Arizona Department of Health Services
Bureau of EMS & Trauma System
Trauma Registry Users Group (TRUG)

Trauma Registry Users Group (TRUG) Meeting Minutes
Wednesday, November 19, 2008 9:30 a.m. – noon
Location: Arizona Dept. of Health Services
150 North 18th Avenue Phoenix AZ 85007
5th Floor – 540A Conference Room
Contact: Anita Ray Ng 602-542-1245 raya@azdhs.gov

Attendees:

Krista Anheluk	Bill Ashland	Paul Bowlby	Joel Bunis	Lisa Bunis
Jane Burney	Vicki Conditt	Michelle Guadnola	David Harden	Karen Helmer
Valerie Hill	Claire Holmes	Shawna Hosler	Xan Hummel	Rose Johnson
Kelley Lewellyn	Alice Magno	Cynthia Marks	Beth Mlenar	Melissa Moyer
Donna Quay	Anita Ray Ng	Linda Tuck	Veronica Videa	David Villa
Cristina Wong	Heather Young			

A) The ADHS Trauma Registry has been moved to the Bureau of EMS & Trauma System. The EMS Database and Trauma Registry are now in the same section of ADHS, supervised by Joel Bunis. Introductions were made for Joel Bunis, Data and QA Section Chief and Krista Anheluk, Trauma & EMS Specialist.

B) Data Validation
1) Validation tool will be similar in format to the NTDS validator, but will be customized by Lancet to meet our state's specific needs.
   a) For ASTR data, we will allow a maximum of 5% for Blanks and Not Documented responses. The cut-off will not apply to the prehospital data fields, which rely upon EMS agency documentation. (FYI – The ADHS Hospital Discharge Database currently rejects records with more than 1.5 % submitted as Blank or Not Documented.)
2) Education/Training - ADHS budget constraints prevent ADHS from hosting a trauma registry ICD-9 training. Hospitals could choose to host a class and allow attendees to register. ADHS will investigate other educational tools.

C) 2008 Required Data Elements

1) ASTR 2008 Data Dictionary – Corrections are needed for a few short text values under the triage criteria and hospital list. An updated data dictionary will be sent out to TRUG members after the 2009 changes are finalized.

2) Recent picklist imports - Flagstaff needs assistance importing the updates. The other hospitals in attendance confirmed they have removed the 2007 lists and updated their zip code files.

3) Airway Management clarifications
   a) Per request of users and BEMSTS, the Field Airway Management picklist will be updated for 2009 to the following:

OXYG	Oxygen administration or nasal canula only
RSISUC	RSI - Intubation Attempt Successful
RSIUNS	RSI - Intubation Attempt Unsuccessful
OETT	Oral ETT - Intubation Successful (screen text update)
NETT	Nasal ETT - Intubation Successful (screen text update)
INTUNS	Not RSI - Intubation Unsuccessful

BMV	Bag Valve Mask (BVM / BMV) (screen text update)
PULSEOX	Pulse Oximetry (new)
~~EOA~~	~~Esophageal obturator (Combitube)~~ (mark as not in use)
ETDLAD	ETDLAD / Combitube (new)
LMA	Laryngeal Mask Airway (LMA) (new)
CAPN	Capnography
AUTOV	Autoventilator
ORAL	Oropharyngeal airway (OPA) (screen text update)
NASO	Nasopharyngeal airway (NPA)
CRIC	Cricothyrotomy
TRACH	Tracheostomy
NOT	Not performed per documentation

- 2009 changes: Remove Esophagael Obturator and move Combitube to new category with ETDLAD. Add Pulse Oximetry and LMA. Update data entry long text for clarification.
- Discussion was held. Users do not want an Intubation sub-picklist because it slows data entry. Additional information will be added to the data dictionary for clarification:
    - Registrar should enter all documented attempts. Example: If patient had two unsuccessful RSI attempts and then a successful RSI attempt, all three attempts should be documented.
    - Intubation will be implied with successful RSI.
    - Oxygen administration will be implied with successful intubation. The long text for the first option will remain as "Oxygen administration or nasal canula only".

