

PEER REVIEW HISTORY

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ARTICLE DETAILS

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| TITLE (PROVISIONAL) | Patient navigators facilitating access to primary care: A scoping review |
| AUTHORS | Peart, Annette; Lewis, Virginia; Brown, Ted; Russell, Grant |

VERSION 1 – REVIEW

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| REVIEWER | Elizabeth Muggah Department of Family Medicine Faculty of Medicine University of Ottawa Ottawa, Canada |
| REVIEW RETURNED | 18-Sep-2017 |

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| GENERAL COMMENTS | <p>Overall this is a useful scoping review that gives primary care policy makers, administrators and clinicians new information on different patient navigation processes that can assist with improving access to primary care. My comments are below.</p> <ul style="list-style-type: none">- I think some more context on the broad role of navigators then hone in on the role of improving access to primary care specifically. The authors talk about navigators being used for health promotion role but as the reader I had a much broader sense of what navigation role could be ie: system navigation, case management, transitions of care. It would help to orient the reader and also to underline the importance of navigation to give the bigger picture first.- Consider explicitly stating how this scoping review information without outcomes could assist those interested in designing/implementing a similar program- be more clear up front about the fact that this won't address effectiveness- notwithstanding the former comment given one of the inclusion criteria was that studies had to report on outcome of connecting at least once with a PC provider I was surprised they didn't report on this outcome. Could the author's explore if any of the 9 principles were linked to the outcome of successful access?- I had not heard of Freeman, would be useful to say a bit more about this work to reinforce the validity of the 9 principles used in the paper- Not clear why Epstein's model of patient centered care was selected, a little more on why patient-centeredness is important for navigation would be useful- It isn't clear how did the authors get from the 5,691 records then exclude 5,613 and be at 78 papers. More detail on this step is needed- In the results some more summary data describing the studies populations/settings would be helpful, ie: underserved populations vs chronic disease, lay vs trained navigators vs process changes, single vs longitudinal intervention |
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| | <p>- all of the studies were American, the authors should consider addressing in the limitation section how this might impact the generalizability of the work and why there were no studies from outside the US. Seems interesting to me that the authors didn't identify research from other countries. Just off the top of my head in our province we have a process called Health Care Connect that is an internet based process connecting people without a PC provider with a provider https://hcc3.hcc.moh.gov.on.ca/HCCWeb/faces/layoutHCCSplash.jsp</p> <p>- A quick search identified this recent scoping review on another aspect of primary care navigation and I thought this might be helpful to review in terms of how the set the context for navigation in primary care and role of the scoping review and then gave more detailed results on included papers https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2046-1</p> |
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| REVIEWER | Christy Harris Lemak, PhD FACHE University of Alabama a Birmingham USA |
| REVIEW RETURNED | 18-Oct-2017 |

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| GENERAL COMMENTS | <p>Thank you for the opportunity to review this excellent scoping review of this very focused topic. The authors clearly describe what they set out to do and then followed through precisely and drew appropriate conclusions.</p> <p>The paper could be improved in the following ways:</p> <p>* There is no recognition or discussion about the potential confusion surrounding different names for potentially the same function - that is - community health worker and navigator. It is possible the authors missed some studies or there are differences in the use of these two different types of resources in referrals to primary care. This entire (somewhat controversial) issue was completely left out of the manuscript.</p> <p>* The potential importance for navigators in primary care (introduction) could be much stronger. This is the entire rationale for conducting the review and right now, it is not convincing. The authors are clearly committed to this issue, but all readers may not be so. I encourage the authors to strengthen this point.</p> <p>As well, the relationship to patient-centered care is not clearly justified. While this is certainly an important area (and one that is timely in the popular literature), I remain unconvinced of the need to explore whether or how navigators (or navigation) incorporate patient-centeredness. This is again an important way to convince readers of the importance for the analyses that follow. Right now, research question 3 seems like a bit of an "add on" to the rest of the manuscript.</p> <p>The authors could potentially build a stronger case for beginning their review in the year 2000.</p> <p>Finally, the Discussion section is the weakest part of the manuscript. The authors could go further to elaborate what was learned and what future studies could explore regarding patient navigation and primary care.</p> |
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| | <p>Some of the things that were not uncovered were not a part of the research questions (and therefore, the scoping review process). This part of the paper needs a more major revision.</p> <p>This is important work and I look forward to continued work to see how we can collectively improve access to primary care through patient navigation.</p> |
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| REVIEWER | Ruta Valaitis McMaster University, Canada |
| REVIEW RETURNED | 29-Oct-2017 |

