## **Appendix 9. Data Quality and Phenotyping Manual**

# A Policy Relevant US Trauma Care System Pragmatic Trial for PTSD and Comorbidity

# **Data Quality and Phenotyping Manual**



**UH3 Operational Manual for Implementation Version 6/1/15** 

## TABLE OF CONTENTS

	<b>Page</b>
1. Identify Injury Cohort	4
A. Eligibility Criteria.	
B. Traumatic Injury Phenotypes	
1. Assault	
2. Burns	5
3. Falls	
4. Gunshot Wounds	6
5. Miscellaneous	7
6. Pedestrian Accidents	9
7. Sports Injuries	10
8. Stab Wounds	10
9. Transportation Related	11
10. Work Injury	11
C. Ineligibility Criteria	12
D. Ineligibility Phenotypes	12
1. Non-injury	12
2. Acute Psychosis	
3. Cognitive Impairment	14
4. Self-inflicted Injury (SA)	16
5. Non-English Speaking	16
6. Incarcerated	17
7. Deceased	17
8. Other	18
2. The 10-item Electronic Medical Record Screening Procedure	19
A. The 10 Risk Factors.	
B. The 10-item Risk Factor Criteria Phenotypes	
1. Female Sex	
2. Non-white Ethnicity	
3. Intentional Injury	
4. Public Insurance (Public or Veteran insurance stats/Medicaid/Medicare)	
5. Intensive Care Unit (ICU) During Current Hospitalization	
6. Prior Inpatient Hospitalization	
7. Substance Use Diagnosis or positive BAC on admission	
8. Tobacco Use	
9. PTSD (Post-traumatic Stress Disorder) diagnosis	
10. Other Psychiatric Diagnosis	
10. Other I sychiatric Diagnosis	20
3. ICD Trauma Codes	31
4. Examples of EMR Risk Factor Identification Location	46
1. Female Sex	
2. Race: Non-White	47
3. Funding: Uninsured/Self-Pay, Public, and Veteran's Insurance	

4. Current Intensive Care Unit (ICU) Admission	48
5. Prior Inpatient Hospitalization	49
6. Intentional Injury	
ICD-I-CM Codes for Intentional Injury Types	52
7. Tobacco Use: Current or History	
8. Substance Use Disorder OR Positive BAC on Admission	
ICD-I-CM Codes for Substance Use Disorders	56
9. Post-traumatic Stress Disorder (PTSD) (Current or History)	60
10. Other Psychiatric Disorders (Current or History)	61
ICD-I-CM Codes for Psychiatric Disorders	
5. TSOS Screening Data Normalized to NTDS Data Dictionary	89
6. TSOS Injury Cohort & 10 PTSD Risk Domains Worksheet	94

## 1. Identifying the Injury Cohort

## A. Eligibility Criteria:

- Admitted to Inpatient Ward for a Traumatic Injury (e.g., motor vehicle collision, motorcycle crash, physical assault, gunshot wound, other)
- $\geq 18$  years of age
- English Speaking
- Not Actively Suicidal/Admitted for a Suicide Attempt
- Cognition Intact (Cannot have Dementia, Low Cognition, etc...)
- Not Incarcerated
- Not Actively Psychotic
- Not Deceased

## **B.** Traumatic Injury Phenotypes

#### 1. Assault

- Victim
- Assailant
- Domestic
- Dispute
- Altercation
- Fight
- Robbery
- Home Invasion
- Punch
- Kick
- Smash
- Hit
- Bite

- Bitten
- Beat up
- Run Over
- Weapon (e.g. Crowbar, Pipe, Machete, Razor Blade, Hammer, Bat, 2 x 4, etc.)
- Evisceration
- Slap
- Push
- Shove

#### 2. Burns

- Fire
- Flame
- Grease
- Steam
- Scald
- Flash Burn
- Electrical
- Electrocuted
- Voltage
- Fireworks
- Blast
- Explosion
- Gasoline
- Chemical
- First (1<sup>st</sup>) Degree Burn
- Second (2<sup>nd</sup>) Degree Burn
- Third (3<sup>rd</sup>) Degree Burn

- Fourth (4<sup>th</sup>) Degree burn
- Partial thickness
- Full thickness
- Total Body Surface Area (TBSA)
- Acute
- X% Burn

#### 3. Falls

- Falls (Involving: Building, Roof, Balcony, Deck, Window, Bridge, Viaduct, Ladder, Vehicles, Cliff, Embankment, Ravine, Tree, Off Horse.)
- Ground Level Fall (GLF) (Involving: Slipped, Tripped, Syncope, Seizure)

## 4. Gunshot Wounds (GSW)

- Multiple GSWs
- Shot
- Shooter
- Shooting
- Gunfire
- Bullets
- Victim
- Assailant
- Intentional
- Dispute
- Altercation
- Accidental
- Firearm
- Rifle
- Pistol

- Handgun
- Drive-by

#### 5. Miscellaneous

- Polytrauma
- Multiple trauma (Multi-Trauma)
- Multiple Injuries
- Lacerations (Splenic, Kidney etc.)
- Traumatic Brain Injury (TBI)
- Head Injury
- Spinal Cord Injury
- Multiple Fractures
- Amputation
- Contusion
- Dislocation
- Concussion
- Wound
- Blunt Trauma
- Animal (Dog, Bear, Cow, Deer)
- Bleeds
- Tendon Tear
- Ruptures
- Penetrating Wound
- Pneumothorax
- Altered Mental Status
- Found Down (S/P Fall, syncope, seizures etc.)
- Right Lower Extremity (RLE)

•	Right Upper Extremity (RUE)
•	Left Lower Extremity (LLE)
•	Left Upper Extremity (LUE)
•	Impaled
•	Globe Rupture
•	Retinal Detachment
•	Fracture(s) (FX) – Open and Closed
	Examples as follow:
	Femur
	Facial
	Calcaneus
	Tibial Plateau
	Malleolus
	Clavicle
	Humerus
	Mandible
	Tibia Fibula
	Spinal Fractures (e.g. Burst)
	Pilon
	Skull
	Acetabular

8

Elbow

Ankle

Rib

Wrist

Pelvic

Femoral Neck

Foot
Talus
Unspecified Fractures
Lower extremity
Hip
Cervical
Orbit
Sacral
Scapular
Jaw
Clavicle
Nasal
lumbar
• Often Involving Hematomas:
-Subdural Hematoma (SDH)
-Subarachnoid Hemorrhage (SAH)
-Intraparenchymal Hemorrhage (IPH)
-Intracranial Hemorrhage
-Intraventricular Hemorrhage
(Other hemorrhages: Abdominal, Lumbar, Thigh, Epidural etc
*Must be S/P or caused by a traumatic event.

## **6. Pedestrian Accidents**

- Pedestrian vs. Car(Auto)/Truck/Bus/Train
- Pedestrian Accident
- Run Over
- Hit by

## 7. Sports Injuries

- Snowboarding Accident
- Skiing Accident
- Skateboarding Accident
- Biking Accident
- Cycling
- Dirt Bike
- ATV Accident
- Roll Over ATV (ROATV)
- Jet Skiing
- Boating
- Diving, Pool
- Scooter
- Skydiving
- Wakeboard
- Hiking
- Snowmobile
- Jump off Cliffs, Rocks
- Rock Climbing

## 8. Stab Wounds (SW)

- Stabbed/Stabbing/Multiple
- Victim
- Assailant
- Intentional
- Dispute
- Altercation

- Domestic
- Knife
- Blade

## 9. Transportation Related

- Motor Vehicle Crash (MVC)
- High Speed Motor Vehicle Crash (HSMVC)
- Roll Over Motor Vehicle Crash (ROMVC)
- Car vs. Pole
- Car vs. Tree
- Car vs. Wall
- T-boned
- Motorcycle Crash (MCC)
- MCC vs. Pole
- MCC vs. Tree
- MCC vs. Wall
- Road rash
- Moped
- Plane Crash
- Train-Related

## 10. Work Injury

- Crush Injury
- De-gloving
- Machinery
- Saw/Table Saw
- Construction

- Crane
- Tractor

## C. Ineligibility Criteria:

- Non-Injury
- < 18 Years of Age
- Non-English Speaking
- Acutely Suicidal/Self-inflicted injury
- Cognitive Impairment
- Incarcerated or Violent/Legal Exclusion
- Acutely Psychotic
- Deceased

## D. Ineligibility Criteria Phenotypes

#### 1. Non-injury

- Aneurism
- Arterial embolism
- Cancer
- Cerebrovascular accident (CVA)
- Cerebral infarction
- Chronic Venous Insufficiency (CVI)
- Food poisoning
- Gangrene
- Headache
- Jaundice
- Pneumonia
- Sepsis

- Shortness of breath (SOB)
- Stroke (Disambiguation)
- Lower Back Pain (LBP) Failure to thrive
- Incontinence
- Weakness
- Hypoxia
- Ischemia
- Endocarditis
- Dyspnea
- Fournier's
- Cardiogenic Shock
- Overdose
- Hemothorax
- Pneumothorax
- Cataract
- Hydrocephalus
- Carcinoma
- Dysplasia
- Fibroids
- Hardware Malfunction
- Pneumonia
- Colostomy
- Volume Overload
- Adenoma
- Hypotension
- Rash

- Shortness of Breath
- Bowel Obstruction
- Appendictis
- Abscess
- Frost Bite
- Dysphagia
- Dehydration
- Myelopathy
- Cardiomyopathy

#### 2. Acute Psychosis

\*Note a patient can have a diagnosis of schizophrenia, paranoid schizophrenia, or schizoaffective disorder but not be acutely psychotic. In these cases, recruiters must examine the inpatient notes regarding current behavior. If their behavior includes any of the indicators below, then the patient would be excluded from participation (unless this behavior is a direct result of the index injury or medication – which would not preclude someone from eventual participation. In these cases, recruiters should wait until shock of the injury/effects of medications have subsided & the patient is no longer exhibiting psychotic symptom sequela).

- Actively Psychotic
- Active Psychosis
- Visual Hallucinations
- Auditory Hallucinations
- Delusions
- Severe/Extreme Paranoia
- Extreme Paranoid Behavior
- Mistaken Identity (of self or others)

#### 3. Cognitive Impairment

\*Note if a patient is experiencing some cognitive deficits specifically related to the injury; but there is a presumption that they will regain function they are not excluded from potential participation (e.g., short term memory loss (STML), confused, oriented to self only). These

patients are not ready for immediate approach, but study staff should continue to monitor the patient's alertness & orientation status and approach only after they become A&O 3-4 (able to comprehend consent & interview questions). However, if the medical record indicates that the patient will not likely regain cognitive function due to the injury they would be excluded from participation.

- Dementia
- History of (HX) Dementia
- Alzheimer's
- Limited Communicative Abilities/Capabilities
- Poor Cognitive Communication
- Limited Cognitive Communication
- Poor Cognitive Abilities/Capabilities
- Memory Deficits
- Severe Short Term Memory (STM)
- Poor Historian
- Impaired Orientation
- Impaired Attention
- Impaired Language
- Severe Delirium (That does not get better with time)
- Extreme Confusion (That does not get better with time)
- Severe Autism
- Down's Syndrome
- Learning Disorder
- Developmental Disorder
- Cerebral Palsy
- Low Cognition
- Cognitive Deficits
- Severe Memory Loss

- Persistent Inability to Remember Self/Loved Ones
- Baseline Difficulty Processing Cognitive Functions

#### 4. Self-inflicted injury (SA)

\*Note: behaviors that were "self-inflicted" but were the result of an attempt to escape potential danger do NOT fall under the self-inflicted category (e.g., jumping out of a window to escape fire, jumping out of vehicle to get away from potential perpetrator)

- Self-Inflicted
- Attempt to Commit Suicide
- In an Attempt to Harm Self
- Wanted to Die
- Self-harm
- Suicidal Intent/Episode/Incident
- Self-Inflicted Gunshot Wound (SIGSW)
- Shot self
- Slit Wrists
- Jumped off Bridge, Viaduct, Rooftop, Balcony etc. (With intent to die)
- Drove recklessly (with intent to die)
- Cut Self
- Stabbed Self
- Intentional GSW

\*Unintentional/accidental GSWs are <u>NOT</u> exclusions e.g., cleaning weapon & discharged into hand, knocked over shotgun by the door & shot foot

• Intentional overdose

\*Prescriptions/Rx's/OTC pills (e.g., Tylenol) or illicit substances/heroin/meth

• Jumped out of window, off of bridge/roof/cliff, out of moving vehicle

#### 5. Non-English Speaking

\*Note the medical record may list another language as the patient's preferred language. However, this in & of itself is not an exclusion. English as a second language is acceptable; however if there is any indication that the patient is not able to read/understand enough English to consent/answer interview questions without assistance then they are excluded from participation.

- Does Not Speak English
- Limited English
- Speaks Minimal English
- Only Speaks Few Words/Phrases in English
- Limited Ability in English
- Requires Translator
- Family/Friend translated/Relayed/Explained to the patient what was said
- Patient needs assistance in their native tongue/language to understand

#### 6. Incarcerated

\*Note the medical record may not always explicitly state that a patient a recruiter may not know that a patient is excluded

- Incarcerated
- Brought in by (BIB) Police
- In Custody
- Shot by Police
- Tazed by Police
- Fleeing Scene
- Fleeing from Police
- Chased by Police/Police Officers/Officers of the Law/Security
- Arrived from Jail/Prison
- Injured while in Custody/Jail/Prison
- Injured while Robbing/Stealing/Attacking

#### 7. Deceased

- Deceased
- Died
- Expired

- Passed away
- Time of death
- Donated organs

#### 8. Other

- Patient Injuring Staff
  - Danger/Dangerous (To Staff)
  - Physically Combative (To Staff)
  - Hostile (To Staff)
  - Aggressive(To Staff)
  - Abusive (To Staff)
- Not an inpatient hospital stay:
  - Discharging same day
  - Outpatient Procedure
  - Limited Stay
  - Outpatient Visit

<sup>\*</sup>Not simply that the patient is a registered organ donor; but that the organ donation has actually occurred

## 2. The 10-item Electronic Medical Record Screening Procedure

(See also Russo, J., Katon, W., & Zatzick, D. (2013). The development of a population-based automated screening procedure for PTSD in acutely injured hospitalized trauma survivors. *General Hospital Psychiatry* 35, 485-491)

Once a list of eligible traumatically injured patients are derived, all patients on the list will be screened for the following 10-item risk factors. However, if a patient does not have 3 or more of the below risk factors, they are excluded from the study. (See corresponding appendices for guidance on determining risk domains).

