Research Portal

### **Take down policy**

If you believe that this document breaches copyright please contact [librarypure@kcl.ac.uk](mailto:librarypure@kcl.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.

## **Member checking: a tool to enhance trustworthiness or merely a nod to validation?**

Linda Birt<sup>1,4</sup>, Suzanne Scott<sup>2</sup>, Debbie Cavers<sup>3</sup>, Christine Campbell<sup>3</sup>, Fiona Walter<sup>1</sup>

1. Primary Care Unit, University of Cambridge, Strangeways Research Laboratory, Wort's Causeway, Cambridge CB2 8RN
2. Dental Institute, King's College London, Guy's Tower, Guy's Hospital, London SE1 9RT
3. Centre for Population Health Sciences, University of Edinburgh, Medical School, Teviot Place, Edinburgh, EH8 9AG.
4. School of Health Sciences, University of East Anglia, Norwich Research park, Norwich, NR4 7TJ

Corresponding author (present address)

Dr Linda Birt  
School of Health Sciences  
The Queen's Building  
Norwich Research Park  
University of East Anglia  
Norwich, NR4 7TJ

01603 593298

Linda.birt@uea.ac.uk

**Abstract:**

The trustworthiness of results is the bedrock of high-quality qualitative research.

Member checking, also known as participant or respondent validation, is a technique for exploring the credibility of results. Data or results are returned to participants to check for accuracy and resonance with their experiences.

Member checking is often mentioned as one in a list of validation techniques. This simplistic reporting might not acknowledge the value of using the method, nor its juxtaposition with the interpretative stance of qualitative research. In this commentary we critique how member checking has been used in published research, before describing and evaluating an innovative in-depth member checking technique, Synthesised Member Checking. The method was used in a study with patients diagnosed with melanoma. Synthesised Member Checking addresses the co-constructed nature of knowledge by providing participants with the opportunity to engage with, and add to, interview and interpreted data, several months after their semi-structured interview.

**Keywords:** member checking, trustworthiness, respondent validation, participant validation, melanoma, credibility

## Background

Within qualitative research the researcher is often both the data collector and data analyst, giving potential for researcher bias (Miles and Huberman, 1994). Qualitative researchers might impose their personal beliefs and interests on all stages of the research process leading to the researcher's voice dominating that of the participant (Mason, 2002). However, the potential for researcher bias might be reduced by actively involving the research participant in checking and confirming the results. The method of returning an interview or analysed data to a participant is known as *member checking*, and also as *respondent validation* or *participant validation*. Member checking is used to validate, verify or assess the trustworthiness of qualitative results (Doyle, 2007).

The novice researcher might be forgiven for perceiving member checking as a straightforward technical method as publications seldom report more than a sentence about the procedure and outcome of member checking. Such absence of detail and discussion is surprising, as member checking might be confounded by epistemological and methodological challenges. These include: the changing nature of interpretations of phenomena over time; the ethical issue of returning data to participants; the dilemma of anticipating and assimilating the disconfirming voices, and deciding who has ultimate responsibility for the overall interpretation. The intellectual debate on how to ensure trustworthiness in qualitative inquiry has raged since Lincoln and Guba's seminal texts in the early 1980s and it remains pertinent today as qualitative researchers seek to have

their work recognised in an evidence-driven world (Guba & Lincoln, 1981, 1989; Lincoln and Guba, 1985).

In this paper we draw on theoretical and empirical studies to discuss the epistemological and ethical challenges of member checking. We then provide a detailed account of a novel in-depth method of member checking – *Synthesised Member Checking (SMC)* - that we developed within a health research study. The study aimed to understand symptom appraisal and help-seeking among people newly diagnosed with the serious skin cancer, malignant melanoma. The research epistemology, the types of knowledge which might be legitimately known, was objectivism, and the theoretical perspective was that of subtle realist. In a subtle realist study it is held that that social phenomena exist independently of the person, however understanding of phenomena is only known through the individual's representation of them (Blaikie, 2007). A person's knowledge and understanding is grounded within their experiences: knowledge is socially constructed (Hammersley, 1992; Crotty, 1998; Snape & Spencer, 2003; Gray, 2013). Within our study a changing skin lesion was an objective phenomenon: it could be observed, measured, recorded and compared to other malignant skin cancers. However a patient's response to a changing skin lesion could be influenced by their past experiences and knowledge. We sought to understand factors which shaped decisions to seek timely help. Multiple data collection methods and member checking are appropriate methods to adopt within a subtle realist approach, enabling a triangulation

of knowledge about a single phenomenon. Triangulation is the use of multiple methods to enhance the understanding of a phenomenon; it can lead to more valid interpretations. Methods from different paradigms can be used, or data collected from different sources, at different times (Torrance, 2012).

### **Theoretical aspects of member checking**

Lincoln and Guba (1985) recommended member checking as a means of enhancing rigour in qualitative research, proposing that credibility is inherent in the accurate descriptions or interpretations of phenomena. Their work was developed during a period when qualitative researchers were attempting to get recognition for the rigour of their work alongside more traditional positivist theoretical studies. Since the 1980s researchers have debated the appropriateness of methods designed to enhance rigour, with some saying techniques of rigour might constrain the qualitative researcher (Sandelowski, 1993; Barbour, 2001), while others have emphasised the need for rigour and validity in qualitative research (Morse, 2015). These three authors all question the value of member checking as a validation technique. Yet, publishers increasingly promote the use of checklists of quality (Equator Network, 2013). The Consolidated Criteria for Reporting Qualitative Research (COREQ: Tong, Sainsbury, & Craig, 2007) provides guidelines for best practice in the reporting of qualitative research. COREQ recognises member checking as a method of rigour: '*ensuring that the participants' own*

*meanings and perspectives are represented and not curtailed by the researchers' own agenda and knowledge'* (Tong et al., 2007:

356). However, Buus and Agdal (2013) raise concerns that there are '*unintended consequences*' if checklists are used as the main way of assessing quality (p.1289).

