

Subject

Age

Sex

☐ Female ☐ Male

Patient Category:(Choose one)

- ☐ ED Only
☐ Hospital admit with ICU
☐ Hospital admit no ICU
☐ Rehab patient

Informed Consent

Consent Source

- ☐ Patient
☐ Legal surrogate
☐ Parent
☐ Guardian
☐ Other family member
☐ Enrolled under approved waiver

Timing of consent

- ☐ Written Informed Consent BEFORE Enrollment
☐ Written Informed Consent AFTER Enrollment

Timing of consent for pediatric patient

- ☐ written assent BEFORE enrollment
☐ written assent AFTER enrollment

Consented by:

- ☐ MD
☐ RN
☐ Research Assistant
☐ Other

Specify other consent:

Date and time written consent signed:
(mm/dd/yyyy hh:mm)

Consented for:(Choose all that apply)

- ☐ Data ☒ 3mo. GOS-E
☐ Plasma ☒ 6mo. GOS-E
☐ DNA
☐ MRI
☐ Outcome Measures

Early & Late Presentation

Date & Time of Injury

EARLY PRESENTATION

Method of Arrival

- ☐ Ambulance
☐ Helicopter
☐ Medical mobile team
☐ Walk in or drop off
☐ Other

Specify other method of arrival:

Hypotension in field?

- ☐ Yes ☐ No ☐ Unknown

Hypoxia in field?

- ☐ Yes ☐ No ☐ Unknown

Intubated in field?

- ☐ Yes ☐ No ☐ Unknown

Prehospital GCS

Date & Time

of Prehospital GCS

Presentation

- ☐ Primary-Directly to Study Hospital
☐ Secondary-To First Hospital, then to Study Hospital

Date & Time of arrival to
First Hospital

Date & Time of arrival to
Study Hospital

LATE PRESENTATION

Date and Time of Presentation

Reason for Presentation

- ☐ Self referral with complaints
☐ Self referral on advice significant
other

If Professional referral,
which:

- ☐ GP ☐ Hospital
☐ Other caretaker

☐ Routine screening

☐ Repatriation

- ☐ Professional referral

Initial medical care directly after injury

Hospitalization:

- ☐ Yes ☐ No

If no: Outpatient treatment:

- ☐ None

☐ Emergency Room

☐ Doctor's Office

☐ Sick Bay (military)

☐ Other health care provider

- ☐ Infirmary (if incarcerated)

Labs

White blood cell	Not Done	Results	$\times 10^5/L$	Other	Specify if Other
	<input type="checkbox"/>	<input type="text"/>		<input type="checkbox"/>	<input type="text"/>
Hemoglobin	<input type="checkbox"/>	<input type="text"/>	mmol/L	<input type="checkbox"/>	<input type="text"/>
Hematocrit	<input type="checkbox"/>	<input type="text"/>	%	<input type="checkbox"/>	<input type="text"/>
Platelet	<input type="checkbox"/>	<input type="text"/>	$\times 10^9/L$	<input type="checkbox"/>	<input type="text"/>
Osmolality	<input type="checkbox"/>	<input type="text"/>	Osm/L	<input type="checkbox"/>	<input type="text"/>
INR	<input type="checkbox"/>	<input type="text"/>			
PT	<input type="checkbox"/>	<input type="text"/>	Seconds	<input type="checkbox"/>	<input type="text"/>
aPTT	<input type="checkbox"/>	<input type="text"/>	Seconds	<input type="checkbox"/>	<input type="text"/>
Sodium	<input type="checkbox"/>	<input type="text"/>	mmol/L	<input type="checkbox"/>	<input type="text"/>
Potassium	<input type="checkbox"/>	<input type="text"/>	mmol/L	<input type="checkbox"/>	<input type="text"/>
Chloride	<input type="checkbox"/>	<input type="text"/>	mmol/L	<input type="checkbox"/>	<input type="text"/>
CO ₂	<input type="checkbox"/>	<input type="text"/>	mmol/L	<input type="checkbox"/>	<input type="text"/>
Glucose	<input type="checkbox"/>	<input type="text"/>	mmol/L	<input type="checkbox"/>	<input type="text"/>
Creatinine	<input type="checkbox"/>	<input type="text"/>	$\mu\text{mol/L}$	<input type="checkbox"/>	<input type="text"/>
BUN	<input type="checkbox"/>	<input type="text"/>	mg/dL	<input type="checkbox"/>	<input type="text"/>
Lactate	<input type="checkbox"/>	<input type="text"/>	mmol/L	<input type="checkbox"/>	<input type="text"/>

Toxic Drug Screen

Type of sample
☐ Serum ☐ Urine

Results:

<input type="checkbox"/> None	<input type="checkbox"/> Unknown/not done
<input type="checkbox"/> Opioids	<input type="checkbox"/> Benzodiazepines
<input type="checkbox"/> Cannabis	<input type="checkbox"/> Amphetamines
<input type="checkbox"/> Cocaine	<input type="checkbox"/> Barbiturates
<input type="checkbox"/> PCP	<input type="checkbox"/> Methadone
<input type="checkbox"/> Other	<input type="text"/>

Blood Alcohol Level mg/100ml blood

Pregnancy Test

Type of sample Result:
☐ Serum ☐ Urine ☐ Positive ☐ Negative

IV fluids

- ☐ Crystalloids
- ☐ Hypertonic saline
- ☐ Blood
- ☐ Albumin
- ☐ Vasopressors
- ☐ Mannitol
- ☐ None

First ABG

pH pCO₂ mm Hg

paO₂ mm Eg HCO₃ mmol/L

Bd/Be mmol/L

FiO₂ FiO₂ Unknown ☐

Conditions:

