

Sport-Related Concussion (SRC) CDE Highlight Summary Document

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. Some of 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 Website](#)).

Subgroup	Recommendations
<p><i>Sport-Related Concussion</i></p>	<p>These instruments and elements are recommended for use in all Sport-Related Concussion (SRC) studies:</p> <p><i>Core instruments:</i></p> <p><u>One</u> of the following Cognitive Assessment measures should be collected: Automated Neuropsychological Assessment Metrics (ANAM), Axon Sports Computerized Cognitive Assessment Tool (CCAT), CNS Vital Signs, Immediate Post-Concussion Assessment and Cognitive Testing (ImPACT). Please note that these could be replaced by a pen or paper battery under the direction of a neuropsychologist.</p> <p><u>One</u> of the following Post-concussive/mild TBI related Symptoms measures should be collected: Health and Behavior Inventory (HBI), Concussion Symptom Inventory (PCSI), Post Concussion Symptoms Scale (PCSS), Rivermead Post-Concussive Symptoms Questionnaire (RPQ).</p> <p><i>Acute:</i> Balance Error Scoring System (BESS)</p> <p><i>Acute:</i> <u>One</u> of the following Post-concussive/mild TBI Related Symptoms should be collected: Child Sport Concussion Assessment Tool (Child-SCAT), Post Concussion Symptom Inventory (PCSI), Post Concussion Symptoms Scale (PCSS), Sport Concussion Assessment Tool (SCAT-3) _or 5, or Rivermead Post-Concussive Symptoms Questionnaire (RPQ).</p> <p><i>Subacute:</i> <u>One</u> of the following Post-concussive/mild TBI Related Symptoms should be collected: Health and Behavior Inventory (HBI), Post Concussion Symptom Inventory (PCSI), Post Concussion Symptoms Scale (PCSS), or Rivermead Post-Concussive Symptoms Questionnaire (RPQ).</p>

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	<p>Persistent/Chronic: <u>One</u> of the following Post-concussive/mild TBI Related Symptoms should be collected: Health and Behavior Inventory (HBI), Post Concussion Symptom Inventory (PCSI), Post Concussion Symptoms Scale (PCSS), or Rivermead Post-Concussive Symptoms Questionnaire (RPQ).</p> <p>Supplemental-Highly Recommended:</p> <p>Acute: Brief Symptom Inventory -- 18 Item (BSI-18), Center for Epidemiologic Studies Depression Scale (CES-D), Children's Orientation and Amnesia Test (COAT), Controlled Oral Word Association Test (COWAT), Health and Behavior Inventory (HBI), Hopkins Verbal Learning Test -Revised (HVLTR), Trail Making Test (TMT), Wechsler Adult Intelligence Scale (WAIS-IV), Wechsler Intelligence Scale for Children (WISC-V)</p> <p>Subacute: Controlled Oral Word Association Test (COWAT), Dizziness Handicap Inventory (DHI), Hopkins Verbal Learning Test -Revised (HVLTR), Pediatric Quality of Life Inventory (PEDSQL), Standardized Assessment of Concussion (SAC), Trail Making Test (TMT), Wechsler Adult Intelligence Scale (WAIS-IV), Wechsler Intelligence Scale for Children (WISC-V), VOMS (Brief Vestibular/Ocular Motor Screening Assessment).</p> <p>Persistent/Chronic: Controlled Oral Word Association Test (COWAT), Dizziness Handicap Inventory (DHI), Dynamic Gait Index, Functional Gait Assessment, Hopkins Verbal Learning Test -Revised (HVLTR), Trail Making Test (TMT), Wechsler Adult Intelligence Scale (WAIS-IV), Wechsler Intelligence Scale for Children (WISC-V).</p> <p>Core and Supplemental-Highly Recommended elements: See Start-Up Resource Listing document (SRC Start-Up Resource Listing)</p>
NIH Resources	<p>Core: None</p> <p>Supplemental: National Institutes of Health (NIH) Toolbox, Patient-Reported Outcomes Measurement Information System (PROMIS); Quality of Life in Neurological Disorders (Neuro-QOL)</p>
Summary Documents	Acute Subgroup Working Group Summary, Subacute Subgroup Working Group Summary, and Persistent/Chronic Working Group Summary
Participant Characteristics; Demographics	<p>Core: General Core</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Demographic</p> <p>Exploratory: None</p>
Participant	Core: None

