

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)	The Value of Robotic Surgery Simulation for Training Surgical Residents and Attendings: A Systematic Review Protocol
AUTHORS	Howard, Kathryn; Makki, Hussein; Novotny, Nathan; Mi, M; Nguyen, Ngan

VERSION 1 – REVIEW

REVIEWER	Rethlefsen, Melissa University of Florida, Health Science Center Libraries
REVIEW RETURNED	04-Jan-2022

GENERAL COMMENTS	<p>Thank you for the opportunity to review this paper. The strengths of this paper are its research question, the detailed explanation of planned qualitative synthesis, and the inclusion of a librarian as part of the authorship team; the “example” search included appears a thorough search. My primary concern is that the manuscript is a labelled a protocol, but that many of the protocol steps have been completed and are reported. Below are a few specific comments that I hope will be helpful in clarifying and strengthening the manuscript.</p> <ol style="list-style-type: none">1. Pg 5, line 38: PRISMA 2020 is not a conduct guideline; it is a reporting guideline. I would edit this wording.2. Supplemental file: I would suggest using the PRISMA-P checklist (for a protocol) rather than that the PRISMA checklist, as the PRISMA checklist is for completed reviews. (BMJ Open requests PRISMA-P be used for protocols.) That being said, I am not sure this manuscript is fully a protocol, as it includes some results.3. Pg 6, line 13: I would suggest changing “Studies in foreign languages, without full content, comments, editorials and letters to the editor will be excluded” to “Studies in languages other than English, without...” If languages other than English will be included, those should be added to “English” here (such as “English and Spanish, without...”). Language restrictions also should be justified. It is not entirely clear to me what “without full content” means here; you may wish to clarify. In addition, letters to the editor are often research-oriented in some journals, so you may want to detail why they are excluded.4. Pg 6, line 21: Please make sure to list the platform for each database (i.e., Embase via Embase.com, Cochrane Library via Wiley). In addition, please ensure that all databases searched are listed in addition to their platforms. This is particularly true for all Web of Science databases searched, but it may also be necessary
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	<p>if only components of the Cochrane Library were searched. See PRISMA-S items 1 and 2 for examples.</p> <p>5. Pg 6: “The search strategy aimed to find both published and unpublished studies. A three-step search strategy was utilized in this review. An initial limited search of PubMed was undertaken followed by analysis of the text words contained in the title and abstract, and of the index terms used to describe the article. A second search using all identified keywords and index terms was then undertaken across all included databases. Thirdly, a hand search was conducted and the reference lists of all identified reports and articles was searched for additional relevant studies.” It appears from this statement that the searches were already complete by the submission of this protocol (this is also shown by the inclusion of a PRISMA flow diagram and results later in the manuscript). If that is the case, it is not clear why only “examples of search terms” were included. The protocol should include all of the planned searches to meet both PRISMA-S and PRISMA 2020 reporting standards. Since the searches appear to have been conducted already, with no planned additional searches, it is even more important that all searches are included in their final versions. If this was the final report of a systematic review, I would suggest additional details are required as well (exact dates of searches, number of results per database, etc, per PRISMA-S).</p> <p>6. Pg 6, line 30: A hand search of what?</p> <p>7. Pg 6, line 30: What does “all identified reports” mean? I think this may mean “all included reports”? Please clarify, as “identified” could indicate that all items from the completed searches, not just ones meeting certain criteria, would be mined for references. Do you plan to review the reference lists by hand or did you use a citation index or other tool to acquire them?</p> <p>8. Pg 6, line 40/41: Why train[ti] and not training[ti]? It is not clear whether I can assess the search strategy here, based on the “examples of search terms” qualification, however, so I am not sure if this would have been included in the final search.</p> <p>9. Pg 6: The authors do not state whether they intend to use any limits, such as language or study type. If none will be used, that should be stated. If some are used, please make sure to state those limits and also justify why limits were added to the search.</p> <p>10. Pg 6, lines 50-4: It is not clear why the Assessment of Methodological Quality section only contains information on the registered protocol, though it is appreciated that the authors registered a protocol. Here, I would expect to see information on the use of the Cochrane Risk of Bias tool, or perhaps the use of the Newcastle-Ottawa Scale or some of the JBI critical appraisal tools for differing study types.</p> <p>11. Pg 7, lines 6-7: It is surprising that screening appears to be completed, and it is a bit concerning that only one individual screened the titles and abstracts. This choice should be justified.</p> <p>12. The JBI checklists included are copyrighted; have the authors cleared their republication with JBI? I would suggest linking to them rather than including them here.</p>
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	<p>13. In reviewing the protocol as registered in PROSPERO, I see that the authors stated that the “First 3 pages of search results will be reviewed from Google and Google Scholar searches.” This does not appear in this version of the protocol. It would be helpful to note deviations between the first, registered protocol and this one, along with details on reasons for changes.</p> <p>14. I am not sure that this article should be titled a protocol; I would suggest either making it a true protocol (no results included) or waiting until the full review is conducted. In either case, the full search strategies for all sources should be included.</p> <p>15. I would suggest rewriting the abstract to comply with PRISMA 2020 for Abstracts, with adjustments for it being a protocol. Items 3-6 below, for example, could be detailed further and/or added to make the abstract more robust.</p> <p>Items in the PRISMA 2020 for Abstracts checklist The PRISMA 2020 for Abstracts checklist retains the same items as those included in the PRISMA for Abstracts statement published in 201329 but has been revised to make the wording consistent with the PRISMA 2020 statement and includes a new item recommending authors specify the methods used to present and synthesize results (item #6). The checklist includes the following 12 items:</p> <ol style="list-style-type: none"> 1. Identify the report as a systematic review 2. Provide an explicit statement of the main objective(s) or question(s) the review addresses 3. Specify the inclusion and exclusion criteria for the review 4. Specify the information sources (such as databases, registers) used to identify studies and the date when each was last searched 5. Specify the methods used to assess risk of bias in the included studies 6. Specify the methods used to present and synthesise results
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REVIEWER	Boone , Brian West Virginia University, Surgery
REVIEW RETURNED	11-Jan-2022

