

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Doctors of chiropractic working with or within integrated health care delivery systems: a scoping review protocol
AUTHORS	Roseen, Eric; Kasali, Aisha; Corcoran, Kelsey; Masselli, Kelsey; Laird, Lance; Saper, Robert; Alford, Daniel; Cohen, Ezra; Lisi, Anthony; Atlas, Steven; Bean, Jonathan F; Evans, Roni; Bussi�eres, Andr�e

VERSION 1 – REVIEW

REVIEWER	Peter Emary D'Youville College, USA
REVIEW RETURNED	10-Sep-2020

GENERAL COMMENTS	<p>Thank you for the opportunity to review this important paper. Overall, this protocol is well-written and addresses a timely and important topic. A scoping literature review of the subject matter is appropriate. I have no major recommendations to make. The rationale is sound, and the research questions and methods are clear.</p> <p>Minor Desirable Revisions: Page 9, line 55 - Please add an "s" to "DC", so that it reads as "DCs". Page 10, line 40 - Please change the word "clinical" to "clinic". Page 10, line 52 - Please do not capitalize the word "information". Page 11, line 48 - Please change "well" to "will". Page 11, line 53 - Please change "organized" to "organize". Page 12, line 53 - Please consider adding the word "our" before the words "scoping review". Page 35, line 15 - Please change "sof tissues" to "soft tissues". Page 35, line 37 - Please change "E.g.," to "e.g.,". Page 35, line 39 - Please consider adding the words "used to create a", so that this statement reads as, "Physico-chemical modalities used to create a thermal effect, ...". Page 36, line 3 - Please consider adding the same words as above, so that this statement reads as, "Physico-chemical modalities used to create a thermal effect, ...". Page 36, line 10 - Please change the word "intend" to "intended". Page 45, line 6 - Please change "Short Form-36" to "Short Form-36".</p>
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REVIEWER	Annette Peart Monash University, Australia
REVIEW RETURNED	22-Sep-2020

GENERAL COMMENTS	A very comprehensive and well-written protocol.
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REVIEWER	Kenneth J Young University of Central Lancashire, UK
REVIEW RETURNED	26-Oct-2020
GENERAL COMMENTS	<p>Please see comments on highlighted parts of the manuscript. Most are suggestions for the authors to consider, however near the end is a section dealing with a proposed survey, which I believe may need ethical approval to undertake.</p> <p>- The reviewer provided a marked copy with additional comments. Please contact the publisher for full details.</p>

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

1. Page 9, line 55 - Please add an "s" to "DC", so that it reads as "DCs".

Response: This correction has been made as suggested (page 8, line 208).

2. Page 10, line 40 - Please change the word "clinical" to "clinic".

Response: This correction has been made as suggested (page 10, line 292).

3. Page 10, line 52 - Please do not capitalize the word "information".

Response: This correction has been made as suggested (page 11, line 300).

4. Page 11, line 48 - Please change "well" to "will".

Response: This correction has been made as suggested (see page 11, line 329).

5. Page 11, line 53 - Please change "organized" to "organize".

Response: This correction has been made as suggested (page 11, line 334).

6. Page 12, line 53 - Please consider adding the word "our" before the words "scoping review".

Response: This correction has been made as suggested (page 12, line 53).

7. Page 35, line 15 - Please change "sof tissues" to "soft tissues".

Response: This correction has been made as suggested (page 33).

8. Page 35, line 37 - Please change "E.g.," to "e.g.,".

Response: This correction has been made as suggested (page 33).

9. Page 35, line 39 - Please consider adding the words "used to create a", so that this statement reads as, "Physico-chemical modalities used to create a thermal effect, ...".

Response: This correction has been made as suggested (page 33).

10. Page 36, line 3 - Please consider adding the same words as above, so that this statement reads as, "Physico-chemical modalities used to create a thermal effect, ...".

Response: This correction has been made as suggested (page 34).

11. Page 36, line 10 - Please change the word "intend" to "intended".

Response: This correction has been made as suggested (page 34).

12. Page 45, line 6 - Please change "Short From-36" to "Short Form-36".

Response: This correction has been made as suggested (page 43).

Reviewer 3

1. Page 3, line 8 – Just for consideration, 'doctor of chiropractic' is generally a North American term, with chiropractors being referred to as such in other places.