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| GENERAL COMMENTS | <p>Thank you for the opportunity to review this interesting and timely manuscript. The topic of patient navigation has gained prominence as a potential strategy to improve the delivery of the health and social care. In addition, there has been much attention placed on improving access to primary care as the first point of contact in the health care system for the population. Thus, this paper addresses both topics which are of current global interest.</p> <p>Page 5. Consider editing the bullet points to be written as complete sentences. Be consistent. Bullet 4 is unclear. Also, it is up to the reader to interpret if the points are considered strengths or limitations. Please make this explicit.</p> <p>Given the lack of consensus on the definition of patient navigation in the literature, it is helpful that the authors have identified the scope of the role of navigators being explored in the scoping review as the mechanism of connection to primary care. The literature review is concise and covers the system navigation literature well to frame this paper.</p> <p>The authors argue on page 7 (line 13-15) that the impact of patient navigation on access to primary care is unclear. It was unsure of the intent of this until I read the inclusion/exclusion criteria. I see that the authors are focusing on people who are unattached to primary care versus people who are attached but just do not access primary care due to access barriers (e.g., mobility, cost of transportation, language, etc). It would help to make this clear at the end of the intro just before the methods begin. It might also help to rephrase the research question 1. to something like: "How have patient navigators been defined and described in connecting people who are unattached to primary care to a primary care provider for regular care? The word "connecting" helps, but I think more clarity on the population of interest would be helpful.</p> <p>Did your research question consider interventions where a team was involved in supporting navigation processes rather than a single patient navigator?</p> <p>The scoping review method as outlined by Arksey and O'Malley and refined by Levac is an appropriate strategy to address the research question.</p> <p>Page 9 Table 1. The column heading "Outcomes of intervention" is unclear. Perhaps the column title should be something else such as 'Setting of the Intervention'? Please clarify what you mean by outcomes of the intervention.</p> |
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I am a bit confused with how looking at outcomes fit in this review other than as an inclusion criteria. See more on this in comments below.

Given the requirement in the selection of papers for inclusion is that there is an outcome reported (attending at least one appointment), did you examine what the outcomes were beyond this? If so, should this be a research question? If not, explain why you did not examine and report on outcomes? It might be useful to know what indicators and or measures were used to measure this.

Page 11- Can you please reference or describe what is meant by descriptive numeric summaries? A paper by Sandelowski might be helpful here. See Sandelowski, M. (2001). Real qualitative researchers do not count: the use of numbers in qualitative research. *Research in nursing & health*, 24(3), 230-240.

You note that you included only OECD countries- I understand that this includes countries such as Japan, Slovenia, Chile, Estonia etc.. see <http://www.oecd.org/about/membersandpartners/list-oecd-member-countries.htm> Did you really include all of these countries? And if so, how did you manage non-English papers? Should this be an additional exclusion criteria? On Page 10 Can you add a reference to support that OECD countries have similar primary care systems?

Page 18- line 8. I am not understanding the sentence "In addition, key stakeholders (including potential participants) were engaged through health fairs⁴², teaching emergency department physicians to use a new health information technology system⁴³, and clinics increasing capacity and expanding hours⁵⁰." Clarify what you are referring to with regard to key stakeholders. Do you mean navigators in addition to potential participants? Were these strategies conducted by navigators to support attachment to primary care or something else? More explanation would be appreciated.

Page 19, Please clarify the sentence (line 33-): "Similarly, seven studies presented ways in which development of resources informed the intervention. These included a needs assessment⁴² 56, software development⁴³, community-based participatory action research⁴⁶ 49 53 and provider collaboration to develop and test navigation mechanisms." Do you mean to say: 'Seven studies presented strategies intentionally used to inform the design of resources to support the navigation intervention, including...?' Perhaps I am misunderstanding what you are meaning here.

Page 21 Table 3. Line 8. Please add a verb to the following for parallel structure, e.g.,: "17 studies: provide information to patient..." (See the implementation phase column).

Discussion: The authors note that "Most programs had components that could be included in a framework of patient navigation." I wondered if there were components revealed that were not considered in Freeman's framework? I am assuming that you coded components deductively into the framework rather than inductively to identify concepts in the framework as well as search for other components. Please clarify your approach to the analysis in the Stage 5 section to make this clear. In general, the analysis section (stage 5) could use more explanation.

