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Validity of five foot and ankle specific electronic
patient-reported outcome (ePRO) instruments in patients
undergoing elective orthopedic foot or ankle surgery

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the psychometric properties according to the item response theory (IRT). This gap could be addressed in future studies. Furthermore, the patients completed all five comprehensive ePROs concerning the same theme at once. Thus, it is possible that the patients became tired and unfocused in completing the ePRO items, affecting the results.

In conclusion, the ePRO versions of the FAAM, the FAOS, the MOXFQ, and the VAS-FA were shown to provide valid scores in foot and ankle surgery patients. These instruments can be recommended for use in outcome assessment of patients with foot and ankle specific symptoms according to the specific scope of each ePRO. Considerable differences exist between the scopes of these ePROs, which must be taken into account when selecting the most appropriate ePRO for use in each foot and ankle patient population. The ePRO version of the modified LEFS did not fulfill all of the predefined and required psychometric criteria. Based on these results, performance of the modified LEFS is not optimal in this patient population and it should be used with caution.

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Conflicts of interest

None of the authors declare support from any organization for the submitted work or other conflicts of interest.

Authorship confirmation

The data, models, or methodology used in the research are collected, analyzed and reported completely by our study group. All authors have been a part of planning, analyzing or writing this article. All authors read and approved the final manuscript. Content of the manuscript, figures or tables have not been published or submitted for publication elsewhere.

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