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<i>Characteristics; Social Status</i>	<p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Socioeconomic Status</p> <p>Exploratory: None</p>
<i>Participant History and Family History; General Health History</i>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Personal Medical History; Participant and Family Psychological History; Concussion History; Migraine History; Substance Use</p> <p>Exploratory: None</p>
<i>History of Disease/Injury Related Events; History of Disease/Injury Event</i>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Injury Report; Return to Play</p> <p>Exploratory: None</p>
<i>Assessment and Examinations; Physical Examinations</i>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Clinical Examination</p> <p>Exploratory: None</p>
<i>Assessments and Examinations; Vital Signs</i>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Vital Signs</p> <p>Exploratory: None</p>
<i>Assessments and Examinations; Laboratory Tests and Biospecimens / Biomarkers</i>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Active Saliva Collection; DNA Guidelines For Genomic Analyses; Passive Saliva Collection; Serum Collection Protocol; Plasma and Serum Guidelines for Proteomic Analysis; TBI Biospecimen Collection Protocol</p>

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Subgroup	Recommendations
	Exploratory: None
Assessments and Examinations; Imaging Diagnostic	Core: None Supplemental – Highly Recommended: None Supplemental: Imaging Exploratory: None
Treatment /Intervention Data; Drugs	Core: None Supplemental – Highly Recommended: None Supplemental: Medications Exploratory: None
Treatments / Intervention Data; Therapies	Core: None Supplemental – Highly Recommended: None Supplemental: Treatment and Interventions Exploratory: None
Outcomes and End Points; Academic	Core: None Supplemental – Highly Recommended: None Supplemental: Wechsler Test of Adult Reading (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Test of Premorbid Functioning (TOPF) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>) Exploratory: None
Outcomes and End Points; Behavioral Function	Core: None Supplemental – Highly Recommended: None Supplemental: None Exploratory: Child Behavior Checklist (CBCL) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Frontal Systems Behavior Scale (FrSBe) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>)

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<p>Outcomes and End Points; Effort/Symptom Validity</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Medical Symptom Validity Test (<i>Subacute and Persistent Chronic timeframes</i>); Test of Memory Malingering (<i>Subacute and Persistent Chronic timeframes</i>)</p> <p>Exploratory: Test of Memory Malingering (<i>Acute</i>); Word Memory Test (<i>Subacute and Persistent/Chronic timeframes</i>)</p>
<p>Outcomes and End Points; Family and Environment</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Conflict Behavior Questionnaire (CBQ)/Interaction Behavior Questionnaire (IBQ) (<i>Persistent/Chronic timeframe</i>); Family Assessment Device (FAD) (<i>Persistent/Chronic timeframe</i>);</p> <p>Exploratory: Child and Adolescent Scale of Environment (CASE) (<i>Subacute and Persistent/Chronic timeframes</i>); Conflict Behavior Questionnaire (CBQ)/Interaction Behavior Questionnaire (IBQ) (<i>Subacute timeframe</i>); Family Assessment Device (FAD) (<i>Subacute timeframe</i>); Family Burden of Injury Interview (self-report or interview) (<i>Subacute and Persistent/Chronic timeframes</i>); Family History Research Diagnostic Criteria (FHRDC) (<i>Subacute and Persistent/Chronic timeframes</i>)</p>
<p>Outcomes and End Points; Global Outcomes</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: None</p> <p>Exploratory: Mayo-Portland Adaptability Inventory (MPAI-4) – Adult (<i>Subacute and Persistent/Chronic timeframes</i>); Mayo-Portland Adaptability Inventory (MPAI-4) – Pediatric (<i>Subacute and Persistent/Chronic timeframes</i>)</p>
<p>Outcomes and End Points; Mood/Anxiety</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: Center for Epidemiologic Studies Depression Scale (CES-D) (<i>Acute timeframe</i>)</p> <p>Supplemental: Beck Depression Inventory - 2 (BDI-2) (<i>Subacute and Persistent/Chronic timeframes</i>); Center for Epidemiologic Studies Depression Scale (CES-D) (<i>Subacute and Persistent/Chronic timeframes</i>); Children's Depression Inventory (<i>Subacute and Persistent/Chronic timeframes</i>); Generalized Anxiety Disorder 7 (GAD 7) (<i>Subacute and Persistent/Chronic timeframes</i>); Patient Health</p>