#### A. The 10 Risk Factors

- 1. Sex: Female
- 2. Race/Ethnicity: Non-White/Hispanic
- 3. Funding: Uninsured/Self-Pay, Public Insurance (Medicare/Medicaid),
  - Active Duty Military, or Veteran Insurance Status
- 4. Current Intensive Care Unit Admission
- 5. Current Intentional Injury Admission
- 6. Prior Inpatient Hospitalization
- 7. Tobacco Use (Current or History)
- 8. ICD-I-CM Substance Use Disorder Diagnosis
  - **OR** Positive BAC on Admission
- 9. ICD-I-CM PTSD Diagnosis
- 10. Other ICD-I-CM Psychiatric Diagnosis

#### B. The 10-item Risk Factor Criteria Phenotypes:

- 1. Female Sex
- 2. Non-white Ethnicity
  - Black
  - African American
  - Asian
  - Hispanic

- Mexican
- Mexican American
- Chicano
- Cuban
- Spanish
- South American
- Central American
- American Indian
- Alaska Native
- Pacific Islander
- Hawaiian
- Samoan
- Asian
- Chinese
- Korean
- Japanese
- Cambodian
- Filipino
- Vietnamese
- Other Non-White/Caucasian Races

## 3. Intentional Injury

- a. Stab Wounds (SW)
- Stabbed/Stabbing/Multiple Stab Wounds
- Victim
- Assailant
- Intentional

- Dispute
- Altercation
- Domestic
- Knife
- Blade

## b. Gunshot Wounds (GSW)

- Multiple GSWs
- Shot
- Shooter
- Shooting
- Gunfire
- Bullets
- Close Range
- Victim
- Assailant
- Intentional
- Dispute
- Altercation
- Accidental
- Firearm
- Rifle
- Pistol
- Handgun
- Drive-by

#### **Assault**

• Victim

• Assailant
• Domestic
• Dispute
• Altercation
• Fight
• Robbery
Home Invasion
Home Raid
• Attacked
• Punched
• Kicked
• Smashed
• Hit
• Bite
• Bitten
• Beat up
• Run Over
• Hit and Run (Intentional)
• Weapon (e.g. Crowbar, Shovel, Pipe, Machete, Razor Blade, Hammer, Bat, 2 x 4)
• Evisceration
• Slap
• Push
• Shove

4. Public insurance (Public or Veteran insurance stats/Medicaid/Medicare). Undocumented first generation American without insurance

#### 5. Intensive Care Unit (ICU) During Current Hospitalization

- Intensive Care Unit (ICU)
- Medical ICU
- Trauma Intensive Care Unit (TICU)
- Neurosurgical Intensive Care Unit (NICU)
- Surgical Intensive Care Unit (SICU)
- Coronary Intensive Care Unit (CICU)
- Burn Intensive Care Unit (BICU)
- Pediatric Intensive Care Unit (PICU)
- Intensive Therapy Unit (ITU)
- Critical Care Unit
- Critical Care Team
- Surgical Critical Care (SCC)
- Neonatal Intensive Care Unit ICU
- Cardio Thoracic Intensive Care Unit ICU
- Cardiac Intensive Care Unit ICU
- Pulmonary and Critical Care

#### 6. Prior Inpatient Hospitalization

#### 7. Substance Use Diagnosis or positive BAC on admission

- Toxicology Screen
- Alcohol
- Alcohol on Breath (AOB)
- Intoxicated
- Appears Intoxicated
- Inebriated

- Drunk
- Drinking
- Positive (+) ETOH
- Ethanol
- Ethyl Alcohol Level
- Acute Alcohol
- Blood Alcohol Level (BAL)
- Blood Alcohol Content (BAC)
- Positive Toxicology Screen
- Positive BAL
- Positive BAC
- Abnormal Toxicology Screen
- Abnormal BAL
- Abnormal BAC
- Urine Alcohol Level
- Significant Alcohol Use
- Beers
- Drinks Daily
- Alcohol Use Disorder
- Heavy Alcohol Use
- Alcohol Abuse
- Alcohol Addiction
- Alcohol Dependence
- Alcohol Withdrawal
- Alcohol Intoxication
- Chronic Alcoholism

- History (Hx) of Alcoholism/Alcohol Abuse/Alcohol Dependence
- Prior Alcoholism/Alcoholic/Alcohol Abuse/Alcohol Dependence
- Alcohol Use Disorders Identification Test (AUDIT)
- Alcohol Screening
- Hazardous Drinking
- Alcoholics Anonymous (AA)
- Narcotics Anonymous (NA)
- Cocaine Anonymous (CA)
- Addiction Intervention Services (AIS)
- Substance Use/Abuse Disorder
- History (Hx) of Substance Use/Abuse/ Dependence/Addiction
- Prior Substance Use/Abuse/ Dependence/Addiction
- Heavy Substance Use
- Chronic Substance Use
- Polysubstance Use
- Polysubstance Abuse
- Drug Abuse Screening Test (DAST)
- Cocaine
- Crack
- Methamphetamine
- Meth
- Crystal Meth
- Heroin
- Intravenous Drug Use (IVDU)
- Speed Balls
- Opiate Use Disorder

- Opiate Abuse
- Opiate Dependence
- Opiate Addiction
- MDMA
- Molly
- Ecstasy
- Chemical Dependency
- History (Hx) of Withdrawal
- Benzodiazepine Use Disorder
- Xanax Dependence
- Marijuana (MJ) Dependence
- 8. Tobacco Use
- Tobacco Dependence
- Nicotine Dependence
- Chronic Tobacco Use
- Tobacco Daily/Daily Tobacco
- Smokes X Pack Per Day (ppd)
- X ppd
- X Cigarettes Daily
- Smokes Cigarettes
- Chews Tobacco
- Smokes cigar
- Pipe Smokes

## 9. PTSD (Post-traumatic Stress Disorder) diagnosis

\*Current diagnosis or History of/Hx PTSD

- Post-traumatic Stress Disorder (PTSD)
- Military
- Army
- Navy
- Marines
- Air Force
- Combat Veteran
- Combat
- Veteran
- Disabled
- Deployment
- Served
- War
- Improvised Explosive Device (IED)
- Nightmares
- Flashbacks
- Reliving
- Disturbing Memories/Thoughts/Images
- Avoidance
- Sleep Disturbances
- Hyper vigilant
- Watchful
- On Guard
- Easily Startled
- Jumpy
- Angry Outbursts

- Irritability
- Posttraumatic Stress Disorder Checklist (PCL)
- PCL Civilian version
- PCL Military version

#### 10. Other Psychiatric Diagnosis

\*Current or History of/Hx:

#### a. Anxiety Disorders

\*Note if a patient has a PTSD diagnosis they will be coded as having BOTH risk factors for "PTSD Dx" AND a risk factor under "Other Psychiatric Dx":

- Anxiety
- History of Anxiety
- Past Medical History (PMH) Anxiety
- Anxiety Attack
- Anxious
- Nervous
- Distress
- Stress
- Restless
- Fidgety
- Panic Disorder
- Panic Attacks
- Post-traumatic Stress Disorder (PTSD)
- Generalized Anxiety Disorder (GAD)
- Obsessive-Compulsive Disorder (OCD)
- Social Phobia
- Alprazolam (Xanax)
- Lorazepam (Ativan)

- Diazepam (Valium)
- Clonazepam (Klonopin)
- Buspirone (BuSpar)
- Citalopram
- Escitalopram
- Fluoxetine
- Paroxetine
- Sertraline
- Venlafaxine
- Duloxetine
- Amitriptyline
- Imipramine
- Nortriptyline

#### **b.** Dissociative Disorders:

- Dissociative Amnesia/Fugue (\*not related to injury)
- Dissociative Identity Disorder
- Depersonalization Disorder

#### c. Factitious Disorders:

- Factitious Disorder
- Munchausen by Proxy

#### d. Mood Disorders:

- Mood Disorder
- Bipolar Disorder
- Bipolar
- Depression
- History of Depression

- Past Medical History (PMH) Depression
- Chronic/Severe Depression
- Depressive Episode
- Major Depressive Disorder (MDD)
- Major Depressive Episode
- Citalopram
- Escitalopram
- Fluoxetine
- Paroxetine
- Sertraline
- Cyclothymic Disorder
- Dysthymic Disorder
- Dysthymia

## e. Personality Disorders:

- Personality Disorder
- Antisocial Personality Disorder
- Avoidant Personality Disorder
- Borderline Personality Disorder (BPD)
- Dependent Personality Disorder
- Histrionic Personality Disorder
- Narcissistic Personality Disorder
- Obsessive-Compulsive Personality
- Paranoid Personality Disorder
- Paranoid Schizophrenia
- Schizoid Personality Disorder
- Schizotypal Personality Disorder

## f. Psychotic Disorders:

- Brief Psychotic Disorder
- Delusional Disorder
- Schizoaffective Disorder
- Schizophrenia
- Schizophreniform
- Shared Psychotic Disorder

#### g. Somatoform Disorders:

- Body Dysmorphic disorder (BDD)
- Conversion Disorder
- Hypochondriasis
- Pain Disorder
- Somatization Disorder

#### h. Others:

- Attention Deficit/Hyperactivity Disorder (ADD/ADHD)
- Gender Identity Disorder
- Adjustment Disorder
- Anorexia Nervosa
- Bulimia Nervosa
- Binge-eating Disorder
- Pica Disorder

## 3. ICD Trauma Codes

Supplementary Classification of External Causes of Injury and Poisoning

# **Intentional Injuries**

	Description	ICD- 9
External Cause Status (E000)	External cause status	E000
Activity(E001-E030)	Activities involving walking and running	E001
	Activities involving water and water craft	E002
	Activities involving snow and ice	E003
	Activities involving climbing, rappelling and jumping off	E004
	Activities involving dancing and other rhythmic movement	E005
	Activities involving other sports and athletics played individually	E006
	Activities involving other sports and athletics played as a team or group	E007
	Activities involving other specified sports and athletics	E008
	Activity involving other cardiorespiratory exercise	E009
	Activity involving other muscle strengthening exercises	E010
	Activities involving computer technology and electronic devices	E011
	Activities involving arts and handcrafts	E012
	Activities involving personal hygiene and household maintenance	E013
	Activities involving person providing caregiving	E014
	Activities involving food	E015

	preparation, cooking and grilling	
	Activities involving property and land maintenance, building and construction	E016
	Activities involving roller coasters and other types of external motion	E017
	Activities involving playing musical instrument	E018
	Activities involving animal care	E019
	Other activity	E029
	Unspecified activity	E030
Railway Accidents (E800-807)	Railway accident involving collision with rolling stock	E800
	Railway accident involving collision with other object	E801
	Railway accident involving derailment without antecedent collision	E802
	Railway accident involving explosion fire or burning	E803
	Fall in on or from railway train	E804
	Hit by rolling stock	E805
	Other specified railway accident	E806
	Railway accident of unspecified nature	E807
Motor Vehicle Traffic Accidents (E810-819)	Motor vehicle traffic accident involving collision with train	E810
	Motor vehicle traffic accident involving re-entrant collision with another motor vehicle	E811
	Other motor vehicle traffic accident involving collision with motor	E812

## vehicle

	Motor vehicle traffic accident involving collision with other vehicle	E813
	Motor vehicle traffic accident involving collision with pedestrian	E814
	Other motor vehicle traffic accident involving collision on the highway	E815
	Motor vehicle traffic accident due to loss of control without collision on the highway	E816
	Noncollision motor vehicle traffic accident while boarding or alighting	E817
	Other noncollision motor vehicle traffic accident	E818
	Motor vehicle traffic accident of unspecified nature	E819
Motor Vehicle Nontraffic Accidents (E820-E825)	Nontraffic accident involving motor-driven snow vehicle	E820
	Nontraffic accident involving other off-road motor vehicle	E821
	Other motor vehicle nontraffic accident involving collision with moving object	E822
	Other motor vehicle nontraffic accident involving collision with stationary object	E823
	Other motor vehicle nontraffic accident while boarding and alighting	E824
	Other motor vehicle nontraffic accident of other and unspecified nature	E825

Other Road Vehicle Accidents (E826-E829)	Pedal cycle accident	E826
	Animal-drawn vehicle accident	E827
	Accident involving animal being ridden	E828
	Other road vehicle accidents	E829
Water transport Accidents (E830- E838)	Accident to watercraft causing submersion	E830
	Accident to watercraft causing other injury	E831
	Other accidental submersion or drowning in water transport accident	E832
	Fall on stairs or ladders in water transport	E833
	Other fall from one level to another in water transport	E834
	Other and unspecified fall in water transport	E835
	Machinery accident in water transport	E836
	Explosion fire or burning in watercraft	E837
	Other and unspecified water transport accident	E838
Air And Space Transport Accidents (E840-E845)	Accident to powered aircraft at takeoff or landing	E840
	Accident to powered aircraft other and unspecified	E841
	Accident to unpowered aircraft	E842
	Fall in on or from aircraft	E843
	Other specified air transport	E844

## accidents

	accidents	
	Accident involving spacecraft	E845
Vehicle Accidents, Not Elsewhere Classifiable (E846-E849)	Accidents involving powered vehicles used solely within the buildings and premises of industrial or commercial establishment	E846
	Accidents involving cable cars not running on rails	E847
	Accidents involving other vehicles, not elsewhere classifiable	E848
	Place of occurrence	E849
Accidental Poisoning By Drugs, Medicinal Substances, And Biologicals (E850-E858)	Accidental poisoning by analgesics antipyretics and antirheumatics	E850
	Accidental poisoning by barbiturates	E851
	Accidental poisoning by other sedatives and hypnotics	E852
	Accidental poisoning by tranquilizers	E853
	Accidental poisoning by other psychotropic agents	E854
	Accidental poisoning by other drugs acting on central and autonomic nervous system	E855
	Accidental poisoning by antibiotics	E856
	Accidental poisoning by other anti- infectives	E857
	Accidental poisoning by other drugs	E858
Accidental Poisoning By Other Solid And Liquid Substances, Gases, And Vapors (E860-E869)	Accidental poisoning by alcohol not elsewhere classified	E860

