



Protocol for the development of the CO-creation REporting Standards (CORES) for research

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Background

There is inconsistent and diverse terminology around the co-creation term, and lack of clarity and poor reporting on its use in research. There is currently little guidance on how to evaluate and report co-creation research making it difficult to standardise or assess the quality of co-creation research. Co-creation is an overarching and encompassing approach, which should not be used interchangeably with but instead is inclusive of the different stages of co-planning, co-management, co-design, co-production and co-evaluation within it (1)(2)(3). Many publications currently call for the need for co-creation reporting standards to be developed for this purpose, for example, (4) (5) (6) (7).

Currently, researchers are using co-approaches and 'shoe-horning' them into current reporting standards because of the lack of appropriate standards (8). The related reporting standards that do exist include: Standards for report qualitative research (SRQR) (9), Enhancing transparency in reporting the synthesis of qualitative research (ENTREQ) (10), Consolidated criteria for reporting qualitative research – interviews and focus groups (COREQ) (11), and reporting of patient and public involvement in research (GRIPP2) (12). However, co-creation research is based on Participatory Action Research (13) (14) (15) where co-creators are considered co-researchers rather than participants, with methods used focusing more on creative tools to encourage innovation, change and disruptive thinking. These therefore do not align with the qualitative research method standards already created. Although patient and public involvement is a part of co-creation research, it is more of an overarching methodology that includes a range of stakeholders that could provide a barrier if not involved or help to make the co-creation a success when involved, such as service deliverers, referrers, commissioners, policy-makers, designers and management. Therefore, when developing the cocreation reporting standards, where it is considered that there are parts of reporting already considered in an existing standard, then this will be referred to, meaning that only novel aspects are included in the new cocreation reporting standards.

Ideas for what can be included in co-creation reporting standards are published by Leask, et al (16). However, these ideas have not been rigorously developed underpinned by guidance for developing reporting standards (17) and has been criticised for not using the more overarching encompassing approach of co-creation (2). The authors of these papers will be invited to participate in the co-creation reporting standards development, alongside other key authors/researchers/editors/PPI/policy-makers in the co-creation field.

Aims and Objectives

Aim

The aim is to create reporting standards for carrying out co-creation research.





Objectives



1. To complete a review of reviews examining current reporting of cocreation projects and any existing frameworks, guidance or standards.
2. To recruit an international expert panel and conduct an e-Delphi exercise to identify and prioritise standards for reporting co-creation research.
3. To undergo consensus meetings with the core team to develop the checklist (and potential flow diagram) and explanation and elaboration document.
4. To gain feedback on the developed COcreation REsearch Standards (CORES) checklist to further refine it for final publication.
5. To translate the checklist (originating in English) to Danish, French, Portuguese and Italian.

Methods

We will follow the methodology described in the guidelines for Developing Health Research Reporting Guidelines (17).

The meta-review (objective 1)

The following databases will be searched: Academic Search Complete, AMED, Business Source Complete, MEDLINE, APA Psycinfo, SPORTDiscus, CINAHL Ultimate, Education Source. Search terms will include synonyms of review and co-creation, co-plan, co-manage, co-design, co-production or co-evaluation in the title. Searches will be limited to peer-reviewed and academic journals published in the last 10 years, excluding protocols. The PRISMA checklist and flow diagram will be followed for reporting the review (18) (19). Narrative analysis will be carried out to summarise current reporting of cocreation projects and any existing frameworks, guidance or standards. This will be used to inform the suggested categories at the beginning of the e-Delphi process.

The e-Delphi (objective 2)

An international expert panel (approx. n=30) of English-speaking methodologists, journal editors, funding bodies, researchers published in the topic and Patients and Public Involvement (PPI) who have experience/expertise in co-creation will be recruited. We will e-mail potential members of the expert panel, inviting them to participate. The invitation will include a description of the process, the anticipated timescale, and the estimated commitment. The email will include a link that takes them to an online survey software that starts with a research information sheet page and consent boxes to tick if they are happy to take part in the e-Delphi process.

