# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

## ARTICLE DETAILS

TITLE (PROVISIONAL)	Interventions to integrate care for people with serious mental illness and substance use disorders: A systematic scoping review protocol
AUTHORS	Richardson, Amy; Richard, Lauralie; Gunter, Kathryn; Derrett, Sarah

# VERSION 1 – REVIEW

REVIEWER	Tiago S. Jesus, Ph.D Global Health and Tropical Medicine & WHO Collaborating Center on Health Workforce Policy and Planning, Institute of Hygiene and Tropical Medicine-NOVA University of Lisbon, Rua da Junqueira 100, 1349-008 Lisbon	
REVIEW RETURNED	19-Aug-2019	
GENERAL COMMENTS	Thank you for the opportunity to review the paper "Interventions to integrate care for people with serious mental illness and substance use disorders: A scoping review protocol" This scoping review protocol is well written, often clear and	
	precise, and overall well accomplished – in rationale, methods, transparency, and engagement of stakeholders. I offer a few suggestions for consideration / improved clarification below in a section-by-section review.	
	TITLE AND ABSTRACT Well accomplished. Maybe the need to reframe whether this is a "directed content analysis" per the comment I provide later on that.	
	STRENGTHS AND LIMITATIONS Page 3: All points seem to be strengths Can you point for a couple of limitations or so?	
	<ul> <li>INTRODUCTION</li> <li>Page 4, line 47 – Can you put the number on – supplementing "far exceeding" (as done in the previous paragraph)?</li> <li>Page 4, line 52/3 – likely because their somatic complaints are ignored/devalued. It is might be important for the reader to understand why.</li> <li>Page 6 – lines 18-22 and line 42/43. It's worthy to note that scoping reviews typically don't answer to that kind of questions – especially because they don't typically have quality assessment / risk of bias procedures; so, some caution/reframing must be taken for the reader not to presume this research will provide 'the' answer to that knowledge gap. The objectives, for example, are well accomplished with those regards.</li> </ul>	

	METHODS Page 7 – Defining the research questions: can some of the five be merged? E.g. #1 & 3; #4 & #5? E.g. Which type of interventions have been designed, and which of them have been associated with better outcomes? On the #5, can you name and cite the framework? It seems to me this is a priori defined.
	Page 8 – 27-28. You should be aware that Endnote will only remove a part of the duplicates. For example, the same article obtained from Medline or Scopus can have the journal's name written in different styles (Disab Rehabil or Disability and Rehabilitation). The EndNote will not delete that duplicated reference. You need to do it manually. Page 8 – 33. Is it 20 citations enough for the pilot test? Why not a fixed % of the total retrieval? What happens if the agreement isn't quite right? Does the agreement level need to reach a pre-defined level for the review to move forward?
	Page 8 Line 49: What does "academic" mean? Is a conceptual article an academic one? Page 8 Study Selection. Is there any retrain in terms of language? I don't recall seeing it and/or no plans on how to deal with paper in languages other than English. Page 9 Line 3- I guess "integrate care" refers to the definition provided into the Introduction – but it is me inferring. It should be explicit.
	Page 9 – 32 -38: Would you consider process-oriented QI indicators or evaluation measures (i.e. whether the target healthcare process has changed) in addition or in alterative to outcomes or outcome-oriented measures? Sometimes programs are evaluated also with those indicators. It is important to understand whether you intend to include them.
	Page 9 – Context: I understand that you want contemporary works. But why since 2000 in particular? Is 1999 not contemporary? Isn't two nearly two decades too much of a time as "contemporary"? My point is whether you have any further support to set 2000 in particular as date limit or whether it was arbitrary within the context of 'contemporary" evidence Finally, can you narrow down in dates later on (in the synthesis stage?) For instance, you can have plenty of evidence in the last decade or so to informedly ignore the works published before.
	Page 9 and 10 – Study Design. What studies you don't include? What about case studies, QI projects?
	Page 10 and 11: "step two". Is the whole described process a directed content analysis (as you name it) or better framed as a Framework Synthesis, or even Best-Fit Framework Synthesis (the latter allowing adjustments in the a priori framework emerging from the data)? Indeed, you use an a priori framework to synthesize the material.
	ETHICS & DISSEMINTATION
	Page 11 – line 47/48. Once again, be cautionary in the capacity of a scoping review to unravel / synthesize the success of interventions.

REFERENCES
They seem complete, relevant and up to date.

## **VERSION 1 – AUTHOR RESPONSE**

**Reviewer Comments:** 

TITLE AND ABSTRACT

Well accomplished. Maybe the need to reframe whether this is a "directed content analysis" per the comment I provide later on that.

