NIH Resources
The NINDS also strongly encourages researchers to use these NIH developed materials for NINDS-sponsored research, when appropriate. Utilization of these resources will enable greater consistency for NINDS-sponsored research studies. These tools are free of charge.

- National Institutes of Health (NIH) Toolbox
- Quality of Life in Neurological Disorders (Neuro-QOL)
- Patient-Reported Outcomes Measurement Information System (PROMIS)

Suicidal Ideation
Investigators should review the FDA’s "Guidance for Industry: Suicidal Ideation and Behavior: Prospective Assessment of Occurrence in Clinical Trials" for the most up-to-date information about suicidal ideation and behavior. One scale that FDA suggests is the Columbia Suicide Severity Rating Scale (C-SSRS) (available at Columbia Suicide Severity Rating Scale).

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<thead>
<tr>
<th>Disease/Domain; Subdomain</th>
<th>Recommendations and List of Forms</th>
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<tr>
<td>NeuroRehab</td>
<td>Core and Supplemental-Highly Recommended CDEs:</td>
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<td></td>
<td>See Start-Up Resource Listing document: <a href="#">NeuroRehab Start-Up Resource Listing</a></td>
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<tr>
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<td>Guidance for Industry: Suicidal Ideation and Behavior: Prospective Assessment of Occurrence in Clinical Trials</td>
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<tr>
<td>Participant Characteristics/Demographics</td>
<td>General Core: General Core</td>
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<td></td>
<td>NeuroRehab Core: Infant Pediatrics Demographics</td>
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<tr>
<td></td>
<td>NeuroRehab [Disease] Core: N/A</td>
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<td></td>
<td>NeuroRehab Supplemental-Highly Recommended: N/A</td>
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<tr>
<td>Assessments and Examinations/Autonomic</td>
<td>General Core: N/A</td>
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<td>NeuroRehab Core: N/A</td>
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<td>NeuroRehab [Disease] Core: N/A</td>
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<tr>
<td></td>
<td>NeuroRehab Supplemental-Highly Recommended: Composite Autonomic Symptom Scale</td>
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<tr>
<td>Disease/Domain; Subdomain</td>
<td>Recommendations and List of Forms</td>
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<tr>
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</tbody>
</table>
| Assessments and Examinations/ Comorbidities | General Core: N/A  
NeuroRehab Core: N/A  
NeuroRehab [Disease] Core: N/A  
**NeuroRehab Supplemental-Highly Recommended:** Boston Naming Test (BNT) - 30-item version; PROMIS Item Bank v1.0 - Alcohol: Negative Consequences; PROMIS Item Bank v1.0 - Dyspnea Functional Limitations |
| Assessments and Examinations/ General and Motor | General Core: N/A  
NeuroRehab Core: Assessments and Examinations Demographic and Clinical Conditions  
NeuroRehab [Disease] Core: N/A  
**NeuroRehab Supplemental-Highly Recommended:** Assessments and Examinations Demographic and Clinical Conditions; Fugl-Meyer Assessment; Functional Gait Assessment |
| Assessments and Examinations/ Other Clinical Data | General Core: N/A  
NeuroRehab Core: N/A  
**NeuroRehab Sport Related Concussion Core:** Immediate Post-Concussion Assessment and Cognitive Testing (imPACT); Post Concussion Symptom Scale  
**NeuroRehab Supplemental-Highly Recommended:** Brief Symptom Inventory-18 (BSI-18); Patient-Reported Outcomes Measurement Information System (PROMIS); Rivermead Post-Concussive Symptoms Questionnaire (RPQ) |
| Assessments and Examinations/ Physical/Neurological Examination | General Core: N/A  
NeuroRehab Core: N/A  
**NeuroRehab Stroke Core:** NIH Stroke Scale (NIHSS)  
**NeuroRehab Supplemental-Highly Recommended:** Glasgow Coma Scale (GCS) |
| Treatment/Intervention Data/ Devices | General Core: N/A  
NeuroRehab Core: N/A  
NeuroRehab [Disease] Core: N/A  
