

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)	Integrating the perspectives of individuals with spinal cord injuries, their family caregivers, and healthcare professionals from the time of rehabilitation admission to community reintegration: protocol for a scoping study on SCI needs
AUTHORS	Moreno, Jhon; Zidarov, Diana; Raju, Chandhana; Boruff, Jill; Ahmed, Sara

VERSION 1 - REVIEW

REVIEWER	Soraia Dornelles Schoeller Professor at Nursing Program and Nursing Graduate Program Federal University of Santa Catarina - Brazil
REVIEW RETURNED	01-Nov-2016

GENERAL COMMENTS	<p>The approach to the subject is interesting reading, calling the health care of people with spinal cord injury (professional and family). It takes a few breakdowns, as highlighted in the text.</p> <p>The discussion should be deepened, increasing the justifications of the study.</p> <p>The reviewer also provided a marked copy with additional comments. Please contact the publisher for full details.</p>
-------------------------	---

REVIEWER	<p>Catharine Craven University of Toronto, Department of Medicine University Health Network, Toronto Canada</p> <p>I am a co-investigator on a related grant funded by the Craig H, Nielsen Foundation (Project # 363697, PI S. Jaglal PhD), entitled "Implementation Considerations for a SCI Caregiver Support Program."</p>
REVIEW RETURNED	28-Nov-2016

GENERAL COMMENTS	<p>The proposed scoping review entitled, "Integrating the perspectives of individuals with spinal cord injuries, their family, caregivers, and healthcare professionals across the continuum of Care: protocol for a scoping study on SCI needs" addresses issues of considerable importance to the field of spinal cord injury.</p> <p>In general the scoping review is appropriately designed and feasible. The plans for implementation are anchored around two distinct theoretical frameworks. The study protocol requires from some minor revisions, and the feasibility of project implementation would benefit from addressing</p>
-------------------------	--

	<p>the following concerns:</p> <p>CONCERNS:</p> <p>Abstract: The abstract requires major revision. The introduction would benefit from clarity regarding the continuum of care the authors plan to study and the population of interest. The aim of the scoping review (not explicitly stated) and the objective(s) should be explicitly stated. The methods for data collection are clearly described. The planned processes for data synthesis requires further elucidation; particularly, given the two theoretical frameworks provided, the diversity of stakeholders whose perceived needs are likely to differ and may conflict with one another. The summary statement in the abstract regarding the impact of the results should be restricted to the aim of the scoping review and the projected outputs. (As an example, Do the authors plan to create one review and report per stakeholder group or a master report?).</p> <p>Needs: The authors have provided a broad all-encompassing definition of needs as the theoretical construct underpinning the project. However, from a feasibility perspective and to avoid having to review an insurmountable volume of literature; a narrower definition of the construct of needs as it applies to this project is recommended. For example, health system issues often change with models of care delivery the economic climate and the environment, the authors may want to narrow the scope of their enquiry to a specific and recent timeframe such as the last decade as opposed to 1945 to present . Alternately, a narrower segment of the care continuum could be explored. For example, the first year after rehab discharge when patients often have multiple medical follow-up requirements, when multiple transitions in roles and living environments occur, and when relationships with spouses and employers often deteriorate or cease. Or as a second example, in the five years prior to death when multimorbidity is prevalent, community resources are often overwhelmed and caregivers experience escalating respite care needs and health care professionals experience burnout. Alternately, the focus of the data collection regarding specific met unmet needs with the view of advancing quality of life based on the proposed frameworks or selecting an alternate framework to address gaps in health service provision over the continuum of care related to unmet needs. As the authors correctly highlight spinal cord injury results in diverse impairment, multimorbidity and complex needs, which are not well served by models of care designed for looking at a single disease entity.</p> <p>Defining the Care Continuum: As a reader, interested in health service delivery, it is vitally important that the authors clarify, which segment of the care continuum they plan to conduct the specified scoping review. If the authors intend to look at unmet needs from the time of rehab admission to living long-term in the community the proposed methods are appropriate. If the authors intend to look across the continuum of care from injury onset to death in the community, then the composition of their focus group and the description throughout the study methods should be revised to reflect the segment of the continuum of care they intend to address.</p> <p>Choice of Frameworks: I note the Ferrans et al model of health</p>
--	---