They suggest that 'good' research clearly reports how methods are contextualised within methodological and theoretical paradigms. Different ways of undertaking a member check might be more appropriate for some methodologies than others.

To evaluate whether the method fits with the theoretical position of a study it is necessary to consider how member checking was undertaken and for what purpose. It is essential that researchers are transparent about what they hope to achieve with the method and how their claims about credibility and validity fit with their epistemological stance. Despite extensive scoping of the literature we found a paucity of published papers that reported at length about how member checking fitted with their research design.

Member checking covers a range of activities including: returning the interview transcript to participants; a member check interview using the interview transcript data or interpreted data; a member check focus group, or returning analysed synthesised data as we do in Synthesised Member Checking. Table 1 summarises ways in which member checking has been used in health and educational research. We now briefly critique each method seeking to promote discussion on how congruent each method might be within a

qualitative paradigm, before moving on to describe our novel process of Synthesised Member Checking (SMC).

### *Returning the interview transcript to participants*

Within an objectivist epistemology asking a participant to check the transcript of their interview potentially enhances accuracy of the data. Yet within a constructionist epistemology it can be used as a way of enabling participants to reconstruct their narrative through deleting extracts they feel no longer represent their experience, or that they feel presents them in a negative way. Providing opportunities to delete data calls into question the very nature of research data: is research data ‘owned’ by the researcher or does it always ‘belong’ to the participant. Furthermore, the event of removing extracts from the transcript might become a data event in itself (Koro-Ljungberg & MacLure, 2013). Returning verbatim transcripts creates the unusual situation where people see their spoken language in written form. Forbat and Henderson (2005) report that returning transcribed data had both affirming and cathartic outcomes for participants: some disliked seeing their speech in text, but others welcomed the opportunity to see their experiences recorded. This method of member checking might enable the researcher to make claims about the accuracy of the transcription of the interview but it does not enable them to make any claims on the trustworthiness of the subsequent analysis.

### *Member check interview*



A more interactive method of member checking is the member check interview. The transcript of the first interview foregrounds the second interview during which the researcher focuses on confirmation, modification and verification of the interview transcript. Alternatively the researcher can undertake analysis on the individual participant's data and the emerging findings might foreground the member check interview (Harvey, 2015). The member check interview has congruence with the epistemology of constructivism in that knowledge is co-constructed. Doyle (2007) reports how, in her hermeneutic phenomenological study on older women, returning transcripts and then undertaking a second interview to discuss data empowered participants as they had the opportunity to remove and add to their data co-constructing new meanings. This fits with the interpretivist and feminist theoretical position of Doyle's study and therefore the method was appropriate for the epistemological stance of the study.

#### *Member check focus group*

Focus groups are a recognised way of exploring the opinions, beliefs and attitudes of a group of people and of enabling people to respond and interact together. Although not commonly used in member checking, Klinger (2005) undertook a focus group to validate results within a study with people living with traumatic brain injury. However, she had a small sample of seven participants, and two did not attend the focus group. The paper does not report which participants failed to attend, therefore it is difficult to

make a judgement on the credibility of the process. Details about how participants engaged with member checking are rarely reported, yet such information enables the reader to make judgements on the usefulness of the procedure in enhancing the trustworthiness of results.

### *Member check of synthesised analysed data*

When the purpose of the member check is to explore whether results have resonance with the participants' experience it might be appropriate to undertake member checking using analysed data from the whole sample. In this case member checking often takes place several months after the data collection event. If participants are to be encouraged to engage in the member check analysed data needs to be presented in accessible ways. Harvey (2015) working with a small cohort over a long study period reports on how she used synthesised data, prior to the third interview within a sequence of four, to '*give participants an opportunity to consider whether any of the experiences or perceptions of others also applied to them*' (2015: 30). Harvey's member checking mirrors a grounded theory approach where emerging theories are 'tested' and developed by further data collection (Charmaz, 2008) In this method member checking has several methodological purposes: to validate results by seeking disconfirming voices (objectivism), yet it also provides opportunity for reflection on personal experiences and creates opportunities to add data (constructivism).

The iterative process of reflection, interpretation, and synthesis used in qualitative analysis means the second and third order constructs of meaning which develop can increasingly distance the results from the original interview data (Grbich, 2006). This might be offered as a reason for not undertaking member checking (Morse, 2015), yet if studies are undertaken to understand experiences and behaviours and to potentially change practice then surely participants should still be able to see their experiences within the final results. Without this level of reliability how can results be transferable to the wider community and how can findings be viewed as evidence to change practice?

### **Ethical aspects of member checking**

Member checking raises ethical questions about the protection of participants during the research process. Furthermore there are ethical considerations over whose voice is brought to the fore: that of the participant through direct quotes from the data or that of the researcher through their interpretations of data (Fossey, Harvey, McDermott, & Davidson, 2002).

