PEER REVIEW HISTORY

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ARTICLE DETAILS

| TITLE (PROVISIONAL) | Protocol for a scoping review to identify models, theoretical design, and formal evaluation of integrated specialist community health service provision for the first 2000 days |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------|
| AUTHORS             | Nelson, Helen; Munns, Ailsa; Ong, Sarah; Watson, Leanne; Burns, Sharyn                                                        |

VERSION 1 – REVIEW

| REVIEWER             | Aytur, Semra |
|----------------------|--------------|
|                      | Univ New Hampshire, Health Management and Policy |
| REVIEW RETURNED      | 24-Aug-2021  |

| GENERAL COMMENTS     | Overall, this is a well-written article that describes the protocol for a scoping review to identify models of integrated specialist community health service provision for the first 2000 days (pre-birth to age five). The rationale and process for conducting a scoping review on this topic are clearly documented. However, it would be helpful if the authors could address the following issues to strengthen the manuscript:  
1) On p. 1, lines 29-30 (Background), the authors state that “In Australia, implementation has outpaced the evidence for policy, practice, and demand for supply”. This sentence is somewhat unclear as written, and it is an important sentence because it sets up the ‘evidence gap’ that the authors describe subsequently. Please consider rewording this sentence for clarity, perhaps by specifying what you mean by “implementation has outpaced the evidence or policy” (?) and how this is linked to ‘demand for supply’?  
2) The authors do a good job throughout the manuscript of linking this work to considerations of equity and the social determinants of health. However, one component that appeared to be lacking was any explicit mention of environmental determinants or negative environmental exposures. It is well-documented in the literature that toxic environmental exposures (e.g., exposure to lead, poor air quality, poor water quality, etc.) can greatly impact early childhood development, as can a lack of greenspace and access to built-environment amenities that promote health. These negative exposures also tend to cluster spatially in disadvantaged neighborhoods. Including a reference to acknowledge environmental determinants would be helpful, perhaps drawing upon the exposome literature. This impacts clinical care as well because clinicians are often not trained to screen or test for these exposures in children, or to discuss these with families.  
3) Under “Concept” (lines 18-19) the authors state that, “Consistent measurement of outcomes will provide a continual feedback process to inform context specific policy and practice.” |

|                      | |
By “continual feedback process” are the authors referring to continuous quality improvement or iterative action cycles such as “Do Plan Act”? If so, please specify and cite.

4) In Table 1, under Context, ‘community-based services’, can the authors please provide a few more examples other than just schools?

I hope these comments help the authors to strengthen the manuscript.

GENERAL COMMENTS

Thank you for the opportunity to review this protocol for a scoping review, it was an interesting read. Please find my comments below:

Abstract
• I understand that the study objective is to “identify models of care delivery, and outcome measures”. Please specify what you mean by outcome measures to help the reader understand what kind of information you want to synthesise
• Please include the sources of evidence in the abstract (acc. to PRISMA-ScR)

Strength and limitations
• I do not understand why the authors point out patient and public involvement as a particular strength of their study, when on p. 6 it is mentioned that no patients were involved in the systematic scoping process

Table 1
• Please provide rationale for why literature will be search from 1991 onwards. Later in the text (p. 7) the authors state “the first and second search will include Jan 2010 to current”. Please clarify the search period and provide rationale.

Table 2
• Will data be extracted on the age of children or whether the individual studies included children, parents or carers? Will data be extracted on the types of conditions with which children present to integrated specialised community-based care?
• Will data be extracted on whether the study was set in a rural vs urban community context?

Additional file 1
• The logbook provided outlines first pilot searches for already existing systematic (scoping) reviews and searches with the aim to identify Mesh-Terms. I recommend to include a more advanced version of the search strategy at the point of publishing this protocol including free text terms and Mesh-terms (as described in the text) along with time and language limits

GENERAL COMMENTS

This is a well-written scoping review protocol focusing on a very interesting area.

A few minor queries/suggestions.
The title suggests that this review intends to "identify models of integrated specialist community health service provision" but the review question states "What models are used for the design and evaluation of ICS...etc". This seems to be slightly different. Am assuming that, for a scoping review, you will source descriptions of integrated care models as well as any theoretical design and formal evaluation literature, and summarise this all together. Can you please clarify?

In table 1:
- typo in title 'screening' (too many e's!)
- it is not necessary to put the 'opposite' of the inclusion criteria in the exclusion criteria. e.g. would not put 'animal studies' in exclusion criteria as the opposite of humans.
- in the population inclusion criteria, you say it includes care for mothers and fathers - presumably of the child aged <5 - what about children who are in care / living with guardians etc? are these excluded?
- for those not familiar with the area, what does 'pre-birth' mean? Does this mean during pregnancy? Is this different from children <5 years? So does the first 2000 days include pregnancy+up to 5 years? Suggest this is made this clear in the background as well.

