

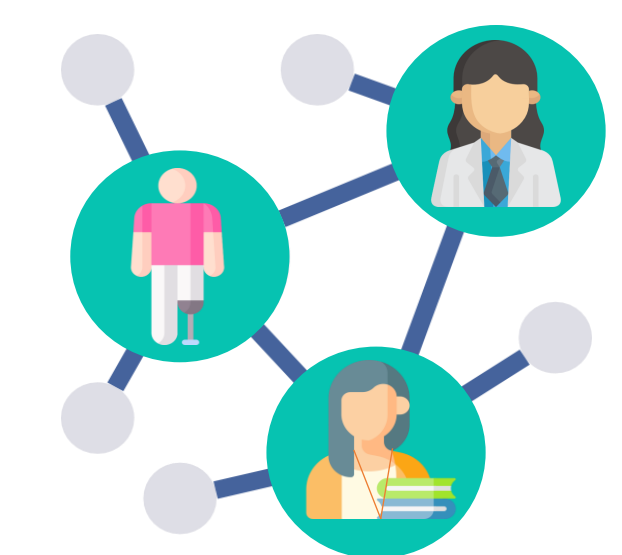
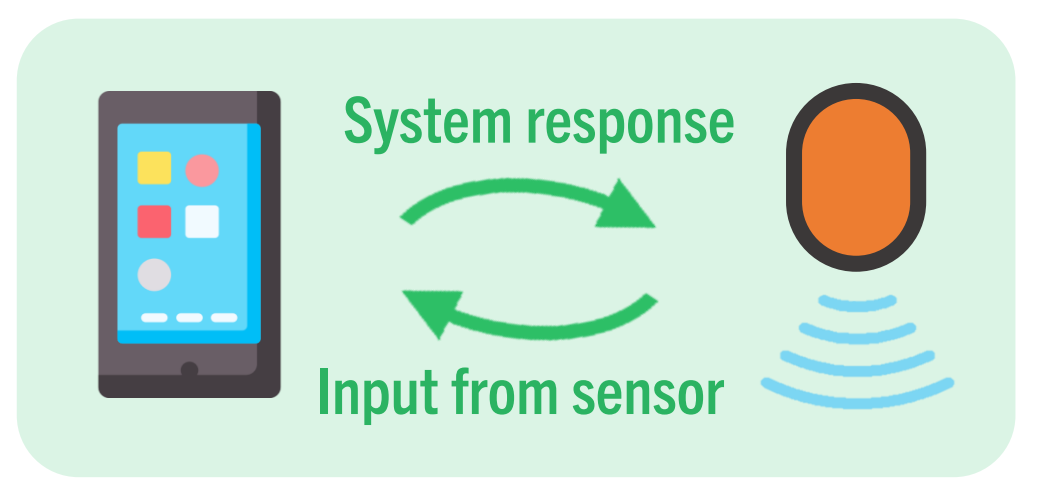
Applying a Co-Creation Approach to Analyze the Viability of a Biofeedback Application for Gait Training in Lower-Limb Prosthetic Users

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BACKGROUND

LLPUs often struggle to develop healthy walking patterns

- BIOFEEDBACK SYSTEMS:**
 - Deliver a user response when a parameter threshold is reached
 - Can complement the current gait training process outside of a clinic setting
- CO-CREATION:**
 - Involving clients and clinicians in the design process creates an impactful end result that ensures user needs are met



OBJECTIVE

Involve stakeholders in **identifying key gaps** in the gait training process of LLPUs & evaluate the **potential of biofeedback** (BFB) to address these gaps.

METHODS

Semi-structured Interviews

User Testing

Written Feedback

Biofeedback provides clients & clinicians with enhanced monitoring capabilities

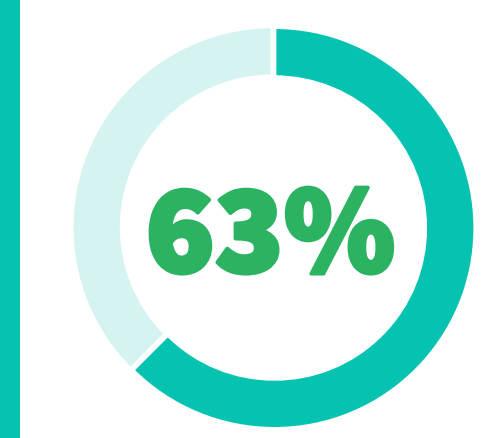


RESULTS

4 Clinicians **8** LLPUs **3** Trainees

KEY CLINICIAN TAKEAWAYS:

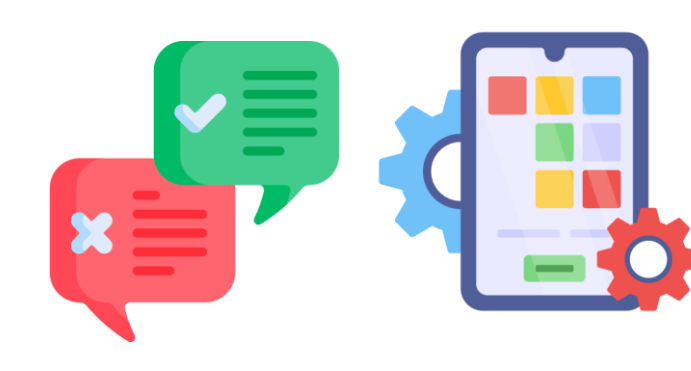
- At-home client feedback & good habit promotion is **valuable**
- BFB setup and use must be **quick** and **simple**
- Clinician interest exists for **observation validation**



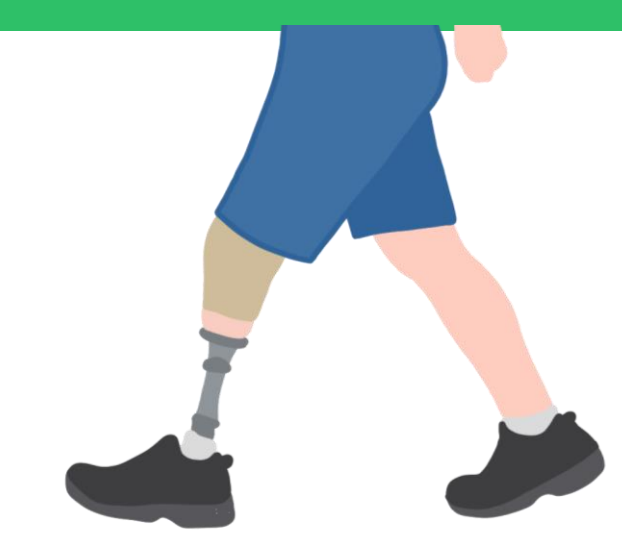
5 of 8 LLPUs expressed interest in using a BFB system **at home**.

NEXT STEPS

Leverage **co-creation** in the app development process by incorporating participant suggestions.



IMPACT



- Allow LLPUs to take an **active role** in their gait rehabilitation by enabling **remote practice**
- Enhance the quality of clinician care

ACKNOWLEDGEMENTS

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