**NeuroRehab Supplemental-Highly Recommended:** Devices: Communication; Devices: Mobility and Manipulation |
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<tr>
<th>Disease/Domain; Subdomain</th>
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</thead>
</table>
| Outcomes and End Points/ Academic/Intellectual Functioning    | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Test of Premorbid Functioning; Wechsler Adult Intelligence Scale - Fourth Edition (WAIS-IV); Word Reading Subtest of the Wide Range Achievement Test (WRAT-4) |
| Outcomes and End Points/ Activities of Daily Living/Performance | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Barthel Index; Functional Independence Measure (FIM)                                                                                                                                  |
| Outcomes and End Points/ Amnesia/Coma                        | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Galveston Orientation and Amnesia Test (GOAT); JFK Coma Recovery Scale- Revised                                                                                     |
| Outcomes and End Points/ Attention/Working Memory             | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Letter-Number Sequencing Subtest; NIH Toolbox Flanker Inhibitory Control Attention Test; Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV) - Digit Span Subtest |
| Outcomes and End Points/ Behavioral Function                 | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Alcohol Use Disorders Identification Test: Self-Report Version (AUDIT); Frontal Behavioral Inventory (FBI); Frontal Systems Behavioral Scale (FrSBe) |
## NeuroRehab CDE Highlight Summary

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<thead>
<tr>
<th>Disease/Domain; Subdomain</th>
<th>Recommendations and List of Forms</th>
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</thead>
</table>
| **Outcomes and End Points/ Cognitive Activity Limitations** | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Functional Independence Measure - Cognition Subscale (Cog-FIM); PROMIS Item Bank v2.0 - Cognitive Function; PROMIS Item Bank v2.0 - Cognitive Function Abilities Subset |
| **Outcomes and End Points/ Cognitive Assessment** | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Brief Test of Adult Cognition by Telephone (BTACT); NIH Toolbox Cognitive Battery; Repeatable Battery for Assessment of Neuropsychological Status (RBANS) |
| **Outcomes and End Points/ Communication** | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Stroke and Aphasia Quality of Life-39 (SAQOL-39) |
| **Outcomes and End Points/ Disease-Specific Health-Related Quality of Life** | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** HDQLIFE; Headache Impact Test-6 (HIT-6); Myotonic Dystrophy Health Index (MDHI); Parkinson's Disease Quality of Life Scale (PDQUALIF); Spinal Cord Injury - Quality of Life (SCI-QOL); Traumatic Brain Injury - Quality of Life (TBI-QOL) |
| **Outcomes and End Points/ Dysphagia** | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Huntington's Disease Dysphasia Scale; Quality of Life in Swallowing Disorders (SWAL-QOL); Swallowing Disturbance Questionnaire (SDQ) |
## Disease/Domain; Subdomain

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| Outcomes and End Points/ Emotional and Cognitive Status | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** PROMIS Item Bank v1.0 - Self-Efficacy for Managing Emotions |
| Outcomes and End Points/ Emotional Impairment | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Apathy Evaluation Scale; Beck Anxiety Inventory (BAI); Beck Depression Inventory II (BDI-II) |
| Outcomes and End Points/ Emotional/Behavioral | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** NIH Toolbox Emotional Battery; PROMIS Item Bank v1.0 - Emotional Distress - Anxiety; PROMIS Item Bank v1.0 - Emotional Distress - Depression (Calibrated Items) |
| Outcomes and End Points/ Executive Functioning | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Five-Point Test (5-PT); Stroop Test |
| Outcomes and End Points/ Eye Hand Motor | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** Grooved Pegboard Test |