	<p>related quality of life includes both objective and subjective constructs of quality of life and considers the importance of the individual and their environment. I wonder if the authors have considered the merit of examining both, or limiting their search to subjective quality of life. The rationale for the decision should be included in the study methods. Further refinement of the Ferrans model based on stakeholder feedback may facilitate ease of synthesizing the results of the scoping review.</p> <p>Search Strategy: The search strategy should specify the needs which are the focus of the review (perhaps in a table), recognizing that the search terms will need to be modified slightly for each database search strategy (PubMed, Embase, Medline, CINAHL etc....). I would also recommend specifying a segment of the search strategy to address each layer of Maslow's hierarchy of needs. Mapping of the constructs in Maslow's hierarchy of needs with the search terms is recommended to ensure relevance of the constructs to the specified search, and to avoid missing some component of the model prior to building the search strategy. As an example the search strategy contained within the manuscript does not appear to address met/unmet physiological needs (i.e. pain, skin integrity, continence etc...).</p> <p>Please consider the relative merit of limiting your search to unmet needs as a means of restricting the scope of the exercise and facilitating data synthesis. Defend the decision in the study methods.</p> <p>Please clarify do you plan to do hand searches of the reference lists of selected articles?</p> <p>Consider restricting the timeframe of the literature search to align with recent models of health service delivery (i.e. last decade) assuming the aim of the scoping review is to inform future health service delivery based on mapping of unmet needs across the continuum of care. .</p> <p>Criteria for removal of studies based on study design or sample size should be specified a priori. (Please clarify do you plan to include case reports or case series with less than 5 participants?).</p> <p>The description of the methods for use of the gray literature is well described.</p> <p>The processes for achieving consensus on article inclusion and data abstraction are well described.</p> <p>Data Syntheses and Translation: Additional details are required regarding the plans for data synthesis. Do the authors plan to produce one report per stakeholder group, a master report of unmet needs across stakeholders groups or a series of reports regarding unmet needs directed at the end-users as implied in the discussion about the potential implications of the study results. This will be critically important to clarify and plan in terms of data validation and syntheses with stakeholders and in developing a knowledge translation plan following completion of the scoping review.</p> <p>Minor Revisions</p> <p>The following minor revisions are suggested to the introduction:</p> <p>INTRODUCTION:</p> <p>The estimated prevalence of spinal cord injury in Canada noted in the opening line of the article should be reviewed for accuracy.</p>
--	--

	<p>Line 9 of the introduction discusses the age and gender distribution of spinal cord injury in Canada. The authors are asked to revise these statements to reflect the changing demographic of traumatic and non-traumatic spinal cord injury nationally and their respective age and gender distributions, as the data provided appear to be provincial and for the traumatic SCI population alone. See Noonan VK et al, Incidence and prevalence of spinal cord injury in Canada: a national perspective Neuroepidemiology. 2012;38(4):219-26.</p> <p>Line 52 page 6, please revise the statement to acknowledge the authors, and not the publisher.</p> <p>For clarity, I would suggest separating health issues and related health service needs from social or economic impacts of spinal cord injury into two separate paragraphs on page 6.</p> <p>Revise the section beginning from page 7 line 54 to page 9 line 26 to highlight the two key issues more succinctly (Consider use of Headings) and restrict the length:</p> <ol style="list-style-type: none"> 1) All stakeholder perspectives are valuable (Different stakeholders have different perspectives on unmet needs and all are valuable) 2) Health and Social Consequences of Unmet Needs (Highlight the health and social impacts of unmet needs) <p>Consider moving a key example of unmet needs from the perspective of family members and caregivers to the paragraphs regarding these groups page 7 lines 1021 for caregivers and page 7 lines 26-50 for rehabilitation care professional.</p> <p>METHODS: The research questions are clear and well designed in the study methods but not the abstract. Study Population: Page 13, line 14 when describing the study populations, I would recommend revising the text to state, describing different needs of adults with traumatic and or non-traumatic spinal cord injury, and deleting inclusion criteria c) participants 18 years of age or older. I am not aware of a PRISMA equivalent for quality reporting of scoping reviews. Ethics: the authors do not specify if ethics approval or an REB waiver for conduct of quality improvement was obtained.</p> <p>REFERENCES: The format of the references is inconsistent, please revise and ensure adherence with BMJ desired format.</p>
--	--