Re: no PPI - has there been anyone from the communities you are working with involved in the design of the research question for the review that will also help with planning of the community consultation etc? It seems a perfect opp

VERSION 1 – AUTHOR RESPONSE

Reviewer 1. Thankyou Dr Aytur for your review and comments. We have included your suggestions to strengthen the manuscript.

1) On p. 1, lines 29-30 (Background), the authors state that “In Australia, implementation has outpaced the evidence for policy, practice, and demand for supply”. This sentence is somewhat unclear as written, and it is an important sentence because it sets up the ‘evidence gap’ that the authors describe subsequently. Please consider rewording this sentence for clarity, perhaps by specifying what you mean by “implementation has outpaced the evidence or policy”(?) and how this is linked to ‘demand for supply’?

Response. Added page 3 lines 36-44: Australia there is limited evaluation data and evidence to inform change in policy and practice [7]. Equitable physical access to community-based services was found to be important for families with young children, including access by public transport and walking [7]. Other issues pertaining to demand for supply and access to services included cost, waiting lists, integration and coordination of services [8]. This represents an evidence gap for data to inform interventions and policy changes, including measurement data to suggest causal links that support continuity of community-based interventions [7,8].

2) The authors do a good job throughout the manuscript of linking this work to considerations of equity and the social determinants of health. However, one component that appeared to be lacking was any explicit mention of environmental determinants or negative environmental exposures. It is well-documented in the literature that toxic environmental exposures (e.g., exposure to lead, poor air quality, poor water quality, etc.) can greatly impact early childhood development, as can a lack of greenspace and access to built-environment amenities that promote health. These negative exposures also tend to cluster spatially in disadvantaged neighborhoods. Including a reference to
acknowledge environmental determinants would be helpful, perhaps drawing upon the exposome literature. This impacts clinical care as well because clinicians are often not trained to screen or test for these exposures in children, or to discuss these with families.

Response. Thank you for referring to the episome literature. In a scoping review on the characteristics of episome studies Haddad et al. (2019) found an overlap between the episome domains as they were originally defined. For this reason we have used the term “environmental exposure” referenced to Haddad et al. (2019).

Added page 4 lines 5-13: Within a systems model, we understand that beyond intrinsic neurobiological pathways, children experience risk through negative environmental determinants [14]. These include family and community factors such as maternal depression, intergenerational trauma, neighbourhood safety, and social inequity [12,14–16]. Environmental determinants also encompass the natural and built physical environment, including greenspace, housing and transport, health care infrastructure (including policies and practices), and access to health promotion programs [7,14].

3) Under “Concept’ (lines 18-19) the authors state that, “Consistent measurement of outcomes will provide a continual feedback process to inform context specific policy and practice.” By “continual feedback process” are the authors referring to continuous quality improvement or iterative action cycles such as “Do Plan Act”? If so, please specify and cite.

Response. Added, page 4 lines 36-40: Consistent measurement of outcomes will provide a continual feedback process to inform context specific policy and practice [23] using a plan-do-study-act (PDSA) cycle [24]. PDSA will be informed by a broader methodological approach [24], beginning with a map of existing services and environmental determinants in the community, consumer and stakeholder engagement, and this scoping review.

4) In Table 1, under Context, ‘community-based services’, can the authors please provide a few more examples other than just schools?

Response. Added, pages 5 and 6 Table1: Community based specialist child and family services. This may include school-based services, playgroups and child-care, safe places for social gathering. The interactions, pathways and protective factors through which early child development is supported in the community [7].

Reviewer 2. Thank you Miss Dieckelmann for your review of the protocol and your comments. Your recommendations are included.

1) Abstract. I understand that the study objective is to “identify models of care delivery, and outcome measures”. Please specify what you mean by outcome measures to help the reader understand what kind of information you want to synthesise.

Response. Added, page 2 line 54: The review will identify models of care delivery, and will identify quality of care outcomes that have been measured, including evidence of reliability and validity.

2) Please include the sources of evidence in the abstract (acc. to PRISMA-ScR)

Response. Added, page 3 line 3: Sources of evidence will include CINAHL, Cochrane databases, Medline, PsychInfo, and Scopus.

3) Strength and limitations. I do not understand why the authors point out patient and public involvement as a particular strength of their study, when on p.6 it is mentioned that no patients were involved in the systematic scoping process.