| Outcomes and End Points/ Functional Outcomes | **General Core:** N/A  
**NeuroRehab Core:** N/A  
**NeuroRehab [Disease] Core:** N/A  
**NeuroRehab Supplemental-Highly Recommended:** 10 Meter Timed Walk; Box and Blocks Test of Manual Dexterity; Timed Up and Go (TUG) |
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| Outcomes and End Points/ Generic Health-Related Quality of Life | **General Core**: N/A  
**NeuroRehab Core**: N/A  
**NeuroRehab [Disease] Core**: N/A  
**NeuroRehab Supplemental-Highly Recommended**: PROMIS-29 Profile; Short Form 36-Item Health Survey (SF-36); World Health Organization Quality of Life Assessment (WHOQOL-BREF) |
| Outcomes and End Points/ Global Health-Related Quality of Life Outcome | **General Core**: N/A  
**NeuroRehab Core**: N/A  
**NeuroRehab [Disease] Core**: N/A  
**NeuroRehab Supplemental-Highly Recommended**: PROMIS Item Bank v1.2 - Global Health; Quality of Life in Neurological Disorders (Neuro-QOL) |
| Outcomes and End Points/ Instrumental Activities of Daily Living | **General Core**: N/A  
**NeuroRehab Core**: N/A  
**NeuroRehab [Disease] Core**: N/A  
**NeuroRehab Supplemental-Highly Recommended**: Assessment of Life Habits (LIFE-H) |
| Outcomes and End Points/ Language | **General Core**: N/A  
**NeuroRehab Core**: N/A  
**NeuroRehab [Disease] Core**: N/A  
**NeuroRehab Supplemental-Highly Recommended**: Animal Naming; Controlled Oral Word Association Test (COWAT) Subtest of the Multilingual Aphasia Examination (MAE); Token Test; Western Aphasia Battery Revised |
| Outcomes and End Points/ Memory | **General Core**: N/A  
**NeuroRehab Core**: N/A  
**NeuroRehab [Disease] Core**: N/A  
**NeuroRehab Supplemental-Highly Recommended**: Brief Visuospatial Memory Test Revised (BVMT-R); Hopkins Verbal Learning Test - Revised (HVLT-R); Rey Auditory Verbal Learning Test (RAVLT) |
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| Outcomes and End Points/ Mood/Anxiety | General Core: N/A  
NeuroRehab Core: N/A  
NeuroRehab [Disease] Core: N/A  
**NeuroRehab Supplemental-Highly Recommended:** Generalized Anxiety Disorder (GAD-7); Hospital Anxiety and Depression Scale (HADS); Patient Health Questionnaire - 9 (PHQ-9) Depression Scale |
| Outcomes and End Points/ Pain | General Core: N/A  
NeuroRehab Core: N/A  
NeuroRehab [Disease] Core: N/A  
**NeuroRehab Supplemental-Highly Recommended:** Brief Pain Inventory (Short Form); PROMIS Item Bank v1.1 - Pain Interference; PROMIS Item Bank v2.0 - Pain Behavior |
| Outcomes and End Points/ Participation | General Core: N/A  
NeuroRehab Core: N/A  
NeuroRehab [Disease] Core: N/A  
**NeuroRehab Supplemental-Highly Recommended:** PROMIS v2.0 - Ability to Participate in Social Roles and Activities; PROMIS v2.0 - Satisfaction with Social Roles and Activities |
| Outcomes and End Points/ Pediatric | General Core: N/A  
**NeuroRehab Core:** Pediatric Quality of Life Inventory (PedsQL); Strengths and Difficulties Questionnaire (SDQ), combined Full and Followup versions  
NeuroRehab [Disease] Core: N/A  
**NeuroRehab Supplemental-Highly Recommended:** N/A |
| Outcomes and End Points/ Performance Validity Tests | General Core: N/A  
NeuroRehab Core: N/A  
NeuroRehab [Disease] Core: N/A  
**NeuroRehab Supplemental-Highly Recommended:** Medical Symptom Validity Test (MSVT); Test of Memory Malingering (TOMM); Victoria Symptom Validity Test (VSVT) |
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<tbody>
<tr>
<td>Outcomes and End Points/ Physical Function</td>
<td>General Core: N/A</td>
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<tr>
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<td>NeuroRehab Core: N/A</td>
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<td>NeuroRehab [Disease] Core: N/A</td>
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<td><strong>NeuroRehab Supplemental-Highly Recommended</strong>: 2 Minute Walk Test; 6 Minute Walk Test; Borg Rating of Perceived Exertion (RPE) Scale</td>
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<tr>
<td>Outcomes and End Points/ Processing Speed</td>
<td>General Core: N/A</td>
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<tr>
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<td>NeuroRehab Core: N/A</td>