- ☐ Preintubation, Room Air
- ☐ Preintubation O₂
- ☐ Postintubation
- ☐ Unknown

Complicating Events

- Aspiration
☐ Yes ☐ No ☐ Unknown
- Cardiopulmonary arrest
☐ Yes ☐ No
- Seizures in ED
☐ Yes ☐ No
- Hypotension
☐ Yes ☐ No
- Hypoxia
☐ Yes ☐ No

Date & Time ED Discharge Destination

- ☐ Discharge home
- ☐ Transferred other facility
- ☐ Hospital admission--Ward
- ☐ Hospital admission--Stepdown Unit
- ☐ Hospital admission--ICU
- ☐ Hospital admission--Operating room
- ☐ Expired

Cause of Injury

- Injury Type**
- ☐ Closed
 - ☐ Penetrating
 - ☐ Blast
- Intention**
- ☐ Intentional
 - ☐ Unintentional
 - ☐ Undetermined

Motor vehicle traffic accidents

- ☐ 810 Motor vehicle vs. train
- ☐ 811 Motor vehicle vs. motor vehicle re-entering road
- ☐ 812 Motor vehicle vs. motor vehicle on the road
- ☐ 813 Motor vehicle vs. non-motor vehicle
- ☐ 814 Motor vehicle vs. pedestrian
- ☐ 815 Motor vehicle vs. object on the road
- ☐ 816 Motor vehicle loss of control on the road
- ☐ 819 Motor vehicle traffic accident, general
- ☐ .0 Driver of motor vehicle
- ☐ .1 Passenger in motor vehicle
- ☐ .2 Driver of motorcycle
- ☐ .3 Passenger on motorcycle
- ☐ .4 Occupant of streetcar
- ☐ .5 Rider of animal or cart
- ☐ .6 Pedal cyclist
- ☐ .7 Pedestrian
- ☐ .9 Unspecified person
- ☐ .8 Other specified person

Other Person

Example: 812.0 First vehicle crashes into second vehicle and the driver of either vehicle is injured

Firearms, air guns, and explosives

- ☐ 922 Accident caused by firearm and air gun missile
- ☐ 923 Accident caused by explosive material
- ☐ 985 Unknown if accidental or intentional

Suicide and Self-Inflicted Injury

- ☐ 950 Poisoning by solid and liquid substances
- ☐ 953 Hanging, strangulation, suffocation
- ☐ 955 Firearms, air guns, and explosives
- ☐ 956 Cutting and piercing instrument
- ☐ 958 Other and unspecified means
- ☐ 959 Late effects of self-inflicted injury

Injury Purposely Inflicted by Other Persons

- ☐ 960.0 Unarmed fight or brawl
- ☐ 960.1 Rape
- ☐ 961 Assault by corrosive or caustic substance
- ☐ 965 Assault by firearms and explosives
- ☐ 9966 Assault by cutting and piercing instruments
- ☐ 967 Child and adult battering/other maltreatment
- ☐ 968 Assault by other or unspecified means

Falls (Accidental)

- ☐ 884 Fall from one level to another
- ☐ 885 Fall on same level from slip, trip, or stumble
- ☐ 886 Fall on same level from contact with person
- ☐ 888 Fall, general

Striking against or struck by person or object (Accidental)

- ☐ 917.0 In sports (tackles)
- ☐ 917.1 Caused by crowd, collective fear or panic
- ☐ 917.9 Other

Cutting and piercing instruments (Accidental)

- ☐ 920.0 Powered lawn mower
- ☐ 920.1 Other powered hand tools
- ☐ 920.2 Powered household appliances
- ☐ 920.3 Knives, swords, and daggers
- ☐ 920 Cutting and piercing, general
- ☐ 986 Undetermined if accidental or intentional

Other accidental causes of injury

- ☐ 807 Railway accident
- ☐ 821 Motor vehicle off-road non-traffic accident
- ☐ 825 Motor vehicle accident not traffic related
- ☐ 829 Other vehicle accident
- ☐ 876 Misadventure during medical care
- ☐ 899 Accident caused by fire
- ☐ 900 Environmental excessive heat
- ☐ 906 Injury caused by animal
- ☐ 910 Accidental drowning and submersion
- ☐ 913 Accidental mechanical suffocation
- ☐ 916 Struck accidentally by falling object
- ☐ 918 Accidentally caught in or between objects
- ☐ 919 Accident caused by machinery
- ☐ 924 Accident caused by hot or caustic liquids or gases
- ☐ 925 Accident caused by electrical current
- ☐ 928 Other environmental or accidental causes
- ☐ 929 Late effects of accidental injury

Place of Injury

- ☐ Street/highway
- ☐ Home
- ☐ Work/school
- ☐ Recreational
- ☐ Military deployment
- ☐ Other
- ☐ Unknown

Safety

Helmet

- ☐ Yes
- ☐ No
- ☐ Not Applicable
- ☐ Unknown

Airbag

- ☐ Yes
- ☐ No
- ☐ Not Applicable
- ☐ Unknown

Seatbelt

- ☐ Yes
- ☐ No
- ☐ Not Applicable
- ☐ Unknown

LOC PTA

Time of assessment

- ☐ ED Discharge
- ☐ ICU Discharge
- ☐ Hospital Discharge

LOC Loss Of Consciousness

- ☐ No
- ☐ Yes
- ☐ Unknown

LOC Duration

- ☐ None
- ☐ <1 minute
- ☐ 1-29 minutes
- ☐ 30-59 minutes
- ☐ 1-24 hours
- ☐ >24 hours
- ☐ >7 days
- ☐ Unknown

LOC Lucid Interval

- ☐ No
- ☐ Yes

PTA (Post Traumatic Amnesia)

- ☐ No
- ☐ Yes
- ☐ Suspected
- ☐ Unknown

PTA Duration

- ☐ None
- ☐ <1 minute
- ☐ 1-29 minutes
- ☐ 30-59 minutes
- ☐ 1-24 hours
- ☐ >24 hours
- ☐ >7 days
- ☐ Unknown

