



## SCHIZOPHRENIA Factsheet

February 2022

### What are outcome assessment tools?

Standardised assessment tools are vital for assessing a range of variables including symptoms, functioning and quality of life. The quality of these tools can be measured in various ways. 'Reliability' refers to the reproducibility of an instrument's results across different assessors, settings and times. 'Construct validity' is the extent to which an instrument measures the theoretical construct it was designed to measure. This involves 'convergent validity' (the degree of correlation between different scales measuring the same construct); and 'divergent validity' (the lack of correlation between scales measuring different constructs). 'Known groups' validity is the extent to which an instrument can demonstrate different scores for groups known to vary on the variables being measured. 'Content validity' is the extent to which each item on a scale represents the construct being measured, and 'internal consistency' is the degree of correlation between items within a scale. 'Predictive validity' refers to sensitivity, which is the proportion of correctly identified positives (e.g. high ratings on a scale), and specificity, which is the proportion of correctly identified negatives (e.g. low ratings on a scale). 'Responsiveness' is the extent to which an instrument can detect clinically significant or practically important changes over time.

### What is the evidence for outcome assessment tools?

Moderate quality evidence suggests the Brief Psychiatric Rating Scale can be factored into five discrete components, comprising positive, negative, and affective symptoms, resistance (hostility) and activation (excitement). The Positive and Negative Syndrome Scale showed a similar factor structure but included a larger number of items in the negative symptom factor and enough items for a discrete disorganisation factor. There is increased detection of symptoms when assessments are conducted in the mother language rather than an acquired language.

Moderate to high quality evidence found good predictive value of the Brief Psychiatric Rating Scale and the Positive and Negative Syndrome Scale for predicting non-response to antipsychotic treatment at 4-12 weeks. There is good predictive validity of the Historical, Clinical and Risk Management-20 scale for predicting aggression in psychiatric facilities. Moderate to low quality evidence suggests the McNeil-Binder Violence Screening Checklist, and the Brøset Violence Checklist may also be effective for predicting aggression or violence, however, the Violence Risk Appraisal Guide had poor predictive validity in people with schizophrenia living in the community.

Moderate quality evidence suggests good inter-rater reliability and some predictive validity for tools assessing duration of untreated psychosis, psychosis onset and treatment onset. Moderate to low quality evidence suggests the Recovery Assessment Scale has the best psychometric properties for measuring personal recovery; it has good construct validity, content validity, internal consistency, test-retest reliability, administrator-friendliness, and has been translated to languages other than English. However, its user-friendly rating is poor. Other scales rating personal recovery with reasonable psychometric properties include the Self-Identified Stage of Recovery scale, which has good construct and content validity, good internal consistency but poor test-retest reliability, and good user-friendliness, and has also been translated to languages other than English. The Mental Health Recovery Measure has good content validity but poor construct validity, and good internal consistency and test-re-test validity.

Moderate to low quality evidence finds reliability is good for the following instruments assessing depressive symptoms; Brief Psychiatric Rating Scale-Depression, Positive and Negative Syndrome scale-Depression, Hamilton Rating Scale for Depression, Montgomery Asberg Depression Rating Scale, Calgary Depression Scale for Schizophrenia, and Beck Depression Inventory. The best concurrent validity indices are reported for the Calgary Depression Scale for Schizophrenia, and the Montgomery Asberg Depression Rating Scale. The highest ranges for sensitivity and specificity were reported for the Calgary Depression Scale for Schizophrenia. For anxiety symptoms, the Beck Anxiety Index, Depression Anxiety Stress Scale or Scale of Anxiety Evaluation in Schizophrenia for general screening, and the DSM-based Generalised Anxiety Disorder Symptoms Severity Scale, Liebowitz Social Anxiety Scale, Obsessive-Compulsive Inventory, Psychological Stress Index, Perseverative Thinking Questionnaire, and Yale-Brown Obsessive Compulsive Scale for anxiety symptoms. Moderate quality evidence suggests good 'known groups' validity for the Short Form health survey-36, but inconsistent convergent validity and poor responsiveness.

For further information see the technical table

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*Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.*

*Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.*

*While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.*