4) Questions from STAB/AZTQ meeting regarding outliers in the 2007 data – For expired patients, are ED Exit Time and Hospital Discharge Time being entered as the time when death is pronounced? Or is the Length of Stay longer because of organ harvesting?
   a) For patients who expire, all hospitals consistently reported that they are entering the ED Exit Time or Hospital Discharge Time as the time that the death was <u>pronounced</u>. Per hospitals, the length of stay is not being extended for organ donation patients. No change in picklist or definition is required. A note will be added to ASTR data dictionary.

5) Inclusion Criteria questions were referred back to TRUG for a decision (see Appendix 1 "Specific Scenarios – Meet Inclusion Criteria for ASTR?")
   a) The current inclusion wording does not account for patients who came in by private vehicle, did not activate the trauma team and were transferred to a trauma center without admission. This scenario is occurring at the smaller reporting facilities. Item 1 of the inclusion criteria will be clarified to add: 1B - A patient with injury who is transported <u>via EMS transport</u> from one acute care hospital to another acute care hospital.

6) Financial data (Hospital Charges / Total Reimbursements) – An error was discovered in the data schema for reimbursements. Sammy from Lancet will be contacting hospitals to check this field. Hospital schema will be checked against the AZ database to identify other fields that are not exporting correctly.

7) Problems with data links and autofills – Several data entry errors have been attributed to incorrect data links and autofilled values. Please check data link values and remove any invalid autofills. ASTR relies on hospital registrars to confirm that the trauma data is entered according to the data dictionary and that it is accurate. Any identified errors will be returned for correction.

8) Results of Blank and "Not on Picklist" checks – 1st and 2nd quarter 2008
   a) Results of blank check reports will be sent to hospitals after data schema issues are corrected.
   b) Anita will discuss results of the "Not on Picklist" reports with Lancet and report back to hospitals.

c) The 2007 Referring Facility data was used to create the most recent AZTQ/STAB reports. Of the records with a transferring facility listed, 50% were missing the referring facility length of stay. Complete data is needed to assist the advisory boards with analyzing the state trauma system.

9) User questions on prehospital "Transported From (Origin)" field:
   a) If injury occurred in jail/prison, do you select "From Jail or Prison" or "From Injury Scene"?
   b) If injury occurred in a nursing home, do you select "From Nursing Home" or "From Injury Scene"?
      (i) Discussion was held. These two options were selected very rarely in the first two quarters of 2008 data and the picklist is confusing. Resolution: "From Jail or Prison" and "From Nursing Home" will be removed from the picklist to eliminate confusion. Users will select "From Injury Scene" for these types of locations. The picklist for E849 Injury Event Location will be expanded to capture Residential Institution injury scene details. More information to follow by email.

INJ_SCENE	From Injury Scene	The origin (location the patient came from) immediately before arrival at the hospital (or EMS Destination). This field applies to all patients, both EMS and non-EMS transports.
REFER_FAC	From Referring Hospital	If patient was injured at home and was transported from home, select "From Injury Scene". If patient was NOT injured at home, but went home before going to the hospital, origin would be: "From Home but Home was NOT the injury scene".
CLINIC_OFF	From Clinic/Doctor Office	
URGENT_CAR	From Urgent Care Center	
NURS-HM	From Nursing Home (includes SNF)	(remove from picklist - instead use "From Injury Scene") – Nursing Home will be removed from this field and captured in the E849 Injury Location.
EMS_REND	From EMS Rendezvous Point	
HOME	From Home but Home was NOT the injury scene	
JAIL_PRISO	From Jail or Prison	(remove from picklist - instead use "From Injury Scene") – Jail or Prison will be removed from this field and captured in the E849 Injury Location.
OTHER	From Other Location	(text update: "From Other Location (NOT Injury Scene)"

D) Discussion regarding "Patient Position in Vehicle" / E-codes – E821 / Definition of "ATV":
1) The design of the E-code system is making it difficult to get a true count of the number of ATV-related events. The E821 picklist refers to off-road vehicles, but E-codes do not specify which type of off-road vehicle was involved. For example, code E821.0 could refer to the driver of a 3 wheeler, Quad, Rhino, Sandrail, Dune Buggy, Golf Cart, Go Kart, military vehicle, etc. In addition, if an ATV was being operated on a street or highway at the time of injury, the off-road E-821 codes would not be used. ASTR does not have an injury text narrative to query for ATVs.
2) There are also data entry errors with regards to ATV incidents currently reported. When looking at quarter 1 and quarter 2 data from 2008, there were many records where the Patient Position in Vehicle was coded as "ATV Driver/Passenger (3 or more tires, all terrain)" but the E-code pertains to a motorcycle (E821.2 or E821.3). These records will be flagged in the data validation.