Extensive ethical attention is given to how researchers protect participants during data collection. Consent procedures are designed to prevent maleficence and promote beneficence. Researchers acknowledge and support participants who become distressed during the collection of sensitive data (Dickenson-Swift, James, Kippen, & Liamputtong, 2007). Yet similar attention is rarely afforded to the process of member

checking even though the researcher might not be present when the participant receives the data. Participants can be in a different phase of their life or illness when they receive the document, and this can raise a number of issues including: distress to the participants or family members if health has declined, or being reminded of previous difficult times if health has improved. If synthesised data are returned there is the potential for distress in that occasionally a participant might not recognise their personal experience and be left feeling isolated and unheard. Therefore it is important that opportunities are provided for participants to reply and liaise with researchers during this process.

Taking part in member checking can be a distressing or a therapeutic process for the participant and participants should be consulted to ascertain if they wish to take part in any validation exercise, whether that is checking interview transcripts or commenting on analysed data. Returning verbatim transcribed data can cause people embarrassment or distress about the way they speak (Carlson, 2010). Yet, Harper and Cole (2012) suggest that the process of seeing personal experiences validated and reflected in those of others can help participants to see they are not alone and benefits might be similar to those experienced in group therapy. Ethically this raises questions about whether the research process should be transformational (Cho & Trent, 2006).

While there is justifiable concern about the impact of member checking on participants, Estroff (1995) discusses whether participants fully engage with research results or

whether they merely accept the researcher's representations of the data. Estroff (1995) suggests that patients might privilege the researcher, accepting all they say, in the same way they accept clinicians and health professionals' treatment decisions. If the levels of engagement in member checking are not reported we risk tokenistic involvement of participants and exaggerated claims about the transferability of the data.

Before using member checking, researchers need to be clear on the relevance and value of the method within their design; they need to have strategies for dealing with the disconfirming voice, and to have considered whether they have the resources or willingness to undertake further analyses if participants do not agree with their analysis.

Without such preparation we risk 'wasting' participants' time on a checklist technique.

For example, if the purpose of the research is to provide knowledge to enact social change, it is an ethical and methodological imperative that alternative interpretations are reported to enable others to make decisions on the transferability of results.

In considering how to address these challenges, we developed Synthesised Member Checking, which provides a novel approach to consider and mitigate for epistemological and ethical concerns. In our study synthesised data from the final stages of analysis was returned to participants alongside illustrative quotes and they were asked to comment on whether the results resonated with their experiences; they were also provided with the opportunity for further comments.

### **A novel method of member checking: Synthesised Member Checking**

We offer an example of Synthesised Member Checking (SMC); a sequenced five step process (see Figure 1). SMC differs from many other methods of member checking in that both interview data and interpreted data are returned to participants. SMC also enables participants to add comments which are then searched for confirmation or disconfirming resonance with the analyzed study data, enhancing the credibility of results. We suggest such a method is appropriate within an objectivist epistemology and a subtle realist theoretical stance (Blaikie, 2007).

\*\*\*insert Figure 1 about here\*\*\*

SMC was recently used in a semi-structured, in-depth interview study, which sought to understand the appraisal and help-seeking of patients newly diagnosed with melanoma (Walter, 2014). In the study we acknowledged that participants perceived the world subjectively. We developed confidence in interpretations of the phenomenon through multiple methods and judgements on the credibility of knowledge claims (Murphy, Dingwell, Greatbatch, Parker, & Watson, 1998). Therefore member checking was an integral part of the original study design. The protocol stated member checking would be used with those participants who consented to take part and the study achieved full research ethical approval. There were sufficient resources, time and funds to re-contact participants; an important consideration, as member checking is often left to the closing

stages of a project when there might be insufficient resources to give little more than a cursory nod to further validation techniques.

### *Method*

Participants (n=63) were identified and recruited by skin cancer nurse specialists at two regional hospitals; they were aged 18 and over, and interviews took place within 10 weeks of diagnosis of a primary malignant cutaneous melanoma. Interviews were undertaken by two researchers using a topic guide developed from the literature and the clinical experience of the research team. Data collection was enhanced by using a calendar landmarking instrument (Mills et al., 2014) to increase recall of significant events during the pathway to diagnosis, and participant drawings of the lesion to facilitate greater description of the skin lesion (Scott et al., 2015). These methods enabled triangulation of data at the initial data collection event. During the interview the experience and narrative of the participant was accepted as their reality. For example the researchers knew the clinical diagnosis of the melanoma before the interview but did not challenge the participant if they described the lesion as a small spot when the histology indicated it measured at least 5 mm. This is congruent with a subtle realist approach in that people report reality from their own perspective. Our analysis was an iterative process using Framework Analysis (Gale, Heath, Cameron, Rashid, & Redwood, 2013) to create and establish meaningful patterns. Member checking was carried out when all interview data had been analysed. It provided an in-depth approach

to triangulating data sequentially, from different time points in the participant's cancer pathway, helping to ensure dependability of data over time. The chosen approach, SMC, provided an opportunity for participants to add further data if the meaning of their experience had changed over time, thereby recognizing the temporal nature of lived experiences (Gadamer, 1975).