REVIEWER	Julie Gassaway Shepherd Center USA
REVIEW RETURNED	01-Dec-2016

GENERAL COMMENTS	<p>This is a proposed manuscript to define a protocol that will be put forth to conduct a scoping study of needs for persons with SCI. I commend you for incorporating stakeholder consultation. However, should you consider this engagement now, prior to publishing your plan? You state that your research questions may be refined and/or changed depending on stakeholder involvement/feedback. As researchers are involving stakeholders in research processes, the</p>
-------------------------	--

	<p>approach is often similar to what you describe – include them at the beginning, but beginning means after the research design and questions are done. This results in much redesign work as stakeholders provide different and valuable perspectives. If this input was obtained at the ‘true’ beginning, much time and energy would be saved. I think this becomes of greater concern when you propose to publish your protocol, which may not be the same as you will need to report in your published results.</p> <p>I have several additional comments/suggestions:</p> <ol style="list-style-type: none"> 1. You do not include PubMed in your list of databases – is this an omission? PubMed includes more than just MedLine 2. Table 1 provides a reproducible search within Ovid. 3. Language usage can be improved and thoughts/paragraphs condensed. For examples; <ol style="list-style-type: none"> a. The first paragraph/sentence on page 9 that begins with “Therefore” doesn’t seem to connect with the previous paragraph. And the wording of the sentence makes it difficult to determine meaning. b. The last sentence on page 11: “SCI needs are not the same as the situation is not immediately assimilated.....” This sentence is a bit run on and difficult to interpret easily. 4. I commend you for employing both Maslow and Ferrans models to incorporate both individual and environmental needs. 5. Should you define and perhaps reference grey literature on page 13? 6. Be sure that references are reported in a consistent format and in the style recommended by the Journal. All book references should include authors, editors, and publishers, along with version number. Correct spelling errors, e.g., #40
--	--

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Soraia Dornelles Schoeller

Institution and Country: Professor at Nursing Program and Nursing Graduate Program, Federal University of Santa Catarina - Brazil

- Comment: The approach to the subject is interesting reading, calling the health care of people with spinal cord injury (professional and family). It takes a few breakdowns, as highlighted in the text.

Response: Thank you for your comments and feedback.

- Comment: The discussion should be deepened, increasing the justifications of the study.

Response: In the introduction we provide a rationale for the study (page 9 and 10 under the heading Gaps in understanding met and unmet needs). To further emphasize the contribution of this work we included new information in the discussion in order to provide information about the feasibility and potential limitations of the current scoping review.

Reviewer: 2

Reviewer Name: B. Catharine Craven

Institution and Country: University of Toronto, Department of Medicine University Health Network, Toronto Canada

Please state any competing interests or state ‘None declared’: I am a co-investigator on a related grant funded by the Craig H, Nielsen Foundation (Project # 363697, PI S. Jaglal PhD), entitled

“Implementation Considerations for a SCI Caregiver Support Program.”

Comment: The proposed scoping review entitled, "Integrating the perspectives of individuals with spinal cord injuries, their family, caregivers, and healthcare professionals across the continuum of Care: protocol for a scoping study on SCI needs" addresses issues of considerable importance to the field of spinal cord injury.