	Accidental poisoning by cleansing and polishing agents disinfectants paints and varnishes	E861
	Accidental poisoning by petroleum products other solvents and their vapors not elsewhere classified	E862
	Accidental poisoning by agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers	E863
	Accidental poisoning by corrosives and caustics not elsewhere classified	E864
	Accidental poisoning from foodstuffs and poisonous plants	E865
	Accidental poisoning by other and unspecified solid and liquid substances	E866
	Accidental poisoning by gas distributed by pipeline	E867
	Accidental poisoning by other utility gas and other carbon monoxide	E868
	Accidental poisoning by other gases and vapors	E869
Misadventures To Patients During Surgical And Medical Care (E870- E876)	Accidental cut puncture perforation or hemorrhage during medical care	E870
	Foreign object left in body during procedure	E871
	Failure of sterile precautions during procedure	E872
	Failure in dosage	E873
	Mechanical failure of instrument or apparatus during procedure	E874
	Contaminated or infected blood other fluid drug or biological	E875

## substance

	Other and unspecified misadventures during medical care	E876
Surgical And Medical Procedures As The Cause Of Abnormal Reaction Of Patient Or Later Complication, Without Mention Of Misadventure At The Time Of Procedure (E878-E879)	Surgical operation and other surgical procedures as the cause of abnormal reaction of patient or of later complication without mention of misadventure at the time of operation	E878
	Other procedures without mention of misadventure at the time of procedure as the cause of abnormal reaction of patient or of later complication	E879
Accidental Falls (E880-E888)	Accidental fall on or from stairs or steps	E880
	Accidental fall on or from ladders or scaffolding	E881
	Accidental fall from or out of building or other structure	E882
	Accidental fall into hole or other opening in surface	E883
	Other accidental falls from one level to another	E884
	Accidental fall on same level from slipping tripping or stumbling	E885
	Fall on same level from collision, pushing, or shoving, by or with other person	E886
	Fracture, cause unspecified	E887
	Other and unspecified fall	E888
Accidents Caused By Fire And Flames (E890-E899)	Conflagration in private dwelling	E890

	Conflagration in other and unspecified building or structure	E891
	Conflagration not in building or structure	E892
	Accident caused by ignition of clothing	E893
	Ignition of highly inflammable material	E894
	Accident caused by controlled fire in private dwelling	E895
	Accident caused by controlled fire in other and unspecified building or structure	E896
	Accident caused by controlled fire not in building or structure	E897
	Accident caused by other specified fire and flames	E898
	Accident caused by unspecified fire	E899
Accidents Due To Natural And Environmental Factors (E900-E909)	Accident caused by excessive heat	E900
	Accidents due to excessive cold	E901
	Accident due to high and low air pressure and changes in air pressure	E902
	Accident caused by travel and motion	E903
	Accident due to hunger thirst exposure and neglect	E904
	Venomous animals and plants as the cause of poisoning and toxic reactions	E905
	Other injury caused by animals	E906
	Accident due to lightning	E907

	Accident due to cataclysmic storms and floods resulting from storms	E908
	Accident due to cataclysmic earth surface movements and eruptions	E909
Accidents Caused By Submersion, Suffocation, And Foreign Bodies (E910-E915)	Accidental drowning and submersion	E910
	Inhalation and ingestion of food causing obstruction of respiratory tract or suffocation	E911
	Inhalation and ingestion of other object causing obstruction of respiratory tract or suffocation	E912
	Accidental mechanical suffocation	E913
	Foreign body accidentally entering eye and adnexa	E914
	Foreign body accidentally entering other orifice	E915
Other Accidents (E916-E928)	Struck accidentally by falling object	E916
	Striking against or struck accidentally by objects or persons	E917
	Caught accidentally in or between objects	E918
	Accidents caused by machinery	E919
	Accidents caused by cutting and piercing instruments or objects	E920
	Accident caused by explosion of pressure vessel	E921
	Accident caused by firearm and air gun missile	E922
	Accident caused by explosive material	E923

	Accident caused by hot substance or object caustic or corrosive material and steam	E924
	Accident caused by electric current	E925
	Exposure to radiation	E926
	Overexertion and strenuous movements	E927
	Other and unspecified environmental and accidental causes	E928
Late Effects Of Accidental Injury (E929)	Late effects of accidental injury	E929
Drugs, Medicinal And Biological Substances Causing Adverse Effects In Therapeutic Use (E930-E949)	Antibiotics causing adverse effects in therapeutic use	E930
	Other anti-infectives causing adverse effects in therapeutic use	E931
	Hormones and synthetic substitutes causing adverse effects in therapeutic use	E932
	Primarily systemic agents causing adverse effects in therapeutic use	E933
	Agents primarily affecting blood constituents causing adverse effects in therapeutic use	E934
	Analgesics antipyretics and antirheumatics causing adverse effects in therapeutic use	E935
	Anticonvulsants and anti- parkinsonism drugs causing adverse effects in therapeutic use	E936
	Sedatives and hypnotics causing adverse effects in therapeutic use	E937
	Other central nervous system depressants and anesthetics causing	E938

# adverse effects in therapeutic use

Psychotropic agents causing adverse effects in therapeutic use	E939
Central nervous system stimulants causing adverse effects in therapeutic use	E940
Drugs primarily affecting the autonomic nervous system causing adverse effects in therapeutic use	E941
Agents primarily affecting the cardiovascular system causing adverse effects in therapeutic use	E942
Agents primarily affecting gastrointestinal system causing adverse effects in therapeutic use	E943
Water mineral and uric acid metabolism drugs causing adverse effects in therapeutic use	E944
Agents primarily acting on the smooth and skeletal muscles and respiratory system causing adverse effects in therapeutic use	E945
Agents primarily affecting skin and mucous membrane ophthalmological otorhinolaryngological and dental drugs causing adverse effects in therapeutic us	E946
Other and unspecified drugs and medicinal substances causing adverse effects in therapeutic use	E947
Bacterial vaccines causing adverse effects in therapeutic use	E948
Other vaccines and biological substances causing adverse effects in therapeutic use	E949

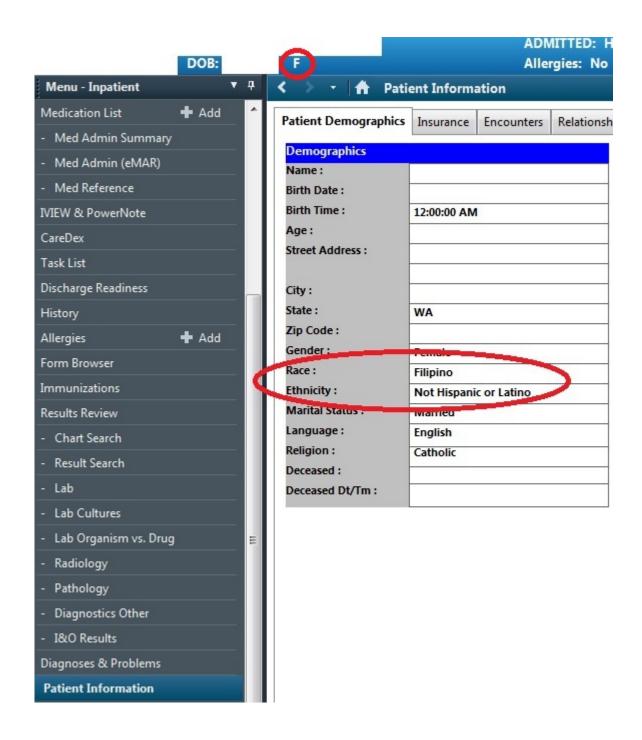
Homicide And Injury Purposely Inflicted By Other Persons (E960- E969)	Fight brawl rape	E960
	Assault by corrosive or caustic substance, except poisoning	E961
	Assault by poisoning	E962
	Assault by hanging and strangulation	E963
	Assault by submersion [drowning]	E964
	Assault by firearms and explosives	E965
	Assault by cutting and piercing instrument	E966
	Perpetrator of child and adult abuse	E967
	Assault by other and unspecified means	E968
	Late effects of injury purposely inflicted by other person	E969
Legal Intervention (E970-E979)	Injury due to legal intervention by firearms	E970
	Injury due to legal intervention by explosives	E971
	Injury due to legal intervention by gas	E972
	Injury due to legal intervention by blunt object	E973
	Injury due to legal intervention by cutting and piercing instrument	E974
	Injury due to legal intervention by other specified means	E975
	Injury due to legal intervention by unspecified means	E976

	Late effects of injuries due to legal	E977
	intervention	
	Legal execution	E978
	Terrorism	E979
Injury Undetermined Whether Accidentally Or Purposely Inflicted (E980-E989)	Poisoning by solid or liquid substances undetermined whether accidentally or purposely inflicted	E980
	Poisoning by gases in domestic use undetermined whether accidentally or purposely inflicted	E981
	Poisoning by other gases undetermined whether accidentally or purposely inflicted	E982
	Hanging strangulation or suffocation undetermined whether accidentally or purposely inflicted	E983
	Submersion (drowning), undetermined whether accidentally or purposely inflicted	E984
	Injury by firearms air guns and explosives undetermined whether accidentally or purposely inflicted	E985
	Injury by cutting and piercing instruments, undetermined whether accidentally or purposely inflicted	E986
	Falling from high place undetermined whether accidentally or purposely inflicted	E987
	Injury by other and unspecified means undetermined whether accidentally or purposely inflicted	E988
	Late effects of injury, undetermined whether accidentally or purposely inflicted	E989
Injury Resulting From Operations Of War	Injury due to war operations by fires and conflagrations	E990

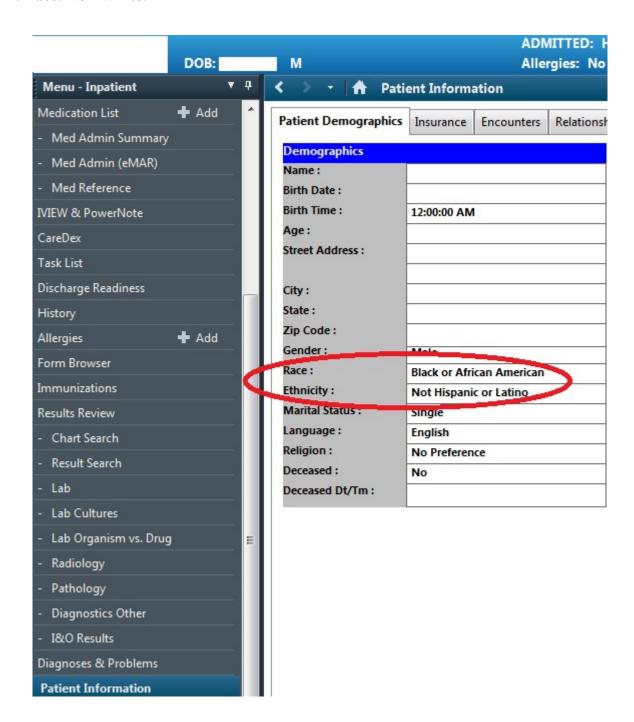
Injury due to war operations by bullets and fragments	E991
Injury due to war operations by explosion of marine weapons	E992
Injury due to war operations by other explosion	E993
Injury due to war operations by destruction of aircraft	E994
Injury due to war operations by other and unspecified forms of conventional warfare	E995
Injury due to war operations by nuclear weapons	E996
Injury due to war operations by other forms of unconventional warfare	E997
Injury due to war operations but occurring after cessation of hostilities	E998
Late effect of injury due to war operations and terrorism	E999

# 4. Examples of EMR Risk Factor Identification/Location

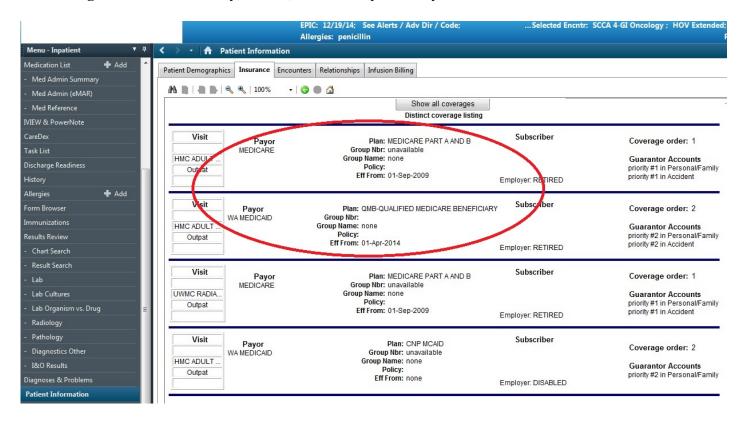
#### 1. Sex: Female



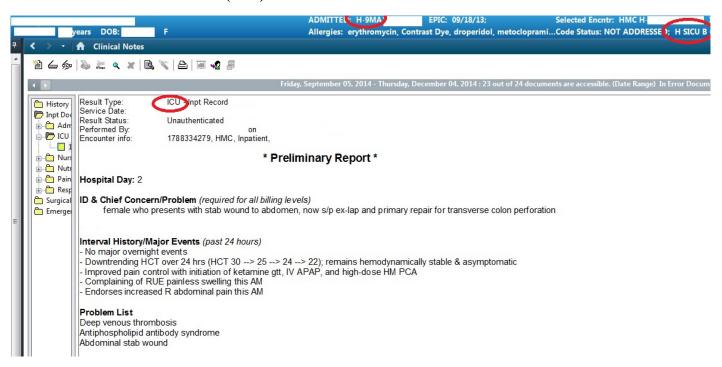
#### 2. Race: Non-White:



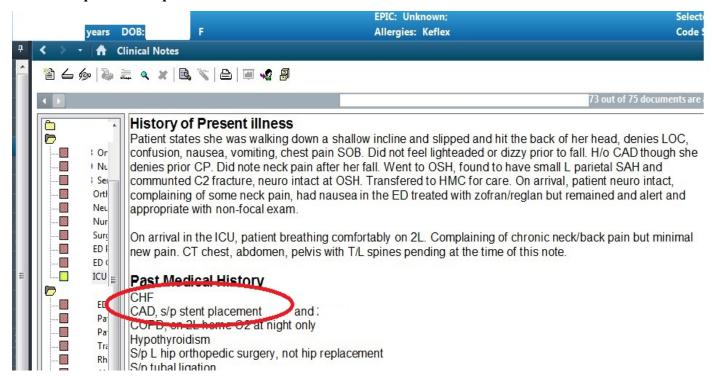
## 3. Funding: Uninsured/Self-Pay, Public, Active Duty Military or Veteran's Insurance

