



PhenX Toolkit

consensus measures for Phenotypes and eXposures

<https://www.phenxtoolkit.org>

Psychiatric Measures for PhenX Toolkit

Measure		Brief Description of Recommended Protocols
1	Anxiety Disorders Screener	a. Adult Two protocols using the Anxiety section of the Composite International Diagnostic Interview–Short Form (CIDI-SF) and the Symptom Checklist 90 (SCL-90) that, respectively, screen for the presence or absence of generalized anxiety disorder, specific phobia, social phobia, agoraphobia, and panic attack and provide a more quantitative measure of anxiety symptom severity.
		b. Child This protocol is a self-report questionnaire (the revised version of the Screen for Child Anxiety Related Emotional Disorders [SCARED-R]) designed to measure symptoms of panic disorder, generalized anxiety disorder, social phobia, separation anxiety disorder, obsessive compulsive disorder, posttraumatic stress disorder, and specific phobias in children ages 8–17 years old.
2	Attention-Deficit/Hyperactivity Disorder Symptoms	a. Adult The use of the Adult Attention-Deficit Hyperactivity Disorder Self-Report Scale (ASRS-v1.1) Symptom Checklist protocol is designed to determine if the participant exhibits attention-deficit/hyperactivity disorder symptoms.
		b. Child The Strengths and Weaknesses of Attention-Deficit/Hyperactivity Disorder Symptoms and Normal Behavior Scale (SWAN) protocol is provided to assess for the indication of attention-deficit/hyperactivity disorder in children.
3	Depression	a. Adult A two-part protocol that draws on the Depression section of the Composite International Diagnostic Interview–Short Form (CIDI-SF) and the Quick Inventory of Depressive Symptoms (QIDS) to screen for depressive symptoms in the general population and, if the participant tests positive, to capture the severity of depressive symptoms in the last 7 days.
		b. Child The Center for Epidemiological Studies Depression Scale for Children (CES-DC) protocol is a self-report instrument that measures depressive symptoms in children ages 6–17 years old.
4	Eating Disorders Screener	The Eating Disorder Diagnostic Scale (EDDS) is a self-report scale that assesses anorexia nervosa, bulimia nervosa, and binge-eating disorder through questions about body image, eating habits, and compensatory behaviors over the last 3–6 months.
5	General Distress Screener	The K6 is a protocol consisting of six questions to assess nonspecific psychological distress during the last 30 days.
6	General Psychiatric Assessment	a. Adult The Composite International Diagnostic Interview–Short Form (CIDI-SF) is a questionnaire that screens adults for the presence of depression, generalized anxiety, specific phobia, social phobia, agoraphobia, panic attack, obsessive compulsive disorder, and personality disorders.
		b. Child The Strengths and Difficulties Questionnaire (SDQ) is a parent-report or teacher-report instrument that screens children ages 3–4 years old, 4–10 years old, and 11–17 years old for positive and negative attributes.
7	Hypomania/Mania Symptoms	a. Adult The Hypomania Checklist 32 Revised (HCL-32-R1) is a self-report questionnaire that screens for hypomanic symptoms in major depressive disorder (MDD) and for the presence of bipolar and bipolar spectrum disorders (including bipolar I and bipolar II disorders).
		b. Child The General Behavior Inventory (GBI) is a parent-report instrument that screens children (less than 18 years old) for symptoms of bipolar disorder over the past year.
8	Obsessive Compulsive Disorder Screener	This protocol includes the Obsessive Compulsive Disorders (OCD) section (Section I) of the Composite International Diagnostic Interview–Short Form (CIDI-SF) to screen for OCD symptoms.
9	Personality Traits	The Big Five Inventory (BFI) is a self-administered instrument designed to measure the big five dimensions of personality: extraversion, agreeableness, conscientiousness, neuroticism, and openness/intellect.
10	Posttraumatic Stress Disorder (PTSD)	The Diagnostic Interview for Genetic Studies (DIGS) Posttraumatic Stress Disorder (PTSD) Screener is an interviewer-administered questionnaire designed to screen for symptoms of PTSD.
11	Psychopathy	The Triarchic Psychopathy Measure (TriPM) is a self-report questionnaire designed to measure psychopathy in terms of three distinct phenotypic constructs: boldness, meanness, and disinhibition.
12	Schizophrenia Screener	The Diagnostic Instrument for Psychoses and Affective Disorders (DI-PAD) is an interviewer-administered instrument designed to elicit information regarding a research subject's functioning and psychopathology, with particular emphasis on affective disorders and schizophrenia.
13	Sleep Disorders Screener	The National Institute of Mental Health (NIMH) Sleep Patterns and Problems instrument is an interviewer-administered questionnaire that captures routine sleep schedule, sleep deprivation, morningness-eveningness, insomnia, narcolepsy, cataplexy, and associated distress.
14	Symptoms of Autism Spectrum Disorders	a. Adolescent The Autism Quotient (AQ) protocol is a parent-report instrument designed to screen for autism symptoms in adolescents ages 12–15 years old.
		b. Adult The Autism Quotient (AQ) for adults is a self-report instrument designed to screen participants ages 16 years and older for symptoms of autism.
		c. Child The Childhood Autism Spectrum Test (CAST), also known as the Social and Communication Development Questionnaire, is a parent-report instrument based on a variety of behavioral descriptions of the core features of the autism spectrum.