Towards the end of the *charting and mapping* of data, as we started to conceptualise the themes, we prepared a concise four page report to return to participants (*SMC Step 1*). This included synthesised data from the whole sample. We included empty spaces in the report to encourage participant engagement (see Box 1 for examples). Each page summarised a theme from our results, and interpretations were contextualised using anonymised illustrative quotes to allow participants to comment on interview data as well as interpreted statements. We chose not to offer an alternative to the written documents: we had not collected email addresses and a document through the post could be engaged with or discarded without imposing too much additional stress to a potentially vulnerable patient group. Carlson (2010) has suggested that participants should be empowered to decide how they would like to receive member checking documents. Alternative methods of enabling engagement in member checking would be to offer electronic copies which may facilitate greater participation and online editing, to provide audio documents which may be particularly appropriate for participants with



disabilities or to offer to have someone visit and go through the document with them (Doyle 2007).

\*\*\*insert Box 1 about here\*\*\*

Before mailing the member checking documents, we checked with the relevant skin cancer nurse specialists that the participant was in good health, to reduce risk of distress (*SMC Step 2*). This proved an important step as 13 participants were not approached: two had died, seven were too ill to receive the report, and the specialist nurses were unsure of current addresses for four participants. Fifty member checking documents were posted, with a copy for participants to retain and a copy to be returned in a stamped addressed envelope (*SMC Step 3*). A cover letter explained that the document was a summary of interim results developed through analysis of all the interviews to represent the experiences important to most people interviewed. Participants were asked to read the document and comment on whether or not they felt the synthesised results resonated with their experiences and if there was anything they would like to change, in order to help us complete our analyses and develop interpretations (See Box 1). This statement reiterated that these were not final results; rather that there was the opportunity to influence the analysis, giving participants permission to disagree. The researcher's contact details were provided in case of queries but no one made use of this. We allowed two weeks to return the document.

*SMC's Step 4* is to record details on level of engagement. In qualitative research we are challenged to take care not to present the views of just one group (Murphy et al. 1998). Poor response rates, or responses from a distinct subset of the sample such as females only, needs to be reported so others can make judgements on the extent to which member checking enhanced trustworthiness claims. In our study 56% (n=28) returned the document, see Table 2. Overall the respondents had similar characteristics, such as gender, age and type of melanoma, to the main study sample, although younger participants were less likely to have replied.

\*\*\*insert Table 2 about here\*\*\*

The yes/no responses were analysed using descriptive statistics, and free text responses were transcribed and coded into the main study coding framework (*SMC Step 5*). There was good resonance between the added member checking data and the original dataset, increasing confidence that results had captured participants' experiences, thus reducing methodological concerns about post-hoc rationalisation and recall bias following their cancer diagnosis.

Overall, most participants agreed with the statements, with only a couple of participants stating that two statements did not represent their understanding of the experience. For example we asked '*People sometimes seem to think that a change in their skin was not serious enough to go to the doctor, do you agree?*' One person wrote '*not in my case*'. Another wrote '*No, but the 'don't have time' 'running late' atmosphere in the chaotic*

*GP surgery is a factor in preventing me from approaching them,* ' confirming our finding about the impact of health care factors on help-seeking. We planned to return to the data if there were disconfirming voices and to undertake further analysis of any themes where participants could not recognise their experiences within our interpretations provided in the member checking document, but this proved unnecessary.

Critically, we also used SMC to explore a new concept which had arisen during the analysis. Eleven participants reported they had been initially reassured by a health professional that their skin lesion was not serious; they had not known what changes in their lesion should prompt further help seeking. Clear advice from health professional on self-monitoring of skin is essential to increase help seeking. Therefore we took the opportunity offered by the SMC to seek additional data. We asked *'If you have been reassured that your moles were not suspicious, either by friends or family, or even a doctor or nurse, what type of information would have helped you "keep an eye" on your moles?'* Some participants stated they would have liked more information on websites or in leaflets, but others said they would not have looked for further information, confirming our finding that health professionals most provide enough detailed information to ensure patients know when to seek further help.

We supplemented member checking with other validation strategies: two researchers independently coded and cross coded both the original and member checking datasets; a

core analysis group consisting of professionals from clinical, psychological and research backgrounds were involved throughout the interpretation and mapping phases of the analysis and further interpretation of the member checking data; lay members, (two people with experience of living with melanoma) were also included in reading a sample of transcripts and contributing to the data interpretation; and preliminary findings were shared with clinicians and other academic experts in the field at appropriate symposia.

## **Discussion**

Synthesised Member Checking offers a new way to undertake member checking which addresses several organisational and ethical issues inherent in other approaches to member checking. It is a cost and time effective way to undertake member checking with a larger sample and working with a health professional on the appropriateness of returning the member checking documents helps ensure that vulnerable participants are not unduly distressed.

It can be most appropriate when the study's epistemological stance is that there is an external reality and that this reality is known only through the individual's understanding and meanings. The study needed to produce results which would have credibility in a clinical environment (Rolfe, 2006); thus the research design had to 'hold its own' in a research world dominated by quantitative clinical research and increasing numbers of mixed method studies (Torrance, 2012). We used triangulation of

qualitative methods: semi-structured interviews, calendar land marking tool, pictorial representation and member checking. No data source was privileged over the other; rather, each type of data either enhanced our understanding of the other or prompted further iterative analysis to deepen understanding of the phenomenon (Hesse-Biber, 2010). The study's validity was transactional in that we sought high levels of accuracy and consensus between the research team, the participants and the data (Cho and Trent, 2006).

One strength of SMC lies in its potential use with larger cohorts of participants. While individual face to face member check interviews might lead to a rich data set and provide opportunity for transformation of meanings, pragmatically this is not possible within large multi-site qualitative studies. SMC provides a cost effective way of re-engaging with participants during the study, and the use of original interview data alongside analysed data enables the participant voice to be present.