Socioeconomic Adult

Demographics

Country Of Birth Country Of Birth (not in list)

- ☐ USA
☐ Mexico
☐ Canada

Country Of Residence Country Of Residence (not in list)

- ☐ USA
☐ Mexico
☐ Canada

Primary Language

Primary Language (Not in list)

RACE

☐ Indian

- ☐ South/Central American Indian
☐ North American Indian

☐ Alaskan Native/
Inuit

- ☐ Alaskan Native
☐ Inuit

☐ Asian

- ☐ South Asian (Indian subcontinent)
☐ Far Eastern Asian

☐ Native Hawaiian/
Pacific Islander

- ☐ Hawaiian
☐ Pacific Islander

☐ White

- ☐ North American
☐ South American
☐ European
☐ Middle Eastern
☐ White African
☐ Oceanian (Australian or New Zealander)

☒ Black

- ☐ African American
☐ African
☐ Afro Carribean

Unable to obtain information (Reason) Other Reason

- ☐ Refused
☐ Unknown by patient or family
☐ Discharged/expired before asked
☐ Other

Ethnicity

- ☐ Hispanic or Latino
☐ Non Hispanic or Latino
☐ Unknown

Handedness

- ☐ Righthanded
☐ Left-handed
☐ Both

Socioeconomics

EDUCATION

Number of years of school completed:

Highest diploma/degree:

- ☐ None, not currently in school
☐ None, but currently in diploma or degree-oriented program
☐ Vocational training (no high school diploma or GED)
☐ GED
☐ High school diploma
☐ Vocational training (post high school)
☐ Associate's degree
☐ Bachelors degree
☐ Masters degree
☐ Doctoral degree
☐ Unable to obtain information

Unable to obtain information (Reason) Other Reason

- ☐ Refused
☐ Unknown by patient or family
☐ Discharged/expired before asked
☐ Other

EMPLOYMENT

Employment

- ☐ Working full time (35 hrs or more/week, at least minimum wage)
☐ Working 20-34 hrs/week, at least minimum wage
☐ Working less than 20 hrs/week, at least minimum wage
☐ Temporary/odd jobs/less than minimum wage jobs
☐ Special employment (sheltered workshop, supportive employment, job coach)
☐ Unemployed
☐ Other
☐ Not in paid workforce (including child, retired, student, homemaker, disabled pre-injury)
☐ Unable to obtain information

Unable to obtain information (Reason) Other Reason

- ☐ Refused
☐ Unknown by patient or family
☐ Discharged/expired before asked
☐ Other

IF MILITARY

Branch of service

- ☐ Airforce
☐ Army
☐ Marine corps
☐ Navy

Military occupation

- ☐ Combat
☐ Non-combat

Rank

- ☐ Junior enlisted (lower than NCO)
☐ NCO* (non-commissioned officers)
☐ Officer (and senior warrant officers)

* Equivalent to: 'petty officer', 'unterofficier', 'corporal', 'sergeant'

IF SCHOOL GOING/STUDENT

School Status

- ☐ Full time student (diploma/degree oriented/2 courses or more)
☐ Part time student (diploma/degree oriented)
☐ Elementary school student (0-8th grade)
☐ Secondary school student (9-12th grade)
☐ Special education
☐ Vocational program
☐ Other
☐ None
☐ Unable to obtain information

School Status Other

Unable to obtain information (Reason) Other Reason

- ☐ Refused
☐ Unknown by patient or family
☐ Discharged/expired before asked
☐ Other

MARITAL STATUS

Marital Status

- ☐ Single
☐ Married/living together/common law
☐ Separated
☐ Divorced
☐ Widowed
☐ Other
☐ Unable to obtain information

Unable to obtain information (Reason) Other Reason

- ☐ Refused
☐ Unknown by patient or family
☐ Discharged/expired before asked
☐ Other

LIVING SITUATION

Primary person living with Specify other resident

Unable to obtain information (Reason) Other Reason

- ☐ Refused
☐ Unknown by patient or family
☐ Discharged/expired before asked
☐ Other

Deployment

Other Deployment

- ☐ None
☐ Afghanistan
☐ Africa
☐ Germany
☐ Iraq
☐ Other

Socioeconomic Child

Demographics

Sex

☐ Female ☐ Male

Country Of Birth Country Of Birth (not in list)

☐ USA

☐ Mexico

☐ Canada

Country Of Residence Country Of Residence (not in list)

☐ USA

☐ Mexico

☐ Canada

Primary Language

Primary Language (Not in list)

RACE

☐ Indian

☐ South/Central American Indian

☐ North American Indian

☐ Alaskan Native/
Inuit

☐ Alaskan Native

☐ Inuit

☐ Asian

☐ South Asian (Indian subcontinent)

☐ Far Eastern Asian

☐ Native Hawaiian/
Pacific Islander

☐ Hawaiian

☐ Pacific Islander

☐ White

☐ North American

☐ South American

☐ European

☐ Middle Eastern

☐ White African

☐ Oceanian (Australian or New Zealander)

Unable to obtain information (Reason) Other Reason

☐ Refused

☐ Unknown by patient or family

☐ Discharged/expired before asked

☐ Other

Ethnicity

☐ Hispanic or Latino

☐ Non Hispanic or Latino

☐ Unknown

Handedness

☐ Righthanded

☐ Lefthanded

☐ Both

☐ Black

☐ African American

☐ African

☐ Afro Carribean

Socioeconomic Child pg 2

LIVING SITUATION

Living with

- ☐ Parents
- ☐ Other family members
- ☐ Adoptive parents
- ☐ Foster care
- ☐ Other
- ☐ Unable to obtain information

Unable to obtain information (Reason) Other Reason

- ☐ Not Allowed
- ☐ Unknown by patient or family
- ☐ Discharged/expired before asked
- ☐ Other

