

Assessing wheelchair breakdowns in Kenya to inform wheelchair test standards for low-resource settings.

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ABSTRACT

A multiyear study compared the occurrence of breakdowns among 87 wheelchairs of six models designed for low-resource settings. The study benefitted from a population living at a boarding school, thus reducing variation of environment and service. Evaluations occurred after 12 to 24 months of use and were done with the Wheelchair Components Questionnaire for Condition. Results showed statistically significant differences among wheelchair components and indicated common areas of weakness. Across wheelchair models, frames and canes (uprights) generally scored well, and brakes, seats, footrests and castors were frequent weak points. These weaknesses likely indicate components that may require more rigorous test standards in wheelchairs designed for use in low-resource settings.

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