Although SMC was developed to meet the specific needs of a health research study the method is transferable to other research fields. We provide detailed explanations of each step, even those which are research management rather than theoretical, to enable the novice researcher to see the time and resources required to undertake good quality member checking. The method could be adapted for smaller cohorts as the interview data which contextualises the synthesised themes (Box 1) could be taken from each participant's interview data and the document slightly amended for each person.

Producing individualised member check documents would lessen concerns that participants might not recognise their own ‘voice’ and experiences in the synthesised data, although in our study responding participants reported that the results had resonance with their situation.

The credibility of member checking rests not in the ‘doing’ of the procedure but in the reporting of the outcomes, for it is only through good quality reporting that others can make judgements on whether the methods have enhanced the credibility of the results. Table 2 provides information on responses rates and who in the sample responded. This type of table adds to the rigour of the reporting by increasing the auditability of methods. Nonetheless we acknowledge the difficulty of finding out why participants chose not to take part in the member checking, and recognise this as a limitation of the method. Ethically, after a follow up phone call or reminder letter, researchers must accept that the participant chooses not to be further involved in the study. There is also the challenge of understanding how participants make sense of the researchers’ interpretations. There is scope for more research into the meaning participants give to taking part in member checking. Such research may help us identify the most effective ways to share data, and the factors which facilitate or inhibit engagement with member checking.

A limitation of all member checking procedures, including SMC, is that participants’ experiences are captured only at distinct times. With increasing use of participatory

research different methodological approaches and challenges are developing (Bergold & Thomas, 2012). Thus, member checking might become a redundant validation tool as participants and other stakeholders guide, oversee and challenge the research design, data collection, analysis and reporting processes throughout the study.

## **Conclusion**

The purpose and process of member checking can differ across studies, therefore researchers can make different claims to the validity of their interpretation. The research should report the consistency of the member checking procedure with the study's epistemological stance. Until recently, word restrictions have often hindered appropriate reporting of member checking, but this might change with the growth of online publishing with its opportunities for supplementary material. Qualitative researchers should report why a specific member checking method was selected or not, give examples of member checking documents and responses from participants to such documents, and describe approaches undertaken to handling additional data or disconfirming cases.

We suggest that Synthesised Member Checking provides a rigorous approach which facilitates participants' engagement beyond existing member check procedures, thereby going some way towards alleviating concerns that member checking has little use as a validation tool (Morse, 2015). Member checking should not be considered merely as a simple technical step in any study; rather, it is an intellectual process which presents

distinct epistemological, ethical and resource challenges. If researchers engage with these concepts and involve participants in the interpretation of data, they can enhance the trustworthiness of their results.

### **Declaration of conflicting interests.**

Dr Fiona Walter was supported by an NIHR Clinical Lectureship followed by a NIHR Clinician Scientist award at the time of this study.

### **Funding**

Thanks to our funding organisation the National Awareness and Early Diagnosis Initiative (NAEDI) (Project Award C8640/A12226), and to their funding partners: Cancer Research UK; Department of Health, England; Economic and Social Research Council; Health and Social Care Research and Development Division; Public Health Agency, Northern Ireland, National Institute for Social Care and Health Research, Wales and the Scottish Government. The views expressed in this publication are those of the author(s) and not necessarily those of the NHS, the National Institute for Health Research or the Department of Health. The views expressed in this publication are those of the authors and not necessarily those of the NHS, the National Institute for Health Research or the Department of Health.



## **Ethics approval**

The study obtained ethical approval from Cambridgeshire 4 Research Ethics Committee (11/EE/0076). All participants consented to take part in the study.

## References

- Barbour, R. S. (2001). Checklist for improving rigour in qualitative research: a case of the tail wagging the dog? *British Medical Journal*, 233, 1115-1117. doi: <http://dx.doi.org/10.1136/bmj.322.7294.1115>
- Bergold, J., & Thomas, S. (2012). Participatory research methods: a methodological approach in motion. *Forum: Qualitative Social Research*, 3(1), 1-35.
- Birt, L.
- Blaikie, N. (2007). *Approaches to social enquiry* (2<sup>nd</sup> Ed.). Cambridge, UK: Polity Press.
- Buus, N., & Agdal, R. (2013). Can the use of reporting guidelines in peer-review damage the quality and contribution of qualitative health care research? *International Journal of Nursing Studies*, 50, 1289-1291. doi: 10.1016/j.ijnurstu.2013.02.012
- Carlson, J. A. (2010). Avoiding traps in member checking. *The Qualitative Report*, 15(5), 1102-1113.
- Charmaz, K. (2008). Grounded Theory. In J. A. Smith (Ed.) *Qualitative psychology: a practical guide to research methods* (pp.81-110). London, UK: Sage.