SCHOOL STATUS OF CHILD

School Status

- ☐ Full time student (diploma/degree oriented/2 courses or more)
- ☐ Part time student (diploma/degree oriented)
- ☐ Elementary school student (0-8th grade)
- ☐ Secondary school student (9-12th grade)
- ☐ Special education
- ☐ Vocational program
- ☐ Other
- ☐ None
- ☐ Unable to obtain information

School Status Other

Unable to obtain information (Reason) Other Reason

- ☐ Refused
- ☐ Unknown by patient or family
- ☐ Discharged/expired before asked
- ☐ Other

Mother's Education

Number of years of school completed:

Highest diploma/degree:

- ☐ None, not currently in school
- ☐ None, but currently in diploma or degree-oriented program
- ☐ Vocational training (no high school diploma or GED)
- ☐ GED
- ☐ High school diploma
- ☐ Vocational training (post high school)
- ☐ Associate's degree
- ☐ Bachelors degree
- ☐ Masters degree
- ☐ Doctoral degree
- ☐ Unable to obtain information

Unable to obtain information (Reason) Other Reason

- ☐ Not Allowed
- ☐ Unknown by patient or family
- ☐ Discharged/expired before asked
- ☐ Other

Father's Education

Number of years of school completed:

Highest diploma/degree:

- ☐ None, not currently in school
- ☐ None, but currently in diploma or degree-oriented program
- ☐ Vocational training (no high school diploma or GED)
- ☐ GED
- ☐ High school diploma
- ☐ Vocational training (post high school)
- ☐ Associate's degree
- ☐ Bachelors degree
- ☐ Masters degree
- ☐ Doctoral degree
- ☐ Unable to obtain information

Unable to obtain information (Reason) Other Reason

- ☐ Not Allowed
- ☐ Unknown by patient or family
- ☐ Discharged/expired before asked
- ☐ Other

Medical History

Medical History Codes:

010. Cardiovascular:

- ☐ 011. Congenital heart disease
☐ 012. Arrhythmia
☐ 013. Ischemic heart disease
☐ 014. Valvular heart disease
☐ 015. Hypertension
☐ 016. Thromboembolic
☐ 017. Peripheral vascular disease
☐ 019. Other

020. Endocrine:

- ☐ 021. Thyroid disorder
☐ 022. IDDM
☐ 023. NIDDM
☐ 029. Other

030. Eye, Ear, Nose & Throat:

- ☐ 031. Sinusitis
☐ 032. Vision abnormality
☐ 033. Hearing deficit
☐ 039. Other

040. Gastrointestinal:

- ☐ 041. GERD
☐ 042. GI bleed
☐ 043. Inflammatory bowel disease
☐ 044. Diarrhea secondary to

- ☐ 049. Other

050. Hematologic:

- ☐ 051. Anemia
☐ 052. HIV positive
☐ 053. AIDS
☐ 054. Sickle cell disease
☐ 055. Coagulopathy
☐ 059. Other

060. Hepatic:

- ☐ 061. Insufficiency
☐ 062. Failure
☐ 063. Hepatitis
☐ 064. Cirrhosis
☐ 069. Other

070. Musculoskeletal:

- ☐ 071. Arthritis
☐ 072. Spasticity
☐ 073. Pressure ulcers
☐ 079. Other

080. Neurologic:

- ☐ Spinal cord injury
☐ Vertebral injury
☐ Cerebral vascular anomaly
☐ Tumor
☐ 081. Cerebrovascular Accident
☐ 082. Transient Ischemic Attacks
☐ 083. Seizures
☐ 083. Seizures-Febrile
☐ 083. Seizures-Posttraumatic
☐ 083. Seizures-Idiopathic
☐ 083. Seizures-Alcohol
☐ 084. Epilepsy: partial
☐ 085. Epilepsy: focal
☐ 086. Epilepsy: other
☐ 087. Headache (non migraine)
☐ 088. Migraine headaches
☐ 089. Previous TBI
☐ Other

090. Oncologic:

- ☐ 091. Leukemia
☐ 092. Lymphoma
☐ 093. Breast Cancer
☐ 094. Prostate Cancer
☐ 095. Lung Cancer
☐ 096. GI Cancer
☐ 097. Kidney Cancer
☐ 098. Cancer (other)
☐ 099. Other

100. Pulmonary:

- ☐ 101. COPD
☐ 102. Asthma
☐ 103. Pneumonia
☐ 104. Tuberculosis
☐ 109. Other

110. Psychiatric:

- ☐ 111. Anxiety
☐ 112. Depression
☐ 113. Sleep disorder
☐ 114. Schizophrenia
☐ 115. Other psychiatric disorder
☐ 119. Other

120. Renal:

- ☐ 121. Insufficiency
☐ 122. Failure
☐ 123. Chronic UTI's
☐ 129. Other

130. Social history:

- ☐ 131. Tobacco use
☐ 132. Alcohol use
☐ 133. Drug use
☐ 139. Other

140. Developmental history:

- ☐ 141. Learning disabilities
☐ 142. Attention deficit /hyperactivity disorder
☐ 143. Developmentally Delayed
☐ 144. Other developmental disorder
☐ 149. Other

Prior Medications

[illegible]

- Frequency of use
- ☐ 1x per day
- ☐ 2x per day
- ☐ 3x per day
- ☐ 4x per day
- ☐ 6x per day
- ☐ Every other day
- ☐ PRN
- ☐ Other

Screening for Previous TBI

1. 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. ☐Yes ☐No

2. Have you ever injured your head or neck in a car accident or from some other moving vehicle accident, e.g., car, truck, bicycle, van, all terrain vehicle? ☐Yes ☐No

3. Have you ever injured your head or neck in a fall or from being hit by something? For example slipping on ice, a wet floor, the street, etc, or while walking. Falling from a curb, stairs, stair, roof, etc. Falling on a hard floor, ice, rocks, etc.
☐Yes ☐No

4. Have you ever injured your head or neck in sports, e.g., football, soccer, skiing, blading, boarding, basketball, baseball, biking, horse back riding. ☐Yes ☐No

5. Have you ever injured your head or neck in a fight, assault, from being hit by someone or being shaken violently?
☐Yes ☐No

6. 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:

7. 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 #9, below).