In general the scoping review is appropriately designed and feasible. The plans for implementation are anchored around two distinct theoretical frameworks. The study protocol requires from some minor revisions, and the feasibility of project implementation would benefit from addressing the following concerns:

CONCERNS:

- Comment: Abstract: The abstract requires major revision. The introduction would benefit from clarity regarding the continuum of care the authors plan to study and the population of interest. The aim of the scoping review (not explicitly stated) and the objective(s) should be explicitly stated.

Response: The abstract has been modified to respond to the specific concerns and the changes are highlighted in yellow. The continuum of care (acute, rehabilitation, and reintegration into the community) and the population of interest (traumatic and non-traumatic SCI) have been specified. The objective has been modified to reflect these changes (the aim is explicit in the sentence of the introduction of the abstract preceding the specific objectives). The specific objectives have been made explicit at the end of the introduction.

- Comment: The methods for data collection are clearly described. The planned processes for data synthesis requires further elucidation; particularly, given the two theoretical frameworks provided, the diversity of stakeholders whose perceived needs are likely to differ and may conflict with one another.

Response: We have added text to further clarify the data synthesis that will allow us to link the domains from the two theoretical frameworks and the feedback from stakeholders (page 17):
“We will create a matrix that integrates the themes identified for the Maslow’s and Ferrans et al.’s model that will allow us to explore the relationship between personal and environmental factors (Ferrans et al.’s model) that influence needs (Maslow model). The matrix will allow the identification and intergroup comparison of the met/unmet needs for each one of the groups (e.g., adults with traumatic and non traumatic SCI, their family caregivers, and their rehabilitation professionals). Following the thematic analysis, special considerations regarding the implications for research, policy and practice will be presented. Thus, the analysis will include both individual and environmental influences of quality of life because SCI needs can be unmet at different points of the continuum of care as a consequence of subjective (e.g., motivation, beliefs, and attitudes) and environmental barriers (e.g., administrative issues, financial limitations, limitations of health policies, among others)”.

“Given the extensive information that will be synthesised and the diverse perspective of stakeholders, we will request input from stakeholders at each step, and for each document/process that is developed for data extraction and synthesis.”

- Comment: The summary statement in the abstract regarding the impact of the results should be restricted to the aim of the scoping review and the projected outputs. (As an example, Do the authors plan to create one review and report per stakeholder group or a master report?)

Response: The sentence about the impact of the results has been modified to reflect the aim of the scoping review (highlighted in yellow). As such, the scoping review will permit to write an integrated master report combining the needs of different stakeholders across the continuum of care.

- Comment: Needs: The authors have provided a broad all-encompassing definition of needs as the theoretical construct underpinning the project. However, from a feasibility perspective and to avoid having to review an insurmountable volume of literature; a narrower definition of the construct of needs as it applies to this project is recommended. For example, health system issues often change with models of care delivery the economic climate and the environment, the authors may want to narrow the scope of their enquiry to a specific and recent timeframe such as the last decade as opposed to 1945 to present. Alternately, a narrower segment of the care continuum could be explored. For example, the first year after rehab discharge when patients often have multiple medical follow-up requirements, when multiple transitions in roles and living environments occur, and when relationships with spouses and employers often deteriorate or cease. Or as a second example, in the five years prior to death when multimorbidity is prevalent, community resources are often overwhelmed and caregivers experience escalating respite care needs and health care professionals experience burnout. Alternately, the focus of the data collection regarding specific met/unmet needs with the view of advancing quality of life based on the proposed frameworks or selecting an alternate framework to address gaps in health service provision over the continuum of care related to unmet needs. As the authors correctly highlight spinal cord injury results in diverse impairment, multimorbidity and complex needs, which are not well served by models of care designed for looking at a single disease entity.

Response: We agree that we adopted a broad definition of needs. Thank you for these suggestions regarding ways to narrow the scope.

