

Feb 6 (14:00 - 14:30, 15:45 - 16:15, 17:30 - 18:00)

Feb 7 (14:00 - 14:30, 15:45 - 16:15)

Exhibition Hall: **Posters 2 - Quality Of Life Issues, Poster Board 41**

Abstract Number: 167

Abstract Title: **The Use Of Cognitive Interviews To Evaluate Item Content In A Prosthetic Mobility Outcome Measure**

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### **Introduction**

Patient-reported outcomes (PROs) help clinicians and researchers understand how health conditions impact patients' lives. When developing PRO questionnaires, it is critical to examine the cognitive processes that participants use to respond to each item to ensure that the responses provide meaningful information. Cognitive interviews may be used to assess these processes and to examine if questions are perceived similarly across participants. The primary aim of this study was to inform the development of an item bank to measure mobility in persons with lower-limb amputation through use of cognitive interviews with prosthetic users.

### **Methods**

Thirty-seven cognitive interviews were conducted with 31 participants who have lower-limb amputation(s) and use prostheses. Each participant responded to up to 30 items from the Prosthetic Limb Users Survey - Mobility (PLUS-M) candidate item set. Subsets were selected to include items of varying content and difficulty. Each candidate item was reviewed by a minimum of five participants who differed in self-reported mobility, literacy, level of amputation, and time since amputation. Items were revised based on participant feedback. Any items that were substantially revised were re-evaluated through additional cognitive interviews.

### **Results**

Feedback from cognitive interviews identified areas for item improvement with respect to clarity, content, and reading level. Participant responses to follow-up questions informed modification of 112 out of a total 153 questions that did not function as intended. These items were revised (42%) or deleted (31%).

### **Discussion**

Cognitive interviews were used to assess the content validity of a candidate item set, identify problematic items, and revise and/or eliminate those items. This process reduced potential response error associated with confusing questions and considerably enhanced the quality of the items in the final item bank.

### **Conclusion**

Cognitive interviews were an essential step in the development of a candidate item bank for measuring mobility.