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	<p>Questionnaire (9 Item) (PHQ-9) (<i>Subacute and Persistent/Chronic timeframes</i>); Short Mood and Feelings Questionnaire (SMFQ) (<i>Acute timeframe</i>)</p> <p>Exploratory: Beck Depression Inventory - 2 (BDI-2) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Brief Sensation Seeking Scale (BSSS) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); NIH Toolbox Emotional Battery(<i>Subacute and Persistent/Chronic timeframes</i>); Post Traumatic Stress Disorder Checklist (PCL) (<i>Subacute and Persistent/Chronic timeframes</i>); Screen for Child Anxiety Related Emotional Disorders (SCARED) (<i>Subacute and Persistent/Chronic timeframes</i>); Short Mood and Feelings Questionnaire (SMFQ) (<i>Subacute and Persistent/Chronic timeframes</i>); The UCLA PTSD Index for the DSM-5(<i>Subacute and Persistent/Chronic timeframes</i>)</p>
<p>Outcomes and End Points; Neurological</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Neurological Outcome Scale (NOS) (<i>Subacute and Persistent/Chronic timeframes</i>)</p> <p>Exploratory: None</p>
<p>Outcomes and End Points; Neuromotor Function</p>	<p>Core: Balance Error Scoring System (Modified) (<i>Acute timeframe</i>)</p> <p>Supplemental –Highly Recommended: Dynamic Gait Index(<i>Persistent/Chronic timeframe</i>); Functional Gait Assessment (<i>Persistent/Chronic timeframe</i>)</p> <p>Supplemental: Activities Specific Balance Confidence Scale (ABC-Scale)(<i>Acute, Subacute and Persistent/Chronic timeframes</i>); Balance Error Scoring System (Modified) (<i>Subacute and Persistent/Chronic timeframes</i>); Dynamic Gait Index (<i>Subacute timeframe</i>); Functional Gait Assessment(<i>Subacute timeframe</i>); NIH Toolbox Standing Balance Test (BST) (<i>Acute and Subacute timeframes</i>); Patient Reported Outcomes Measurement Information System (PROMIS) (<i>Acute, Subacute and Persistent/Chronic timeframes</i>); Walking While Talking Test (Dual Task Test) (<i>Subacute and Persistent/Chronic timeframes</i>); Neck Disability Index (<i>Subacute and Persistent/Chronic timeframes</i>)</p> <p>Exploratory: NIH Toolbox Motor Battery (<i>Subacute and Persistent/Chronic timeframes</i>); NIH Toolbox Standing Balance Test (BST) (<i>Acute and Chronic/Persistent timeframes</i>); BOT2 balance subset(<i>Acute, Subacute and Persistent/Chronic timeframes</i>);</p>
<p>Outcomes and End Points; Cognitive Assessments</p>	<p>Core: Automated Neuropsychological Assessment Metrics (ANAM)** (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Axon Sports Computerized Cognitive Assessment Tool (CCAT)**(<i>Acute, Subacute, and Persistent Chronic timeframes</i>); CNS Vital Signs** (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Immediate</p>

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	<p><i>Post-Concussion Assessment and Cognitive Testing (ImPACT)** (Acute, Subacute, and Persistent Chronic timeframes); Standardized Assessment of Concussion (SAC)** (Acute timeframe)</i></p> <p>Supplemental – Highly Recommended: Children's Orientation and Amnesia Test (COAT) (<i>Acute timeframe</i>), Controlled Oral Word Association Test (COWAT) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Hopkins Verbal Learning Test - Revised (HVLt-R) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Standardized Assessment of Concussion (SAC) (<i>Subacute timeframe</i>); Trail Making Test (TMT) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Wechsler Adult Intelligence Scale (WAIS-IV) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Wechsler Intelligence Scale for Children (WISC-V) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>)</p> <p>Supplemental: Acute Concussion Evaluation Form (ACE) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Behavior Rating Inventory of Executive Function (BRIEF) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Brief Visuospatial Memory Test – Revised (BVMt-R) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); California Verbal Learning Test II *** (<i>Persistent/Chronic timeframe</i>); Delis-Kaplan Executive Function System (D-KEFS) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Repeatable Battery for Assessment of Neuropsychological Status (RBANS) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Rey Auditory Verbal Learning Test (RAVLT) (<i>Persistent/Chronic timeframe</i>); Stroop Test (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Symbol Digit Modalities Test (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Wide-Range Assessment of Memory and Learning-Revised (WRAML-2) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Woodcock-Johnson, 3rd Edition (WJ-III); Achievement Tests (<i>Subacute and Persistent/Chronic timeframes</i>); Word Reading Subtest of the Wide Range Achievement Test (WRAT-4) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>)</p> <p>Exploratory: Beery-Buktenica Developmental Test of Visual-Motor Integration, 6th edition (Beery VMI) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); California Verbal Learning Test for Children (CVLT-C) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); California Verbal Learning Test II*** (<i>Acute and Subacute timeframes</i>); Cognitive Battery -NIH Toolbox (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Color-Word Interference Test (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Conners' Continuous Performance Test-Revised (CPT - III) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Grooved Pegboard Test (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Rey Auditory Verbal Learning Test (RAVLT) (<i>Acute and Subacute timelines</i>); Test of Everyday Attention (Tea-Ch) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Test of Executive Control (TEC) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Test of Memory and Learning-Revised (TOMAL-2) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Test of Word Reading Efficiency 2nd Edition (TOWRE-2) (<i>Acute, Subacute, and Persistent Chronic timeframes</i>); Wechsler Abbreviated Scale of Intelligence (WASI II); 2 subtest version (<i>Acute, Subacute, and Persistent Chronic timeframes</i>)</p>

