

MEDICAL HISTORY

MEDHIST = Medical History

1. CDE Variable	MEDHIST = Medical history
2. CDE Definition	Significant medical history prior to injury.
3. Recommended instrument for assessment	Obtain information from interview of subject and/or relative(s).
4. Description of measure	Record significant history (past or present) by body region/disease entity according to the predefined categories. Significant is defined as required/requiring specialist consultation and treatment. All medication taken at the time of injury should be recorded as free text and related to the condition requiring medication by documenting the associated history codes per medication.
5. Permissible values	<p><u>Medical history:</u> no/yes/unknown <u>Medication:</u> free text <u>When information obtained:</u></p> <ul style="list-style-type: none">- Before enrolment- After enrolment- Not done <p>Basic: Medical History Codes</p> <ul style="list-style-type: none">- Cardiovascular (010)- Endocrine (020)- Eye, Ear, Nose, Throat (030)- Gastrointestinal (040)- Hematologic (050)- Hepatic (060)- Musculoskeletal (070)- Neurologic (080)- Previous TBI (089)- Oncologic (090)- Pulmonary (100)- Psychiatric (110)- Renal (120)- Social History (130)- Developmental History (140)- Other (150) <p>Intermediate: Additional details are recorded for:</p> <ul style="list-style-type: none">- previous TBI- number of exposures to blast- number of prior concussions <p>Advanced: In the advanced version further details are recorded within the medical history codes as listed for the basic version.</p>

	<p><u>010. Cardiovascular:</u></p> <p>011. Congenital heart disease 012. Arrhythmia 013. Ischemic heart disease 014. Valvular heart disease 015. Hypertension 016. Thromboembolic 017. Peripheral vascular disease</p> <p><u>020. Endocrine:</u></p> <p>021. Thyroid disorder 022. IDDM 023. NIDDM</p> <p><u>030. Eye, Ear, Nose & Throat:</u></p> <p>031. Sinusitis 032. Vision abnormality 033. Hearing deficit</p> <p><u>040. Gastrointestinal:</u></p> <p>041. GERD 042. GI bleed 043. Inflammatory bowel disease</p> <p><u>050. Hematologic:</u></p> <p>051. Anemia 052. HIV positive 053. AIDS 054. Sickle cell disease</p> <p><u>060. Hepatic:</u></p> <p>061. Insufficiency 062. Failure 063. Hepatitis 064. Cirrhosis</p> <p><u>070. Musculoskeletal:</u></p> <p>071. Arthritis</p> <p><u>080. Neurologic:</u></p> <p>081. Cerebrovascular Accident 082. Transient Ischemic Attacks 083. Febrile Seizures (children) 084. Epilepsy: partial 085. Epilepsy: focal 086. Epilepsy: other 087. Headache (non migraine) 088. Migraine headaches 089. Previous TBI</p>	<p><u>090. Oncologic:</u></p> <p>091. Leukemia 092. Lymphoma 093. Breast Cancer 094. Prostate Cancer 095. Lung Cancer 096. GI Cancer 097. Kidney Cancer 098. Cancer (other)</p> <p><u>100. Pulmonary:</u></p> <p>101. COPD 102. Asthma 103. Pneumonia 104. Tuberculosis</p> <p><u>110. Psychiatric:</u></p> <p>111. Anxiety 112. Depression 113. Sleep disorder 114. Schizophrenia 115. Other psychiatric disorder</p> <p><u>120. Renal:</u></p> <p>121. Insufficiency 122. Failure 123. Chronic UTI's</p> <p><u>130. Social history:</u></p> <p>131. Tobacco use 132. Alcohol use 133. Drug use</p> <p><u>140. Developmental history:</u></p> <p>141. Learning disabilities 142. Attention deficit / hyperactivity disorder 143. Other developmental disorder</p> <p><u>150. Other</u></p>
6. Classification: Basic/Intermediate/Advanced	<p><u>Intermediate</u>: includes the number of previous episodes of TBI suffered, differentiated in prior concussions and exposures to blast.</p> <p><u>Advanced</u>: the advanced version includes a further specification of conditions per predefined category.</p>	
7. Procedure	<p>Obtain information on medical history and medication as soon as possible after visit/admission from subject or proxy. Document whether this information was obtained prior to study enrolment or later.</p>	
8. Comments/Special instructions:	<p>When entering medication in free text format, please additionally enter the medical history codes for which this medication was taken.</p>	
9. Rationale/justification:	<p>Comorbidity prior to injury may influence the disease course and chances of recovery. Serious comorbidity or comorbidity that may influence the assessment of outcome are generally considered exclusion criteria in randomized clinical trials. Effects of pre-existing medication may influence hemodynamic parameters (eg. betablockers) and in pharmaceutical trials the possibility of drug interactions can not be excluded in advance. It is</p>	

therefore highly relevant to accurately record the significant relevant medical history and medication.