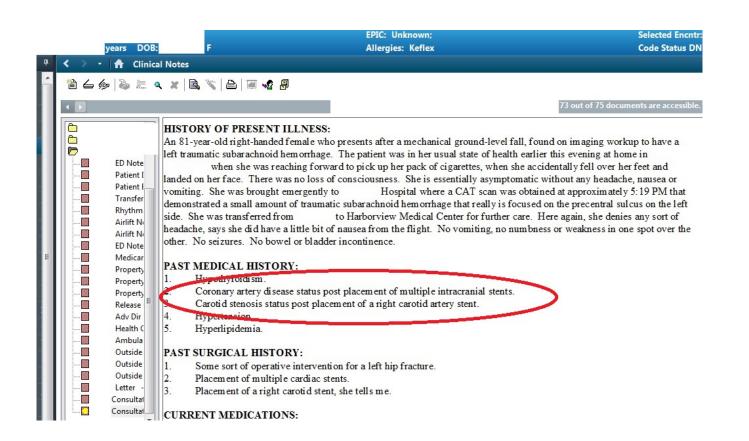


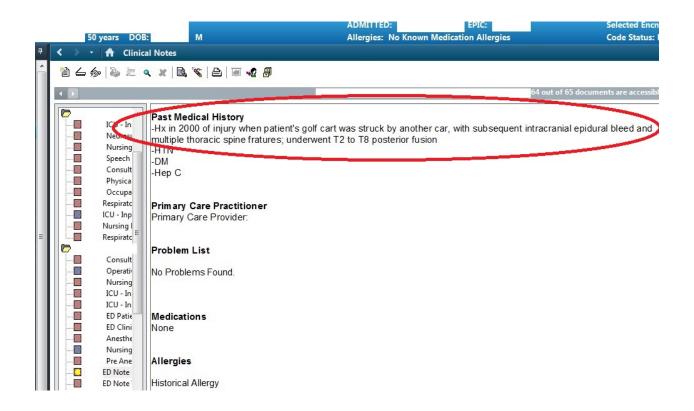
#### 4. Current Intensive Care Unit (ICU) Admission

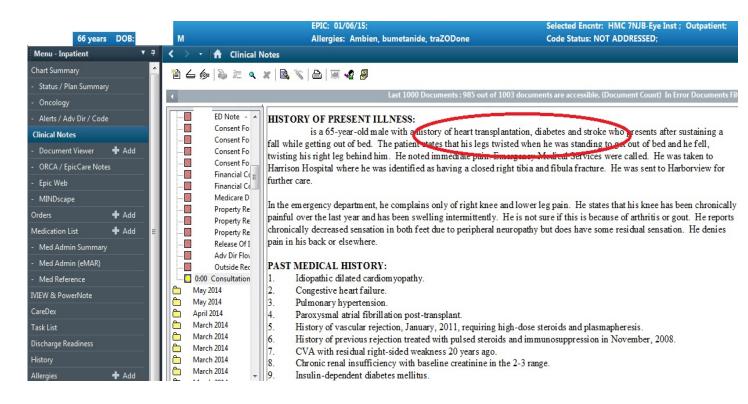


#### 5. Prior Inpatient Hospitalization

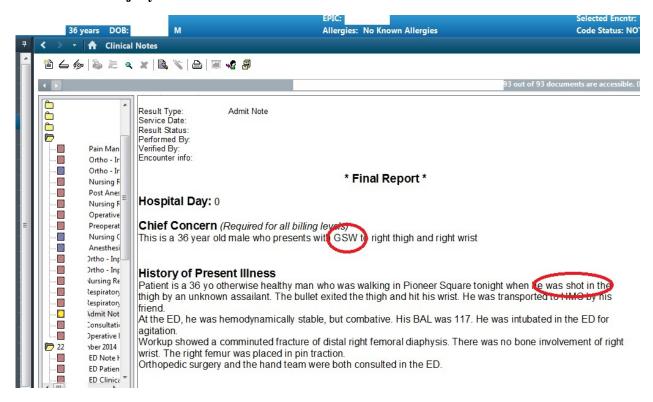


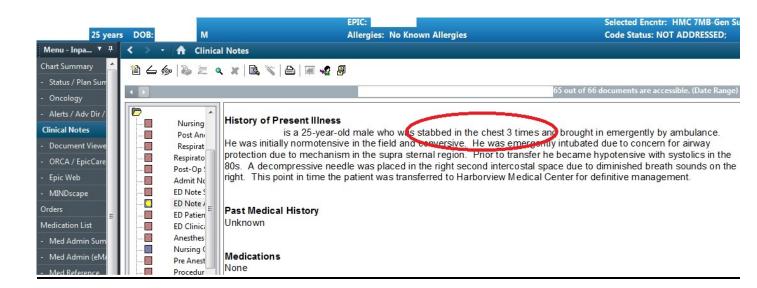






## 6. Intentional Injury





# **ICD-I-CM Codes for Intentional Injury Types**

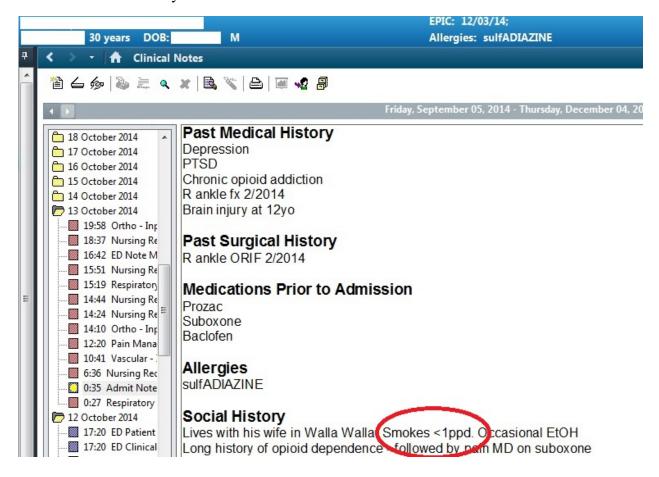
Injury Undetermined Whether Accidentally Or Purposely Inflicted (E980-E989)	Poisoning by solid or liquid substances undetermined whether accidentally or purposely inflicted	E980
	Poisoning by gases in domestic use undetermined whether accidentally or purposely inflicted	E981
	Poisoning by other gases undetermined whether accidentally or purposely inflicted	E982
	Hanging strangulation or suffocation undetermined whether accidentally or purposely inflicted	E983
	Submersion (drowning), undetermined whether accidentally or purposely inflicted	E984
	Injury by firearms air guns and explosives undetermined whether accidentally or purposely inflicted	E985
	Injury by cutting and piercing instruments, undetermined whether accidentally or purposely inflicted	E986
	Falling from high place undetermined whether accidentally or purposely inflicted	E987
	Injury by other and unspecified means undetermined whether accidentally or purposely inflicted	E988
	Late effects of injury, undetermined whether accidentally or purposely inflicted	E989

#### 7. Tobacco use: Current or history

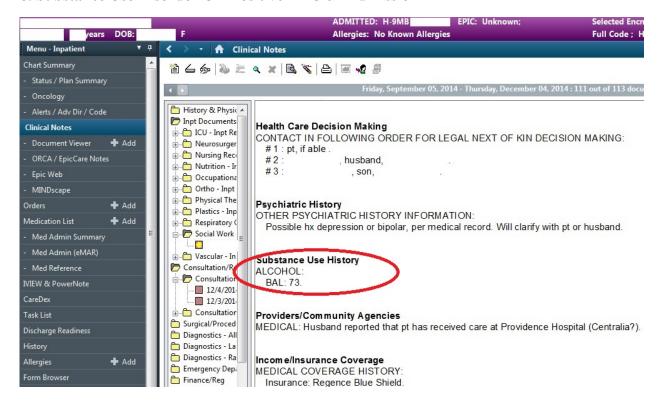
#### ICD-9-CM:

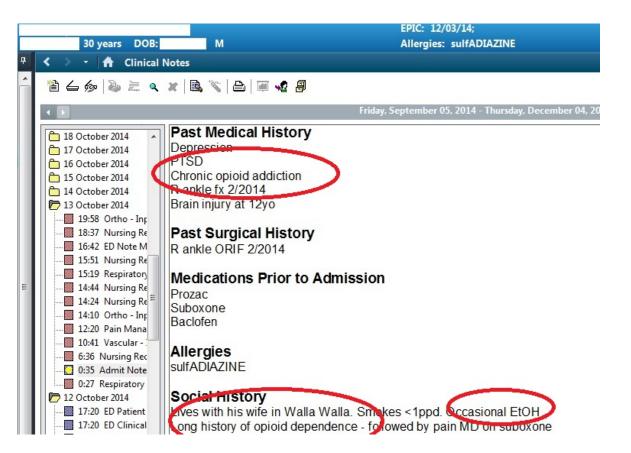
305.1- Tobacco Use Disorder

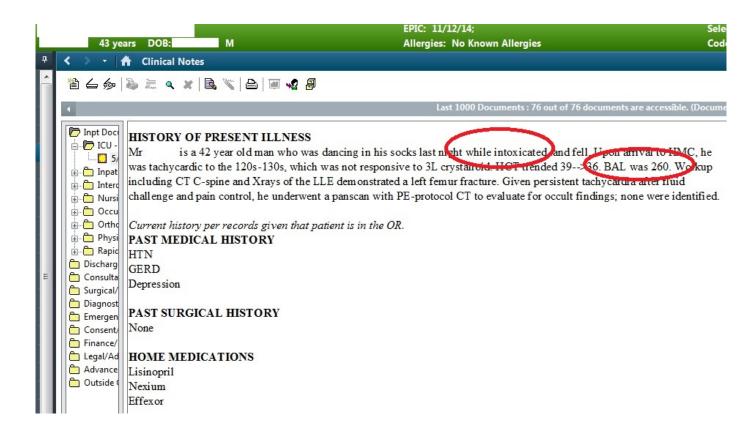
V15.82- Personal history of tobacco use

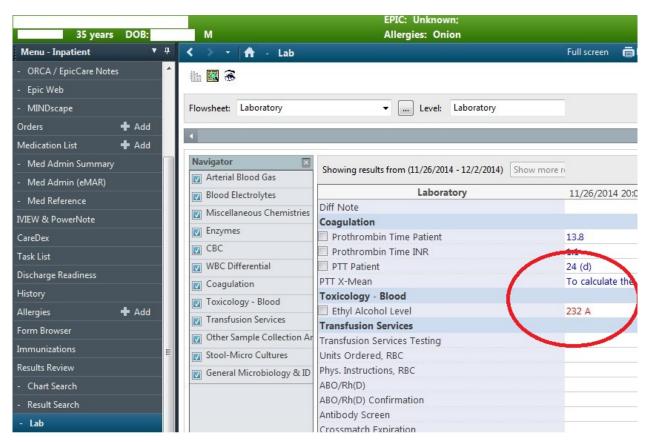


#### 8. Substance Use Disorder OR Positive BAC on Admission









## **ICD-I-CM Codes for Substance Use Disorders**

303	ALCOHOL DEPENDENCE SYNDR*	1	ICD-9
303.0	AC ALCOHOL INTOXICATION*	1	ICD-9
303.00	Alcohol Intoxication	1	DSM-IV- TR
303.01	AC ALCOHOL INTOX-CONTIN	1	ICD-9
303.02	AC ALCOHOL INTOX-EPISOD	1	ICD-9
303.03	AC ALCOHOL INTOX-REMISS	1	ICD-9
303.9	ALCOHOL DEPEND NEC/NOS*	1	ICD-9
303.90	Alcohol Dependence	1	DSM-IV- TR
303.91	ALCOH DEP NEC/NOS-CONTIN	1	ICD-9
303.92	ALCOH DEP NEC/NOS-EPISOD	1	ICD-9
303.93	ALCOH DEP NEC/NOS-REMISS	1	ICD-9
304	DRUG DEPENDENCE*	1	ICD-9
304.0	OPIOID TYPE DEPENDENCE*	1	ICD-9
304.00	Opioid Dependence	1	DSM-IV- TR
304.01	OPIOID DEPEND-CONTIN	1	ICD-9
304.02	OPIOID DEPENDENCE-EPISOD	1	ICD-9
304.03	OPIOID DEPENDENCE-REMISS	1	ICD-9
304.1	BARBITURATE DEPENDENCE*	1	ICD-9
304.10	Sedative, Hypnotic, or Anxiolytic Dependence	1	DSM-IV- TR
304.11	BARBITURAT DEPEND-CONTIN	1	ICD-9
304.12	BARBITURAT DEPEND-EPISOD	1	ICD-9
304.13	BARBITURAT DEPEND-REMISS	1	ICD-9
304.2	COCAINE DEPENDENCE*	1	ICD-9

20420			DSM-IV-
304.20	Cocaine Dependence	1	TR
304.21	COCAINE DEPEND-CONTIN	1	ICD-9
304.22	COCAINE DEPEND-EPISODIC	1	ICD-9
304.23	COCAINE DEPEND-REMISS	1	ICD-9
304.3	CANNABIS DEPENDENCE*	1	ICD-9
304.30	Cannabis Dependence	1	DSM-IV- TR
304.31	CANNABIS DEPEND-CONTIN	1	ICD-9
304.32	CANNABIS DEPEND-EPISODIC	1	ICD-9
304.33	CANNABIS DEPEND-REMISS	1	ICD-9
304.4	AMPHETAMINE DEPENDENCE*	1	ICD-9
304.40	Amphetamine Dependence	1	DSM-IV- TR
304.41	AMPHETAMIN DEPEND-CONTIN	1	ICD-9
304.42	AMPHETAMIN DEPEND-EPISOD	1	ICD-9
304.43	AMPHETAMIN DEPEND-REMISS	1	ICD-9
304.5	HALLUCINOGEN DEPENDENCE*	1	ICD-9
304.50	Hallucinogen Dependence	1	DSM-IV- TR
304.51	HALLUCINOGEN DEP-CONTIN	1	ICD-9
304.52	HALLUCINOGEN DEP-EPISOD	1	ICD-9
304.53	HALLUCINOGEN DEP-REMISS	1	ICD-9
304.6	DRUG DEPENDENCE NEC*	1	ICD-9
304.60	Inhalant Dependence or Phencyclidine Dependence	1	DSM-IV- TR
304.61	DRUG DEPEND NEC-CONTIN	1	ICD-9
304.62	DRUG DEPEND NEC-EPISODIC	1	ICD-9
304.63	DRUG DEPEND NEC-IN REM	1	ICD-9

