Reviewer’s report

Title: The unpredictable journeys of spreading, sustaining and scaling healthcare innovations: a scoping review

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Reviewer: Chrysanthi Papoutsi

Reviewer's report:

This scoping review provides a timely contribution to a growing literature on spread, scale-up and sustainability of innovations. It synthesises lessons learnt from a number of relevant articles and provides a well-reasoned framework of actionable guidance, which has been developed together with stakeholders. Content-wise the paper does a good job in reviewing key challenges within a complex literature on spread and scale-up literature. Presentation, framing and justification could be improved, however, to add to the value of this work and maximise its potential.

Introduction

The introduction makes a good case for the relevance of this work. A little bit more detail would aid understanding.

For example, the second paragraph mentions: 'We found four groups of commonly identified challenges: Incentives and policies that are misaligned with improvement goals; the relatively weak integration of the medical profession within health systems; the predominance of some sectors of care (e.g. acute and sub-specialty) over others (e.g. primary and long-term care) (40,44-49); and the siloed functioning of professionals and funding mechanisms (40,43).'

- Would this be part of the introduction or part of the findings?

- What do the authors mean by 'relatively weak integration of the medical profession within health systems'?

- The next sentence mentions 'The 3S are considered promising processes for overcoming these four groups of challenges...' - by whom are they considered 'promising processes' and in what way? May need some rephrasing to accurately express what the authors want to convey.
Theoretical background

It is unclear how diffusion of innovations has been used as the theoretical background for the review. Do the authors mean that they have drawn on its theoretical concepts to 'read' and analyse their data (this partly appears to be the case in Results)? Or does diffusion of innovations belong to the introduction section merely as background?

Methods

The methods section needs more detail and needs to be specified more consistently:

- For someone unfamiliar with scoping reviews, it may be unclear what 'verification' and 'documentation' entail.

- What are the differences between 'exploratory scoping search', 'search' and 'bibliography search'?

- The first half of the 'search strategy' section seems to include some repetition where the searching of electronic databases is described - or is this about different stages in the review? Please clarify.

- It looks like the 'search strategy' section also includes details about screening and data extraction? Perhaps a different heading is warranted? In fact it is a little confusing to read that the review followed five stages and then see the review methods described in two sections with different headings.

- As part of the inclusion criteria, 'operational issues' are mentioned. Could you please explain what this means?

- Table 1 provides definitions of the themes included in the thematic analysis. The definition of mechanisms in this review is: 'Coherence, cognitive participation, collective action, reflexive monitoring through which human agency is expressed' (out of Normalisation Process Theory). If the review is looking for these 4 mechanisms only, then this needs to be specified more clearly. This would mean that NPT has been used as a lens to analyse the data (although reading the results this does not seem to be the case)? Perhaps a different definition for mechanisms is needed?

- Processes of 'validation' should be explained in more detail.

- Please also include more details on how the framework was developed from the results of the review and stakeholder engagement.
Results

- Categories of data extraction mentioned in the first paragraph should instead be included in the methods section.

- A brief paragraph is needed to summarise the studies included in this review and their characteristics. Unless someone looks at the additional files 1 and 2, there is very little information on the studies reviewed here (e.g. study designs, disciplines etc).

Discussion

This section forms the core of the paper, presenting the framework of actionable guidance.

- I'm wondering if the 5 sub-headings fully match the content of each of the sections. For example, the sub-heading 'innovation work' includes 'perceived value' which has already been discussed at length in the previous section on 'innovation has many meanings'. Would a better sub-heading be 'innovation work is demanding for people, organisations and communities: focus on feasibility and capacity-building' to match the content?

- Also, the section 'innovation journey as a social exchange process' discusses context at length but context is mentioned again in the next section on 'innovation as a political and contextual process' - these last two sections in the discussion could be made more distinct, as there seems to be quite a bit of overlap at the moment.

- Please also elaborate on the strengths and limitations of this review

- The future work section could also discuss what type of research (i.e. study types and design) is needed in this area, based on gaps identified

Overall, another revision could improve on the thread of argumentation and the flow of the paper. Throughout, I sometimes found I had to go back and forth between sentences, to make sure I understood what was meant.

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