Diabetes Measures for PhenX Toolkit

Chair of this Working Group was Dr. Craig Hanis of the University of Texas at Houston. Co-leads of the Expert Review Panel that updated this domain were Dr. Rick Troiano of the National Cancer Institute and Dr. John Himes of the University of Minnesota School of Public Health.

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What is the PhenX Toolkit?

The PhenX Toolkit is an online catalog of recommended, standard measures and is available for use at no cost at https://www.phenxtoolkit.org.

The purpose of the PhenX Toolkit is to:

• Provide recommended, standard measures of phenotypes and exposures for use in biomedical research
• Facilitate acceptance and use of standard PhenX measures
• Promote collaboration and facilitate cross-study analyses

Researchers visit the Toolkit to:

• Select and incorporate standard measures into ongoing studies
• Consider PhenX measures when planning new studies
• Review and select high-quality, recommended, standard measures in order to expand a study beyond the primary research focus
• Review and select PhenX measures that relate to researchers’ primary research focus

PhenX Toolkit features:

• The Smart Query Tool provides two search options: a Smart Search based on keywords (and synonyms) and a Text Search that searches all text
• Browse options: Domains, Measures, Collections, Supplemental Information, and hierarchical tree view
• Link your study to find other researchers using the same measures and to explore opportunities for cross-study analysis
• Standards included: cancer Data Standards Registry and Repository (caDSR) Common Data Elements (CDEs); Logical Observation Identifiers Names and Codes (LOINC)
• Registered Users have access to additional features and functionality (e.g., saving more than one “My Toolkit”)
• Quick Start and Tutorial resources help new users become familiar with the Toolkit
• Data Dictionaries compatible with submission to the database of Genotypes and Phenotypes (dbGaP) and Custom Data Collection Worksheets can be downloaded
• REDCap Instrument Zip files for PhenX protocols can be uploaded directly to REDCap

For each PhenX measure, the following information is provided:

• Brief description of the measure
• Rationale for selecting the measure for inclusion in the Toolkit
• Detailed protocol(s) for collecting the measure
• Information about the personnel, training, and equipment needed to collect the measure
• Any special requirements
• Related measures
• References

PhenX Research Domains

- Alcohol, Tobacco and Other Substances
- Anthropometrics
- Cancer
- Cardiovascular
- Demographics
- Diabetes
- Environmental Exposures
- Gastrointestinal
- Infectious Diseases and Immunity
- Neurology
- Nutrition and Dietary Supplements
- Obesity
- Ocular
- Oral Health
- Physical Activity and Physical Fitness
- Pregnancy
- Psychiatric
- Psychosocial
- Rare Genetic Conditions
- Reproductive Health
- Respiratory
- Skin, Bone, Muscle and Joint
- Social Environments
- Speech and Hearing

PhenX supplements:

Several National Institutes of Health (NIH) institutes and programs have contributed supplemental funding to add depth to the Toolkit in specific areas of research.

PhenX Measures for Sickle Cell Disease Research funded by the National Heart, Lung, and Blood Institute (NHBLI).

PhenX Measures for Tobacco Regulatory Research were supported by NIH and the Food and Drug Administration’s Center for Tobacco Products (CTP).

PhenX Measures for Mental Health Research funded by the National Institute of Mental Health (NIMH).

PhenX Measures for Substance Abuse and Addiction Research funded by the National Institute on Drug Abuse (NIDA).

The PhenX Toolkit Genomic Resource Grant (U41) is funded by NIH’s National Human Genome Research Institute (NHGRI), with co-funding from NIH’s NIDA and OBSSR.

Dr. Carol M. Hamilton is the RTI International Principal Investigator, and Dr. Erin M. Ramos is the NHGRI Project Scientist.

More information is available at the project web portal: https://www.phenx.org

Funding for the Social Environments domain provided by the Office of Behavioral and Social Sciences Research (OBSSR).