The e-delphi will be based on the protocol used to develop the StaRI implementation reporting standards (20) (21) (22) (23) with 3 or 4 rounds as needed. It will begin with



an open round where participants will be asked to list at least six standards that should be required for the reporting of co-creation research. To aid deliberation and collation of the responses, prompts under a range of headings will be provided based on the meta-review (e.g., rationale, approach, idea and aim development, setting, co-creators, co-defining the process, methods, co-design and co-production, co-refining, co-evaluation, presentation of results, sustainability), with an additional space for providing suggestions which do not fit, or fit into more than one category. Examples from similar reporting standards and the meta-review will be provided to support the process and guide the expert panel to providing meaningful input and gaining consensus during the e-Delphi process. It will be emphasised that these are only provided to assist clarity in the task and to prompt thinking. Participants will be asked to indicate if any of the suggested standards are particularly important to them. The expert panel will also be asked to provide references/links to publications with good practice examples of reporting co-creation research.

Responses will be collated by the core research team and then provided for ranking of each item on the provided checklist on a score of 1 to 9 (least important to very important). Comments on grouping, clarification and any missing items will also be invited. Participants will be provided with a 2-week deadline to complete each e-Delphi round. If they do not meet that deadline, then an email will be sent with another 7-days to complete the round.

The research team will then calculate medians and level of agreement for the items providing an overarching summary to all participants, and providing the individual responses to each person so they can compare their own response with the overarching response. They will then re-score the items after this ability to reflect. For clarity, it will be made clear which ones had reached the considered consensus level with 80% or more agreement and considered important (scores of 7-9), compared to those not reaching the consensus level of agreement and/or considered of lower importance. We envisage a consensus to be reached at this stage, but if needed another round will be provided only presenting items reaching consensus of 80% or more agreement and high importance (score of 7-9).

Consensus meetings (objective 3)

The core team listed as investigators of this project will then hold a series of online and face-to-face consensus meetings with the purpose of a) examining the results of the meta-review and e-Delphi, b) developing the CORES checklist, c) considering the need for a flow diagram, and it's content if needed d) examine underpinning evidence, explanation and useful examples for elaboration for each item on the checklist, and e) agree plans for publication, key tasks and timelines. Where useful, there is an option to co-opt support from the expert panel during this stage.

Checklist feedback (objective 4)

The developed checklist will be sent to the expert panel who took part in the e-delphi plus UK attendees of the co-creation course being delivered as part of the Erasmus+



funded Cocreating Wellbeing project. Feedback will be gathered using an online survey asking participants whether it is understandable, useable and if anything is missing. Feedback will be used to refine the checklist for final publication.

Translation (objective 5)

The core team will then translate the final English-version of the checklist into their own languages (Danish, French, Portuguese and Italian) using the method of back translation with the UK team. The availability of the checklist in 5 languages will be provided for public use on the CoCreating Wellbeing website.

Dissemination

It is planned to publish the meta-review and e-Delphi results, a CORES statement with checklist (and flow diagram if appropriate), and an explanation and elaboration document. The resources will be made available on the Equator Network website and the CoCreating Wellbeing website. Journal’s will be encouraged to ask authors to include how they meet the Co-creation Reporting Standards (CORES) when reporting co-creation research or parts of the co-creation process (e.g., co-design or co-production). The CO-creation REporting Standards (CORES) will be included as educational materials and activities in all future versions of the internationally delivered CoCreating Wellbeing course. People who took part in the e-Delphi and checklist feedback will be asked if they wish to be acknowledged on the publications.

Organisation

Dr Gemma Pearce is the CORES project lead and corresponding author who developed the research idea and has experience of developing reporting standards for the Equator Network (StaRI). Nikki Holliday is carrying out the meta-review and working with Gemma to run the e-Delphi, consensus meetings, feedback, translation and CORES document creation. The team of investigators, with co-opted support as required from the Expert Panel, will support the interpretation of data from the Delphi and checklist feedback surveys, complete the consensus meetings, translate the checklist, and develop the final statement and supporting documentation. Regular core team meetings will be held throughout the project.

Timeline

Months	Tasks
March 2023	Literature scoping Registration with Equator Network Ethics submission



April -July 2023	Meta-review e-Delphi Consensus meetings
August - October 2023	Checklist feedback survey Publication writing Translation process
November – December 2023	Publication submission Dissemination plan actioned

Funding

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