

Psychological testing: Use do-it-yourself tools or refer?

Quick checklists are handy but not always sufficient



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r. A, age 38, presents with severe anxiety symptoms that suggest generalized anxiety disorder (GAD). You wish to confirm the diagnosis before starting medication, measure treatment response, and provide documentation to Mr. A's managed care company.

Miss B, age 73, complains of memory and organization problems. Her history of transient ischemic attacks suggests vascular dementia, but the gradual symptom onset suggests Alzheimer's dementia. You need to clarify the diagnosis.

Informed use of psychological testing can help you plan treatment by clarifying the causes, diagnosis, and prognosis of patients' symptoms. With hundreds of instruments available, we offer an overview to help you quickly choose appropriate in-office tools or refer for moreintensive testing.

QUICK BUT IMPERFECT

Checklists and rating scales can quickly gauge a personality trait such as impulsivity or target



symptom such as anxiety, using a numerical list of words or statements:

- A checklist's response format is dichotomous (typically yes/no).
- Rating scales offer greater options, such as a 4-point scale for measuring symptoms as 0 (not present), 1 (mild), 2 (moderate), 3 (severe).

Many rapid-assessment instruments are self-report, and some require an observer (such as a parent or teacher) to respond. Rating scales may take more time to complete than checklists but provide useful symptom frequency and severity data.

Some checklists/rating scales can assess more than one disorder or target symptom. These wide-band instruments—often called inventories or schedules—tend to be lengthy (1 to 2 hours), often require an interview, and generally require specialized training to administer.¹⁻⁴

Pros. Two attributes make checklist/rating scales popular in clinical practice: their convenience, and managed care's quest for documentation of service need, quality of care, cost-effectiveness, and symptom reduction. Brief, accurate, efficient checklists/rating scales can help you give managed care firms the documentation they require to authorize continued treatment—whether psychotherapy or medication monitoring.

Cons. Many checklists/rating scales are psychometrically weak, with low reliability and unproven validity. Some are lengthy or have other traits that diminish their clinical value (*Table 1*).

LONGER AND MORE DETAILED

Objective tests typically contain true/false questions for which responses are reported as percentiles or standard scores. Examples are the Minnesota Multiphasic Personality Inventory (MMPI-2), used to clarify axis I diagnoses, and Millon Clinical Multiaxial Inventory (MCMI-III), chiefly used to assess personality disorders.

Table 1

Pros and cons of checklists/rating scales

Pros

- May be rapidly given (≤15 minutes) and scored by staff
- · Usually inexpensive
- · May be used repeatedly to document change
- Provide symptom frequency and severity data (rating scales)

Cons

- · May have questionable validity/reliability
- · May be long and difficult to score
- May provide inadequate symptom data (checklists)
- Susceptible to response distortion (patients may exaggerate or minimize symptoms)

Objective tests' ability to assess a wide band of psychopathology can help you evaluate patients with complex differential diagnoses.⁶ **Projective tests** are unstructured instruments developed to detect covert psychosis and pathologic conflicts/impulses. Patients respond to ambiguous stimuli (inkblots, pictures, incomplete sentences)

that are assumed to function as a screen onto which

a person projects his or her conflicts and issues.³

Useful projective tests include the Rorschach ink blot test, Thematic Apperception Test (TAT) of interpersonal relationships, and several sentence-completion tests. The Rorschach can take 1 to 2 hours to administer and score and requires years to master. The Rotter Incomplete Sentences Blank (2nd ed) (RISB) is well-constructed; available in high school, college, and adult forms; and can help clarify major conflicts.³

Projective tests' psychometric properties have been questioned, but the Rorschach is considered useful in detecting subtle psychoses.⁶

Neuropsychological tests can identify and localize brain injury. Board-certified neuropsychologists (with 2 years' postdoctoral training) use them to



Table 2

Commonly used checklists/rating scales for adult assessment

Disorder/target symptom	Commonly used scales
Anger	Anger, Irritability and Assault Questionnaire (AIAQ)
Anxiety Phobias GAD OCD PTSD	Fear Questionnaire (FQ) Beck Anxiety Inventory (BAI) Yale-Brown Obsessive Compulsive Scale (Y-BOCS) Posttraumatic Stress Diagnostic Scale (PDS)
Bipolar disorder	Young Mania Rating Scale (YMRS)
Depression	Beck Depression Inventory (BDI) Zung Self-rating Depression Scale (SDS)
Eating disorders	Eating Disorders Inventory-2
Family issues	Family Assessment Device (FAD)
Impulse control	Barratt Impulsiveness Scale, Version II (BIS-II)
Pain	McGill Pain Questionnaire (MPQ)
Personality disorders	Millon Clinical Multiaxial Inventory (MCMI-III)
Psychosis	Brief Psychiatric Rating Scale (BPRS) Manchester Scale
Sexuality	Sexual Interaction Inventory (SII)
Sleep	Sleep Disorder Questionnaire (SDQ)
Suicide risk	Beck Scale for Suicide Ideation (BSS)

GAD: Generalized anxiety disorder OCD: Obsessive-compulsive disorder PTSD: Posttraumatic stress disorder

assess traumatic brain injury, evaluate poststroke syndromes or early dementia, and differentiate dementia and depression. These tests also have litigation and forensic applications, such as assessing competence or malingering.