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| | <p>Did anyone check the coding? Who conducted the analysis in step 5? What themes arose? Which questions were answered by themes?</p> <p>You note that “The impact of navigators or navigation on access to primary care is not clear.” Is that because you did not pull this information, or because it was not reported, or something else. As noted above, I wondered if this was a research question that could have been added and reported on. If you did not pull this information, perhaps make it clear that this review was not looking to examine outcomes. You note in future research that “studies included were program descriptions with little evidence to indicate a sustainable impact or effectiveness.” I am not sure that the paper showed any results on outcomes.</p> <p>Can the tables be single spaced to ease reading?</p> <p>Consider adding ‘system navigation’ as one of your key words to assist searches for this topic.</p> |
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VERSION 1 – AUTHOR RESPONSE

1. INTRODUCTION

a. Context of the paper

Reviewer 1 suggests more context on the broad role of navigators to orient the reader and underline the importance of navigation is required. Reviewer 2 also calls for the importance of navigators in primary care be stronger.

Response: We believe this is an important suggestion. We have added information concerning the approach, tasks and potential role of navigation in primary care (page 6 lines 40-52).

b. Scoping review population of interest

Reviewer 3 asks for clarification of the population under investigation and how this relates to research question 1.

Response: We have added information to the introduction, specifically the end of paragraph 3 (page 6), and in the last paragraph of the introduction (page 7), relating to the focus of our review on people unattached to primary care.

c. Relationship to patient-centred care

Reviewers 1 and 2 ask for more information and clarification on why patient-centred care, and Epstein’s model, in particular, was important to include in this review.

Response: We included patient-centred care in this review as it is one of the six aims of quality care proposed by the Institute of Medicine. We chose Epstein’s model as it fits with the concept of patient navigation and its extension beyond the clinical encounter to the broader health care setting. We have added information on the rationale for inclusion in the patient-centred care paragraph (pages 6-7), accordingly.

2. METHODS

a. Research questions

Reviewers 1 and 3 ask for clarity of focus of the review (not looking at effectiveness) and re-phrasing of research question 1.

Response: This suggestion also relates to Reviewer 3’s request for clarification of the population of interest (1b above). We have added to the second paragraph of ‘Stage 1: Identify the research question’ to indicate we are not looking at impact or effectiveness. We have re-phrased research question 1 based on the suggestions of Reviewer 3 so the population of interest is clear.

b. Inclusion criteria

Reviewers 2 and 3 ask for explanations of criteria for selected studies, specifically building a stronger case for the start date, inclusion of all OECD countries, management of how non-English papers, and consideration of team interventions.

Response: We reviewed the literature from 2000-2016. This date reflects increasing interest in patient-centred care and use of patient navigators in the last 20 years, and covers the period since publication of the Institute of Medicine's Crossing the Quality Chasm report. This enabled us to focus on contemporary literature relevant to current practice. We have added information to our selection criteria ('Stage 3: Study selection', page 9) for clarity.

Our criteria outline that only papers published in English were included. We feel this does not require further clarification in the exclusion criteria. All OECD countries were included during the searches. The context provided in the exclusion criteria regarding non-OECD primary care systems does not require further clarification, in our opinion. While team-based interventions were not excluded, they did not specifically arise in our searches.

c. Table 1: Key search terms

Reviewer 3 asks for clarification of Table 1, namely column headings and inclusion of 'system navigator'. Reviewer 2 suggests discussing confusion surrounding the use of different names for potentially the same function, for example, community health worker and navigator. Reviewer 2 raises concerns about missing studies or not recognising differences in these two types of roles in referrals to primary care.

Response: We have amended Table 1 to make the column heading clear. As our searches are now complete we are unable to add 'system navigation' to a new search. However, using the term 'navigation' in our searches would have picked up 'system navigation'.

Our search strategy sought to include all terms or names we determined as being synonymous with navigation. We have added information to our limitations section of the 'Discussion' to address this issue.

d. Analysis of the results

Reviewer 3 asks for clarification of our approach to analysis (Stage 5), specifically how components were coded, further explanation of the process, and referencing descriptive numeric summaries.

Response: We grouped the components deductively and found they fitted quite well to the navigation framework. We feel our approach was reasonable, but have provided more information on data analysis (page 12) for clarification. We have deleted the confusing reference to descriptive numeric summaries.