“The definition of needs has been variable across published studies”, we wrote. For that reason, we deliberately embraced a broader definition that would allow us to capture met needs, unmet needs, expressed needs, priorities, expectations, and preferences, as all of them are compatible with our definition of needs. We acknowledge that reviewing this amount of literature is challenging. Thus, we agreed to conduct a scoping review, which is the best strategy to summarize a large body of information. The originality of the scoping review lies in the integration of the perspectives of different stakeholders across the continuum of care within the theoretical frameworks. Further, a preliminary search was conducted and the amount of information to be analyzed does not exceed the usual number of references to be analyzed in a scoping review (information not shown in the manuscript). However, as we agree that “health system issues often change with models of care delivery the economic climate and the environment” we have decided to narrow the scope to the past 20 years. This represents the time when models of chronic disease management were being elaborated and healthcare systems in the western world starting to consider transforming healthcare structures (successfully or not) to better address the demands of chronic disease.

- Comment: Defining the Care Continuum: As a reader, interested in health service delivery, it is vitally important that the authors clarify, which segment of the care continuum they plan to conduct the specified scoping review. If the authors intend to look at unmet needs from the time of rehab admission to living long-term in the community the proposed methods are appropriate. If the authors intend to look across the continuum of care from injury onset to death in the community, then the composition of their focus group and the description throughout the study methods should be revised to reflect the segment of the continuum of care they intend to address.

Response: In our third objective (Page 13, last paragraph), we added information to specify the continuum of care, from the time of rehabilitation admission to the community integration. Just like the reviewer, we also believe that the proposed methods are appropriate in this continuum.

- Comment: Choice of Frameworks: I note the Ferrans et al model of health related quality of life includes both objective and subjective constructs of quality of life and considers the importance of the individual and their environment. I wonder if the authors have considered the merit of examining both,

or limiting their search to subjective quality of life. The rationale for the decision should be included in the study methods. Further refinement of the Ferrans model based on stakeholder feedback may facilitate ease of synthesizing the results of the scoping review.

Response: We did not want to limit the analysis to the subjective aspects of quality of life because we understand that SCI needs can be unmet at different points of the continuum of care as a consequence of environmental barriers (e.g., administrative issues, financial limitations, limitations of health policies, among others). We added a sentence to the data synthesis section (step 5) to the study methods to clarify that we are interested in both subjective and objective constructs of quality of life. In addition, we understand the importance of stakeholder feedback to refine the Ferrans et al.'s model and we thank the reviewer to call our attention on this matter. We have added a sentence in step 6

- Comment: Search Strategy: The search strategy should specify the needs which are the focus of the review (perhaps in a table), recognizing that the search terms will need to be modified slightly for each database search strategy (PubMed, Embase, Medline, CINAHL etc....). I would also recommend specifying a segment of the search strategy to address each layer of Maslow's hierarchy of needs. Mapping of the constructs in Maslow's hierarchy of needs with the search terms is recommended to ensure relevance of the constructs to the specified search, and to avoid missing some component of the model prior to building the search strategy. As an example the search strategy contained within the manuscript does not appear to address met/unmet physiological needs (i.e. pain, skin integrity, continence etc...).

Response: The search was designed with the needs in Maslow hierarchy in mind, considering synonyms and subject headings in each of the databases.

As shown in table 1, we included the term physiological (row 18) in our search strategy, which captures the concept of physiological needs broadly. The subject headings will also capture this concept. Searching on the specific terms for each physiological need was beyond the scope of the research question, and would have rendered unmanageable the number of results. The search was peer reviewed by another librarian per the PRESS standard, and she confirmed this way of approaching the search.

- Comment: Please consider the relative merit of limiting your search to unmet needs as a means of restricting the scope of the exercise and facilitating data synthesis. Defend the decision in the study methods.