☐Yes ☐No

If answer to #7 is "Yes", ask:

7A. How long were you knocked out or did you lose consciousness? (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.)

Injury #	How long were you knocked out?	How old were you?
1.		
2.		
3.		
4.		
5.		

If more than 5, how many more?	Longest period of unconsciousness?	How many ≥ 30 mins.?	Youngest age?

If answer to #7 is "No", ask:

8. Were you dazed, confused or do you or have a gap in your memory from the injury(ies) you mentioned above? [RULE OUT ALCOHOL BLACKOUTS] ☐Yes ☐No

8A. How long were you dazed or confused? (If identified multiple injuries with period of confusion, ask for each. If not sure of the time frame, encourage them to make their best guess.)

Injury #	How long were you dazed and confused?	How old were you?
1.		
2.		
3.		
4.		
5.		

If more than 5, how many more?	Longest period confused?	How many ≥ 30 mins.?	Youngest age?

9. 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

LIST ALL INJURIES KNOWN AT TIME OF ED DISCHARGE

Injuries and Diagnoses ISS_____

Injury/Diagnosis	Body Region	AIS	ICD9

Hospital Admission/Discharge

ICU Admission

Date & Time of Admission	Previous Unit*	Weight (kg)	Height (cm)	Date & Time of Discharge

*Previous Unit select from:

- ☐ ED
- ☐ OR
- ☐ CT-Angio
- ☐ Ward
- ☐ Direct Transfer from Other Hospital

Ward or Step-Down Admission

Date & Time of Admission	Previous Unit**	Weight (kg)	Height (cm)	Date & Time of Discharge

**Previous Unit select from:

- ☐ ED
- ☐ OR
- ☐ CT-Angio
- ☐ Ward
- ☐ Direct Transfer from Other Hospital
- ☐ ICU

Hospital Discharge

DNR Written Date Time

Support Withdrawn/Comfort Care

Date Time

Discharge Status

☐ Alive ☐ Dead

Death Date Time

Principal Cause of Death

- ☐ Head injury/initial injury
- ☐ Head injury/secondary intracranial damage
- ☐ Systemic trauma
- ☐ Medical complications
- ☐ Other

Death Cause Other

Hospital Discharge Date Time Discharge to:

- ☐ Other hospital
- ☐ Rehab unit
- ☐ Nursing home
- ☐ SNF
- ☐ Home
- ☐ Other

Discharge to Other

STUDY ID: SF _____

Surgeries

If more than 1 surgical procedure was performed during one surgery, please list each procedure on their own line.
The same start and end date/time will indicate that the procedures were performed during the same surgery.

Surgery Timing Key
Emergent
Elective/scheduled
Emergent return to OR

Operation name	Date	Surgery Start Time	Surgery End Time	Surgery Timing	Hypotension Yes No	# times SBP < 90 mm Hg	Hypoxia Yes No	# times SpO2 < 95%

STUDY ID: SF

Monitoring Devices**ICP MONITOR:** ☐ Yes ☐ No

Date/Time inserted:	Date/Time removed:	Unit: <input type="checkbox"/> ED <input type="checkbox"/> OR <input type="checkbox"/> ICU	Location: <input type="checkbox"/> Right <input type="checkbox"/> Left	Device used: <input type="checkbox"/> Ventriculostomy <input type="checkbox"/> Subdural <input type="checkbox"/> Intraparenchymal <input type="checkbox"/> Epidural <input type="checkbox"/> Other, _____:	Reason for stopping: <input type="checkbox"/> Monitor/catheter failure <input type="checkbox"/> Patient considered unsalvageable <input type="checkbox"/> Patient died <input type="checkbox"/> Clinically no longer required
Date/Time inserted:	Date/Time removed:	Unit: <input type="checkbox"/> ED <input type="checkbox"/> OR <input type="checkbox"/> ICU	Location: <input type="checkbox"/> Right <input type="checkbox"/> Left	Device used: <input type="checkbox"/> Ventriculostomy <input type="checkbox"/> Subdural <input type="checkbox"/> Intraparenchymal <input type="checkbox"/> Epidural <input type="checkbox"/> Other, _____:	Reason for stopping: <input type="checkbox"/> Monitor/catheter failure <input type="checkbox"/> Patient considered unsalvageable <input type="checkbox"/> Patient died <input type="checkbox"/> Clinically no longer required
Date/Time inserted:	Date/Time removed:	Unit: <input type="checkbox"/> ED <input type="checkbox"/> OR <input type="checkbox"/> ICU	Location: <input type="checkbox"/> Right <input type="checkbox"/> Left	Device used: <input type="checkbox"/> Ventriculostomy <input type="checkbox"/> Subdural <input type="checkbox"/> Intraparenchymal <input type="checkbox"/> Epidural <input type="checkbox"/> Other, _____:	Reason for stopping: <input type="checkbox"/> Monitor/catheter failure <input type="checkbox"/> Patient considered unsalvageable <input type="checkbox"/> Patient died <input type="checkbox"/> Clinically no longer required
Date/Time inserted:	Date/Time removed:	Unit: <input type="checkbox"/> ED <input type="checkbox"/> OR <input type="checkbox"/> ICU	Location: <input type="checkbox"/> Right <input type="checkbox"/> Left	Device used: <input type="checkbox"/> Ventriculostomy <input type="checkbox"/> Subdural <input type="checkbox"/> Intraparenchymal <input type="checkbox"/> Epidural <input type="checkbox"/> Other, _____:	Reason for stopping: <input type="checkbox"/> Monitor/catheter failure <input type="checkbox"/> Patient considered unsalvageable <input type="checkbox"/> Patient died <input type="checkbox"/> Clinically no longer required
Date/Time inserted:	Date/Time removed:	Unit: <input type="checkbox"/> ED <input type="checkbox"/> OR <input type="checkbox"/> ICU	Location: <input type="checkbox"/> Right <input type="checkbox"/> Left	Device used: <input type="checkbox"/> Ventriculostomy <input type="checkbox"/> Subdural <input type="checkbox"/> Intraparenchymal <input type="checkbox"/> Epidural <input type="checkbox"/> Other, _____:	Reason for stopping: <input type="checkbox"/> Monitor/catheter failure <input type="checkbox"/> Patient considered unsalvageable <input type="checkbox"/> Patient died <input type="checkbox"/> Clinically no longer required

