**Supplemental Digital Content 2. Definitions of postconcussion syndrome**

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|  | **Research or diagnostic criteria** |
| DSM-4  Postconcussional Disorder | A. A history of head trauma that has caused significant cerebral concussion.  B. Evidence from neuropsychological testing or quantified cognitive assessment of difficulty in attention (concentrating, shifting focus of attention, performing simultaneous cognitive tasks) or memory (learning or recalling information).  C. Three (or more) of the following occur shortly after the trauma and last at least three months: 1. becoming fatigued easily; 2. disordered sleep; 3. headache; 4. vertigo or dizziness; 5. irritability or aggression on little or no provocation; 6. anxiety, depression or affective lability; 7. changes in personality; 8. apathy or lack of spontaneity.  D. The symptoms in criteria B and C have their onset following head trauma or else represent a significant worsening of pre-existing symptoms.  E. The disturbance causes significant impairment in social or occupational functioning and represents a decline from a previous level of functioning. In school-age children, the impairment may be manifested by a significant worsening in school or academic performance dating from the trauma.  F. The symptoms do not meet the criteria for Dementia Due to Head Trauma and are not better accounted for by another mental disorder (e.g., Amnestic Disorder Due to Head Trauma, Personality Change Due to Head Trauma). |
| DSM-5: 331.83 (G31.84)  Major or Mild Neurocognitive Disorder Due to Traumatic Brain Injury | A. The criteria are met for major or mild neurocognitive disorder.  B. There is evidence of a traumatic brain injury—that is, an impact to the head or other mechanisms of rapid movement or displacement of the brain within the skull, with one or more of the following: 1. Loss of consciousness; 2. Posttraumatic amnesia; 3. Disorientation and confusion; 4. Neurological signs (e.g., neuroimaging demonstrating injury; a new onset of seizures; a marked worsening of a pre-existing seizure disorder; visual field cuts; anosmia; hemiparesis).  C. The neurocognitive disorder presents immediately after the occurrence of the traumatic brain injury or immediately after recovery of consciousness and persists past the acute post-injury period.  D. Can include behavioral disturbances (294.11 [F02.81]). |
| ICD-10: F07.2  Postconcussional Syndrome | A. A syndrome that occurs following a head trauma usually sufficiently severe to result in loss of consciousness  B. Includes a number of disparate symptoms such as headache, dizziness, fatigue, irritability, difficulty in concentration and performing mental tasks, impairment of memory, insomnia, and reduced tolerance to stress, emotional excitement, or alcohol. |

Abbreviations: DSM, Diagnostic and Statistical Manual of Mental Disorders; ICD, International Statistical Classification of Diseases and Related Health Problem