3. RESULTS

a. Reporting on the studies

Reviewers 1 and 3 are concerned we didn't report on outcomes, although a key element of inclusion criteria. Reviewer 1 asks us to consider stating how findings without outcomes could assist others to design and implement similar programs. Reviewer 3, in particular, asks if outcomes beyond the inclusion criteria were examined; if so, should this be a research question, and if not, why? Reviewer 3 feels outcome indicators or measures would be useful. In addition, Reviewer 1 states more information on populations, settings, and interventions would be useful in the summary data. Reviewer 3 gives feedback about the wording of Table 3 and requests the tables be single-spaced.

Response: These are important points raised by the reviewers. The outcome (patient attending an appointment) was an important criterion for us, as it served to 'contain' the review to include studies who reported on this outcome only. We made a pragmatic decision in terms of the limitation of outcomes. Hence we chose to focus on descriptions of programs and their patient-centredness. However, we have added information to the paper to address the reviewer's concerns. Table 2 has been significantly updated to include primary outcomes and timeframes (for example, three, six, twelve months follow-up).

We have added in Table 2 information on populations served, settings, and interventions, to give a clearer picture of the studies. In the Discussion we have added information about designing and implementing similar programs, to address Reviewer 1's concerns.

We have added a word to Table 3 to correct the grammatical error. However, we have not altered the spacing of the tables as these meet the requirements of BMJ Open.

b. Use of Freeman's patient navigation framework

Reviewer 1 asks for more information about Freeman's patient navigation framework and if any of the principles were linked to the outcomes of interest. Reviewer 3 asks if any navigation components revealed were not considered in the context of Freeman's framework.

Response: We have updated the manuscript to include more information about Freeman's framework in the paragraph 'Patient navigation program components'. We feel this is sufficient as the framework is increasingly cited in patient navigation literature. We did not explore whether principles were linked to outcomes as this was beyond the scope of this paper, however such an exploration may be of benefit. We have added this to our manuscript in the 'Future research' section.

While we did not specifically seek to test Freeman's framework, there were no difficulties with characterising program components within the model.

c. Number of studies reviewed

Reviewer 1 asks for more detail on how we got from 5,691 records, then exclude 5,613 to get 78 papers.

Response: We have added information into the first results paragraph, including an extra reference to Figure 1 (first sentence) to ensure readers can see the methods of refining the number of studies in our review.

d. Explanation of paragraphs in discussion of Principle 2 (Integration of a fragmented healthcare system) and Principle 6 (Defined level of skill)

Reviewer 3 asks for more information about key stakeholder engagement (Principle 2) and clarification of the seven studies involved in the development of resources (Principle 6).

Response: We have reviewed the paragraph discussing key stakeholder engagement in Principle 2 and as it doesn't considerably add to the paper, have deleted this. We have re-phrased the paragraph under Principle 6 according to Reviewer 3's advice.

4. DISCUSSION

a. Strengthening the discussion section

Reviewer 2 urges us to revise this section and elaborate what was learned and impact on future practice and research.

Response: We have undertaken a major revision of the Discussion and expanded it to include:

- Clear structure of main findings to focus on what we learned and directly respond to the research questions
- Linked findings to relevant literature: we have included an updated description of the activities patient navigators undertake with reference to a recent scoping review of patient navigation
- Highlighted limitations and applying these to implications for practice and research
- Clarified the lack of examination of the impact of navigation and removed the statement about the impact of navigation being unclear.

b. Limitations of the paper

Reviewer 1 asks us to address all included studies being based in the United States, and how this may impact on the generalisability of our work.

Response: We have added information to the second paragraph of our limitations to address this issue.

5. ARTICLE SUMMARY

a. Bullet points

Reviewer 3 asks us to consider editing the bullet points to be complete sentences and make strengths and limitations explicit, so the reader can interpret if the points are indeed strengths or weaknesses.

Response: We have re-phrased the bullet points to ensure they read as complete sentences. While we acknowledge and agree with Reviewer 3 (it is up to the reader to interpret whether the article summary consists of strengths or weaknesses), our message remains in line with the requirements of BMJ Open.