NOTE: Complete protocols and links to common data elements are available through the PhenX Survey at <https://www.phenxtoolkit.org>.

What Is PhenX?

PhenX is a collaborative, consensus project between RTI International, the National Human Genome Research Institute (NHGRI) of the National Institutes of Health, and the larger research community. The objective of PhenX is to recommend measures with specified measurement protocols that have a high priority for inclusion in genome-wide association studies (GWAS). The consistent use of some measurement protocols across studies will facilitate cross-study comparisons. High-priority measures are, therefore, those measures that are broadly relevant to multiple health outcomes or assessments of health outcomes, although the measures are not focused on differential diagnosis.

Research Domains

The PhenX Steering Committee (SC) chose 21 research domains. A research domain is a field of research with a unifying theme and easily enumerated quantitative and qualitative measures. Working Groups (WGs) of experts in a specific domain were constituted, and they:

- Evaluated the scope of the domain and the broad elements of that scope, and then
- Recommended potential high-priority measures with specific measurement protocols.

These measures were vetted with the larger research community, and final recommendations from the WGs were reviewed by the SC. The primary goal of the project is to collect these recommendations in a Toolkit that will enable scientists to select measures and implement those measures in studies.

For more information on the PhenX project, please visit the project's website at <https://www.phenx.org/>.

Research Area (Domain)	Status	WG Chair(s)	SC Liaison
Alcohol, Tobacco and Other Substances	In Toolkit	Deborah S Hasin	Erin M Ramos
Anthropometrics	In Toolkit	Michele Forman	Michelle Williams
Cancer	In Toolkit	Neil Caporaso and Christine B Ambrosone	Margaret R Spitz
Cardiovascular	In Toolkit	Thomas A Pearson	William R Harlan
Demographics	In Toolkit	Myles Cockburn	Peter Kraft
Diabetes	In Toolkit	Craig L Hanis	William R Harlan
Environmental Exposures	In Toolkit	Lynn R Goldman	Diane Wagener
Gastrointestinal	In Toolkit	David Whitcomb	William R Harlan
Infectious Diseases and Immunity	In Toolkit	Richard Kaslow	Jonathan Haines
Neurology	In Toolkit	Jeffery M Vance	Lindsay A Farrer
Nutrition and Dietary Supplements	In Toolkit	Patrick J Stover	Jose M Ordovas
Ocular	In Toolkit	Janey L Wiggs	Jonathan Haines
Oral Health	In Toolkit	James Beck and Bryan Michalowicz	Mary L Marazita
Physical Activity and Physical Fitness	In Toolkit	Bill Haskell and Rick Troiano	Jose M Ordovas
Psychiatric	In Toolkit	Jordan Smoller and Kenneth Kendler	Carlos N Pato
Psychosocial	In Toolkit	Bernice Pescosolido	Carlos N Pato
Reproductive Health	In Toolkit	Carol Hogue	Michelle Williams
Respiratory	In Toolkit	Edwin K Silverman	Terri H Beaty
Skin, Bone, Muscle and Joint	In Toolkit	Douglas P Kiel	Lindsay A Farrer
Social Environments	In Toolkit	Barbara Entwisle	Peter Kraft
Speech and Hearing	In Toolkit	Cynthia Morton and Mabel Rice	Mary L Marazita