STRENGTHS AND LIMITATIONS

Page 3: All points seem to be strengths.... Can you point for a couple of limitations or so? The strengths and limitations section now refers to specific limitations of the study (page 3), including the restriction of the review to articles published in English and the absence of a quality assessment of included studies (preventing conclusions regarding intervention effectiveness). INTRODUCTION

Page 4, line 47 – Can you put the number on – supplementing "far exceeding" (as done in the previous paragraph)?

Thank you; the percentage of deaths due to heart disease and suicide respectively has now been reported (page 4, lines 25-28).

Page 4, line 52/3 – likely because their somatic complaints are ignored/devalued. It is might be important for the reader to understand why.

Failure to acknowledge physical health complaints among people with mental illness/substance use disorders has been identified as an important reason for the elevated risk of chronic diseases in this group. A sentence describing the importance of stigma and the misinterpretation of physical symptoms as mental illness has now been added (page 5, lines 18-21).

Page 6 – lines 18-22 and line 42/43. It's worthy to note that scoping reviews typically don't answer to that kind of questions – especially because they don't typically have quality assessment / risk of bias procedures; so, some caution/reframing must be taken for the reader not to presume this research will provide 'the' answer to that knowledge gap. The objectives, for example, are well accomplished with those regards.

The background section of the scoping review has been reframed to more clearly align with the objectives of the study: which focus on describing interventions, theories informing intervention development, and the extent to which interventions have addressed key components of an existing integrated care framework (page 6, lines 27-31). The degree to which interventions have been successful (as indicated by changes in outcomes) will no longer be examined. As helpfully pointed out by the reviewer, this is not the purpose of a scoping review, and would require a quality assessment of each included study.

#### METHODS

Page 7 – Defining the research questions: can some of the five be merged? E.g. #1 & 3; #4 & #5? E.g. Which type of interventions have been designed, and which of them have been associated with better outcomes? On the #5, can you name and cite the framework? It seems to me this is a priori defined.

Question 3 has now been removed from the list of research questions and merged with Question 1 as recommended by the reviewer (page 7, lines 28-29). The framework referred to in Question 5 is now named and cited (page 8, line 5).

Page 8 – 27-28. You should be aware that Endnote will only remove a part of the duplicates. For example, the same article obtained from Medline or Scopus can have the journal's name written in

different styles (Disab Rehabil or Disability and Rehabilitation). The EndNote will not delete that duplicated reference. You need to do it manually.

Thank you for drawing this to our attention. After removal of duplicates using the Endnote function, we will also scan all articles and manually remove remaining duplicates. This is now noted in the methods section (page 8, lines 26-27).

Page 8 - 33. Is it 20 citations enough for the pilot test? Why not a fixed % of the total retrieval? What happens if the agreement isn't quite right? Does the agreement level need to reach a pre-defined level for the review to move forward?

Based on the reviewer's recommendation, the two researchers responsible for screening titles and abstracts will pilot the screening of 5% of articles retrieved from the database search to test application of the inclusion criteria. As mentioned, after each stage of the review process the reviewer's agreement will be assessed and a third reviewer (SD) will be consulted in cases of disagreement, until consensus is achieved. Consensus will need to be reached in relation to each of the articles reviewed for the pilot screen before independent screening of remaining titles and abstracts is conducted (page 8, lines 29-31).

Page 8 Line 49: What does "academic" mean? Is a conceptual article an academic one?

The word 'academic' has now been removed to avoid confusion (page 9, line 9) and the criteria for inclusion of a full text article in relation to participants, interventions, outcomes, context, and study design is described below. As identified in the study design section, only empirical investigations of interventions that have endeavoured to produce changes in outcomes will be included. Conceptual articles will be excluded (page 10, line 26).

Page 8 Study Selection. Is there any retrain in terms of language? I don't recall seeing it and/or no plans on how to deal with paper in languages other than English.

As identified on page 8 (line 19), the search will be restricted to articles and reports published in English. This is now acknowledged as a limitation in the strengths and limitations section of the manuscript.

Page 9 Line 3- I guess "integrate care" refers to the definition provided into the Introduction – but it is me inferring. It should be explicit.

The definition of integrated care that will be used to guide study selection is that which is described in the introduction (as developed by Singer and colleagues, 2011). This definition is now reiterated in the methods section (page 9, lines 28-29).

