

RECOMMENDATIONS FOR MINIMAL QUALITY OF LIFE VALIDATION

CRITERIA IN CLINICAL TRIALS

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OBJECTIVES

Health related quality of life (HRQoL) is being increasingly used as a secondary end-point in clinical trials. The accurate and precise measurement of HRQoL requires rigorous scientific attention to the design and validation of questionnaire instruments. The aim of the present study was to review the available medical literature and to suggest a minimal instrument development and validation standard for HRQoL instruments used in the regulatory evaluation of therapeutics.

METHODS

A search of the Medline database yielded 238 articles on the validation of specific HRQoL instruments and 22 review articles on validation methodologies. Review articles and selected validation articles were analyzed with respect to specific procedures used to validate HRQoL instruments. From this review a list of evaluation criteria and overall flowchart for HRQoL instrument development are presented.

RESULTS

The following criteria should be evaluated when developing HRQoL instruments for use in clinical trials:

QUESTIONS OF VALIDITY

Face Validity: Do the items selected in the questionnaire appear to be measuring what they are intended to?

Construct Validity: How accurately the instrument captures the outcome it claims to measure in different contexts? Contexts include different patient populations and different levels of severity of disease.

Criterion Validity: How discriminating an instrument is in being able to capture the full range of the outcome continuum in is intended to measure?

Content Validity: How comprehensively and accurately an instrument captures all relevant domains of the outcome it claims to measure?

Convergent Validity: What is the degree of correlation between different measures of the same construct?

Predictive Validity: Does the measure predict future differences in disease status?

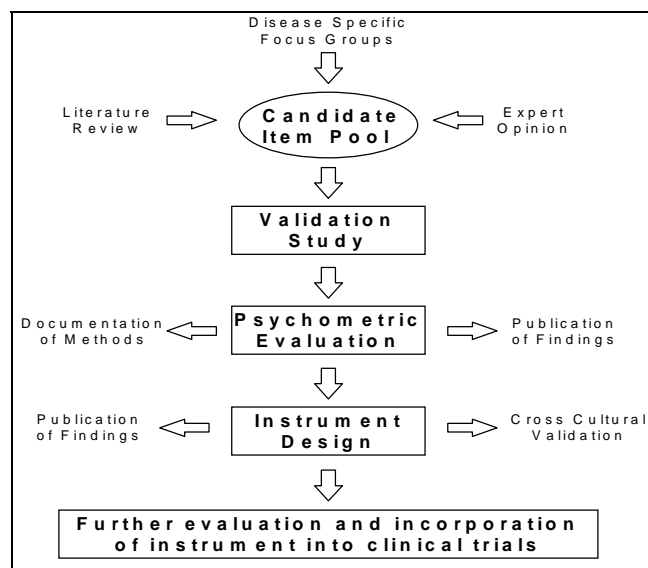
PERFORMANCE

Internal Consistency and Reliability: The evaluation of correlations among related items in the same underlying domain and measuring the reproducibility of an instrument over multiple test administrations within the same subject and disease status.

SENSITIVITY TO CHANGE

Responsiveness: The assessment of the reliability of observed change scores as well as measuring an instrument's ability to detect minimally important change either from the perspective of the patient or health care provider.

INSTRUMENT DEVELOPMENT PROCESS FLOWCHART



CONCLUSIONS

There are currently no regulatory guidelines from either the FDA or EMEA regarding standards for the validation of HRQoL instruments despite widespread agreement in the scientific community on the importance of validation. The development of minimal criteria are proposed to assist regulatory bodies in evaluating the quality of HRQoL instruments used to support regulatory applications.