Response: Thanks for calling our attention on this critical aspect of the scoping review. To gain a better understanding of SCI needs, we believe it is relevant to include both met and unmet needs, as the information will be used by stakeholders to guide decisions about how to improve current health services and community programs (please see page 9 under the heading Gaps in understanding met and unmet needs). Having information about SCI met and unmet needs will help stakeholders to prioritize next steps for addressing unmet needs, in the context of what is currently being addressed effectively for the care and support of individuals with SCI and their caregivers. In fact, our preliminary review found that most of the studies do not make the difference between met and unmet needs. Thus, the conclusions will take into consideration this limitation. We added some information about this concern in the study methods, step 5 and 6.

- Comment: Please clarify do you plan to do hand searches of the reference lists of selected articles?

Response: Yes, we will hand search the reference lists to ensure we have not missed any relevant articles (see page 14 under the heading Search strategy and information sources).

- Comment: Consider restricting the timeframe of the literature search to align with recent models of health service delivery (i.e. last decade) assuming the aim of the scoping review is to inform future health service delivery based on mapping of unmet needs across the continuum of care.

Response: Please see response above that explains that we will limit timeframe to the past 20 years (see page 14 under the heading Step 2).

- Comment: Criteria for removal of studies based on study design or sample size should be specified a priori. (Please clarify do you plan to include case reports or case series with less than 5 participants?).

Response: We opted not to make sample size an exclusion criterion as indicated in step 2 (f) as qualitative and quantitative studies would be retained. Case reports will be included and we have specified this in Step 2 (page 14, paragraph 1)

- Comment: The description of the methods for use of the gray literature is well described.

Response: Thank you. We considered important to capture gray literature and to integrate it in the scoping review.

- Comment: The processes for achieving consensus on article inclusion and data abstraction are well described.

Response: We believe that it is important to ensure the quality and reliability of the results.

- Comment: Data Syntheses and Translation: Additional details are required regarding the plans for data synthesis. Do the authors plan to produce one report per stakeholder group, a master report of unmet needs across stakeholders groups or a series of reports regarding unmet needs directed at the end-users as implied in the discussion about the potential implications of the study results. This will be critically important to clarify and plan in terms of data validation and syntheses with stakeholders and in developing a knowledge translation plan following completion of the scoping review.

Response: As previously mentioned, the scoping review will permit to write an integrated master report combining the needs of different stakeholders across the continuum of care. However, our knowledge translation plan will include extracting end-user specific information for each targeted group (e.g. patient/caregiver, clinician, decision-maker). When possible, the needs will be listed as met or unmet. We added more information in step 6 (page 18).

Minor Revisions

The following minor revisions are suggested to the introduction:

INTRODUCTION:

- Comment: The estimated prevalence of spinal cord injury in Canada noted in the opening line of the article should be reviewed for accuracy.

Response: We have verified the estimated prevalence for SCI in Canada as presented in the Government of Canada and Public Health Agency of Canada report (Mapping connections: an understanding of neurological conditions in Canada. 2014, page 54).

- Comment: Line 9 of the introduction discusses the age and gender distribution of spinal cord injury in Canada. The authors are asked to revise these statements to reflect the changing demographic

of traumatic and non-traumatic spinal cord injury nationally and their respective age and gender distributions, as the data provided appear to be provincial and for the traumatic SCI population alone. See Noonan VK et al, Incidence and prevalence of spinal cord injury in Canada: a national perspective *Neuroepidemiology*. 2012;38(4):219-26.

Response: Thank you for the reference. We added information in the introduction to reflect the estimates of both traumatic and non traumatic SCI and included Noonan et al. (2012) in the reference list.

- Comment: Line 52 page 6, please revise the statement to acknowledge the authors, and not the publisher.

Response: The sentence has been modified to acknowledge the authors.

- Comment: For clarity, I would suggest separating health issues and related health service needs from social or economic impacts of spinal cord injury into two separate paragraphs on page 6.

Response: As suggested, the information has been separated in two different paragraphs.