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<p>Outcomes and End Points; Vestibular and Oculo Motor Function</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: Dizziness Handicap Inventory (DHI) (<i>Subacute timeframe and Persistent/Chronic</i>); VOMS (Brief Vestibular/Ocular Motor Screening Assessment) (<i>Subacute timeframe</i>)</p> <p>Supplemental: Dizziness Handicap Inventory (DHI) (<i>Acute timeframe</i>); Dynamic Visual Acuity Test -NIH Toolbox (<i>Acute, Subacute and Persistent/Chronic timeframe</i>); Tinnitus Functional Index (TFI) (<i>Subacute and Persistent/Chronic timeframe</i>); Tinnitus Handicap Inventory (THI) (<i>Subacute and Persistent/Chronic timeframe</i>); VOMS (Brief Vestibular/Ocular Motor Screening Assessment) (<i>Persistent/Chronic timeframe</i>); Clinical Test of Dynamic Visual Acuity (<i>Subacute and Persistent Chronic timeframes</i>); Computerized Test of Dynamic Visual Acuity (<i>Subacute and Persistent/Chronic timeframes</i>); King Devick (<i>Acute, Subacute and Persistent/Chronic timeframe</i>)</p> <p>Exploratory: VOMS (Brief Vestibular/Ocular Motor Screening Assessment) (<i>Acute timeframe</i>); Clinical Test of Dynamic Visual Acuity (<i>Acute timeframe</i>); Computerized Test of Dynamic Visual Acuity (<i>Acute timeframe</i>)</p>
<p>Outcomes and End Points; Other Symptoms</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: Brief Symptom Inventory-18 (BSI-18) (<i>Acute timeframe</i>)</p> <p>Supplemental: Brief Symptom Inventory-18 (BSI-18) (<i>Subacute and Persistent/Chronic timeframe</i>)</p> <p>Exploratory: None</p>
<p>Outcomes and End Points; Post-concussive/mild TBI Related Symptoms</p>	<p>Core: Child Sport Concussion Assessment Tool (Child-SCAT) (<i>Acute timeframe</i>); Health and Behavior Inventory (HBI) (<i>Subacute and Persistent/Chronic timeframes</i>); Post-concussion Symptom Inventory (PCSI) (<i>Acute timeframe</i>); Post Concussion Symptoms Scale (PCSS) (<i>Acute, Subacute and Persistent/Chronic timeframes</i>); The Rivermead Postconcussive Symptom Questionnaire (RPQ) (<i>Acute, Subacute and Persistent/Chronic timeframes</i>)</p> <p>Supplemental – Highly Recommended: Health and Behavior Inventory (HBI) (<i>Acute timeframe</i>)</p> <p>Supplemental: Automated Neuropsychological Assessment Metrics (ANAM) (<i>Persistent/Chronic timeframe</i>); Axon Sports Computerized Cognitive Assessment Tool (CCAT) (<i>Persistent/Chronic timeframe</i>); CNS Vital Signs (<i>Persistent/Chronic</i>)</p>