BRAIN TISSUE OXYGEN PROBES (LICOX): ☐ Yes ☐ No

Date/Time catheter inserted: _____ Date/Time catheter removed: _____

Unit: ☐ ED ☐ OR ☐ ICU Location: ☐ Right ☐ Left**Reason for stopping:**☐ Monitor/catheter failure ☐ Patient considered unsalvageable ☐ Patient died ☐ Clinically no longer required**JUGULAR VENOUS SATURATION** ☐ Yes ☐ No

Date/Time catheter inserted: _____ Date/Time catheter removed: _____

Unit: ☐ ED ☐ OR ☐ ICU Location: ☐ Right ☐ Left**Reason for stopping:**☐ Monitor/catheter failure ☐ Patient considered unsalvageable ☐ Patient died ☐ Clinically no longer required**CEREBRAL BLOOD FLOW PROBE** ☐ Yes ☐ No

Date/Time catheter inserted: _____ Date/Time catheter removed: _____

Unit: ☐ ED ☐ OR ☐ ICU Location: ☐ Right ☐ Left**Reason for stopping:**☐ Monitor/catheter failure ☐ Patient considered unsalvageable ☐ Patient died ☐ Clinically no longer required

Complications

NEUROLOGICAL

- ☐ Rhinorrhea
- ☐ Otorrhea
- ☐ Meningitis
- ☐ Seizure
- ☐ Ventriculitis
- ☐ Stroke
- ☐ Neurogenic Shock
- ☐ Other CSF Leak
- ☐ Other
- ☐ Other

CARDIOVASCULAR

- ☐ Cardiac Arrest
- ☐ CHF
- ☐ DVT
- ☐ Major Arrhythmia
- ☐ MI
- ☐ Hypertension Requiring Treatment
- ☐ Hypotension Requiring Treatment
- ☐ Hemorrhagic Shock
- ☐ Other
- ☐ Other

OTHER COMPLICATIONS

- ☐ MSOF
- ☐ Transfusion Reaction

PULMONARY

- ☐ ARDS
- ☐ Fat Embolus
- ☐ PE
- ☐ Pleural Effusions
- ☐ Pneumonia
- ☐ Presumed Pneumonia
- ☐ Respiratory Failure
- ☐ VAP
- ☐ Asthma
- ☐ Other
- ☐ Other

LAB ABNORMALITIES

- ☐ Hypoglycemia
- ☐ Hyperglycemia
- ☐ Hyponatremia
- ☐ Hypernatremia
- ☐ PT/PTT/INR Abnormality
- ☐ Other
- ☐ Other

INFECTION OTHER THAN PNEUMONIA / WOUND

- ☐ Bacteremia
- ☐ Fever (Temp>38.5) of unknown origin
- ☐ Presumed Infection
- ☐ Sepsis
- ☐ Septicemia
- ☐ UTI
- ☐ Septic Shock
- ☐ Other
- ☐ Other

GI/ABDOMEN

- ☐ Abdominal Compartment Syndrome
- ☐ Bowel Obstruction
- ☐ GI Bleed
- ☐ Hepatic Encephalopathy
- ☐ Hepatic Failure
- ☐ Pancreatitis
- ☐ Renal Failure
- ☐ Other
- ☐ Other

WOUND

- ☐ Abscess
- ☐ Seroma / hematoma / bleeding
- ☐ Wound Dehiscence
- ☐ Wound Infection
- ☐ Pressure Ulcer
- ☐ Other
- ☐ Other

HEMATOPOETIC

- ☐ Coagulopathy
- ☐ DIC
- ☐ Anemia Requiring Treatment
- ☐ Other
- ☐ Other

STUDY ID: SF _____

Daily Labs Date _____ Time _____

BLOOD CHEMISTRY	Not done	Results	Units	Other units	Specify if Other
Glucose			mmol/L		
Urea			mmol/L		
Creatinine			μmol/L		
Amylase			U/L		
ASAT/SGOT			U/L		
ALAT/SGPT			U/L		
LDH			U/L		
Alkaline Phosphatase			U/L		
Total Bilirubin			μmol/L		
Sodium mmol/L			mmol/L		
Potassium			mmol/L		
Magnesium			mmol/L		
Calcium			mmol/L		
Other					
HAEMATOLOGY					
Hemoglobin			mmol/L		
Hematocrit			%		
White blood cell			X10 ⁵ /L		
White blood cell differential count:					
Neutrophils			%		
Lymphocytes			%		
Eosinophils			%		
Others			%		
Platelet			X10 ⁹ /L		
PROTHROMBIN TIME (PT)			sec.		
INR					
PARTIAL THROMBOPLASTIN TIME, ACTIVATED (APTT)			sec.		
Fibrinogen			Mg/L		
D-dimers			μg/ml		
FDP			μg/ml		
PaO2			mm Hg		
PaCO2			mm Hg		
pH					
BE/BD			mmol/L		
HCO3			mmol/L		