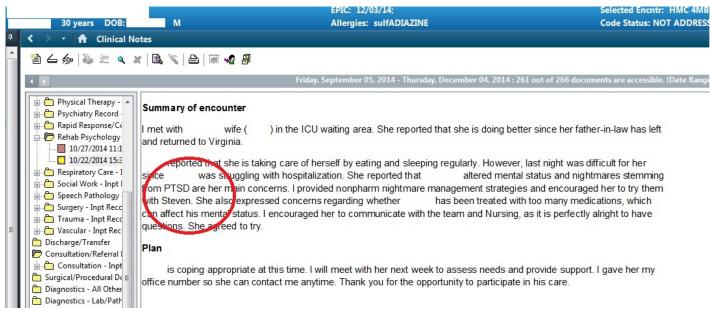
304.7	OPIOID/OTHER DRUG DEPEND*	1	ICD-9
304.70	OPIOID/OTHER DEP-UNSPEC	1	ICD-9
304.71	OPIOID/OTHER DEP-CONTIN	1	ICD-9
304.72	OPIOID/OTHER DEP-EPISOD	1	ICD-9
304.73	OPIOID/OTHER DEP-REMISS	1	ICD-9
304.8	COMB DRUG DEPENDENCE NEC*	1	ICD-9
304.80	Polysubstance Dependence	1	DSM-IV- TR
304.81	COMB DRUG DEP NEC-CONTIN	1	ICD-9
304.82	COMB DRUG DEP NEC-EPISOD	1	ICD-9
304.83	COMB DRUG DEP NEC-REMISS	1	ICD-9
304.9	DRUG DEPENDENCE NOS*	1	ICD-9
304.90	Other (or Unknown) Substance Dependence	1	DSM-IV- TR
304.91	DRUG DEPEND NOS-CONTIN	1	ICD-9
304.92	DRUG DEPEND NOS-EPISODIC	1	ICD-9
304.93	DRUG DEPEND NOS-REMISS	1	ICD-9
305	NONDEPENDENT DRUG ABUSE*	1	ICD-9
305.0	ALCOHOL ABUSE*	1	ICD-9
305.00	Alcohol Abuse	1	DSM-IV- TR
305.01	ALCOHOL ABUSE-CONTINUOUS	1	ICD-9
305.02	ALCOHOL ABUSE-EPISODIC	1	ICD-9
305.03	ALCOHOL ABUSE-IN REMISS	1	ICD-9
305.1	Nicotine Dependence	1	DSM-IV- TR
305.2	CANNABIS ABUSE*	1	ICD-9
305.20	Cannabis Abuse	1	DSM-IV- TR

305.21	CANNABIS ABUSE-CONTIN	1	ICD-9
305.22	CANNABIS ABUSE-EPISODIC	1	ICD-9
305.23	CANNABIS ABUSE-IN REMISS	1	ICD-9
305.3	HALLUCINOGEN ABUSE*	1	ICD-9
305.30	Hallucinogen Abuse	1	DSM-IV- TR
305.31	HALLUCINOG ABUSE-CONTIN	1	ICD-9
305.32	HALLUCINOG ABUSE-EPISOD	1	ICD-9
305.33	HALLUCINOG ABUSE-REMISS	1	ICD-9
305.4	BARBITURATE ABUSE*	1	ICD-9
305.40	Sedative, Hypnotic, or Anxiolytic Abuse	1	DSM-IV- TR
305.41	BARBITURATE ABUSE-CONTIN	1	ICD-9
305.42	BARBITURATE ABUSE-EPISOD	1	ICD-9
305.43	BARBITURATE ABUSE-REMISS	1	ICD-9
305.5	OPIOID ABUSE*	1	ICD-9
305.50	Opioid Abuse	1	DSM-IV- TR
305.51	OPIOID ABUSE-CONTINUOUS	1	ICD-9
305.52	OPIOID ABUSE-EPISODIC	1	ICD-9
305.53	OPIOID ABUSE-IN REMISS	1	ICD-9
305.6	COCAINE ABUSE*	1	ICD-9
305.60	Cocaine Abuse	1	DSM-IV- TR
305.61	COCAINE ABUSE-CONTINUOUS	1	ICD-9
305.62	COCAINE ABUSE-EPISODIC	1	ICD-9
305.63	COCAINE ABUSE-IN REMISS	1	ICD-9
305.7	AMPHETAMINE ABUSE*	1	ICD-9

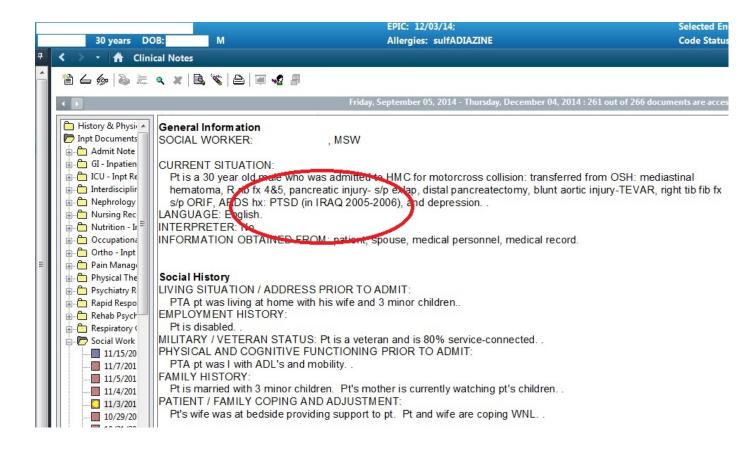
305.70	Amphetamine Abuse	1	DSM-IV- TR
305.71	AMPHETAMINE ABUSE-CONTIN	1	ICD-9
305.72	AMPHETAMINE ABUSE-EPISOD	1	ICD-9
305.73	AMPHETAMINE ABUSE-REMISS	1	ICD-9
305.8	ANTIDEPRESSANT ABUSE*	1	ICD-9
305.80	ANTIDEPRESS ABUSE-UNSPEC	1	ICD-9
305.81	ANTIDEPRESS ABUSE-CONTIN	1	ICD-9
305.82	ANTIDEPRESS ABUSE-EPISOD	1	ICD-9
305.83	ANTIDEPRESS ABUSE-REMISS	1	ICD-9
305.9	DRUG ABUSE NEC/NOS*	1	ICD-9
305.90	Phencyclidine Abuse, Inhalant Abuse, Other (or Unknown) Substance Abuse	1	DSM-IV- TR
305.91	DRUG ABUSE NEC-CONTIN	1	ICD-9
305.92	DRUG ABUSE NEC-EPISODIC	1	ICD-9
305.93	DRUG ABUSE NEC-IN REMISS	1	ICD-9

## 9. Posttraumatic Stress Disorder (PTSD) (Current or History)

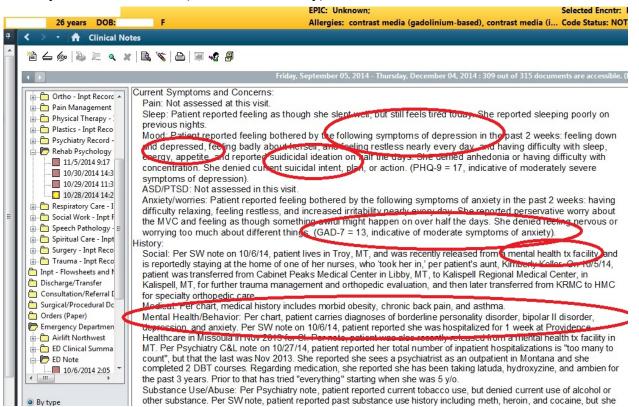
ICD-9-CM Diagnosis Code: 309.81

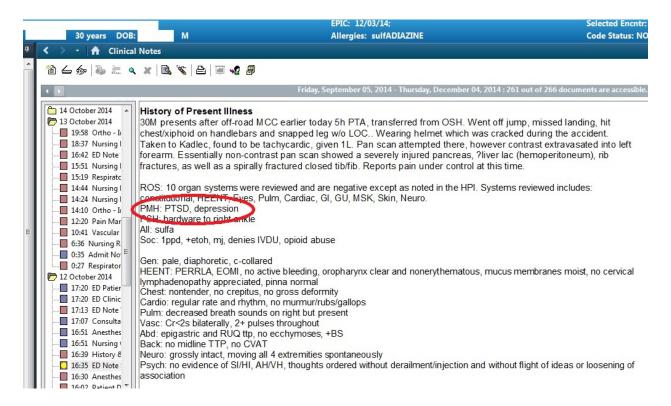


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#### 10. Psychiatric Disorders (Current or History)





## **ICD-I-CM Codes for Psychiatric Disorders**

290.0	SENILE DEMENTIA UNCOMPLICATED	1	ICD-9
290.1	PRESENILE DEMENTIA	1	ICD-9
290.10	PRESENILE DEMENTIA UNCOMPLICATED	1	ICD-9
290.11	PRESENILE DELIRIUM	1	ICD-9
290.12	PRESENILE DELUSION	1	ICD-9
290.13	PRESENILE DEPRESSION	1	ICD-9
290.2	SENILE DELUSION/DEPRESSIVE FEATURES	1	ICD-9
290.20	SENILE DELUSION	1	ICD-9
290.21	SENILE DEPRESSIVE	1	ICD-9
290.3	SENILE DELIRIUM	1	ICD-9
290.4	VASCULAR DEMENTIA	1	ICD-9

290.40	Vascular Dementia, Uncomplicated	1	DSM-IV- TR
290.41	Vascular Dementia, With Delirium	1	DSM-IV- TR
290.42	Vascular Dementia, With Delusions	1	DSM-IV- TR
290.43	Vascular Dementia, With Depressed Mood	1	DSM-IV- TR
290.8	SENILE PSYCHOSIS NEC	1	ICD-9
290.9	SENILE PSYCHOT COND NOS	1	ICD-9
291	ALCOHOLIC PSYCHOSES*	1	ICD-9
291.0	Alcohol Intoxication Delirium or Alcohol Withdrawal Delirium	1	DSM-IV- TR
291.1	Alcohol-Induced Persisting Amnestic Disorder	1	DSM-IV- TR
291.2	Alcohol-Induced Persisting Dementia	1	DSM-IV- TR
291.3	Alcohol-Induced Psychotic Disorder, With Hallucinations	1	DSM-IV- TR
291.4	PATHOLOGIC ALCOHOL INTOX	1	ICD-9
291.5	Alcohol-Induced Psychotic Disorder, With Delusions	1	DSM-IV- TR
291.8	ALCOHOLIC PSYCHOSIS NEC*	1	ICD-9
291.81	Alcohol Withdrawal	1	DSM-IV- TR
291.82	Alcohol-Induced Sleep Disorder	1	DSM-IV- TR
291.89	Alcohol-Induced Mood Disorder; Alcohol-Induced Sexual Dysfunction; Alcohol-Induced Sleep Disorder; Alcohol-Induced Anxiety Disorder	1	DSM-IV- TR
291.9	Alcohol-Related Disorder NOS	1	DSM-IV- TR

292	DRUG PSYCHOSES*	1	ICD-9
292.0	Amphetamine, Cocaine, Nicotine, Opioid, or Other (or Unknown)] Withdrawal; Sedative, Hypnotic or Anxiolytic Withdrawal	1	DSM-IV- TR
292.1	DRUG PARANOID/HALLUCINOS*	1	ICD-9
292.11	Amphetamine, Cannabis, Cocaine, Hallucinogen, Inhalant, Opioid, Phencyclidine, or Other (or Unknown) Substance-Induced Psychotic Disorder, With Delusions; Sedative, Hypnotic or Anxiolytic-Induced Psychotic Disorder, With Delusions	1	DSM-IV- TR
292.12	Amphetamine, Cannabis, Cocaine, Hallucinogen, Inhalant, Opioid, Phencyclidine, or Other (or Unknown)] Substance-Induced Psychotic Disorder, With Hallucinations; Sedative-, Hypnotic- or Anxiolytic-Induced Psychotic Disorder, With Hallucinations	1	DSM-IV- TR
292.2	PATHOLOGIC DRUG INTOX	1	ICD-9
292.8	OTHER DRUG MENTAL DIS*	1	ICD-9
292.81	Amphetamine, Cannabis, Cocaine, Hallucinogen, Inhalant, Opioid, Phencyclidine, or Other (or Unknown)] Substance Intoxication Delirium; Sedative, Hypnotic or Anxiolytic Intoxication or Withdrawal Delirium	1	DSM-IV- TR
292.82	Inhalant or Other (or Unknown) Substance-Induced Persisting Dementia; Sedative-, Hypnotic- or Anxiolytic- Induced Persisting Dementia	1	DSM-IV- TR
292.83	Other (or Unknown)] Substance-Induced Persisting Amnestic Disorder; Sedative-, Hypnotic- or Anxiolytic-Induced Persisting Amnestic Disorder	1	DSM-IV- TR

292.84	Amphetamine, Cocaine, Hallucinogen, Inhalant, Opioid, Phencyclidine, or Other (or Unknown) Substance-Induced Mood Disorder; Sedative-, Hypnotic- or Anxiolytic-Induced Mood Disorder	1	DSM-IV- TR
292.85	Amphetamine, Caffeine, Cocaine, Opioid, or Other (or Unknown) Substance-Induced Sleep Disorder, Sedative-, Hypnotic- or Anxiolytic- Induced Sleep Disorder	1	DSM-IV- TR
292.89	Substance-Induced Anxiety Disorder, Sexual Disfunction, Sleep Disorder, or Intoxication (Refer to the DSM-IV-TR); Hallucinogen Persisting Perception Disorder	1	DSM-IV- TR
292.9	Amphetamine, Caffeine, Cannabis, Cocaine, Hallucinogen, Inhalant, Nicotine, Opioid, Phencyclidine, or Other (or Unknown) Substance-Related Disorder NOS; Sedative-, Hypnotic- or Anxiolytic-Related Disorder NOS	1	DSM-IV- TR
293	TRANSIENT ORG MENTAL DIS*	1	ICD-9
293.0	Delirium Due to General Medical Condition	1	DSM-IV- TR
293.1	SUBACUTE DELIRIUM	1	ICD-9
293.8	OTH TRANSIENT ORG MENTAL*	1	ICD-9
293.81	Psychotic Disorder Due to [General Medical Condition], With Delusions	1	DSM-IV- TR
293.82	Psychotic Disorder Due to [General Medical Condition], With Hallucinations	1	DSM-IV- TR
293.83	Mood Disorder Due to General Medical Condition	1	DSM-IV- TR
293.84	Anxiety Disorder Due to General Medical Condition	1	DSM-IV- TR
293.89	Catatonic Disorder Due to General Medical Condition	1	DSM-IV- TR

