

# Editorial

## Measuring Outcome Measures



We would like to believe that there is a single best measure for answering every diagnostic or rehabilitative challenge. What, for example, is the best way to screen infants? What is the best test of auditory processing disorder? What is the best site of lesion measure? What is the best way to educate deaf children? And, of course, what is the best method for assessing benefit from amplification? But challenges like these always turn out to be vastly more complicated than a single answer can satisfy.

In this issue of *JAAA*, authors Gabrielle Saunders, of the National Center for Rehabilitative Auditory Research at the VAMC in Portland, Oregon, and Jeffrey Jutai, of the Department of Physical Medicine and Rehabilitation, University of Western Ontario, London, Ontario, address the issue of hearing aid outcome measures from a unique perspective. They ask how hearing-specific measures compare with a more generic measure of quality of life. On the surface, hearing-specific measures would seem to enjoy a validity advantage. Measures like real-ear gain, performance improvement, and user satisfaction appear to address the issues most relevant to successful hearing aid use. But, as Saunders and Jutai point out, how well hearing aids “work” cannot be so easily separated from how well they restore functional capabilities and how well they improve psychosocial well-being.

Saunders and Jutai studied 92 individuals who were either actual or potential hearing aid users. They administered three hearing-specific measures, the Abbreviated Profile of Hearing Aid Benefit (APHAB), the Expected Consequences of Hearing Aid Ownership (ECHO), the Satisfaction with Amplification in Daily Life (SADL), and one generic measure of how assistive devices affect quality of life, the Psychosocial Impact of Assistive Devices Scale (PIADS). The PIADS explored the extent to which the use of an aid promoted feelings of competence,

confidence, and motivation to explore life’s possibilities. The various scales were compared in terms of reported daily hearing aid use.

Findings are complicated and demand a careful reading of the entire paper, but the complex nature of the problem is illustrated by correlations between degree of hearing loss (4-frequency PTA) and the various subscales of SADL and PIADS. Not unexpectedly, the PTA correlated negatively with two SADL subscales, indicating that greater hearing loss is associated with less satisfaction with amplification. But PTA correlated positively with two PIADS subscales, indicating that the greater the hearing loss, the greater the positive impact of amplification on psychosocial well-being. In other words, individuals with more severe losses do not like hearing aids as much, but in terms of quality of life, they benefit from them.

The authors conclude that no single measure can successfully engage all of the issues inherent in this complex problem. Rather, they suggest that each measure may have a different clinical application. The APHAB, for example, would be appropriate for trouble-shooting a particular hearing aid fitting; the SADL would be helpful in revealing specific problems that an individual may have in understanding what hearing aids can offer him or her; and the PIADS would be useful for documenting overall psychosocial outcome.

“The measure to be chosen,” the authors suggest, “should be determined by the desired information.” That is very appropriate advice for all who seek simple answers to complex problems.

*James Jerger  
Editor-in-Chief*