



PhenX Toolkit

consensus measures for Phenotypes and eXposures

<https://www.phenxtoolkit.org>

Geriatrics Measurement Protocols for PhenX Toolkit

Dr. Mary Sano of the Icahn School of Medicine was chair of the Geriatrics Working Group.

| | Measure | Description of Measurement Protocols |
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| 1 | Activities of Daily Living (ADLs) | The individual is asked a series of questions about eight basic activities of daily living (e.g., bathing). The questions ask whether the respondent needed help from another person to perform the activity and whether the respondent had any difficulty with the activity. |
| 2 | Auditory Perception and Noise Exposure | A 29-item, interviewer-administered questionnaire with yes-or-no, Likert-style, and multiple-choice questions about the subject's current hearing, use of hearing aids, and history of potential causes of hearing loss. |
| 3 | Behavioral Disturbances | The Neuropsychiatric Inventory Questionnaire (NPI-Q) is a self-administered questionnaire used by informants (e.g., caregivers) to assess neuropsychiatric symptoms of a patient over the previous month and the effect on the patient and caregiver. Twelve domains and cardinal symptoms of each domain are assessed with yes-or-no responses. Both severity and distress ratings are recorded for each confirmed symptom. |
| 4 | Cognitive Changes | The informant (e.g., caregiver) is asked a series of questions to ascertain changes in the subject's cognition over the past 2 years. These questions are from the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE). |
| 5 | Cystatin C Assay for Kidney Function | This protocol provides instructions for drawing, processing, and storing blood for the serum cystatin C assay according to the National Health and Nutrition Examination Survey (NHANES) methods. |
| 6 | Dental Issues and Difficulty Chewing | An interviewer-administered series of nine questions about the subject's teeth, difficulty biting or chewing food, and pain. |
| 7 | Falls | The respondent views a monthly calendar and notes the dates on which he or she fell to the ground during that month. Then, after the respondent receives the calendar by mail, an interviewer calls the respondent and asks a series of questions about each fall that appears on the calendar. |
| 8 | Family History of Dementia and Longevity | An interviewer-administered questionnaire that assesses medical diagnoses of an individual's mother and father as they relate to dementia and Alzheimer's disease. |
| 9 | Foot Pain | An interviewer-administered, three-item questionnaire containing yes-or-no and Likert-style questions. |
| 10 | Frailty | The Study of Osteoporotic Fracture (SOF) Frailty Index is an assessment of frailty based on an individual's weight change over the past 3 years, physical ability to perform five chair stands without using arms for support, and energy level. |
| 11 | Involuntary Weight Loss | An interviewer-administered two-item questionnaire assessing weight loss of more than 5 pounds in the past 12 months and an individual's intent to lose weight. |
| 12 | Knee Injury and Osteoarthritis | A self-administered questionnaire consisting of 42 Likert-style items in five subscales: Pain, Other Symptoms, Function in Daily Living, Function in Sport and Recreation, and Knee-Related Quality of Life. |
| 13 | Life Space | An interview-administered questionnaire with nine yes-or-no questions. |
| 14 | Resilience | A self-administered questionnaire with six Likert-style items. |
| 15 | Smell and Taste | The Modified Pocket Smell Test (M-PST) is an eight-item, self-administered "scratch-and-sniff" test contained in two 4-item PSTs, which will be used in parallel. Eleven questions from the NHANES Chemical Senses–Taste & Smell Questionnaire determine whether the subject has had difficulty with taste or smell over the past 12 months. |
| 16 | Urinary Incontinence | An interviewer-administered, four-item questionnaire measuring urine leakage, use of protection for urine leakage, and impact of leakage of urine on daily activities. |

PhenX is driven by the scientific community, and measurement protocols are selected by Working Groups of experts using a well-established consensus process. PhenX measurement protocols are included in the National Institutes of Health (NIH) Common Data Element Resource Portal and have been recommended for use in more than 300 NIH Funding Opportunity Announcements to date.

The Steering Committee

Distinguished experts from the scientific community provide overarching guidance and promote the use of PhenX measurement protocols.

Liaisons

Liaisons from the NIH and other federal agencies communicate with the Steering Committee and lend expertise.

The Scientific Community

The broader scientific community is invited to comment during outreach on proposed new measurement protocols and updates of PhenX content.



Working Groups

Small groups of scientists with relevant expertise recommend measurement protocols for inclusion in the PhenX Toolkit.

The PhenX Team

The PhenX Team is funded by a Cooperative Agreement. PhenX is led by RTI International, working with NHGRI.

Expert Review Panels

Small groups of scientists with relevant expertise review and recommend updates to PhenX measurement protocols.

Collaborators

PhenX collaborators include the database of Genotypes and Phenotypes (dbGaP), Research Electronic Data Capture (REDCap), the cancer Data Standards Registry and Repository (caDSR) Common Data Elements (CDEs), Logical Observation Identifiers Names and Codes (LOINC), and the NIH Common Data Element Resource Portal.

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For more information, please visit

<https://www.phenxtoolkit.org>

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