293.9	Mental Disorder NOS due to General Medical Condition	1	DSM-IV- TR
294	OTHER ORGANIC PSYCH COND*	1	ICD-9
294.0	Amnestic Disorder Due to General Medical Condition	1	DSM-IV- TR
294.1	DEMENTIA IN OTH DISEASES*	1	ICD-9
294.10	Dementia of the Alzheimer's Type, With Early or Late Onset, Without Behavioral Disturbance; also Dementia Due to [medical condition]. Without Behavioral Disturbance	1	DSM-IV- TR
294.11	Dementia of the Alzheimer's Type, With Early or Late Onset, With Behavioral Disturbance; also Dementia Due to [medical condition]. With Behavioral Disturbance	1	DSM-IV- TR
294.8	Dementia NOS or Amnestic Disorder NOS	1	DSM-IV- TR
294.9	Cognitive Disorder NOS	1	DSM-IV- TR
295	SCHIZOPHRENIC DISORDERS*	1	ICD-9
295.0	SIMPLE SCHIZOPHRENIA*	1	ICD-9
295.00	SIMPLE SCHIZOPHREN- UNSPECIFIED	1	ICD-9
295.01	SIMPL SCHIZOPHREN-SUBCHR	1	ICD-9
295.02	SIMPLE SCHIZOPHREN-CHR	1	ICD-9
295.03	SIMP SCHIZ-SUBCHR/EXACER	1	ICD-9
295.04	SIMPL SCHIZO-CHR/EXACERB	1	ICD-9
295.05	SIMPL SCHIZOPHREN-REMISS	1	ICD-9
295.1	HEBEPHRENIA*	1	ICD-9
295.10	Schizophrenia, Disorganized Type	1	DSM-IV- TR
295.11	HEBEPHRENIA-SUBCHRONIC	1	ICD-9

295.12	HEBEPHRENIA-CHRONIC	1	ICD-9
295.13	HEBEPHREN-SUBCHR/EXACERB	1	ICD-9
295.14	HEBEPHRENIA-CHR/EXACERB	1	ICD-9
295.15	HEBEPHRENIA-REMISSION	1	ICD-9
295.2	CATATONIC SCHIZOPHRENIA*	1	ICD-9
295.20	Schizophrenia, Catatonic Type	1	DSM-IV- TR
295.21	CATATONIA-SUBCHRONIC	1	ICD-9
295.22	CATATONIA-CHRONIC	1	ICD-9
295.23	CATATONIA-SUBCHR/EXACERB	1	ICD-9
295.24	CATATONIA-CHR/EXACERB	1	ICD-9
295.25	CATATONIA-REMISSION	1	ICD-9
295.3	PARANOID SCHIZOPHRENIA*	1	ICD-9
295.30	Schizophrenia, Paranoid Type	1	DSM-IV- TR
295.31	PARANOID SCHIZO-SUBCHR	1	ICD-9
295.32	PARANOID SCHIZO-CHRONIC	1	ICD-9
293.32	TARANOID SCHIZO-CHRONIC	1	TCD )
295.33	PARAN SCHIZO-SUBCHR/EXAC	1	ICD-9
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295.33	PARAN SCHIZO-SUBCHR/EXAC	1	ICD-9
295.33 295.34	PARAN SCHIZO-SUBCHR/EXAC PARAN SCHIZO-CHR/EXACERB	1	ICD-9 ICD-9
295.33 295.34 295.35	PARAN SCHIZO-SUBCHR/EXAC PARAN SCHIZO-CHR/EXACERB PARANOID SCHIZO-REMISS	1 1 1	ICD-9 ICD-9 ICD-9
295.33 295.34 295.35 295.4	PARAN SCHIZO-SUBCHR/EXAC PARAN SCHIZO-CHR/EXACERB PARANOID SCHIZO-REMISS AC SCHIZOPHRENIC EPISODE*	1 1 1 1	ICD-9 ICD-9 ICD-9 ICD-9 DSM-IV-
295.33 295.34 295.35 295.4 295.40	PARAN SCHIZO-SUBCHR/EXAC PARAN SCHIZO-CHR/EXACERB PARANOID SCHIZO-REMISS AC SCHIZOPHRENIC EPISODE* Schizophreniform Disorder	1 1 1 1	ICD-9 ICD-9 ICD-9 ICD-9 DSM-IV-TR
295.33 295.34 295.35 295.4 295.40 295.41	PARAN SCHIZO-SUBCHR/EXAC  PARAN SCHIZO-CHR/EXACERB  PARANOID SCHIZO-REMISS  AC SCHIZOPHRENIC EPISODE*  Schizophreniform Disorder  AC SCHIZOPHRENIA-SUBCHR	1 1 1 1 1	ICD-9 ICD-9 ICD-9 ICD-9 DSM-IV-TR ICD-9
295.33 295.34 295.35 295.4 295.40 295.41 295.42	PARAN SCHIZO-SUBCHR/EXAC PARAN SCHIZO-CHR/EXACERB PARANOID SCHIZO-REMISS AC SCHIZOPHRENIC EPISODE* Schizophreniform Disorder AC SCHIZOPHRENIA-SUBCHR AC SCHIZOPHRENIA-CHR	1 1 1 1 1	ICD-9 ICD-9 ICD-9 ICD-9 DSM-IV-TR ICD-9 ICD-9

295.5	LATENT SCHIZOPHRENIA*	1	ICD-9
295.50	LATENT SCHIZOPHREN-UNSP	1	ICD-9
295.51	LAT SCHIZOPHREN-SUBCHR	1	ICD-9
295.52	LATENT SCHIZOPHREN-CHR	1	ICD-9
295.53	LAT SCHIZO-SUBCHR/EXACER	1	ICD-9
295.54	LATENT SCHIZO-CHR/EXACER	1	ICD-9
295.55	LAT SCHIZOPHREN-REMISS	1	ICD-9
295.6	RESIDUAL SCHIZOPHRENIA*	1	ICD-9
295.60	Schizophrenia, Residual Type	1	DSM-IV- TR
295.61	RESID SCHIZOPHREN-SUBCHR	1	ICD-9
295.62	RESIDUAL SCHIZOPHREN-CHR	1	ICD-9
295.63	RESID SCHIZO-SUBCHR/EXAC	1	ICD-9
295.64	RESID SCHIZO-CHR/EXACERB	1	ICD-9
295.65	RESID SCHIZOPHREN-REMISS	1	ICD-9
295.7	SCHIZOAFFECTIVE TYPE*	1	ICD-9
295.70	Schizoaffective Disorder	1	DSM-IV- TR
295.71	SCHIZOAFFECTIVE-SUBCHR	1	ICD-9
295.72	SCHIZOAFFECTIVE-CHRONIC	1	ICD-9
295.73	SCHIZOAFF-SUBCHR/EXACER	1	ICD-9
295.74	SCHIZOAFFECT-CHR/EXACER	1	ICD-9
295.75	SCHIZOAFFECTIVE-REMISS	1	ICD-9
295.8	SCHIZOPHRENIA NEC*	1	ICD-9
295.80	SCHIZOPHRENIA NEC-UNSPEC	1	ICD-9
295.81	SCHIZOPHRENIA NEC-SUBCHR	1	ICD-9
295.82	SCHIZOPHRENIA NEC-CHR	1	ICD-9
295.83	SCHIZO NEC-SUBCHR/EXACER	1	ICD-9

295.84	SCHIZO NEC-CHR/EXACERB	1	ICD-9
295.85	SCHIZOPHRENIA NEC-REMISS	1	ICD-9
295.9	SCHIZOPHRENIA NOS*	1	ICD-9
295.90	Schizophrenia Undifferentiated Type	1	DSM-IV- TR
295.91	SCHIZOPHRENIA NOS-SUBCHR	1	ICD-9
295.92	SCHIZOPHRENIA NOS-CHR	1	ICD-9
295.93	SCHIZO NOS-SUBCHR/EXACER	1	ICD-9
295.94	SCHIZO NOS-CHR/EXACERB	1	ICD-9
295.95	SCHIZOPHRENIA NOS-REMISS	1	ICD-9
296	AFFECTIVE PSYCHOSES*	1	ICD-9
296.0	MANIC DIS, SINGL EPISODE*	1	ICD-9
296.00	Bipolar I Disorder, Single Manic Episode, Unspecified	1	DSM-IV- TR
296.01	Bipolar I Disorder, Single Manic Episode, Mild	1	DSM-IV- TR
296.02	Bipolar I Disorder, Single Manic Episode, Moderate	1	DSM-IV- TR
296.03	Bipolar I Disorder, Single Manic Episode, Severe Without Psychotic Features	1	DSM-IV- TR
296.04	Bipolar I Disorder, Single Manic Episode, Severe With Psychotic Features	1	DSM-IV- TR
296.05	Bipolar I Disorder, Single Manic Episode, In Partial Remission	1	DSM-IV- TR
296.06	Bipolar I Disorder, Single Manic Episode, In Full Remission	1	DSM-IV- TR
296.1	MANIC, RECURRENT EPISODE*	1	ICD-9
296.10	RECUR MANIC DIS-UNSPEC	1	ICD-9
296.11	RECUR MANIC DIS-MILD	1	ICD-9
296.12	RECUR MANIC DIS-MOD	1	ICD-9

296.13	RECUR MANIC DIS-SEVERE	1	ICD-9
296.14	RECUR MANIC-SEV W PSYCHO	1	ICD-9
296.15	RECUR MANIC-PART REMISS	1	ICD-9
296.16	RECUR MANIC-FULL REMISS	1	ICD-9
296.2	DEPR PSYCH, SINGL EPISOD*	1	ICD-9
296.20	Major Depressive Disorder, Single Episode, Unspecified	1	DSM-IV- TR
296.21	Major Depressive Disorder, Single Episode, Mild	1	DSM-IV- TR
296.22	Major Depressive Disorder, Single Episode, Moderate	1	DSM-IV- TR
296.23	Major Depressive Disorder, Single Episode, Severe Without Psychotic Features	1	DSM-IV- TR
296.24	Major Depressive Disorder, Single Episode, Severe With Psychotic Features	1	DSM-IV- TR
296.25	Major Depressive Disorder, Single Episode, In Partial Remission	1	DSM-IV- TR
296.26	Major Depressive Disorder, Single Episode, In Full Remission	1	DSM-IV- TR
296.3	DEPR PSYCH, RECUR EPISOD*	1	ICD-9
296.30	Major Depressive Disorder, Recurrent, Unspecified	1	DSM-IV- TR
296.31	Major Depressive Disorder, Recurrent, Mild	1	DSM-IV- TR
296.32	Major Depressive Disorder, Recurrent, Moderate	1	DSM-IV- TR
296.33	Major Depressive Disorder, Recurrent, Severe Without Psychotic Features	1	DSM-IV- TR
296.34	Major Depressive Disorder, Recurrent, Severe With Psychotic Features	1	DSM-IV- TR
296.35	Major Depressive Disorder, Recurrent, In Partial Remission	1	DSM-IV- TR

296.36	Major Depressive Disorder, Recurrent, In Full Remission	1	DSM-IV- TR
296.4	BIPOLAR AFFECTIVE, MANIC*	1	ICD-9
296.40	Bipolar I Disorder, Most Recent Episode Hypomanic or Manic, Unspecified	1	DSM-IV- TR
296.41	Bipolar I Disorder, Most Recent Episode Manic, Mild	1	DSM-IV- TR
296.42	Bipolar I Disorder, Most Recent Episode Manic, Moderate	1	DSM-IV- TR
296.43	Bipolar I Disorder, Most Recent Episode Manic, Severe Without Psychotic Features	1	DSM-IV- TR
296.44	Bipolar I Disorder, Most Recent Episode Manic, Severe With Psychotic Features	1	DSM-IV- TR
296.45	Bipolar I Disorder, Most Recent Episode Manic, In Partial Remission	1	DSM-IV- TR
296.46	Bipolar I Disorder, Most Recent Episode Manic, In Full Remission	1	DSM-IV- TR
296.5	BIPOLAR AFFECT, DEPRESS*	1	ICD-9
296.50	Bipolar I Disorder, Most Recent Episode Depressed, Unspecified	1	DSM-IV- TR
296.51	Bipolar I Disorder, Most Recent Episode Depressed, Mild	1	DSM-IV- TR
296.52	Bipolar I Disorder, Most Recent Episode Depressed, Moderate	1	DSM-IV- TR
296.53	Bipolar I Disorder, Most Recent Episode Depressed, Severe Without Psychotic Features	1	DSM-IV- TR
296.54	Bipolar I Disorder, Most Recent Episode Depressed, Severe With Psychotic Features	1	DSM-IV- TR
296.55	Bipolar I Disorder, Most Recent Episode Depressed, In Partial Remission	1	DSM-IV- TR
296.56	Bipolar I Disorder, Most Recent Episode	1	DSM-IV-

	Depressed, In Full Remission		TR
296.6	BIPOLAR AFFECTIVE, MIXED*	1	ICD-9
296.60	Bipolar I Disorder, Most Recent Episode Mixed, Unspecified	1	DSM-IV- TR
296.61	Bipolar I Disorder, Most Recent Episode Mixed, Mild	1	DSM-IV- TR
296.62	Bipolar I Disorder, Most Recent Episode Mixed, Moderate	1	DSM-IV- TR
296.63	Bipolar I Disorder, Most Recent Episode Mixed, Severe Without Psychotic Features	1	DSM-IV- TR
296.64	Bipolar I Disorder, Most Recent Episode Mixed, Severe With Psychotic Features	1	DSM-IV- TR
296.65	Bipolar I Disorder, Most Recent Episode Mixed, In Partial Remission	1	DSM-IV- TR
296.66	Bipolar I Disorder, Most Recent Episode Mixed, In Full Remission	1	DSM-IV- TR
296.7	Bipolar I Disorder, Most Recent Episode Unspecified	1	DSM-IV- TR
296.8	MANIC-DEPRESSIVE NEC/NOS*	1	ICD-9
296.80	Bipolar Disorder NOS	1	DSM-IV- TR
296.81	ATYPICAL MANIC DISORDER	1	ICD-9
296.82	ATYPICAL DEPRESSIVE DIS	1	ICD-9
296.89	Bipolar II Disorder	1	DSM-IV- TR
296.9	AFFECT PSYCHOSES NEC/NOS*	1	ICD-9
296.90	Mood Disorder NOS	1	DSM-IV- TR
296.99	AFFECTIVE PSYCHOSES NEC	1	ICD-9
297	PARANOID STATES*	1	ICD-9
297.0	PARANOID STATE, SIMPLE	1	ICD-9

