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Introduction

- Patient-reported outcome measures (PROMs) are not used widely to evaluate the benefits of lower-limb orthoses, in part, because there is no consensus on what to measure and little psychometric evidence for PROMs in orthoses users.
- This study builds on our efforts to assess patient and clinician perspectives on quality-of-care topics that are important to measure for custom AFO users, identify instruments to assess care quality for individuals using custom AFOs, and assess orthotists' and physical therapists' perspectives on quality-of-care indicators.
- Aims of this study were to assess sensitivity to change of instruments measuring quality-of-care indicators valued by patients and clinicians.

Methods

Subjects: A convenience sample of adults receiving a new or a major new component of a custom AFO from 2 VAs and a rehabilitation hospital's orthotic clinics.

Instruments: EQ-5D; PROMIS Pain Interference, Physical Function, Participation in Social Roles and Activities, and Satisfaction with Social Roles and Activities short



Known Groups Validity Evidence

Measure	Time Up and Go Test (sec)	10MWT, Self-Selected Pace (sec)	10MWT, Fast Pace (sec)	Six Minute Walk Test (meters)
Effect size	0.29	0.31	0.19	0.07
Effect size	0.16	0.10	0.22	0.11
Effect size	0.04	0.01	0.31	0.32

Discussion

- Results provide evidence of sensitivity to change in 4 of the 9 measures. EQ-5D total score, OPUS HR-QOL, PROMIS Physical Function, and Rivermead Mobility Index
- OPUS LEFS and Rivermead Mobility Index correlate moderately with all performance instruments. EQ-5D-5L and PROMIS had low correlations with performance instruments.



Conclusions

- Findings fill a knowledge gap regarding the sensitivity to change and validity of PROMs that are suitable for use with custom AFOs users.
- Orthotists and physical therapists may consider using select PROMs that demonstrate sensitivity to change to document patient experiences with custom AFOs.
- Future studies should evaluate measurement properties in other orthotic and prosthetic populations.

References

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