10. References:

SCREENING FOR HISTORY OF TBI

HistTBI = History of previous TBI exposure

1. CDE Variable	HistTBI = History of previous TBI exposure
2. CDE Definition	This element will document exposure to TBI prior to the index injury.
3. Recommended instrument for assessment	Ohio State University TBI Identification Method-Short Form (OSU TBI-ID-SF). The OSU TBI-ID is a structured interview developed using recommendations from the CDC for the detection of history of exposure to TBI. It was designed to elicit self- or proxy-reports of TBI occurring over a person's lifetime. The OSU TBI-ID-SF uses an interview methodology based on the original longer version, but only measures selected summary indices.
4. Description of measure	Structured Interview
5. Permissible values	<p>Ohio State University TBI Identification Method Short Form (v.12-10-08)*</p> <p>1. Prior to the present injury, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Prior to the present injury, have you ever injured your head or neck in a car accident or from some other moving vehicle accident? (e.g. motorcycle, ATV)</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. Prior to the present injury, have you ever injured your head or neck in a fall or from being hit by something (e.g. falling from a bike, horse, or rollerblades, falling on ice, being hit by a rock)? Have you even been injured playing sports or on the playground?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>4. Prior to the present injury, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

5. Prior to the present injury, have you ever been nearby when an explosion or a blast occurred? If you served in the military, think about any combat-related incidents.

- Yes
 No

If all above are "no" then stop. If answered "yes" to *any* of the questions above, ask:

6. Were you knocked out or unconscious following any of the injuries you mentioned above? DO NOT INCLUDE LOSING CONSCIOUSNESS DUE TO DRUG OVERDOSE OR FROM BEING CHOKED (see #8, below).

- Yes
 No

If answer to #6 is "No", ask:

7A. Were you dazed or have a gap in your memory from the injury(ies) you mentioned above? [RULE OUT ALCOHOL BLACKOUTS]

- Yes
 No

If answer to #6 is "Yes", ask:

7B. How long were you knocked out? (If identified multiple injuries with loss of consciousness, ask for each. If not sure of the time frame, encourage them to make their best guess.)

1. _____ How old were you? _____
2. _____ How old were you? _____
3. _____ How old were you? _____
4. _____ How old were you? _____
5. _____ How old were you? _____

If more than 5, how many more? _____

Longest knocked out? _____

How many \geq 30 mins.? _____

Youngest age? _____

8. Have you ever lost consciousness from a drug overdose or being choked?

- _____ Number of times from a drug overdose
_____ Number of times from being choked

**6. Classification:
Basic/Intermediate/Advanced**

Identical

**7.
Procedu
re**

To avoid biases created by terminology used, the interview first elicits recall of all possible head or neck injuries through a series of queries tapping possible causes of TBI. For these injuries, the occurrence and length of loss of consciousness is probed, with age also being determined for those injuries with loss of consciousness. If there is no loss of consciousness, the presence of altered consciousness is probed. Finally, an estimate of the number of anoxic injuries due to drug overdose or choking is obtained.

8. Comments/Special instructions:

Using the structured elicitation method of the OSU TBI-ID-SF, multiple dimensions of history are available, including number of injuries with loss of consciousness, number of injuries with loss of consciousness >30 minutes, age at first TBI with loss of consciousness, whether there was an injury with loss of consciousness before the age of 15, worst injury, and # anoxic injuries due to drug overdose or being choked.

A Scoring system has been developed to quantify these dimensions and to broadly categorize the likelihood of TBI exposure as: improbable – possible – mild TBI/complex mild or moderate and more severe TBI.

SCORING

_____ **# TBI-LOC** (number of TBI's with loss of consciousness from #7b)

_____ **# TBI-LOC ≥ 30** (number of TBI's with loss of consciousness ≥ 30 minutes from #7b)

_____ **age at first TBI-LOC** (youngest age from #7b)

_____ **TBI-LOC before age 15** (if youngest age from #7B < 15 then =1, if ≥ 15 then = 0)

_____ **Worst Injury** (1-5):

If responses to #1-5 are "no" classify
as 1 "improbable TBI".

If in response to #6 and 7a reports never having LOC, being dazed or having memory lapses
classify as 1 "improbable TBI".

If in response to #7a reports being dazed or having a memory lapse classify
as 2 "possible TBI".

If in response to #7b loss of consciousness (LOC) does not exceed 30 minutes for any injury
classify as 3 "mild TBI".

If in response to #7b LOC for any one injury is between 30 minutes and 24 hours classify
as 4 " moderately severe TBI".

If in response to #7b LOC for any one injury exceeds 24 hours classify
as 5 " more severe TBI".

_____ **# anoxic injuries** (sum of incidents reported in #8)

9. Rationale/justification:

The OSU TBI-ID can provide measures of the extent of exposure to TBI. It has long been recognized that sustaining a TBI increases the risk for subsequent TBI's. By improving our ability to measure lifetime exposure to TBI's, we may be able to better identify factors which increase risk for subsequent TBI's.

10. References:

Adapted with permission from the Ohio State University TBI Identification Method
(Corrigan JD, Bogner JA. Initial reliability and validity of the OSU TBI Identification Method. *J Head Trauma Rehabil.* Nov-Dec 2007;22(6):318-329. © reserved 2007, The Ohio Valley Center for Brain Injury Prevention and Rehabilitation)