Application of nominal group technique to inform a co-design project on power-assisted exercise equipment for people with stroke
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Rationale and Aim
• Power-assisted exercise is an accessible physical activity option for people with stroke [1].
• Co-design research will advance the equipment to quantify detected user effort and align power assisted exercise with published guidelines.

The aim of this Patient Public Involvement activity was to establish priority design features and select three machines from a range of nine for software improvement.

Methods
• Nominal group technique [2] was used with expert exercise scientists and physiotherapists (n=6) and end users with stroke (n=3).
• Group discussion was followed by voucher allocation to preferred machines.
• Content analysis generated a list of specification features.
• Votes from the end user group were multiplied twofold to ensure equal representation.

Findings
Emerging domains:
1) software and interface, 2) exercise programme, 3) machine and accessories, 4) setting and service.

Foci:
End users on accessibility; physiotherapists on motivational features; exercise scientists on physiological performance.

Conclusion
Nominal group technique facilitated a structured approach to Patient Public Involvement. All attendees emphasised the importance of an individualised user experience.
The findings enabled selection of three preferred machines for advancement and identification of user-centred priority design features.


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