Page 9 – 32 -38: Would you consider process-oriented QI indicators or evaluation measures (i.e. whether the target healthcare process has changed) in addition or in alterative to outcomes or outcome-oriented measures? Sometimes programs are evaluated also with those indicators. It is important to understand whether you intend to include them.

In order to ensure the number of included articles is manageable to review, process-oriented indicators and evaluation outcomes will not be included. Furthermore, a key focus of this scoping review is to identify which outcomes integrated care approaches have been designed to modify among people with SMI/SUDs. This has now been made explicit (page 10, lines 9-11).

Page 9 – Context: I understand that you want contemporary works. But why since 2000 in particular? Is 1999 not contemporary? Isn't two nearly two decades too much of a time as "contemporary"? My point is whether you have any further support to set 2000 in particular as date limit or whether it was arbitrary within the context of 'contemporary" evidence.... Finally, can you narrow down in dates later

on (in the synthesis stage?) For instance, you can have plenty of evidence in the last decade or so to informedly ignore the works published before.

Restricting searches to include articles published since January 2000 is a common practice in scoping and systematic reviews (see a list of examples below from a quick google search):

Happell, B., Galletly, C., Castle, D., Platania-Phung, C., Stanton, R., Scott, D., ... & Furness, T. (2015). Scoping review of research in Australia on the co-occurrence of physical and serious mental illness and integrated care. International Journal of Mental Health Nursing, 24(5), 421-438.
Raichand, S., Dunn, A. G., Ong, M. S., Bourgeois, F. T., Coiera, E., & Mandl, K. D. (2017). Conclusions in systematic reviews of mammography for breast cancer screening and associations with review design and author characteristics. Systematic Reviews, 6(1), 105.

Ramsey, A. T., Satterfield, J. M., Gerke, D. R., & Proctor, E. K. (2019). Technology-based alcohol interventions in primary care: systematic review. Journal of Medical Internet Research, 21(4), e10859.
Shishehgar, M., Kerr, D., & Blake, J. (2018). A systematic review of research into how robotic technology can help older people. Smart Health, 7, 1-18.

- Khademvatan, S., Foroutan, M., Hazrati-Tappeh, K., Dalvand, S., Khalkhali, H., Masoumifard, S., & Hedayati-Rad, F. (2017). Toxoplasmosis in rodents: a systematic review and meta-analysis in Iran. Journal of Infection and Public Health, 10(5), 487-493.

Although arbitrary, this restriction does help to ensure that an unwieldly number of articles is not retrieved. Although we can narrow down dates at a later stage (and may indeed do this depending on the number of articles identified), this may lead to important interventions being missed that were progressive for their time of publication e.g. Druss, B. G., Rohrbaugh, R. M., Levinson, C. M., & Rosenheck, R. A. (2001). Integrated medical care for patients with serious psychiatric illness: a randomized trial. Archives of General Psychiatry, 58(9), 861-868.

Page 9 and 10 – Study Design. What studies you don't include? What about case studies, QI projects?

More information on the types of studies that will not be included has now been provided. Case studies and quality improvement projects will be excluded from the review (page 10, lines 25-27).

Page 10 and 11: "step two". Is the whole described process a directed content analysis (as you name it) or better framed as a Framework Synthesis, or even Best-Fit Framework Synthesis (the latter allowing adjustments in the a priori framework emerging from the data)? Indeed, you use an a priori framework to synthesize the material.

We agree with the reviewer that the directed content analysis would be more appropriately labelled as a framework synthesis, given the use of an a priori framework. We have updated the manuscript to reflect this (see abstract and page 11, line 15). A best-fit framework synthesis will not be applied as our aim is to examine the extent to which relevant domains of the Framework for Measuring Integrated Patient Care (Singer et al., 2011) have been applied, and not to investigate whether this framework should be amended or further refined.

#### **ETHICS & DISSEMINTATION**

Page 11 – line 47/48. Once again, be cautionary in the capacity of a scoping review to unravel / synthesize the success of interventions.

The statement about the success of interventions has now been removed from this section (page 12, line 17).

We would like to thank the reviewer and assistant editor once more for their considered comments. We hope that with the above changes the protocol is now acceptable for publication.

# **VERSION 2 – REVIEW**

REVIEWER	Tiago S. Jesus, Ph.D Global Health and Tropical Medicine (GHTM), WHO Collaborating Centre for Health Workforce Policy and Planning, Institute of Hygiene and Tropical Medicine - NOVA University of Lisbon
REVIEW RETURNED	26-Sep-2019
GENERAL COMMENTS	This reviewer is fully satisfied with the revisions made. They helped to improve clarity.