PEER REVIEW HISTORY

BMJ Paediatrics Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Quality of patient- and proxy-reported outcomes for children with
	impairment of the lower extremity: study protocol
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VERSION 1 – REVIEW

REVIEWER	Reviewer name: Dr. Anoo Bhopti Institution and Country: Monash University Faculty of Medicine Nursing and Health Sciences, Australia Competing interests: None
REVIEW RETURNED	12-May-2022

GENERAL COMMENTS	Dear authors Many thanks for your protocol paper. Your methods, appraisal and analysis sections are very clear – well done! I have made some suggestions for you to consider to add more clarity to this paper. I will mention my comments below Introduction Section: This section does not clarify what gap you are addressing. Is it patient population? Or validated disease? Or psychometrics of Assessments? There is no introduction to the idea of children with impairment of lower extremity (that is the title of your paper), so the reader is trying to understand what is the real population? You may want to consider introducing the incidence of using the outcome measures, what are common assessments used for impairments of the lower extremity? What are these LE impairments? Just giving some idea to the reader about the incidence of the "issue" so that the gap gets highlighted. Also you use the term "patient" a lot and we like to move away from this term in paediatrics so maybe be cautious of the use of this term Some other specific feedback Page 5 Line 7 – PROs as an outcome – repetition of word outcome Page 5 Line 18 – Clinicians "should" – please consider using clinicians "need to" rather than should Page 5 Line 22 – Consequently this phenomenon – what does "this" phenomenon refer to? Is unclear Page 5 – Line 36 – sudden mention of "individual PROMs per joint "-no reference to this anywhere earlier in the paragraphs Page 8 – Line 25 – Can you clarify what the pre-defined criterium is for inter-rater agreement? This is important for your protocol Lastly the discussion – This is very generalistic. Page 9, line 8 – you mention content and construct validity here – I would recommend to also mention this in your introduction to clarify the gap. In the discussion section focus on your population and your issue rather than a general reporting of (specific patient population , a specific disease etc (page 9, line 10 – 14)_make this specific to your study to match the title and population and outcome measures.
	Best wishes

VERSION 1 – AUTHOR RESPONSE

Dear Prof. Imti Choonara and Dr. Morris Gordon,

Thank you for your time and your valuable feedback in order to help strengthen our research. I have reviewed your feedback and implemented changes to our systematic review protocol. I also wish to respond to your questions via this email.

Dear Prof. Imti Choonara,

The first sentence has been re-written. Our authors speak dutch and english, we have done a small systematic search prior to the final search to identify how many studies are written in our native language about PROMs and their development. Unfortunately we could find only studies describing the PROMs as an outcome and no studies on the development of the PROM in Dutch. Therefore we included only articles written in english.

Dear Dr. Morris Gordon,

The title has been changed appropriately. The GRADE approach is implemented within the COSMIN methodology. The COSMIN initiative has made an easy to use guideline (80 or so pages long) that guides the research through the entirety of the process when systematically reviewing the methodological quality AND descriptive/qualitative elements of a study on PROM development and validation. A normal GRADE approach towards studies on PROM development and validation would not be applicable. Therefore the altered version of the GRADE approach is embedded within the COSMIN guideline. More information on the exact application of the COSMIN and GRADE can be found in this study (COSMIN guideline for systematic reviews of patient-reported outcome measures, PMID 29435801).

The results of the systematic review, according to COSMIN guidelines, provide an enormous amount of data embedded within multiple tables and graphs to provide the reader the insight necessary to understand the primary tools and how to utilize them.

Dear Dr. Anoo Bhopti,

We have rewritten parts of the introduction to further clarify the knowledge gap we wish to research. We have reviewed grammatical errors.

Thank you all for the feedback, we truly think this research is necessary to further develop the proper usage of PROMs in pediatric orthopedic practice. I hope my revisions will lead to a positive result.

Kind regards,

Tim Saris, MD, PhD-student