297.1	Delusional Disorder	1	DSM-IV- TR
297.2	PARAPHRENIA	1	ICD-9
297.3	Shared Psychotic Disorder	1	DSM-IV- TR
297.8	PARANOID STATES NEC	1	ICD-9
297.9	PARANOID STATE NOS	1	ICD-9
298	OTH NONORGANIC PSYCHOSES*	1	ICD-9
298.0	REACT DEPRESS PSYCHOSIS	1	ICD-9
298.1	EXCITATIV TYPE PSYCHOSIS	1	ICD-9
298.2	REACTIVE CONFUSION	1	ICD-9
298.3	ACUTE PARANOID REACTION	1	ICD-9
298.4	PSYCHOGEN PARANOID PSYCH	1	ICD-9
298.8	Brief Psychotic Disorder	1	DSM-IV- TR
298.9	Psychotic Disorder NOS	1	DSM-IV- TR
299	PSYCHOSES OF CHILDHOOD*	1	ICD-9
299.0	INFANTILE AUTISM*	1	ICD-9
299.00	Autistic Disorder	1	DSM-IV- TR
299.01	INFANTILE AUTISM-RESID	1	ICD-9
299.1	DISINTEGRATIVE PSYCHOSIS*	1	ICD-9
299.10	Childhood Disintegrative Disorder	1	DSM-IV- TR
299.11	DISINTEGR PSYCH-RESIDUAL	1	ICD-9
299.8	EARLY CHLD PSYCHOSES NEC*	1	ICD-9
299.80	Pervasive Developmental Disorder NOS including Rett's Disorder and Asperger's Disorder	1	DSM-IV- TR

299.81	CHILD PSYCHOS NEC-RESID	1	ICD-9
299.9	EARLY CHLD PSYCHOSIS NOS*	1	ICD-9
299.90	CHILD PSYCHOS NOS-ACTIVE	1	ICD-9
299.91	CHILD PSYCHOS NOS-RESID	1	ICD-9
300	NEUROTIC DISORDERS*	1	ICD-9
300.0	ANXIETY STATES*	1	ICD-9
300.00	Anxiety Disorder NOS	1	DSM-IV- TR
300.01	Panic Disorder Without Agoraphobia	1	DSM-IV- TR
300.02	Generalized Anxiety Disorder	1	DSM-IV- TR
300.09	ANXIETY STATE NEC	1	ICD-9
300.1	HYSTERIA*	1	ICD-9
300.10	HYSTERIA NOS	1	ICD-9
300.11	Conversion Disorder	1	DSM-IV- TR
300.12	Dissociative Amnesia	1	DSM-IV- TR
300.13	Dissociative Fugue	1	DSM-IV- TR
300.14	Dissociative Identity Disorder	1	DSM-IV- TR
300.15	Dissociative Disorder NOS	1	DSM-IV- TR
300.16	Factitious Disorder With Predominantly Psychological Signs and Symptoms	1	DSM-IV- TR
300.19	Factitious Disorder NOS, With Combined Psychological and Physical Signs and Symptoms, With Predominantly Physical Signs and Symptoms	1	DSM-IV- TR

300.2	PHOBIC DISORDERS*	1	ICD-9
300.20	PHOBIA NOS	1	ICD-9
300.21	Panic Disorder With Agoraphobia	1	DSM-IV- TR
300.22	Agoraphobia Without History of Panic Disorder	1	DSM-IV- TR
300.23	Social Phobia	1	DSM-IV- TR
300.29	Specific Phobia	1	DSM-IV- TR
300.3	Obsessive-Compulsive Disorder	1	DSM-IV- TR
300.4	Dysthymic Disorder	1	DSM-IV- TR
300.5	NEURASTHENIA	1	ICD-9
300.6	Depersonalization Disorder	1	DSM-IV- TR
300.7	Body Dysmorphic Disorder or Hypochondriasis	1	DSM-IV- TR
300.8	NEUROTIC DISORDERS NEC*	1	ICD-9
300.81	Somatization Disorder	1	DSM-IV- TR
300.82	Undifferentiated Somatoform Disorder or Somatoform Disorder NOS	1	DSM-IV- TR
300.89	NEUROTIC DISORDERS NEC	1	ICD-9
300.9	Unspecified Mental Disorder (nonpsychotic)	1	DSM-IV- TR
301	PERSONALITY DISORDERS*	2	ICD-9
301.0	Paranoid Personality Disorder	2	DSM-IV- TR
301.1	AFFECTIVE PERSONALITY*	2	ICD-9
301.10	AFFECTIV PERSONALITY NOS	2	ICD-9

301.11	CHRONIC HYPOMANIC PERSON	2	ICD-9
301.12	CHR DEPRESSIVE PERSON	2	ICD-9
301.13	Cyclothymic Disorder	1	DSM-IV- TR
301.2	SCHIZOID PERSONALITY*	2	ICD-9
301.20	Schizoid Personality Disorder	2	DSM-IV- TR
301.21	INTROVERTED PERSONALITY	2	ICD-9
301.22	Schizotypal Personality Disorder	2	DSM-IV- TR
301.3	EXPLOSIVE PERSONALITY	2	ICD-9
301.4	Obsessive-Compulsive Personality Disorder	2	DSM-IV- TR
301.50	Histrionic Personality Disorder	2	DSM-IV- TR
301.51	CHR FACTITIOUS ILLNESS	1	ICD-9
301.59	HISTRIONIC PERSON NEC	2	ICD-9
301.6	Dependent Personality Disorder	2	DSM-IV- TR
301.7	Antisocial Personality Disorder	2	DSM-IV- TR
301.8	OTHER PERSONALITY DIS*	2	ICD-9
301.81	Narcissistic Personality Disorder	2	DSM-IV- TR
301.82	Avoidant Personality Disorder	2	DSM-IV- TR
301.83	Borderline Personality Disorder	2	DSM-IV- TR
301.84	PASSIVE-AGGRESSIV PERSON	2	ICD-9
301.89	PERSONALITY DISORDER NEC	2	ICD-9
301.9	Personality Disorder NOS	2	DSM-IV-

			TR
302	SEXUAL DISORDERS*	1	ICD-9
302.0	EGO-DYSTONIC HOMOSEXLTY	1	ICD-9
302.1	ZOOPHILIA	1	ICD-9
302.2	Pedophilia	1	DSM-IV- TR
302.3	Transvestic Fetishism	1	DSM-IV- TR
302.4	Exhibitionism	1	DSM-IV- TR
302.5	TRANS-SEXUALISM*	1	ICD-9
302.50	TRANS-SEXUALISM NOS	1	ICD-9
302.51	TRANS-SEXUALISM, ASEXUAL	1	ICD-9
302.52	TRANS-SEXUAL, HOMOSEXUAL	1	ICD-9
302.53	TRANS-SEX, HETEROSEXUAL	1	ICD-9
302.6	Gender Identity Disorder in Children or Gender Identity Disorder NOS	1	DSM-IV- TR
302.7	PSYCHOSEXUAL DYSFUNCTION*	1	ICD-9
302.70	Sexual Dysfunction NOS	1	DSM-IV- TR
302.71	Hypoactive Sexual Desire Disorder	1	DSM-IV- TR
302.72	Female Sexual Arousal Disorder or Male Erectile Disorder	1	DSM-IV- TR
302.73	Female Orgasmic Disorder	1	DSM-IV- TR
302.74	Male Orgasmic Disorder	1	DSM-IV- TR
302.75	Premature Ejaculation	1	DSM-IV- TR
302.76	Dyspareunia (Not Due to a General	1	DSM-IV-

	Medical Condition)		TR
302.79	Sexual Aversion Disorder	1	DSM-IV- TR
302.8	PSYCHOSEXUAL DIS NEC*	1	ICD-9
302.81	Fetishism	1	DSM-IV- TR
302.82	Voyeurism	1	DSM-IV- TR
302.83	Sexual Masochism	1	DSM-IV- TR
302.84	Sexual Sadism	1	DSM-IV- TR
302.85	Gender Identity Disorder in Adolescents or Adults	1	DSM-IV- TR
302.89	Frotteurism	1	DSM-IV- TR
306	PSYCHOPHYSIOLOGIC DIS*	1	ICD-9
306.0	PSYCHOGEN MUSCULSKEL DIS	1	ICD-9
306.1	PSYCHOGENIC RESPIR DIS	1	ICD-9
306.2	PSYCHOGEN CARDIOVASC DIS	1	ICD-9
306.3	PSYCHOGENIC SKIN DISEASE	1	ICD-9
306.4	PSYCHOGENIC GI DISEASE	1	ICD-9
306.5	PSYCHOGENIC GU DISEASE*	1	ICD-9
306.50	PSYCHOGENIC GU DIS NOS	1	ICD-9
306.51	Vaginismus (Not Due to a General Medical Condition)	1	DSM-IV- TR
306.52	PSYCHOGENIC DYSMENORRHEA	1	ICD-9
306.53	PSYCHOGENIC DYSURIA	1	ICD-9
306.59	PSYCHOGENIC GU DIS NEC	1	ICD-9
306.6	PSYCHOGEN ENDOCRINE DIS	1	ICD-9

306.7	PSYCHOGENIC SENSORY DIS	1	ICD-9
306.8	PSYCHOGENIC DISORDER NEC	1	ICD-9
306.9	PSYCHOGENIC DISORDER NOS	1	ICD-9
307	SPECIAL SYMPTOM NEC*	1	ICD-9
307.0	Stuttering	1	DSM-IV- TR
307.1	Anorexia Nervosa	1	DSM-IV- TR
307.2	TICS*	1	ICD-9
307.20	Tic Disorder NOS	1	DSM-IV- TR
307.21	Transient Tic Disorder	1	DSM-IV- TR
307.22	Chronic Motor or Vocal Tic Disorder	1	DSM-IV- TR
307.23	Tourette's Disorder	1	DSM-IV- TR
307.3	Stereotypic Movement Disorder	1	DSM-IV- TR
307.4	NONORGANIC SLEEP DISORD*	1	ICD-9
307.40	NONORGANIC SLEEP DIS NOS	1	ICD-9
307.41	TRANSIENT INSOMNIA	1	ICD-9
307.42	Primary Insomnia	1	DSM-IV- TR
307.43	TRANSIENT HYPERSOMNIA	1	ICD-9
307.44	Primary Hypersomnia	1	DSM-IV- TR
307.45	DISRUPT SLEEP-WAKE CYCLE	1	ICD-9
307.46	Sleep Terror Disorder or Sleepwalking Disorder	1	DSM-IV- TR
307.47	Nightmare Disorder, Dyssomnia NOS,	1	DSM-IV-

	Parasomnia NOS		TR
307.48	REPETIT SLEEP INTRUSION	1	ICD-9
307.49	NONORGANIC SLEEP DIS NEC	1	ICD-9
307.5	EATING DISORDERS NEC/NOS*	1	ICD-9
307.50	Eating Disorder NOS	1	DSM-IV- TR
307.51	Bulimia Nervosa	1	DSM-IV- TR
307.52	Pica	1	DSM-IV- TR
307.53	Rumination Disorder	1	DSM-IV- TR
307.54	PSYCHOGENIC VOMITING	1	ICD-9
307.59	Feeding Disorder of Infancy or Early Childhood	1	DSM-IV- TR
307.6	Enuresis (Not Due to a General Medical Condition)	1	DSM-IV- TR
307.7	Encopresis Without Constipation and Overflow Incontinence	1	DSM-IV- TR
307.8	PSYCHALGIA*	1	ICD-9
307.80	Pain Disorder Associated With Psychological Factors	1	DSM-IV- TR
307.81	TENSION HEADACHE	1	ICD-9
307.89	Pain Disorder Associated With Both Psychological Factors and a General Medical Condition	1	DSM-IV- TR
307.9	Communication Disorder NOS	1	DSM-IV- TR
308	ACUTE REACTION TO STRESS*	1	ICD-9
308.0	STRESS REACT, EMOTIONAL	1	ICD-9
308.1	STRESS REACTION, FUGUE	1	ICD-9

308.2	STRESS REACT, PSYCHOMOT	1	ICD-9
308.3	Acute Stress Disorder	1	DSM-IV- TR
308.4	STRESS REACT, MIXED DIS	1	ICD-9
308.9	ACUTE STRESS REACT NOS	1	ICD-9
309	ADJUSTMENT REACTION*	1	ICD-9
309.0	Adjustment Disorder With Depressed Mood	1	DSM-IV- TR
309.1	PROLONG DEPRESSIVE REACT	1	ICD-9
309.2	ADJUST REACT/OTH EMOTION*	1	ICD-9
309.21	Separation Anxiety Disorder	1	DSM-IV- TR
309.22	EMANCIPATION DISORDER	1	ICD-9
309.23	ACADEMIC/WORK INHIBITION	1	ICD-9
309.24	Adjustment Disorder With Anxiety	1	DSM-IV- TR
309.28	Adjustment Disorder With Mixed Anxiety and Depressed Mood	1	DSM-IV- TR
309.29	ADJ REACT-EMOTION NEC	1	ICD-9
309.3	Adjustment Disorder With Disturbance of Conduct	1	DSM-IV- TR
309.4	Adjustment Disorder With Mixed Disturbance of Emotions and Conduct	1	DSM-IV- TR
309.8	OTHER ADJUST REACTION*	1	ICD-9
309.81	Posttraumatic Stress Disorder	1	DSM-IV- TR
309.82	ADJUST REACT-PHYS SYMPT	1	ICD-9
309.83	ADJUST REACT-WITHDRAWAL	1	ICD-9
309.89	ADJUSTMENT REACTION NEC	1	ICD-9
309.9	Adjustment Disorder Unspecified	1	DSM-IV- TR