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Subgroup	Recommendations
	<p><i>timeframe</i>); Child Sport Concussion Assessment Tool (Child-SCAT) (Acute and <i>Persistent/Chronic timeframe</i>); Galveston Orientation and Amnesia Test (GOAT) (<i>Acute timeframe</i>); Health and Behavior Inventory (HBI) (<i>Subacute and Persistent/Chronic timeframes</i>); Post-concussion Symptom Inventory (PCSI) (<i>Subacute and Persistent/Chronic timeframes</i>); Sport Concussion Assessment Tool (SCAT-3) _or 5 (<i>Subacute and Persistent/Chronic timeframes</i>)</p> <p>Exploratory: Immediate Post-Concussion Assessment and Cognitive Testing (imPACT) (<i>Persistent/Chronic timeframe</i>)</p>
<p>Outcomes and End Points; Psychological Other</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Alcohol, Smoking, and Substance Use Involvement Screening Test (ASSIST) (<i>Persistent/Chronic timeframe</i>); Alcohol Use Disorders Identification Test: Self-Report Version (AUDIT) (<i>Subacute and Persistent/Chronic timeframes</i>); Substance Abuse Questions from the TBI Model Systems Database (<i>Acute timeframe</i>)</p> <p>Exploratory: Alcohol, Smoking, and Substance Use Involvement Screening Test (ASSIST) (<i>Subacute timeframe</i>); Kiddie Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL) (<i>Subacute and Persistent/Chronic timeframes</i>); Minnesota Multiphasic Personality Inventory – 2 – Restructured Form (MMPI-2-RF) (<i>Subacute and Persistent/Chronic timeframes</i>); NIH Toolbox Sensory Battery (<i>Subacute and Persistent/Chronic timeframes</i>); Substance Abuse Questions from the TBI Model Systems Database (<i>Subacute timeframe</i>)</p>

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<p>Outcomes and End Points; Quality of Life/ Patient Reported Outcomes</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: Pediatric Quality of Life Inventory (PEDSQL) (<i>Subacute timeframe</i>)</p> <p>Supplemental: Pediatric Quality of Life Inventory (PEDSQL) (<i>Acute and Persistent/Chronic timeframes</i>); Short Form-12 Health Survey (SF-12) (<i>Subacute timeframe</i>); Short Form-36 Medical Outcome Study (SF-36 v2) (<i>Persistent/Chronic timeframe</i>); Satisfaction with Life Scale (SWLS) (<i>Acute timeframe</i>)</p> <p>Exploratory: NIH Toolbox Odor Identification Test (OIT) (<i>Persistent/Chronic timeframes</i>); Patient Reported Outcomes Measurement Information System (PROMIS) (<i>Acute, Subacute and Persistent/Chronic timeframes</i>); Quality of Life in Neurological Disorders (Neuro-QOL) (<i>Acute, Subacute and Persistent/Chronic timeframes</i>); Regional Taste Intensity Test - NIH Toolbox (<i>Persistent/Chronic timeframe</i>); Short Form-12 Health Survey (SF-12) (<i>Acute timeframe</i>); Short Form-36 Medical Outcome Study (SF-36 v2) (<i>Subacute timeframe</i>); TBI-QOL(<i>Acute, Subacute and Persistent/Chronic timeframes</i>)</p>
<p>Outcomes and End Points; Sleep</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: Pittsburgh Sleep Quality Index(<i>Subacute and Persistent/Chronic timeframes</i>); Epworth Sleepiness Scale -Adult Scale (<i>Subacute and Persistent/Chronic timeframes</i>); Epworth Sleepiness Scale Children’s Scale(<i>Subacute and Persistent/Chronic timeframes</i>)</p> <p>Exploratory: Pittsburgh Sleep Quality Index(<i>Acute timeframe</i>); Epworth Sleepiness Scale Children’s Scale (<i>Acute timeframe</i>); Epworth Sleepiness Scale Adult Scale (<i>Acute timeframe</i>)</p>
<p>Outcomes and End Points; Social Cognition</p>	<p>Core: None</p> <p>Supplemental – Highly Recommended: None</p> <p>Supplemental: None</p> <p>Exploratory: Child and Adolescent Scale of Participation (CASP) (<i>Subacute and Persistent/Chronic timeframes</i>); Strengths and Difficulties Questionnaire (SDQ) (<i>Subacute and Persistent/Chronic timeframes</i>)</p>

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— *Include one or more data elements that are Core or Supplemental – Highly Recommended

** One of the Core cognitive measures should be collected and one of the Core symptom checklists

***California Verbal Learning Test II - Adults OR Rey Auditory Verbal Learning Test (RAVLT)