Response: Thank you for this comment. We appreciate that terminology may vary across countries and regions. Our search strategy is broad and should capture articles using a range of terminology, e.g., doctor of chiropractic, chiropractor. For example, our Pubmed search:

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"AND (("Chiropractic"[Mesh] OR "Manipulation, Chiropractic"[Mesh] OR "Manipulation, Spinal"[Mesh] OR Chiropractic[Title/Abstract] OR Chiropractor[Title/Abstract] OR Spinal manipulation[Title/Abstract] OR Manual therapy[Title/Abstract] OR Non-pharmacologic[Title/Abstract] OR Spine care[Title/Abstract])))"
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2. Page 5, lines 22-29 - This is changing in some places. For instance the National Health Service in the UK is implementing a new First Contact Practitioner role: <https://firstcontactpractitioner.org.uk/>. However, it has been largely closed to chiropractors and currently available only to physiotherapists: <https://www.england.nhs.uk/gp/expanding-our-workforce/first-contact-physiotherapists/>.

Response: Thank you for sharing this program to improve access to nonpharmacologic treatments. We recognize this is a dynamic field, and that some health systems are introducing programs to promote and improve access to nonpharmacologic treatments for pain. We have also observed that chiropractors are not always included in these efforts.

We anticipate our search will identify some examples where chiropractors are working in health systems. We will summarize available evidence so that health system leaders and other stakeholders are aware of programs that employ or collaborate closely with chiropractors.

3. Page 5, lines 29-33 - This reference may be useful here: Johnson, C. and Green, B. N. (2009) 'Public Health, Wellness, Prevention, and Health Promotion: Considering the Role of Chiropractic and Determinants of Health', *Journal of Manipulative and Physiological Therapeutics*, 32(6), pp. 405–412. doi: 10.1016/j.jmpt.2009.07.001.

Response: Thank you for this suggestion and for sharing this reference. We appreciate the value of this work and anticipate it will be helpful when discussing the findings of our review, which may include a more in-depth discussion on social determinants of health / determinants of health care access.

4. Page 5, line 43 - This is a bit pedantic, but whenever I see 'interestingly' in a paper I think, 'interesting to whom?' I believe more useful terms are 'notably' (because that implies that there is a fact/opinion worth noting) or strikingly if it surprising, or other terms that seem more meaningful and specific.

Response: We have revised the statement to include 'notably' rather than ' interestingly' as it better fits an implication of fact or opinion worth noting.

5. Page 5, line 50 - It may be worth stating where it is available through an integrated system, e.g. Denmark, Switzerland, others?

Response: Indeed, we anticipate that our search strategy will identify papers from other countries where chiropractic training and clinical practice is more (or less) integrated with the training of other healthcare providers and with mainstream health care delivery systems.

Variation by country may elucidate contextual factors that predict successful implementation / can inform potential implementation strategies. For example - a unique education system, health system Infrastructure and/or other policy in Denmark may make it easier to implement chiropractic care in medical settings, than elsewhere, e.g., North America. We will compare the implementation of chiropractic care in health systems between and within countries in the discussion of our next paper based on literature identified in our scoping review.

6. Page 6, lines 5-12 This reference may also be relevant here: Young, K. J. (2015) 'Overcoming barriers to diversity in chiropractic patient and practitioner populations: a commentary', *Journal of cultural diversity*, 22(3), pp. 82–87.

Response: We anticipate this paper will be particularly useful once we have the results from our scoping review, and will keep it in mind for the discussion of the next paper.

7. Page 8, line 10 - I suggest that these are two separate questions, 1c and 1d.

Response: Thank you for this suggestion. The intention of our three sub-aims (1a-1c) is to mirror the three domains of the proctor conceptual model (evidence-based intervention, implementation strategy, outcome measurement). The outcome measurement domain is further delineated into different categories of outcomes, e.g., implementation and clinical outcome as illustrated in Figure 1.

8. Page 9, line 10 - Outside North America, osteopaths are much like chiropractors, so the settings will require careful scrutiny.

Response: The point is well taken. We have operationalized the term 'medical setting' acknowledging that these settings are increasingly multidisciplinary. This may include clinics or health systems that employ doctors of osteopathy/ osteopaths. We agree - this is likely more applicable in the United States where doctors of osteopathy are well integrated into training programs and health systems.

9. Page 9, lines 14-15 - Reference? Worldwide or USA?

Response: We have revised the sentence to specify primary care providers as a particularly relevant example (Page 8, line 253-255) where the number of solo private practices have declined.

“As the provision of health care has become more complex and multidisciplinary, fewer clinicians (e.g., primary care providers) are working in traditional independent solo private practices.”

