Reviewer’s report

Title: Using a ‘rich picture’ to facilitate systems thinking in research coproduction

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Reviewer: Nasreen Jessani

Reviewer's report:

OVERALL COMMENTS

Thank you for the opportunity to review this manuscript. I really enjoyed learning about "rich picture" as a tool for sense making and its value in systems thinking. The outcomes discussed provide strong evidence that this could be a viable and useful tool to encourage more systems thinking. More such examples would be good to learn from.

While this is an important tool, the paper is more about the process for developing a rich picture with a lot of detail about the workshopping process and the methodology. There are several areas that need more clarity and much more details to truly understand what was done. I would recommend revisiting the paper with the journal scope in mind but also some revisions to answer the queries below, keeping in mind that this is an interesting approach and method to consider.

SPECIFIC COMMENTS

Introduction

This provides a good background and flow in general. A few comments:

Page 6 Line 53: This seems to come prematurely as we don't yet even know the aims of the study before we hear about how rich picture was used. Suggest moving this to a later part of the paper.

Other valuable papers to consider:

Peters: https://health-policy-systems.biomedcentral.com/articles/10.1186/1478-4505-12-51

Methods

The methods are very thorough with each step well explained. However there are a few areas that are unclear. If N=7, what important voices could be missing from the process? How many participants could there have been? Is there a breakdown of the 7? How many were policymakers and how many were health promotion officers? How many were IT staff? Are IT staff the policymakers? A bit more clarity would be helpful. How many of the researchers were present?
In the intro you indicate that coproduction is "the joint working of people who are not in the same organisation to produce goods or services." Were these 7 people therefore from different orgs? Producers and users? Its clear that the larger study was co-produced but it is unclear whether this component can be considered co-produced also with the definition as is. Perhaps answers to the questions earlier will also assist with some of these queries.

Is the entire experience that is shared here the result of the workshop? If so that needs to be clear that this is a reflection of the PHMIS and production of a rich picture within a one day workshop.

Page 7 Line 25: Its unclear…how do you explore dynamics between two inanimate systems - an electronic system (PHIMS) and a practice? Are you exploring dynamics between people engaged in utilizing both? If exploration is between two inanimate processes, then its unclear how the rich picture fits in…perhaps rephrasing would make this clearer.

Page 9 line 55: what is a "scaled out view?"

Page 10 line 40: How were the drafts shared - virtually, in person, email?? How was the picture trialled? What does it mean to be trialled - ie what probing questions were asked to ensure that it was meeting the objectives? How many of the research team were involved in this?

Page 10 line 60: you mention trialling with one HP team. How many teams were there in total? How was the trialling team chosen? How many people were in the trialling team?

Page 12 line 18: after participants generated ideas in silence was there discussion and were there differences in interpretation? How were these managed?

Page 12 line 20: How were different thoughts or ideas to the provocative questions managed? How did facilitators deal with diametrically opposed interpretations?

Page 13 line 1: can the survey questions be included? What was asked and in what way?

Box 2: There needs to be more clarity on the three aspects in the box. Is the first the purpose of multistakeholder engagement? The second is the aim of the visual picture and the third the goal of the workshop? Its not clear particularly as purpose, aim and goals are often used interchangeably.

Results

Why are the main questions called Themes? Aren't they just questions?

What questions could have been asked, in retrospect, that should be included in future exercises such as these?

Were there any decisions (amongst participants) to rectify some of the incongruencies that participants noted? Ie…were there other outcomes that were unanticipated through this method?
Perhaps I missed the full range of who the participants were but most quotes come from the managers and IT designers form the same organisation. I had the impression that there were several other types of other participants whose thoughts could be shared?

Page 17 Line 56: Did all participants complete the evaluation? Are results means etc of 7/7 partners? Did the researchers complete the form also?

Discussion

Its not clear about where in the process the research project comes in…does the rich picture help raise questions for research or is the rich picture the output of the research?

Its not clear who the producers and the users of the research are that are tasked to "co-produce" …and what are they co-producing? The research question? The analysis? The output (rich picture?).

It would be helpful to anchor this new methodology more in terms of other creative forms of coproduction that are documented such as drama, art, photo-voice, video-voice etc and what is similar or different in terms of desired outcomes re systems thinking?

The authors mention some of the challenges such as concerns about "validity" as well as hesitancy to question ones own role in the system. What potential solutions to this do the authors propose? What can we glean from psychology literature to overcome the latter? What types of other "provocative" questions could be posed?

In terms of long term evaluation, what can be considered with respect to whether this group actually now use a different approach in thinking and employing a systems thinking approach? What would be the best way of capturing this and learning from it?

Minor comments:

Some minor spelling errors etc…need correcting.

Page 6 Line 20: should read "concretely"

Page 6 Line 40: should read Crowe et al.

Page 7 Line 13: Simplify opening sentence. Perhaps: "The data for our rich picture came from…

Page 9 line 3: word missing after "staff members"

Page 11 line 9: should read To not Two

Page 11 line 37-47: Too long a sentence. Need to separate the ideas
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