- Comment: Revise the section beginning from page 7 line 54 to page 9 line 26 to highlight the two key issues more succinctly (Consider use of Headings) and restrict the length:

o All stakeholder perspectives are valuable (Different stakeholders have different perspectives on unmet needs and all are valuable)

o Health and Social Consequences of Unmet Needs (Highlight the health and social impacts of unmet needs)

Response: Indeed, the section addresses several important issues: interdisciplinary healthcare, diverse perspectives in rehabilitation, the needs of individuals with SCI and their family caregivers. As suggested, we included headings to separate the sections and we reorganized the content to provide the reader with an understanding of the main key issues.

We added one heading for to highlight the “different perspectives in SCI needs”. A second section addresses information about the consequences of unmet needs in the portion under the heading “Changing needs in the rehabilitation continuum”.

- Comment: Consider moving a key example of unmet needs from the perspective of family members and caregivers to the paragraphs regarding these groups page 7 lines 10-21 for caregivers and page 7 lines 26-50 for rehabilitation care professional.

Response: We moved the sections indicated under the heading “different perspectives in SCI needs”.

- METHODS:

Comment: The research questions are clear and well designed in the study methods but not the abstract.

Response: The abstract has been modified to reflect the research question (presented as general and specific objectives).

- Comment: Study Population: Page 13, line 14 when describing the study populations, I would recommend revising the text to state, describing different needs of adults with traumatic and or non-traumatic spinal cord injury, and deleting inclusion criteria c) participants 18 years of age or older.

Response: We decided to keep the inclusion criterion of age because it helps to have a clear

threshold to include studies and facilitates the study selection process. We want to make sure that the age limit is explicit as some countries have different age limits to legally define an adult.

- Comment: I am not aware of a PRISMA equivalent for quality reporting of scoping reviews.

Response: As suggested by the editor, the PRISMA-P checklist has been included on a separate file with the corresponding page numbers.

- Comments: Ethics: the authors do not specify if ethics approval or an REB waiver for conduct of quality improvement was obtained.

Response: As this is a scoping review, there is no need for a REB approval and a waiver to conduct quality improvement will be obtained.

- REFERENCES:

Comment: The format of the references is inconsistent, please revise and ensure adherence with BMJ desired format.

Response: References have been checked for consistency and are presented in a numbered list, as per author guidelines (please see <http://bmjopen.bmj.com/pages/authors/#studyprotocols>).

Reviewer: 3

Reviewer Name: Julie Gassaway

Institution and Country: Shepherd Center, USA

Please state any competing interests or state 'None declared': None

Comment: This is a proposed manuscript to define a protocol that will be put forth to conduct a scoping study of needs for persons with SCI.

I commend you for incorporating stakeholder consultation. However, should you consider this engagement now, prior to publishing your plan? You state that your research questions may be refined and/or changed depending on stakeholder involvement/feedback. As researchers are involving stakeholders in research processes, the approach is often similar to what you describe – include them at the beginning, but beginning means after the research design and questions are done. This results in much redesign work as stakeholders provide different and valuable perspectives. If this input was obtained at the 'true' beginning, much time and energy would be saved. I think this becomes of greater concern when you propose to publish your protocol, which may not be the same as you will need to report in your published results.

Response: We thank you for your kind comments and suggestions. We also believe that stakeholder consultation often leads to redesign. For the current scoping review, we conducted stakeholder consultation at the "true beginning", prior to the submission of the study protocol. We have validated our research questions with clinicians, decision makers, and other researchers with experience in this area during different consultation meetings. The full manuscript went through several iterations as we incorporated their feedback and recommendations. We added information about the stakeholder consultation in step 6, page 18.

I have several additional comments/suggestions:

- Comment: You do not include PubMed in your list of databases – is this an omission? PubMed includes more than just MedLine

Response: It was not necessary to search PubMed as the Ovid Medline file used for this search

included Epub Ahead of Print, In-Process & Other Non-Indexed Citations.

- Comment: Table 1 provides a reproducible search within Ovid.

Response: Indeed, table 1 provides a reproducible search in Ovid Medline

- Comment: Language usage can be improved and thoughts/paragraphs condensed. For examples;
o The first paragraph/sentence on page 9 that begins with “Therefore” doesn’t seem to connect with the previous paragraph. And the wording of the sentence makes it difficult to determine meaning.