- Cho, J., & Trent, A. (2006). Validity in qualitative research revisited. *Qualitative Research*, 6(3), 319-340. doi: 10.1177/1468794106065006
- Crotty, M. (1998). *The foundations of social research: meaning and perspective in the research process*. London, UK: Sage.
- Dickenson-Swift, V., James, E. L., Kippen, S., & Liamputtong, P. (2007). Doing sensitive research: what challenges do qualitative researchers face. *Qualitative Research*, 7(3), 327-353.
- Doyle, S. (2007). Member checking with older women: a framework for negotiating meaning. *Health Care for Women International*, 8(10), 888-908.
- Estroff, S. E. (1995). Whose story is it anyway? Authority, voice and responsibility in narratives of chronic illness. In S.K. Toombs, D. Barnard, R.A. Carson (Eds). *Chronic illness: from experience to policy* (pp.77-104). Bloomington, USA: Indiana University Press.
- Equator Network. (2013). *Guidelines for reporting health research* Retrieved from <http://www.equator-network.org/wp-content/uploads/2012/12/Reporting-guidelines-in-journals-August-2013.pdf>.
- Forbat, L., & Henderson, J. (2005). Theoretical and practical reflections on sharing transcripts with participants. *Qualitative Health Research*, 15(8), 1114-1128.

Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry* 36, 717-732.

Gadamer, H. (1975/1996). *Truth and Method* Translated G. Barden and J. Cumming. London, UK: Sheed and Ward.

Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, 13, 117-124. doi: 10.1186/1471-2288-13-117

Gray, D. E. (2013). *Doing research in the real world*. London, UK: Sage.

Grbich, C. (2006). *Qualitative data analysis: an introduction*. London, UK: Sage.

Guba, E.G., & Lincoln, Y.S. (1981). *Effective evaluation*. San Francisco, USA: Jossey-Bass.

Guba, E.G., & Lincoln, Y.S. (1989). *Fourth generation evaluation*. Newbury Park, USA: Sage.

Hammersley, M. (1992). *What's wrong with ethnography?* New York, USA: Routledge.

- Harper, M., & Cole, P. (2012). Member checking: can benefits be gained similar to group therapy. *The Qualitative Report*, 17(2), 510-517.
- Harvey, L. (2015). Beyond member-checking: a dialogic approach to the research interview. *International Journal of Research & Method in Education*, 38(1), 23-38.
- Hesse-Biber, S. (2010). Qualitative approaches to mixed methods practice. *Qualitative Inquiry*, 16(6), 455-468. doi: 10.1177/1077800410364611
- Klinger, L. (2005). Occupational adaptation: perspectives of people with traumatic with traumatic brain injury. *Journal of Occupational Science*, 12(1), 9–16.
- Koelsch, L. E. (2013). Reconceptualizing the member check interview. *International Journal of Qualitative Methods*, 12, 168-179.
- Koro-Ljungberg, M., & MacLure, M. (2013). Provocations, re-un-visions, death, and other possibilities of “data”. *Cultural Studies <=> Critical Methodologies*, 13(4), 219-222. doi: 10.1177/1532708613487861
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Newbury Park, California: Sage.
- Mason, J. (2002). *Qualitative researching* (2<sup>nd</sup> Ed.). London, UK: Sage.

- Miles, M.B., & Huberman, M. (1994). *An extended sourcebook: qualitative data analysis* (2<sup>nd</sup> Ed.). Newbury Park, California: Sage.
- Mills, K., Emery, J., Cheung C., Hall, N., Birt, L. & Walter, F.M. (2104) A qualitative exploration of the use of calendar landmarking instruments in cancer symptom research. *BMC Family Practice*, 15:167-175. doi:10.1186/s12875-014-0167-8.
- Morse, J.M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research*, 25(9), 1212-1222. doi: 10.1177/1049732315588501
- Murphy, E., Dingwell, R., Greatbatch, D., Parker, S., & Watson, S. (1998). Qualitative research methods in health technology assessment: a review of the literature. *Health Technology Assessment*, 2(16), 1-276.
- Rolfe, G. (2006). Validity, trustworthiness and rigour: quality and the idea of qualitative research. *Journal of Advanced Nursing*, 53(3), 304-310.
- Sandelowski, M. (1993). Rigor or rigor mortis: the problem of rigor in qualitative research revisited. *Advances in Nursing Science*, 16(2), 1-8.
- Scott, S.E., Birt, L., Cavers, D., Shah, N., Campbell, C. & Walter, F.M. (2015) Patient drawings of their melanoma: a novel approach to understanding symptom perception and appraisal prior to health care. *Psychology and Health*, 30 (9), 1035-1048. doi: 10.1080/08870446.2015.1016943

Snape, D., & Spencer, L. (2003). The foundations of qualitative research. In J. Ritchie & J. Lewis (Eds.) *Research practice: a guide for social science students and researchers* (pp. 1-23). London, UK: Sage.

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357.

Torrance, H. (2012). Triangulation, respondent validation and democratic participation in mixed methods research. *Journal of Mixed Methods Research*, 6(2), 111-123. doi: 10.1177/1558689812437185.

Walter F.M., Birt, L., Cavers, D., Scott, S., Emery, J., Burrows, N., Cavanagh, G., Mackie, R., Weller, D., & Campbell, C. (2014) 'This isn't what mine looked like': a qualitative study of symptom appraisal and help seeking in people recently diagnosed with melanoma. *BMJ Open*, 4(7), 1-2 doi:10.1136/bmjopen-2014-005566.

