What problems did the researchers set out to study, and why?
The researchers set out to describe meaningful interpretations of functional status outcome measures when using a computerized adaptive test (CAT) developed from the Lower-Extremity Functional Scale (LEFS). CATs are increasingly being used as clinical outcome measures for patient-reported outcomes; however, the developers of these tests face a challenge in correlating functional scores with clinically meaningful information.

Who participated in this study?
The data from this study were collected from a cohort of 8,714 individuals who had hip impairments and were receiving physical therapy from 257 outpatient clinics in the United States between January 2005 and June 2007. The data were collected via the Focus on Therapeutic Outcomes Inc (FOTO) database.

What new information does this study offer?
This study attempted to interpret a patient-reported outcome score in clinically meaningful terms. This information may make it easier for clinics to collect patient-reported outcomes as part of their daily practice. This will ultimately improve the clinician’s knowledge of patients’ perceptions of their own health and better track patient progress.

How did the researchers go about this study?
The researchers used 4 main approaches to interpret the outcome data clinically. The standard error of the estimate was used to determine 90% confidence intervals, percentile ranks were applied for functional status scores, thresholds were determined for functional status changes for clinically important and statistically reliable change, and a functional staging method was used.

What are the limitations of the study, and what further research is needed?
These researchers performed a secondary analysis of data on people with similar diagnoses, as collected from a proprietary database management company. Therefore, it may not be possible to generalize this information to nonparticipating clinics. Further research should be performed to validate the functional staging method developed in this analysis.

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The Bottom Line is a translation of study findings for application to clinical practice. It is not intended to substitute for a critical reading of the research article.


The Bottom Line