

## Piloting the Wheelchair Components Questionnaire for triangulation purposes

Joy Wee, Karen Rispin

The Wheelchair Components Questionnaire (WCQ) asks respondents to rate wheelchair components using visual analogue scale (VAS) format with accompanying comments; it has been used for rating condition of wheelchair components in field studies in low resource settings (1). Appropriateness of wheelchairs for users is important, as is appropriateness from a clinical standpoint. We pilot the use of the WCQ employing these two additional aspects in a field study of low cost wheelchairs in a low resource setting. We hypothesize that modifying the WCQ to serve this purpose of triangulation provides more complete data for feedback to wheelchair manufacturers and providers.

Three versions of the WCQ were employed: The WCQ for appropriateness (WCQa), completed by an experienced seating specialist; the WCQ for user acceptance (WCQu), completed by wheelchair users; and the WCQ for condition, completed by a clinician involved with wheelchair maintenance. The study was conducted in partnership with a host organization at a boarding school for children with disabilities in a low resource setting. The study protocol was approved by LeTourneau University institutional Review Board and the ethics committee of our partner organization. Users of 4 types of wheelchairs in place at the study site were recruited as participants in 2014. Data was obtained for all 3 versions of the WCQ on 39 wheelchairs within the same month. In this paper, utility of triangulation is explored with respect to qualitative feedback in the form of comments.

1. Rispin, K., et al., *Preliminary development and validation of the wheelchair parts* questionnaire to assessthe condition of individual wheelchairs and the design of wheelchairs, RESNA annual conference 2013: Bellevue, WA.