**Table 1 Examples of different types of member checking**

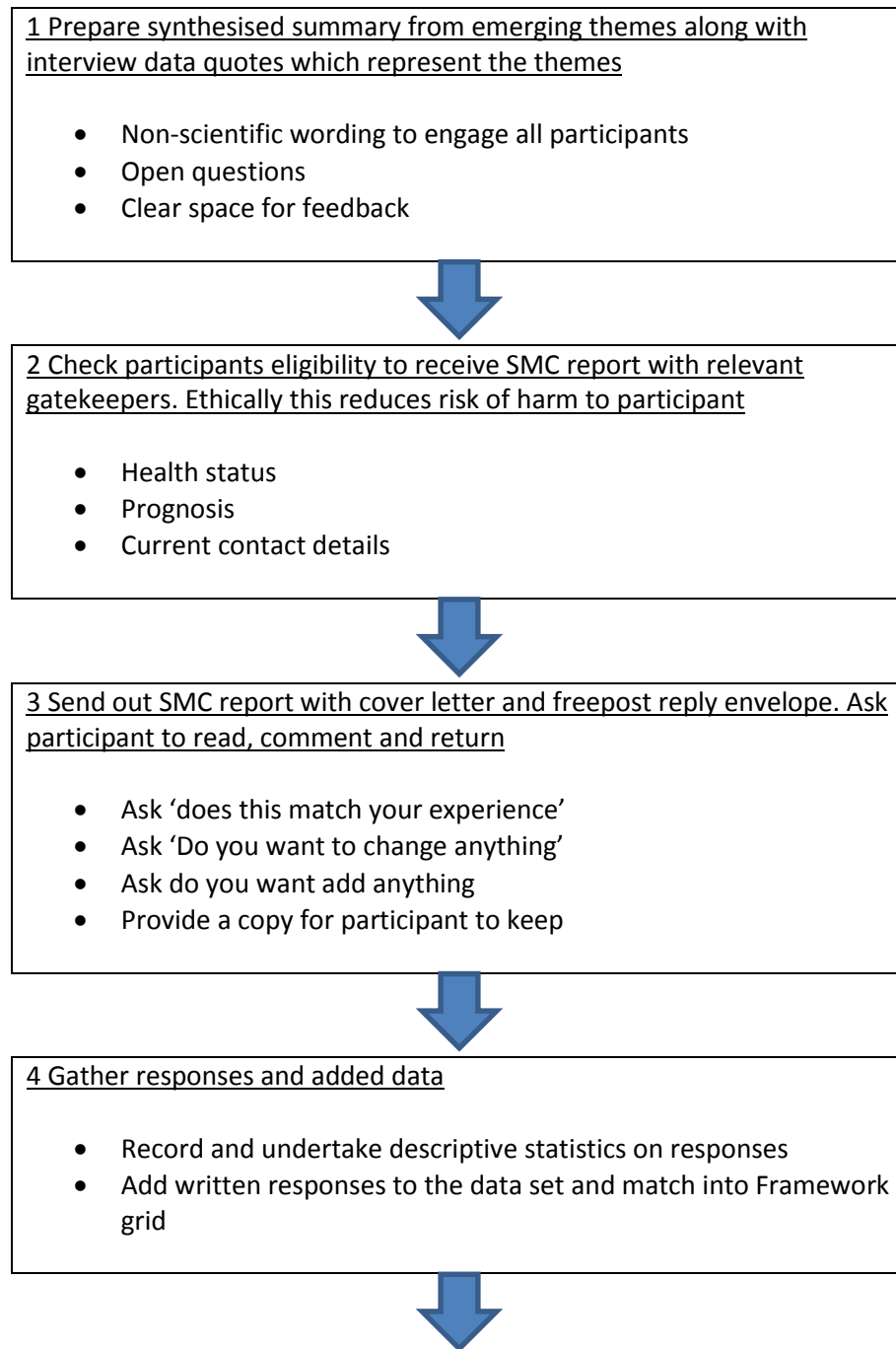
Method of member checking	Epistemological stance	Theoretical issues	Method	Ethical issues
<b>Returning transcribed verbatim transcripts</b> (Forbat & Henderson, 2005; Carlson 2010)	Positivist: Implies there is a truth value in the spoken/written word	<ul style="list-style-type: none"> <li>• Appropriate for checking factual information.</li> <li>• Could enable the addition of new data</li> <li>• Could enable participant to delete the data they no longer wish to have used thereby changing the data set</li> </ul>	<ul style="list-style-type: none"> <li>• Need to return transcripts relatively quickly while interview still fresh in memory</li> <li>• Could return transcript using paper or electronic methods, or audio tapes</li> </ul>	<ul style="list-style-type: none"> <li>• Participant distress when see the spoken word in typed form.</li> <li>• Can retrigger memories of disturbing events</li> </ul>
<b>Member check interview –using the transcript</b> (Doyle, 2007)	Constructionist/interpretive: Can co-construct new meaning and validate previous interpretations	<ul style="list-style-type: none"> <li>• Enables shared discussion of the interview transcript</li> <li>• Interview focuses on confirmation, modification and verification of interview text</li> <li>• Could enable the addition of new data</li> <li>• Need to undertake further analysis of member check interview</li> </ul>	<ul style="list-style-type: none"> <li>• Transcript could be returned prior to the interview</li> <li>• Need to re-consent the participant</li> <li>• Additional cost for further transcribing and time to analysis</li> <li>• Losing participants to follow-up</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns for participant safety reduced as the researcher present</li> <li>• Coercion as it might be hard to disagree with researcher's interpretation in their presence</li> </ul>
<b>Member check interview – using analyses of single participant's data</b> (Birt, 2010; Koelsch, 2013; Harvey, 2015)	Interpretive	<ul style="list-style-type: none"> <li>• Each participant receives researcher's interpretation of their interview</li> <li>• Interview focuses on confirmation, modification and verification of interpretation</li> <li>• Could enable the addition of new data</li> <li>• Need to undertake further analysis of member check interview</li> <li>• Participants might agree on potential illustrative quotations</li> <li>• Does not enhance the trustworthiness of the whole data set as researcher still needs to combine data set</li> </ul>	<ul style="list-style-type: none"> <li>• Need to have undertaken sufficient analysis to prepare data for sharing.</li> <li>• Need to re-consent the participant</li> <li>• Additional cost for further transcribing and time to analysis</li> <li>• Losing participants to follow-up</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns for participant safety reduced as the researcher present</li> <li>• Coercion as it might be hard to disagree with researcher's interpretation in their presence</li> <li>• Participants can veto illustrative quotes which might expose their identity in small research environments</li> </ul>