GENERAL COMMENTS	This paper seeks to address the value of robotic surgery simulation using a systematic review. While this topic is timely and of interest, publication of the protocol for a systematic review is not warranted. This methodology can be included in the final published paper along with the results.
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1:

Thank you for your time and effort to read our protocol and provide comments.

Comment 1: This sentence has been removed from the methods section. Page 4, line 15

Comment 2: The PRISMA-P checklist has been included as a supplementary file with the protocol.

Comment 3: We have adjusted the paragraph on exclusion criteria to better justify our decisions on excluding certain published work. Page 5, lines 20-24

Comment 4: We have adjusted the review with the platforms that were searched. Page 5, lines 32-34

Comment 5: We have added in each of the searches that were done and what key words were

utilized. Page 5 line 51 – Page 7 line 28

Comment 6: We have added that google scholar was the service that was hand searched. Page 5, lines 41-43

Comment 7: We performed a hand search which was used to search the references and this wording should have been included not identified. Page 5, lines 43-44

Comment 8: This has been changed with the addition of the search terms used by Dr. Mi in her comprehensive review. Page 5 line 51 – Page 7 line 28

Comment 9: Our search was limited to English language only with justification for this choice listed as well. Page 5 lines 22-24, lines 48-49

Comment 10: We plan to use the JBI Critical appraisal tools and have added this information into the protocol. Page 7, lines 34-35

Comment 11: We have added our justification for screening with one abstract screener. Page 7, lines 41-44

Comment 12: We have removed the appendixes and have referenced the website for JBI. Page 7, line 34-35

Comment 13: We have placed our hand search that was conducted into the paper as it was listed in PROSPERO. Page 5, line 41-43

Comment 14: We have made this a true protocol and eliminated the results section.

Comment 15: We have left the abstract the same to comply with the suggested abstract as listed by the editor minus the results section. Final abstract for future publication after results completion will comply with the PRISMA guidelines.

Reviewer 2:

We would like to thank you for taking the time to read our protocol and provide your comments. Robotic simulation is an important and burgeoning field within surgical education. Given the high interest within the field we feel that this review will bring about important summarizations of the research currently completed and highlight what is currently missing within the field. While the methodology of a systematic review may be published within the final manuscript, we feel that it is important to show the work that is currently being preformed to address summarization of robotic surgery.

VERSION 2 – REVIEW

REVIEWER	Rethlefsen, Melissa University of Florida, Health Science Center Libraries
REVIEW RETURNED	28-Mar-2022

GENERAL COMMENTS	<p>Thank you for your thoughtful revisions and responses to reviewer comments. I have three minor comments on this revision that I hope will be helpful for improving the transparency of the manuscript.</p> <ol style="list-style-type: none"> 1. In your abstract, there remains a sentence about the review being conducted according to PRISMA 2020. I would consider removing this or adapting it to say that it is reported according to PRISMA-P and PRISMA-S (and perhaps that it will be reported according to PRISMA 2020 in a later section). 2. Please add the justification for limiting to English language (e.g., no resources available for translation).
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	<p>3. Thank you for adding all of the search strategies to the manuscript. This will be helpful for reproducibility. To ensure complete reporting, please be sure to add:</p> <ol style="list-style-type: none">The platform that will be used to search EmbaseThe platform used to search the Cochrane LibraryThe names of each Web of Science database that will be part of the Web of Science search (e.g., Science Citation Index, Social Science Citation Index, etc)The search terms used to search Google Scholar and the number of results per page of Google Scholar, since this can be set by the searcher
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VERSION 2 – AUTHOR RESPONSE

Thank you so much for taking the time to review our protocol and your thoughtful responses. I have listed below our comments. Page and Line numbers refer to the marked copy.

1. We have eliminated the line about the PRISMA guidelines within the abstract. Page 2, Line 14
2. We have added our justification to non-english exclusion given no translational services. Page 5, Line 8
3. Our librarian has added her search information to include the databases. Page 5, Line 16-28