The consolidation of solo primary care practices in the USA has been, in part, due to recent policy aimed at expanding access to healthcare, e.g., the Affordable Care Act. Many other countries have been more successful at this effort, by establishing single payer systems. These would, in theory, be incentivized to provide high-value care within their system, which would include evidence-based practices not provided by medical physicians. Multi-disciplinary and team-based approaches to primary care are also increasingly common worldwide. Our scoping review will identify available literature and will consider how the policy of a country or region may influence the implementation of chiropractic care within integrated health care delivery systems.

We have added the following references:

1. Peterson LE, Baxley E, Jaen CR, Phillips RL. Fewer family physicians are in solo practices. *J Am Board Fam Med.* 2015;28(1):11-12.
2. Saint-Pierre C, Herskovic V, Sepulveda M. Multidisciplinary collaboration in primary care: a systematic review. *Fam Pract.* 2018;35(2):132-141.

10. Page 12, line 14 - This stage seems to be beyond the scope of a scoping review, and implies another, separate study that looks qualitative in nature to me. I suggest either leaving it out of this protocol or modifying and renaming it 'dissemination of findings' or similar.

Response: The sixth stage is an optional step of scoping review methodology (Arksey & O'Malley, 2005). As stated, the purpose of the consultation phase is to stimulate ongoing feedback and maximize the usefulness of our findings to providers from a range of healthcare disciplines that may collaborate with DCs in routine clinical care.”

11. Page 13, line 3 - You would certainly need ethics approval in order to gather data from participants in the stakeholder groups described in Stage 6, unless you are intending to bring them in as members of the research team. This is unclear to me.

Response: Thank you for this comment. We agree that we will need ethics approval in order to complete the consultative stage of this scoping review. We have indicated this in the Abstract and Methods section

Page 3, lines 85-86: “Ethics approval will not be obtained for this review of published and publicly accessible data, but will be obtained for the web-based survey.”

Page 13, line 381-385: “Formal ethical approval is not required to undertake this scoping review of published and publicly accessible literature. However, ethical approval will be obtained before initiating the web-based survey described in the final consultation phase. This cross-sectional survey of stakeholders will facilitate feedback regarding the implications of our review for clinicians, researchers, and health system leaders. “

12. Page 26, lines 3-4 - I suggest adding school of graduation if available, as trends may be observed in the practice behaviour of graduates of certain institutions. Also, years post graduation may be a better metric than age, as chiropractic is not infrequently a second career.

Response: We have added 'school of graduation' and 'years post-graduation' to our extraction form.

13. Formatting Amendments:

Figure/s should not be embedded. Please remove all your figures in your main document and upload each of them separately under file designation 'Image' (except tables and please ensure that figures are in better quality or not pixelated when zoomed in).

They can be in TIFF, JPG or PDF format. Make sure that they have a resolution of at least 300 dpi and at least 90mm x 90mm of width. Figures in document, excel and powerpoint format are not acceptable.

Response: Our Figure 1 has been uploaded separately under file designation 'Image' in the proper format.

14. Patient and Public Involvement:

Authors must include a statement in the methods section of the manuscript under the sub-heading 'Patient and Public Involvement'.

This should provide a brief response to the following questions:

How was the development of the research question and outcome measures informed by patients' priorities, experience, and preferences?

How did you involve patients in the design of this study?

Were patients involved in the recruitment to and conduct of the study?

How will the results be disseminated to study participants?

For randomized controlled trials, was the burden of the intervention assessed by patients themselves?

Patient advisers should also be thanked in the contributorship statement/acknowledgements.

If there is no patient involved in the study, please state "No patient involved" under the sub-heading 'Patient and public involvement'.

Response: Our scoping review has no patient involvement and therefore, under the sub-heading 'Patient and Public Involvement', in the methods section, the following is stated, "No patient involved".

Thank you for considering our revised manuscript for publication. We are happy to be able to incorporate the feedback from reviewers, and believe the manuscript has improved based on your comments. Please do not hesitate to contact me if I can provide any further information.

VERSION 2 – REVIEW

REVIEWER	Peter Emary D'Youville College, USA
REVIEW RETURNED	03-Dec-2020

GENERAL COMMENTS	I am satisfied with the authors' revisions.
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REVIEWER	Kenneth Young University of Central Lancashire
REVIEW RETURNED	07-Dec-2020

GENERAL COMMENTS	The authors have appropriately responded to reviewer comments.
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