<b>Member check focus group</b> (Klinger, 2005)	Interpretive	<ul style="list-style-type: none"> <li>• Focus group might include participants or others with similar experiences</li> <li>• Participants might feel their experiences are validated and others have the same experience</li> <li>• Group might move from a discussion group to one of support</li> <li>• Can confirm or disaffirm results</li> <li>• Group might generate new data which has been constructed in different social setting (i.e. group rather an individual)</li> </ul>	<ul style="list-style-type: none"> <li>• Need to have undertaken sufficient analysis to prepare data for sharing.</li> <li>• Need to re-consent people for confidentiality of original data and understanding how new data will be used</li> <li>• Cost of venue and further transcribing of the focus group.</li> <li>• Not as convenient for participant if they have to travel to venue</li> </ul>	<ul style="list-style-type: none"> <li>• Data needs to be non-identifiable</li> <li>• Group coercion can make it difficult for single disconfirming voice</li> <li>• Coercion as it might be hard to disagree with the researcher if they are leading the focus group</li> </ul>
<b>Member check using synthesised analysed data (1)</b> (Harvey, 2015)	<p>Positivist if simply for confirming results.</p> <p>Constructionist if opportunity to comment and add data as in Synthesised Member Checking</p>	<ul style="list-style-type: none"> <li>• Themes are returned so can make claims about the trustworthiness of findings.</li> <li>• The participant should be able to recognise their own experiences within the synthesised themes.</li> <li>• If seeking additive data need to provide explanation and space for participants to engage with this.</li> <li>• If several participants do not return limits claims on trustworthiness of final data set</li> </ul>	<ul style="list-style-type: none"> <li>• Need to do analysis increasing time before the themes can be returned</li> <li>• Have to consider the length and language of the document to engage participants in conceptual themes</li> <li>• Need to check contact details if several months after the interview</li> <li>• Losing participants to follow-up</li> </ul>	<ul style="list-style-type: none"> <li>• Less risk of participant distress as the themes are synthesised and conceptualised.</li> <li>• Need to confirm participants able and willing to receive the document if several months have elapsed</li> </ul>

1 Synthesised Member Checking is an example of this method and is described in detail in this paper.

**Figure 1 Flow chart of the processes undertaken in Synthesised Member Checking: a five step tool**



#### 5 Integrate findings

- Cross reference added data with existing codes
- Elicit and integrate any new findings
- Test and report disconfirming cases

### Box 1 Example of page from Melanoma Interview Study member checking document

#### Awareness of skin cancer or melanoma

We found that people were not overly aware of their moles, freckles or spots, and it was only when changes happened to their skin that they started to look more carefully. People in the study seemed to have heard of skin cancer but there was less awareness of melanoma being a skin cancer. When people noticed a change in a mole they often found an alternative explanation for the change rather than thinking it was cancer.

- **Don't think about my skin** – People tended not to be conscious of their skin. Changes in moles happened slowly and appeared to go unnoticed, *'when you've got moles that are just so much part of the furniture you just don't take any notice of them anymore.'*
- **Not really knowing about melanoma** – It seems many people had some awareness that a changing mole was a cause of concern. However fewer knew that melanoma was a serious skin cancer, *'I thought melanoma was actually inside your body, I didn't even know melanoma was another word for tumour, I've found all this out since, I was naive about it all.'*
- **Putting the change down to something else** – Several people thought a change in their mole or freckle was a normal change perhaps as part of getting older or being pregnant. A few thought they had an injury or a bite, *'Since I'd been outside to a barbeque and I thought, oh well I've been bitten, it's just bitten there on the mole.'*
- **Being very aware of melanoma** – When people knew of others who had had a melanoma they knew that changes in moles needed to be checked by a doctor, *'because my mum had melanoma I've always been aware to keep a check on my moles.'*

**Please add any further comments and consider the statements in the box below**

**It seems people have a general idea that a changing mole is something to be concerned about, but few people have a good understanding of the condition melanoma. Do you agree?**

**It seems that most people were not actively checking their skin for changes.**

**Table 2: Characteristics of participants who returned member check document and who provided additional comment**

	Main study	Sent member checking document	Returned with substantive annotation	Returned with minimal annotation	Returned no annotation	Did not return
<b>Number of participants</b>	63	50	16	8	4	22
<b>Gender</b>	Female 31	Female 26	Female 8	Female 5	Female 1	Female 12
<b>Stage of melanoma</b>	Thinner 33 Thicker 30	Thinner 27 Thicker 23	Thinner 8 Thicker 8	Thinner 6 Thicker 2	Thinner 1 Thicker 3	Thinner 12 Thicker 10
<b>Mean age</b>	64 (29-93)	61 (29-91)	61 (40-84)	65 (53-76)	72 (45-91)	59 (29-86)