Some neuropsychologists use a comprehensive instrument such as the Halstead-Reitan Neuropsychological Test Battery, which evaluates memory, abstract thought, language, sensory-

motor integration, imperception, and motor dexterity. Others may select specific instruments to answer a referring psychiatrist's question.

CHOOSING AN INSTRUMENT

Medical reference librarians can help research specific instruments and choose useful testing tools. We also recommend Corcoran and Fischer's *Measures for Clinical Practice*,⁸ which



— Table 3

Common checklists/rating scales for geriatric assessment

Disorder/target symptom	Commonly used scales
Cognitive status	Mini-Mental State Examination (MMSE) Neurobehavioral Cognitive Status Examination (Cognistat) Dementia Rating Scale Repeatable Battery for the Assessment of Neuropsychological Status (RBANS)
Caregiver stress	Caregiver's Burden Scale (CBS)
Death concerns	Concern About Death-Dying (CADD) and Coping (C) checklist
Depression	Geriatric Depression Scale (GDS)

provides practical information on administration, advantages, and disadvantages of instruments that:

- are used in clinical practice
- provide data on psychometric properties
- take <15 minutes to complete
- are rapidly scored
- provide information on symptom severity
- can be used to document change.

Other useful references are available, ^{1,2,4,9} but most include research tools or wide-band, multiscale instruments—such as the MMPI-2—that require specialized training. *Tables 2-4* list common instruments to test patients of all ages.

IN-OFFICE TESTING VS REFERRAL

You could use in-office testing to diagnose Mr. A's anxiety symptoms and provide documentation to his managed care company. For Miss B's memory problems, we recommend referral for psychological testing.

Mr. A completes the 21-item Beck Anxiety Inventory (BAI) in your office. You select the BAI because it is psychometrically sound, brief (about 10 minutes to complete and score), and easily understood.

Results can be readily used for feedback to patients or third-party payers.

Mr. A's score of 19 is consistent with GAD and justifies a medication trial. The BAI provides information about his experience of anxiety (subjective vs. somatic) that can guide psychotherapy. You plan to repeat the BAI over time to monitor treatment.

Miss B would benefit from referral to a neuropsychologist, as screening tools do not reliably differentiate among the dementias. The neuropsychologist will likely use all or part of the Halstead-Reitan Neuropsychological Test Battery to localize any ischemic-related brain injury and clarify the diagnosis. This test also can provide data to stage her dementia and help you and her family with care decisions.

PSYCHOLOGIST REFERRAL

When referring patients for psychological testing, we recommend that you tell the psychologist what information you need and let him or her select the tests. Relying on their expertise can save time and yield a report that targets the referral question.

Three cases follow that illustrate types of referral questions doctoral-level psychologists can help answer with appropriately chosen tests:

continued



Table 4

Common checklists/rating scales for child and adolescent assessment

Disorder/target symptom	Commonly used scales
Anxiety	Multidimensional Anxiety Scale for Children (MASC)
Assertiveness	Assertiveness Scale for Adolescents (ASA)
Conduct	Child Behavior Checklist (CBCL)
Depression	Children's Depression Self Rating Scale (CDRS)
Drug/alcohol risk	CAGE Questionnaire Michigan Alcohol Screening Test (MAST)
Impulsivity	Impulsivity Scale (IS)
PTSD	Child Report of Posttraumatic Symptoms (CROPS)
Reaction to divorce	Children's Belief About Parental Divorce Scale (CBAPS)
Self-esteem	Rosenberg Self-Esteem Scale (RSE)
Suicide risk	Multi-Attitude Suicide Tendency Scale (MAST)
Test anxiety	Children's Cognitive Assessment Questionnaire (CCAQ)

PTSD: Posttraumatic stress disorder

WHAT EXPLAINS TREATMENT RESISTANCE?

Mr. C, age 43, presents with mixed anxiety and depression. He complains of insomnia, fatigue, tightness in the chest, and trembling hands. You give him the Beck Depression Inventory (BDI) and Beck Anxiety Inventory (BAI), which show mild depression/anxiety. You prescribe fluoxetine, 20 mg/d, and 8 weeks later his symptoms are unchanged. The patient is demanding, critical, and has a pattern of interpersonal difficulty. You suspect a personality disorder is complicating treatment.