STUDY ID: SF _____

Vital Signs

Eyes	Motor	Verbal
1-No Response	1-No Response	1-No Response
2-To Pain	2-Extension	2-Incomprehensible Sounds
3-To Verbal Command	3-Flexion Abnormal	3-Inappropriate Words
4-Spontaneously	4-Flexion Withdrawal	4-Disoriented & Converses
Unstable-Closed to swelling	5-Localizes to Pain	5-Oriented & Converses
Unstable-Other	6-Obeys Commands	Unstable-Tracheostomy/ETT
	Unstable-Deep sedation/paralysis	Unstable-Other
	Unstable-Other	

[illegible]

STUDY ID: SF _____

Therapy Intensity LevelPosition

- ☐ Head elevation for ICP control
- ☐ Nursed flat (180°) for CPP management

Sedation/metabolic suppression and neuromuscular blockade

- ☐ Sedation (low dose as required for mechanical ventilation)
- ☐ Higher dose sedation for ICP control (not aiming for burst suppression)
- ☐ Metabolic suppression for ICP control with high dose barbiturates or propofol
- ☐ Neuromuscular blockade (paralysis)

CSF Drainage

- ☐ <120 ml/day (<5 ml/hour) ☐ ≥120 ml (≥5 ml/hour)

Fluid loading and vasopressor therapy

- ☐ Fluid loading for maintenance of cerebral perfusion
- ☐ Vasopressor therapy required for management of cerebral perfusion

Hyperventilation

- ☐ Moderate hypocapnia for ICP control [PaCO₂ ≥4 kPa (30 mmHg)]
- ☐ Intensive hypocapnia for ICP control [PaCO₂ <4 kPa (30 mmHg)]

Hyperosmolar Therapy

- ☐ Hyperosmolar therapy with mannitol up to 100 g/day
- ☐ Hyperosmolar therapy with hypertonic saline up to 40 g/day
- ☐ Hyperosmolar therapy with mannitol >100 g/day
- ☐ Hyperosmolar therapy with hypertonic saline >40 g/day

Treatment of fever and hypothermia

- ☐ Treatment of fever (temp >38C) or spontaneous temp below 34.5C
- ☐ Mild hypothermia for ICP control with a lower limit of 35C
- ☐ Hypothermia below 35C

Surgery for refractory ICP (decompression/ lobectomy)

- ☐ Intracranial operation for progressive mass lesion, not scheduled on admission
- ☐ Decompressive craniectomy

Date _____

Time _____

FLUIDS	
Fluid in	ml
Blood and derivatives	ml
Fluid out	ml
TOTAL DOSE VASOPRESSORS	
Noradrenaline	mg
Phenylephrine	mg
Dopamine	mg
Other _____	
TOTAL DOSE HYPEROSMOLAR AGENTS	
Mannitol	g
Hypertonic Saline	g

Date and Time of Assessment

3 Month Glasgow Outcome Scale—Extended (GOS-E)

CONSCIOUSNESS

1. Is the head injured person able to obey simple commands, or say any words?

☐ No (VS)

☐ Yes

Anyone who shows ability to obey even simple commands, or utter any word or communicate specifically in any other way is no longer considered to be in the vegetative state. Eye movements are not reliable evidence of meaningful responsiveness. Corroborate with nursing staff. Confirmation of VS requires full assessment as in the Royal College of Physician Guidelines.

INDEPENDENCE IN THE HOME

2a. Is the assistance of another person at home essential every day for some activities of daily living?

☐ No

☐ Yes

For a 'No' answer they should be able to look after themselves at home for 24 hours if necessary, though they need not actually look after themselves. Independence includes the ability to plan for and carry out the following activities: getting washed, putting on clean clothes without prompting, preparing food for themselves, dealing with callers, and handling minor domestic crises. The person should be able to carry out activities without needing prompting or reminding, and should be capable of being left alone overnight.

2b. Do they need frequent help or someone to be around at home most of the time?

☐ No (Upper SD)

☐ Yes

(Lower SD)

For a 'No' answer they should be able to look after themselves at home for up to 8 hours during the day if necessary, though they need not actually look after themselves.

2c. Was assistance at home essential before the injury?

☐ No

☐ Yes

INDEPENDENCE OUTSIDE THE HOME

3a. Are they able to shop without assistance?

☐ No (Upper SD)

☐ Yes

This includes being able to plan what to buy, take care of money themselves, and behave appropriately in public. They need not normally shop, but must be able to do so.

3b. Were they able to shop without assistance before the injury?

☐ No

☐ Yes

4a. Are they able to travel locally without assistance?

☐ No (Upper SD)

☐ Yes

They may drive or use public transport to get around. Ability to use a taxi is sufficient, provided the person can phone for it themselves and instruct the driver.

4b. Were they able to travel without assistance before the injury?

☐ No

☐ Yes

WORK

5a. Are they currently able to work to their previous capacity? ☐ No ☐ Yes

If they were working before, then their current capacity for work should be at the same level. If they were seeking work before, then the injury should not have adversely affected their chances of obtaining work or the level of work for which they are eligible. If the patient was a student before injury then their capacity for study should not have been adversely affected.

5b. How restricted are they? ☐ Reduced work capacity (Upper MD)
☐ Able to work only in a sheltered workshop or non-competitive job, or currently unable to work (Lower MD)

5c. Were they either working or seeking employment before the injury (answer 'yes') or were they doing neither (answer 'no')? ☐ No ☐ Yes

SOCIAL & LEISURE ACTIVITIES

6a. Are they able to resume regular social and leisure activities outside home? ☐ No ☐ Yes

They need not have resumed all their previous leisure activities, but should not be prevented by physical or mental impairment. If they have stopped the majority of activities because of loss of interest or motivation then this is also considered a disability.