310	Specific Non-Psychotic Disorders due to Brain Damage	1	ICD-9
310.0	FRONTAL LOBE SYNDROME	1	ICD-9
310.1	Personality Disorder Due to General Medical Condition	2	DSM-IV- TR
310.2	POSTCONCUSSION SYNDROME	1	ICD-9
310.8	NONPSYCHOT BRAIN SYN NEC	1	ICD-9
310.9	NONPSYCHOT BRAIN SYN NOS	1	ICD-9
311	Depressive Disorder NOS	1	DSM-IV- TR
312	CONDUCT DISTURBANCE NEC*	1	ICD-9
312.0	UNSOCIALIZED AGGRESSION*	1	ICD-9
312.00	UNSOCIAL AGGRESS-UNSPEC	1	ICD-9
312.01	UNSOCIAL AGGRESSION-MILD	1	ICD-9
312.02	UNSOCIAL AGGRESSION-MOD	1	ICD-9
312.03	UNSOCIAL AGGRESS-SEVERE	1	ICD-9
312.1	UNSOCIALIZ, UNAGGRESSIVE*	1	ICD-9
312.10	UNSOCIAL UNAGGRESS-UNSP	1	ICD-9
312.11	UNSOCIAL UNAGGRESS-MILD	1	ICD-9
312.12	UNSOCIAL UNAGGRESS-MOD	1	ICD-9
312.13	UNSOCIAL UNAGGR-SEVERE	1	ICD-9
312.2	SOCIALIZED CONDUCT DIS*	1	ICD-9
312.20	SOCIAL CONDUCT DIS-UNSP	1	ICD-9
312.21	SOCIAL CONDUCT DIS-MILD	1	ICD-9
312.22	SOCIAL CONDUCT DIS-MOD	1	ICD-9
312.23	SOCIAL CONDUCT DIS-SEV	1	ICD-9
312.3	IMPULSE CONTROL DIS NEC*	1	ICD-9
312.30	Impulse-Control Disorder NOS	1	DSM-IV-

			TR
312.31	Pathological Gambling	1	DSM-IV- TR
312.32	Kleptomania	1	DSM-IV- TR
312.33	Pyromania	1	DSM-IV- TR
312.34	Intermittent Explosive Disorder	1	DSM-IV- TR
312.35	ISOLATED EXPLOSIVE DIS	1	ICD-9
312.39	Trichotillomania	1	DSM-IV- TR
312.4	MIX DIS CONDUCT/EMOTION	1	ICD-9
312.8	OTHER CONDUCT DISTURB*	1	ICD-9
312.81	Conduct Disorder, Childhood-Onset Type	1	DSM-IV- TR
312.82	Conduct Disorder, Adolescent-Onset Type	1	DSM-IV- TR
312.89	Conduct Disorder, Unspecified Onset	1	DSM-IV- TR
312.9	Disruptive Behavior Disorder NOS	1	DSM-IV- TR
313	EMOTIONAL DIS CHILD/ADOL*	1	ICD-9
313.0	OVERANXIOUS DISORDER	1	ICD-9
313.1	MISERY & UNHAPPINESS DIS	1	ICD-9
313.2	SENSITIVITY & WITHDRAWAL*	1	ICD-9
313.21	SHYNESS DISORDER-CHILD	1	ICD-9
313.22	INTROVERTED DIS-CHILD	1	ICD-9
313.23	Selective Mutism	1	DSM-IV- TR
313.3	RELATIONSHIP PROBLEMS	1	ICD-9

313.8	OTH EMOTIONAL DIS CHILD*	1	ICD-9
313.81	Oppositional Defiant Disorder	1	DSM-IV- TR
313.82	Identity Problem	1	DSM-IV- TR
313.83	ACADEMIC UNDERACHIEVMENT	1	ICD-9
313.89	Reactive Attachment Disorder of Infancy or Early Childhood	1	DSM-IV- TR
313.9	Disorder of Infancy, Childhood, or Adolescence NOS	1	DSM-IV- TR
314	HYPERKINETIC SYNDROME*	1	ICD-9
314.0	ATTENTION DEFICIT DIS*	1	ICD-9
314.00	Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type	1	DSM-IV- TR
314.01	Attention-Deficit/Hyperactivity Disorder, Combined Type or Attention- Deficit/Hyperactivity Disorder Predominantly Hyperactive-Impulsive Type	1	DSM-IV- TR
314.1	HYPERKINET W DEVEL DELAY	1	ICD-9
314.2	HYPERKINETIC CONDUCT DIS	1	ICD-9
314.8	OTHER HYPERKINETIC SYND	1	ICD-9
314.9	Attention-Deficit/Hyperactivity Disorder NOS	1	DSM-IV- TR
315	SPECIFIC DEVELOP DELAYS*	1	ICD-9
315.0	SPECIFIC READING DIS*	1	ICD-9
315.00	Reading Disorder	1	DSM-IV- TR
315.01	ALEXIA	1	ICD-9
315.02	DEVELOPMENTAL DYSLEXIA	1	ICD-9
315.09	READING DISORDER NEC	1	ICD-9

315.1	Mathematics Disorder	1	DSM-IV- TR
315.2	Disorder of Written Expression	1	DSM-IV- TR
315.3	SPEECH/LANGUAGE DISORDER*	1	ICD-9
315.31	Expressive Language Disorder	1	DSM-IV- TR
315.32	Mixed Receptive-Expressive Language Disorder	1	DSM-IV- TR
315.39	Phonological Disorder	1	DSM-IV- TR
315.4	Developmental Coordination Disorder	1	DSM-IV- TR
315.5	MIXED DEVELOPMENT DIS	1	ICD-9
315.8	DEVELOPMENT DELAYS NEC	1	ICD-9
315.9	Learning Disorder NOS	1	DSM-IV- TR
316	Psychological Factors Affecting Medical Condition	1	DSM-IV- TR
317	Mild mental retardation	2	DSM-IV- TR
318	OTHER MENTAL RETARDATION*	2	ICD-9
318.0	Moderate Mental Retardation	2	DSM-IV- TR
318.1	Severe Mental Retardation	2	DSM-IV- TR
318.2	Profound Mental Retardation	2	DSM-IV- TR
319	Mental Retardation, Severity Unspecified	2	DSM-IV- TR
327.01	Sleep Disorder Due to [General Medical Condition], Insomnia Type	1	DSM-IV- TR

327.02	Insomnia related to [Axis I or Axis II Disorder]	1	DSM-IV- TR
327.14	Sleep Disorder Due to [General Medical Condition], Hypersomnia Type	1	DSM-IV- TR
327.15	Hypersomnia Related to [Axis I or Axis II Disorder]	1	DSM-IV- TR
327.30	Circadian Rhythm Sleep Disorder, Unspecified Type	1	DSM-IV- TR
327.31	Circadian Rhythm Sleep Disorder, Delayed Sleep Phase Type	1	DSM-IV- TR
327.35	Circadian Rhythm Sleep Disorder, Jet Lag Type	1	DSM-IV- TR
327.36	Circadian Rhythm Sleep Disorder, Shift Work Type	1	DSM-IV- TR
327.44	Sleep Disorder Due to [General Medical Condition], Parasomnia Type	1	DSM-IV- TR
327.8	Sleep Disorder Due to [General Medical Condition], Mixed Type	1	DSM-IV- TR
332.1	Neuroleptic-Induced Parkinsonism	1	DSM-IV- TR
333.1	Medication-Induced Postural Tremor	1	DSM-IV- TR
333.7	Neuroleptic-Induced Acute Dystonia	1	DSM-IV- TR
333.82	Neuroleptic-Induced Tardive Dyskinesia	1	DSM-IV- TR
333.90	Medication-Induced Movement Disorder NOS	1	DSM-IV- TR
333.92	Neuroleptic Malignant Syndrome	1	DSM-IV- TR
333.99	Neuroleptic-Induced Acute Akathisia	1	DSM-IV- TR
347.00	Narcolepsy	1	DSM-IV- TR

607.84	Male Erectile Disorder Due to [General Medical Condition]	1	DSM-IV- TR
608.89	Male Dyspareunia Due to [General Medical Condition], Other Male Sexual Dysfunction Due to [General Medical Condition], Male Hypoactive Sexual Desire Disorder Due to [General Medical Condition]	1	DSM-IV- TR
625.0	Female Dyspareunia Due to [General Medical Condition]	1	DSM-IV- TR
625.8	Female Hypoactive Sexual Desire Disorder Due to [General Medical Condition], Other Female Sexual Dysfunction Due to [General Medical Condition]	1	DSM-IV- TR
780.09	Delirium NOS	1	DSM-IV- TR
780.93	Age-Related Cognitive Decline	1	DSM-IV- TR
787.6	Encopresis, With Constipation and Overflow Incontinence	1	DSM-IV- TR
799.9	Diagnosis or Condition Deferred on Axis I or Diagnosis Deferred on Axis II	1	DSM-IV- TR
995.2	Adverse Effects of Medication NOS	1	DSM-IV- TR
995.52	Neglect of Child (if focus of attention is on victim)	1	DSM-IV- TR
995.53	Sexual abuse of child (if focus of attention is on victim)	1	DSM-IV- TR
995.54	Physical abuse of child (if focus of attention is on victim)	1	DSM-IV- TR
995.81	Physical abuse of adult (if focus of attention is on victim)	1	DSM-IV- TR
995.83	Sexual abuse of adult (if focus of attention is on victim)	1	DSM-IV- TR
V15.81	Noncompliance With Treatment	1	DSM-IV-

			TR
V61.10	Partner Relational Problem	1	DSM-IV- TR
V61.12	Physical or Sexual Abuse of Adult (if by a partner)	1	DSM-IV- TR
V61.20	Parent-Child Relational Problem	1	DSM-IV- TR
V61.21	Sexual or Physical Abuse or Neglect of Child	1	DSM-IV- TR
V61.8	Sibling Relational Problem	1	DSM-IV- TR
V61.9	Relational Problem Related to [a Mental Disorder or General Medical Condition]	1	DSM-IV- TR
V62.29	Occupational Problem	1	DSM-IV- TR
V62.3	Academic Problem	1	DSM-IV- TR
V62.4	Acculturation Problem	1	DSM-IV- TR
V62.81	Relational Problem NOS	1	DSM-IV- TR
V62.82	Bereavement	1	DSM-IV- TR
V62.83	Physical or Sexual Abuse of Adult (if by person other than partner)	1	DSM-IV- TR
V62.89	Borderline Intellectual Functioning, Religious or Spiritual Problem, or Phase of Life Problem	1	DSM-IV- TR
V65.2	Malingering	1	DSM-IV- TR
V71.01	Adult Antisocial Behavior	1	DSM-IV- TR
V71.02	Child or Adolescent Antisocial Behavior	1	DSM-IV- TR

# 5. TSOS Screening Data Normalized to NTDS Data Dictionary

Injury Cohort Definition: All 11 conditions must be met

Age 18 or greater = TRUE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary D 08 Value = or > 18
- NTDSDataDictionary D 09 Value = 4

Inpatient admission start date/time within 24 hours = TRUE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary inclusion criteria p. iv
  - "Hospital admission as defined by your trauma registry inclusion criteria; OR patient transfer via EMS transport (including air ambulance) from one hospital to another hospital..."

Current admission includes a qualifying injury diagnosis = TRUE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary inclusion criteria p. iv
  - At least one of the following injury diagnostic codes:
  - ICD-9-CM: 800 959.9
  - ICD-10-CM: S00-S99 with 7th character modifiers of A, B, or C ONLY
  - ICD-10-CM: T07
  - ICD-10-CM: T14
  - ICD-10-CM: T20-T28 with 7th character modifier of A ONLY
  - ICD-10-CM: T30-T32

• ICD-10-CM: T79.A1-T79.A9 with 7th character modifier of A ONLY

#### Actively psychotic = FALSE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary NOT INCLUDED

#### Actively suicidal = FALSE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary NOT INCLUDED

### Injury is self-inflicted = FALSE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary I 06 or I 10 Values:
  - ICD-9-CM: E950-E959
  - ICD-9-CM: E950-E959
  - ICD-9-CM: E980-E989
- NTDSDataDictionary I\_07 or I\_11 Values:
  - ICD-10: X60–X84

#### Is a prisoner = FALSE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary NOT INCLUDED

### Speaks English = TRUE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary NOT INCLUDED

Has a terminal illness = FALSE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary DG 01 Value = 12 or 25 or
  - Any of the following diagnoses:
  - Stage 4 cancer
  - End-stage renal disease
  - End-stage liver disease
  - Late-stage AIDS (or "Full-blown AIDS")
  - Severe symptomatic AIDS

Has an ongoing cognitive impairment = FALSE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary NOT INCLUDED

Has 2 or more contacts = TRUE

- TSOS data category: Injury cohort
- NIH Collaboratory data variety: Study data
- NTDSDataDictionary NOT INCLUDED

10-domain PTSD Risk Factor Screening Elements: Screen is POSITIVE if there are 3 or more TRUE elements

Female sex = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary D 12 Value = 2

Race is nonwhite = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary D 10 Value < 6

Funding source indicates low socioeconomic status = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary F\_01 Value <> 4

#### Admitted to intensive care unit = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary ED 19 Value = 8

#### Prior inpatient hospitalizations = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary NOT INCLUDED

### Injury etiology is intentional = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary NOT INCLUDED
  - At least one of the following injury diagnostic codes:
  - ICD-9-CM: E96-E99
  - ICD-10-CM: Under review

#### Active tobacco user = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary DG 01 Value = 8

#### Active substance or alcohol user = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary ED 17 Value > 2 (3 = trace, 4 = beyond legal limit)
- NTDSDataDictionary ED 18 Value > 2 (3 = prescription drug, 4 = illegal drug)

• NTDSDataDictionary - DG\_01 Value = 2 AND/OR 28

## Has a PTSD diagnosis = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary NOT INCLUDED
  - At least one of the following diagnostic codes:
  - ICD-9-CM: 309.81
  - ICD-10-CM: Under review

## Has a psychiatric disorder diagnosis = TRUE

- TSOS data category: Ten-item PTSD risk screen
- NIH Collaboratory data variety: Clinical data
- NTDSDataDictionary DG 01 Value = 27

# 6. TSOS Injury Cohort & 10 PTSD Risk Domains Worksheet

Data Location			
	Medical Record	Ward or Patient Observation	Patient interview
Injury Cohort			
Injury			
Age			
Psych			
Non-English			
Prisoner			
10 PTSD Risk Domains			
Sex			
Race/Ethnicity			
Intentional			
Public or Veteran (Insurance)			
ICU			
Previous Hospitalization			
Alcohol & Drug (BAC)			
Tobacco			
PTSD			
Other Mental Health Diagnoses			