VERSION 2 – REVIEW

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| REVIEWER | Elizabeth Muggah Department of Family Medicine University of Ottawa, Ottawa Canada I have worked several years ago with one of the authors (G Russell) as a co-author on a paper |
| REVIEW RETURNED | 07-Jan-2018 |

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| GENERAL COMMENTS | I appreciate the detailed response from the authors who have thoughtfully gone through all of the concerns raised by the three reviewers. I do continue to think this is a valuable paper worth publishing. The content of the paper has been strengthened in this second revision. However I have ongoing concerns about the flow of the paper. I find it still isn't a "crisp" succinct document. I think the paper would benefit from having a professional editor read through it. I have tried to go through it in more detail myself (see attached document with my notes) to point out the areas that remain not as clear as I think they could be. The reviewer also provided a marked copy with additional comments. Please contact the publisher for full details. |
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| REVIEWER | Christy Harris Lemak University of Alabama at Birmingham USA |
| REVIEW RETURNED | 20-Dec-2017 |

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| GENERAL COMMENTS | Excellent Revision! All of my concerns have been addressed! Well Done! |
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| REVIEWER | Ruta Valaitis McMaster University, Canada |
| REVIEW RETURNED | 02-Jan-2018 |

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| GENERAL COMMENTS | All of my concerns have been addressed by the revision and response to the reviewers' feedback. I have one small suggestion for typesetting. It would be helpful for readers to have the top line of the table 2 headings repeat on each page. |
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VERSION 2 – AUTHOR RESPONSE

1. INTRODUCTION

Reviewer 1 suggests added text to the existing introduction to improve clarity.

Response: We added information about the origins of patient navigation to the Introduction (bottom of page 6) and removed this from the Results, as Reviewer 1 suggested. However, we feel the remaining text in the Introduction stands on its own.

2. METHODS

Reviewer 1 adds text to the second paragraph of 'Stage 1: Identify the research question', to refer to the target population as unattached. Reviewer 1 also suggests alerting the reader that we did not investigate the effectiveness of interventions, earlier in the Methods.

Response: We understand the term unattached may refer to people who do not have a health provider. However, we believe the current description is adequate.

We referred to the intent of the review at the beginning of the Methods and the reference to effectiveness sits correctly in the text.

We have also corrected an Author number (the last sentence in 'Stage 3: Study Selection').

3. RESULTS

a. Reporting on the studies

Reviewer 2 recommends formatting of Table 2 so column headings repeat on each page.

During the first revision process, Reviewer 1 was concerned we did not report on outcomes, although a key element of inclusion criteria. She stated more information on populations, settings, and interventions would be useful in the summary data. For this revision, Reviewer 1 asks why studies were included if they did not report on the outcomes. She suggests we amend this column for improved clarity.

Reviewer 1 also asks why sample size is not included in some studies and requests consistent formatting of the sample sizes in parentheses.

Response: We have formatted Table 2 to repeat column headings at the top of each page, and agree with Reviewer 2 it is helpful for readers.

In our response to Reviewer 1's original concerns, we revised Table 2 to include outcomes, timeframes, populations, settings, and interventions. We feel that for studies to be listed on the table it is self-evident they meet the inclusion criteria. However, we have added further text to the 'Primary Outcome' column in Table 2 for improved clarity.

In Table 2, we added text relating to sample size to the relevant studies, and all references to sample size formatted consistently.

b. Patient navigation definition, description, and components

Reviewer 1 suggests improvements to the flow of the text. She has concerns about inconsistent reporting of the studies reviewed and recommends we add a column to Table 2 to address patient navigation principles included in each study.

Response: We have made some amendments to the text as suggested. We moved the reference to Freeman's principles to the Introduction. We edited 'Principle 2: Integration of a fragmented healthcare system' text for clarity and feel Reviewer 1's suggestions have strengthened this paragraph.

We feel that adding an additional column to Table 2 to include patient navigation principles is unnecessary. Neither Reviewer 1 on her initial review or Reviewer 2 and 3 in either review made this suggestion. We feel, with respect, the section stands on its own without the need to include more information in an already text-heavy table.

4. DISCUSSION

Reviewer 1 suggests improvements to the flow of the text, by adding new and moving existing text.

Response: We appreciate the time taken by Reviewer 1 to closely examine the Discussion, and have made some changes for clarity. We have amended the paragraph prior to the limitations Reviewer 1 found most confusing, and believe this is more concise.

5. CONCLUSION

Reviewer 1 suggests changes to the text to state 'patient-centredness should be considered a key component of patient navigation in primary care'.

Response: For clarity, we have added the word 'primary' to the first sentence of the Conclusion. Respectfully we disagree with the suggested changes. Our intent was not to prescribe a model of practice but explore the use of navigators to facilitate access to primary care, and their patient-centredness.

6. ARTICLE SUMMARY

Reviewer 1 suggests changes to the wording of the bullet points in the Article Summary.

Response: We do not agree with deleting the second bullet point, as we believe the paper is indeed a comprehensive review, including grey literature. We have edited the fourth bullet point for clarity.