Response: We decided to remove the word therefore and to rephrase the sentence. As the text has been modified following the reviewers’ feedback, we believe that the latest organization present the content in an improved version (please see changes highlighted in yellow).

o The last sentence on page 11: “SCI needs are not the same as the situation is not immediately assimilated.....” This sentence is a bit run on and difficult to interpret easily.

Response: The sentence has been rephrased to facilitate the interpretation.

- Comment: I commend you for employing both Maslow and Ferrans models to incorporate both individual and environmental needs.

Response: Thank you for your positive appreciation about the use of the two models.

- Comment: Should you define and perhaps reference grey literature on page 13?

Response: We have included a definition with examples and a reference in the section corresponding to step 2.

- Comment: Be sure that references are reported in a consistent format and in the style recommended by the Journal. All book references should include authors, editors, and publishers, along with version number. Correct spelling errors, e.g., #40

Response: The spelling errors have been corrected and the book references have been modified to include the information requested.

VERSION 2 – REVIEW

REVIEWER	Soraia Dornelles Schoeller Universidade Federal de Santa Catarina Brasil
REVIEW RETURNED	09-Mar-2017

GENERAL COMMENTS	The questions I have pointed out were duly resolved.
-------------------------	--

REVIEWER	Julie Gassaway Shepherd Center USA
REVIEW RETURNED	13-Feb-2017

GENERAL COMMENTS	It is easy for the reader to become confused as to the timeframe for the review. Thus, I marked "NO" in the list above for "Is the research
-------------------------	---

	<p>question or study objective clearly defined?"</p> <p>In the Abstract and in the list of objectives in Methods, you state timeframe is from rehabilitation admission to community reintegration. However, in the rest of the manuscript and in the title, the timeframe is referred to as the continuum of care. Please be consistent throughout.</p> <p>Also, what is the definition for community reintegration - 1 year, 5 years, 10 years, etc. You might also want to consider starting your review period at rehabilitation discharge rather than admission - at admission, patients and families are typically in a state of shock/confusion and perspectives of need can change often and dramatically.</p>
--	---

VERSION 2 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Soraia Dornelles Schoeller

Institution and Country: Professor at Nursing Program and Nursing Graduate Program, Federal University of Santa Catarina - Brazil

- Comment: The questions I have pointed out were duly resolved.

Response: Thank you for your comments and feedback.

Reviewer: 3

Reviewer Name: Julie Gassaway

Institution and Country: Shepherd Center, USA

Please state any competing interests or state 'None declared': None

- Comment: It is easy for the reader to become confused as to the timeframe for the review. Thus, I marked "NO" in the list above for "Is the research question or study objective clearly defined?". In the Abstract and in the list of objectives in Methods, you state timeframe is from rehabilitation admission to community reintegration. However, in the rest of the manuscript and in the title, the timeframe is referred to as the continuum of care. Please be consistent throughout.

- Response: The continuum of care has been replaced by from rehabilitation admission to community reintegration for consistency in different sections of the manuscript, including the title.

- Comment: Also, what is the definition for community reintegration - 1 year, 5 years, 10 years, etc. You might also want to consider starting your review period at rehabilitation discharge rather than admission) at admission, patients and families are typically in a state of shock/confusion and perspectives of need can change often and dramatically.

- Response: We agree that at admission, individuals with SCI and family caregivers are in an acute emotional state that changes over time. As such, the identification of the needs at different stages of the rehabilitation continuum (from rehabilitation admission to community reintegration) is paramount to understand this change and to obtain a broader perspective. In consequence, we decided to keep the sections of the manuscript to indicate that the review period starts at rehabilitation admission to community reintegration. As community reintegration can be different for individuals with SCI because of personal factors and contextual influences of by the healthcare delivery system, the time of community reintegration will be included in the variables to be extracted from the studies (see the section under the heading Step 4. Data extraction process).