Response. Thank you for this question. Please see the response to reviewer 3. We have amended the Patient and Public Involvement section (page 8, lines 22-37) to demonstrate this strength of the study related to the initial consumer consultation and stakeholder engagement that informed the development of a three-part study. The research question for the scoping review was shaped on the initial consumer consultation and stakeholder feedback.
4) Table 1. Please provide rationale for why literature will be search from 1991 onwards. Later in the
text (p.7) the authors state “the first and second search will include Jan 2010 to current”. Please
clarify the search period and provide rationale.
Response. The search period in Table 1 was in error. Changed (Page 6 line 22) and (Page 6 line 38):
January 2010 to current to account for policy and practice relevant to the past decade,

5) Table 2. Will data be extracted on the age of children or whether the individual studies included
children, parents or carers? Will data be extracted on the types of conditions with which children
present to integrated specialised community-based care?
Response. Yes, data will be extracted on the age of children, and if individual studies included
children, parents or carers. The wording has been amended for clarity
Added, page 7, line 28: Age of children pre birth – 5 years (including if individual studies included
children, parents, or carers). Presenting conditions of children, parents or carers.

6) Will data be extracted on whether the study was set in a rural vs urban community context?
Response. Yes, this has now been added page 7 line 37: rural or urban context.

7) The logbook provided outlines first pilot searches for already existing systematic (scoping) reviews
and searches with the aim to identify Mesh-Terms. I recommend to include a more advanced version
of the search strategy at the point of publishing this protocol including free text terms and Mesh-terms
(as described in the text) along with time and language limits.
Response. The title for this logbook has been amended to Additional File 1 Logbook / Search
Strategy for Pilot Searches for Existing Reviews
A more advanced version of the strategy has been included with Mesh terms, free text terms and time
and language limits.

Reviewer 3. Thank Dr Fogg for your review of this protocol and for your comments and
recommendations.
1) The title suggests that this review intends to "identify models of integrated specialist community
health service provision" but the review question states "What models are used for the design and
evaluation of ICS...etc". This seems to be slightly different. Am assuming that, for a scoping review,
you will source descriptions of integrated care models as well as any theoretical design and formal
evaluation literature, and summarise this all together. Can you please clarify?
Response. The title has been changed: Protocol for a scoping review to identify models, theoretical
design, and methods of formal evaluation of integrated specialist community health service provision for the first
2000 days.
The review question has been changed (page 5 line 32): What models, theoretical design, and
methods of formal evaluation are used for integrated specialist community-based health service
 provision for the first 2000 days?

2) In table 1:
- typo in title 'screeening' (too many e's!)
- it is not necessary to put the ‘opposite’ of the inclusion criteria in the exclusion criteria. e.g. would not
put ‘animal studies’ in exclusion criteria as the opposite of humans.
- in the population inclusion criteria, you say it includes care for mothers and fathers - presumably of the child aged <5 - what about children who are in care / living with guardians etc? are these excluded?
- for those not familiar with the area, what does 'pre-birth' mean? Does this mean during pregnancy? Is this different from children <5 years? So does the first 2000 days include pregnancy+up to 5 years? Suggest this is made clear in the background as well.

Response. Amended (Table 1, page 4)
- The word screening is amended
- ‘Animal studies’ is removed from the exclusion criteria
- ‘This’ has been removed leaving ‘care for mothers, fathers, carers.’
- The term ‘prebirth’ has been changed to ‘during pregnancy up to age five years’ in Table 1 and in the background.

3). Re: no PPI - has there been anyone from the communities you are working with involved in the design of the research question for the review that will also help with planning of the community consultation etc? It seems a perfect opportunity.

Response. Thank you for this question. This has been amended to include prior consumer involvement that informed a three part study of which the scoping review forms one part.

Added, page 8 lines 22-37. This study was commenced in response to a community consultation to inform the need for and direction of project development by the non-government organisation (NGO) Carey Community Resources, and future ethical considerations [35]. Community members highlighted difficulties in sourcing support for children and families due to long waitlists and distances needed to travel for specialist services. They also emphasised direct and indirect costs experienced by families when trying to access these services. The need for services to ‘communicate’ with each other, providing background and referrals was highlighted. Services also need capacity to work with families from diverse cultural and language backgrounds. Community members requested an information guide to show current available community services. In response to this initial conversation, the NGO mapped available services with a view to preparing an information guide. The research question for the scoping review was informed through the initial consumer feedback and by conversation with service providers during the mapping process.

**VERSION 2 – REVIEW**

| REVIEWER                     | Aytur, Semra                        |
|------------------------------|------------------------------------|
|                             | Univ New Hampshire, Health Management and Policy |
| REVIEW RETURNED             | 29-Nov-2021                        |

| GENERAL COMMENTS             | The authors have satisfactorily addressed my comments. Thank you. |

| REVIEWER         | Dieckelmann, Mirjam                   |
|------------------|--------------------------------------|
| REVIEW RETURNED  | 08-Nov-2021                           |

| GENERAL COMMENTS | The authors did an excellent job in improving the manuscript. Looking forward to reading the results of this work. |