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<td></td>
<td>NeuroRehab [Disease] Core: N/A</td>
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<td><strong>NeuroRehab Supplemental-Highly Recommended</strong>: Processing Speed Index of the Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV); Symbol Digit Modalities Test; Trail Making Test</td>
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<tr>
<td>Outcomes and End Points/ Psychiatric and Psychological Functions</td>
<td>General Core: N/A</td>
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<td>NeuroRehab Core: N/A</td>
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<td>NeuroRehab [Disease] Core: N/A</td>
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<td><strong>NeuroRehab Supplemental-Highly Recommended</strong>: Apathy Scale (AS); Columbia - Suicide Severity Rating Scale (C-SSRS); Impact of Event Scale (IES)</td>
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<tr>
<td>Outcomes and End Points/ Psychiatric and Psychological Status</td>
<td>General Core: N/A</td>
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<td>NeuroRehab Core: N/A</td>
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<td>NeuroRehab [Disease] Core: N/A</td>
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<td><strong>NeuroRehab Supplemental-Highly Recommended</strong>: Alcohol, Smoking, and Substance Use Involvement Screening Test (ASSIST); PTSD Checklist for DSM-5 (PCL-5); Structured Clinical Interview for DSM-5 Axis I Disorders Research Version (SCID-5-RV)</td>
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<tr>
<td>Outcomes and End Points/ Psychological Status</td>
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<td>NeuroRehab Core: N/A</td>
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<td>NeuroRehab [Disease] Core: N/A</td>
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<td><strong>NeuroRehab Supplemental-Highly Recommended</strong>: Center for Epidemiologic Studies-Depression Scale (CES-D); Hamilton Anxiety Rating Scale (HAM-A); Hamilton Depression Rating Scale (HDRS)</td>
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</table>
## NeuroRehab CDE Highlight Summary

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<tr>
<td><strong>Outcomes and End Points/ Screening</strong></td>
<td><strong>General Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab [Disease] Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Supplemental-Highly Recommended</strong>: Mini-Mental State Examination (MMSE); Montreal Cognitive Assessment (MoCA); Telephone Interview for Cognitive Status (TICS)</td>
</tr>
<tr>
<td><strong>Outcomes and End Points/ Sleep</strong></td>
<td><strong>General Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab [Disease] Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Supplemental-Highly Recommended</strong>: Neuro-QOL Adult Bank - Sleep Disturbance; PROMIS Item Bank v1.0 - Sleep Disturbance; PROMIS Item Bank v1.0 - Sleep Related Impairment</td>
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<tr>
<td><strong>Outcomes and End Points/ Speech</strong></td>
<td><strong>General Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab [Disease] Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Supplemental-Highly Recommended</strong>: Acoustic Analysis of Speech; Voice Handicap Index (VHI)</td>
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<tr>
<td><strong>Outcomes and End Points/ Trunk Control/Balance</strong></td>
<td><strong>General Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab [Disease] Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Supplemental-Highly Recommended</strong>: Activities Specific Balance Confidence Scale (ABC-Scale); Berg Balance Scale (BBS); Mini-Balance Evaluation Systems Test (Mini-BESTest)</td>
</tr>
<tr>
<td><strong>Outcomes and End Points/ Visual</strong></td>
<td><strong>General Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab [Disease] Core</strong>: N/A  &lt;br&gt; <strong>NeuroRehab Supplemental-Highly Recommended</strong>: Judgment of Line Orientation (Benton JLO); Rey-Osterrieth Complex Figure Test (ROCF)</td>
</tr>
</tbody>
</table>