6b. What is the extent of restriction on their social and leisure activities?
☐ Participate a bit less: at least half as often as before injury (Lower GR)
☐ Participate much less: less than half as often (Upper MD)
☐ Unable to participate: rarely, if ever, take part (Lower MD)

6c. Did they engage in regular social and leisure activities outside home before the injury? ☐ No ☐ Yes

FAMILY & FRIENDSHIPS

7a. Have there been psychological problems which have resulted in ongoing family disruption or disruption to friendships? ☐ No ☐ Yes

Typical post-traumatic personality changes: quick temper, irritability, anxiety, insensitivity to others, mood swings, depression, and unreasonable or childish behavior.

7b. What has been the extent of disruption or strain?
☐ Occasional - less than weekly (Lower GR)
☐ Frequent - once a week or more, but tolerable (Upper MD)
☐ Constant - daily and intolerable (Lower MD)

7c. Were there problems with family or friends before the injury? ☐ No ☐ Yes

If there were some problems before injury, but these have become markedly worse since injury then answer 'No' to Q7c.

RETURN TO NORMAL LIFE

8a. Are there any other current problems relating to the injury which affect daily life?

₁ ☐ No (Upper GR) ₂ ☐ Yes

(Lower GR)

Other typical problems reported after head injury: headaches, dizziness, tiredness, sensitivity to noise or light, slowness, memory failures, and concentration problems.

8b. Were similar problems present before the injury?

₁ ☐ No ₂ ☐ Yes

If there were some problems before injury, but these have become markedly worse since injury then answer 'No' to Q8b.

Epilepsy:

Since the injury has the head injured person had any epileptic fits? ☐ No

☐ Yes

Have they been told that they are currently at risk of developing epilepsy?

☐ No

☐ Yes

What is the most important factor in outcome?

☐ Effects of head injury

☐ Effects of illness or injury to another part of the body

☐ A mixture of these

The patient's overall rating is based on the lowest outcome category indicated on the scale. Refer to Guidelines for further information concerning administration and scoring

- 1 Dead
- 2 Vegetative State (VS)
- 3 Lower Severe Disability (Lower SD)
- 4 Upper Severe Disability (Upper SD)
- 5 Lower Moderate Disability (Lower MD)
- 6 Upper Moderate Disability (Upper MD)
- 7 Lower Good Recovery (Lower GR)
- 8 Upper Good Recovery (Upper GR)

GOS-E SCORE:

Neurological Assessment: symptoms and signs

	Yes	No
Physical		
Headache		
Nausea		
Vomiting		
Balance problems		
Dizziness		
Visual problems		
Fatigue		
Sensitivity to light		
Sensitivity to noise		
Numbness/tingling		
Sleep		
Drowsiness		
Sleeping less than usual		
Sleeping more than usual		
Trouble falling asleep		
Cognitive		
Feeling mentally foggy		
Feeling slowed down		
Difficulty concentrating		
Difficulty remembering		
Emotional		
Irritability		
Sadness		
More emotional		
Nervousness		
Do these symptoms worsen with:		
Physical activity		
Cognitive activity		
Overall rating:		
How different is the person acting compared to his/her usual self?		
Normal <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 Very different		

3 Month Post Discharge & Outpatient Care Date/Time of assessment ____/____/____ :__

Patient Outcome

Date of Death ____/____/____

☐ Alive ☐ Dead

Cause of Death

☐ Head injury/initial injury ☐ Head injury/secondary intracranial damage ☐ Systemic trauma
☐ Medical complications ☐ Other Cause Of Death _____

Patient Residence

☐ On date of assessment: ☐ On date of death:

Residence

☐ Home ☐ Hospital ☐ Rehab center ☐ Nursing home ☐ Other Residence _____

Return to work/school

☐ No ☐ Sheltered ☐ Partial
☐ Full ☐ N/A ☐ Unknown

Family Strain/disruption

☐ None ☐ Minor ☐ Moderate ☐ Severe

Effect on marriage

☐ None ☐ Separated
☐ Divorced ☐ N/A

Is the patient currently involved with any legal issues resulting from the injuries incurred from the original incident? ☐ Yes ☐ No ☐ Don't Know

Rehabilitation

☐ None ☐ Only as outpatient
☐ General rehab (inpt) ☐ TBI rehabilitation unit (inpt) ☐ General long-term care unit (inpt) ☐ Geriatric rehab unit (inpt)

IF TREATED AS AN INPATIENT: Admit date ____/____/____ Discharge date ____/____/____

SHORT TERM REHAB INTERRUPTIONS

Interruption 1: Start Date ____/____/____ End Date ____/____/____

Reason: ☐ Readmit to hospital ☐ Readmit to ICU ☐ Required surgical procedure ☐ Return to Work ☐ Other _____

Interruption 2: Start Date ____/____/____ End Date ____/____/____

Reason: ☐ Readmit to hospital ☐ Readmit to ICU ☐ Required surgical procedure ☐ Return to Work ☐ Other _____

Interruption 3: Start Date ____/____/____ End Date ____/____/____

Reason: ☐ Readmit to hospital ☐ Readmit to ICU ☐ Required surgical procedure ☐ Return to Work ☐ Other _____

OUTPATIENT THERAPY

If treated as an outpatient: Start Date ____/____/____ End Date ____/____/____

Active Rehab Ongoing: ☐ Yes ☐ No

Frequency of outpatient therapy: ☐ Only follow-up; no active treatment ☐ Less than once per week
☐ weekly ☐ 2-3 times per week ☐ daily

Type of Outpatient Therapy

☐ Physical therapy ☐ Occupational therapy ☐ Speech therapy ☐ Therapeutic recreation ☐ Cognitive remediation
☐ Vocational services ☐ Psychological services ☐ Nursing services ☐ Comprehensive day treatment ☐ Peer mentoring
☐ Social work/Case management ☐ Independent living training ☐ Home health ☐ Other hospital unit ☐ Other _____