Clinical Evaluation of Pneumatic Technology for Powered Mobility Devices

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Protocol

Methods:

Design:

This study was a qualitative analysis of comments obtained from a focus group and transcribed phone interviews. The project was approved by the Institutional Review Board at the Department of Veteran Affairs. All participants completed informed consent prior to study participation. The clinical trial was not carried out because of COVID-19.

Participants

Participants were recruited at the Human Engineering Research Laboratories, Southwestern Veterans Center, and VA Heinz Long Term Care Facility using recruitment flyers, and through contacts with staff at the facilities. Inclusion criteria were: must be 18 years or older, must speak and understand English in order to provide informed consent, must use or be in the process of obtaining a scooter or Group 2 power wheelchair without power seat functions, and must be a resident of a long-term Veterans care facility, a spouse or other facility resident, or an employee of a participating long-term care facility. Participants who were employees must have had some experience with charging, storing, transporting, cleaning, or maintaining BPMDs (e.g., nurses, physical therapists, occupational therapists, technicians/engineers). There were no exclusion criteria.

Study Design and Procedure

The participants witnessed a demonstration of the pneumatic technology scooter and power wheelchair. They were then invited to participate in an additional qualitative, transcribed interview via phone. The phone interviewer used a standardized interview script, and the interview was limited to 30 minutes. The focus group and the qualitative phone interview

focused on the strengths and weaknesses of pneumatic devices compared to conventional wheelchairs or scooters that were battery powered.