In this case, the MMPI-2 and MCMI-III would be useful to clarify diagnosis. The MMPI-2 gauges anxiety (state anxiety, phobias, social anxiety and posttraumatic stress disorder), and depression.

The MCMI-III was developed to assess axis II diagnoses and has scales to assess each personality disorder. These tests provide information about psychological-mindedness, treatment resistance, and characteristics that can guide psychotherapy.

DRUGS, PSYCHOSIS, OR BIPOLAR DISORDER?

Mr. D's parents report that their 20-year-old is isolating himself in his room, is not sleeping, and has grandiose beliefs of special powers and knowledge. He has no psychiatric history. Because these symptoms could suggest numerous psychopathologies, you would like help with the differential diagnosis.

Mr. D's symptoms could suggest drug abuse, schizophrenia, psychotic depression, or bipolar

continued on page 66



continued from page 60

disorder. The psychologist might use the MMPI-2 to assess drug abuse, depression, mania, and psychosis. The relative elevation of each scale could be clinically useful; if scales gauging psychosis and depression are both elevated, psychotic depression is likely, whereas an elevation chiefly on the mania scale would point to bipolar disorder.

The Rorschach test could assess psychotic process. The MMPI-2 could be repeated in a few months to gauge treatment response.

IS THIS EARLY ALZHEIMER'S DISEASE?

Mr. E, age 78, presents with mild memory and word-finding deficits and complains of fatigue, loss of appetite, and anhedonia. Physical exam and lab tests are unremarkable, and you suspect early Alzheimer's dementia and depression. You wish to confirm the diagnosis to decide whether to start a cholinesterase inhibitor, antidepressant, or other medication. You also wish to document change over time.

An in-office depression checklist would be appropriate for Mr. E. The 30-item, self-rated Geriatric Depression Scale is psychometrically sound and can be completed in 15 to 20 minutes.

Referral is recommended for dementia screening with an tool such as the Neurobehavioral Cognitive Status Examination (Cognistat) or Repeatable Battery for the Assessment of Neuropsychological

In-office assessment tools can help you rapidly diagnose many uncomplicated psychiatric disorders, monitor treatment response, and provide documentation to managed care. Refer patients with more-complex differential diagnoses to doctoral-level psychologists for projective, neuropsychological, or wide-band testing.

Bottom"

Related resources

- ► Corcoran K, Fischer J. Measures for clinical practice, vols. 1 and 2. New York: Free Press; 2000.
- Maruish ME (ed). The use of psychological testing for treatment planning and outcomes assessment. Mahwah, NJ: Lawrence Erlbaum Associates; 1999.
- Rush AJ, Pincus HJ, First MB, et al. (eds). Handbook of psychiatric measures. Washington, DC: American Psychiatric Association; 2000.
- American Psychological Association. FAQ/Finding information about psychological tests. http://www.apa.org/science/ faq-findtests.html.

DRUG BRAND NAMES

Fluoxetine • Prozac

DISCLOSURE

The authors report no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

Status (RBANS). The Mini-Mental State Examination (MMSE) is used for in-office screening of cognitive deficits but lacks sensitivity to detect mild decline. Cognistat or RBANS are less influenced by the patient's education level and are more sensitive than the MMSE to early dementia.

All three instruments are brief enough to repeat as needed to document change.

References

- Maruish ME (ed). The use of psychological testing for treatment planning and outcomes assessment. Mahwah, NJ: Lawrence Erlbaum Associates; 1999.
- Sajatovic M, Ramirez LF. Rating scales in mental health. Hudson, OH: Lexi-Comp; 2003.
- 3. Aiken LR. Assessment of adult personality. New York: Springer; 1997.
- Rush AJ, Pincus HJ, First MB, et al (eds). Handbook of Psychiatric Measures. Washington, DC: American Psychiatric Association; 2000.
- Belar CD. Psychological assessment in capitated care. In: Butcher JN (ed). Personality assessment in managed care: Using the MMPI-2 in treatment planning. New York: Oxford Press; 1997:13-80.
- Adams RL, Culbertson JL. Personality assessment: adults and children. In: Sadock BJ, Sadock VA (eds). Comprehensive textbook of psychiatry, vol. 1 (7th ed). Baltimore: Lippincott Williams & Wilkins; 2000:702-21.
- Swanda RM, Haaland KY, La Rue A. Clinical neuropsychology and intellectual assessment of adults. In: Sadock BJ, Sadock VA (eds). Comprehensive textbook of psychiatry, vol. 1 (7th ed). Baltimore: Lippincott Williams & Wilkins; 2000:689-701.
- 8. Corcoran K, Fischer J. Measures for clinical practice, vols 1 and 2. New York: Free Press; 2000.
- Blacker D. Psychiatric rating scales. In: Sadock BJ, Sadock VA (eds). Comprehensive textbook of psychiatry, vol. 1 (7th ed). Baltimore: Lippincott Williams & Wilkins; 2000:755-83.