3) Discussion was held. Injuries from ATVs are a popular reporting topic. An off-road sub-picklist will be added to the Position in Vehicle field to further clarify the type of off-road vehicle for reporting. Information on this picklist update will be emailed for TRUG review.

E) Required Data Elements for reporting year 2009 – discuss if we need any changes:

a) Need better ATV details than we can get from the E-coding (see above item D)
b) Should we add Law Enforcement Number (text field) for linking EMS database?
   (i) Hospitals reported that they receive this information less than 1% of the time. Data element will not be added at this time. Item may be readdressed for 2010 data.
c) Should we add an Injury Narrative (text field) to verify and supplement E-codes?
   (i) An Injury Narrative field is needed for E-code data QA and to supplement the injury details that are not specified in the E-codes. Most of the reporting hospitals already have an Injury Narrative field. Anita will contact Lancet about mapping this field to ASTR and adding it to the hospital registries without this field. Detailed instructions will be send out regarding what information should be entered in this field.
d) Identifying pregnant patients?
   (i) NTDS removed "Pregnancy" from the co-morbidity list for 2008 data, but this decision affects the ability to report on the number of pregnant patients. The only indication of pregnancy in the 2008 data is under EMS triage criteria but this field only captures triaged patients who were > 20 weeks pregnant. Discussion was held. Decision was made to add "Pregnancy" back into the co-morbidity list for 2009. This picklist selection will not be exported to NTDS.
e) Border Patrol Involvement?
   (i) In an effort to limit database changes, this field will not be added at this time. Hospitals may add this field if they wish to capture it. Item may be readdressed for 2010.
f) Referring Facility transfer reason?
   (i) Discussion was held. It was reported that the vast majority of trauma patients are transferred due to requiring a higher level of care. Field will not be added at this time.
g) Transfer delays – ex: Number of calls to receiving hospital?
   (i) Discussion was held. Transferring facilities want ability to capture information on transfer delays, such as the number of calls made before finding an accepting hospital. Other transfer barriers were suggested, such as weather, lack of EMS transporters, etc. This field will become important as more Level III and IV hospitals report to ASTR. Data element will not be added in 2009, but it will be discussed for 2010 data entry.
h) Format of prehospital transports & need to identify which set of vital signs are being entered:
   (i) TRUG requested we customize the trauma databases to identify which set of vitals pertain to which EMS agency. We also need a way to always capture the first scene vitals for NTDS export, even if those vitals are Not Documented. Discussion was held on possible solutions. Anita will contact Lancet to find out the easiest way to address this software change.
   (ii) Note following meeting: Anita discussed with Lancet the best format for prehospital data. Lancet's recommendation: Vital signs should be moved into the main prehospital EMS data block with only one set of vitals captured per run sheet. Field airway management can be moved to the main prehospital tab as a separate field to allow for multiple entries.
i) "ED Disposition list is not inclusive (cath lab, interventional radiology, GI lab, pacemaker lab, etc.)" For 2009, we will continue to follow the NTDS list. This field may be re-addressed for 2010. When selecting the appropriate disposition, keep in mind that NTDS is using disposition to "roughly characterize the functional status of the patient at discharge". Please capture the disposition that most closely represents the level of <u>medical care</u> the patient required at discharge.
j) "Hospital Disposition list does not include jail, psych facility, other." For 2009, we will continue to follow the NTDS list. This field may be re-addressed for 2010. Again, when selecting the appropriate disposition, keep in mind that NTDS is using disposition to "roughly characterize the functional status of the patient at discharge". Please capture the disposition that most closely represents the level of <u>medical care</u> the patient required at discharge. Instructions from the NTDS data dictionary:
   - Field value = 6, "home" refers to any place of residence (jail, institutional care, etc)

- Disposition to any other non-medical facility should be coded as 6: Discharged home with no home services.
- Disposition to any other medical facility should be coded as 9: Discharged/Transferred to another type of rehabilitation or long-term care facility

k) AIS 2005 updates / Functional Capacity Index – The AIS website indicates the scale has been updated effective October 2008 and updated pages cost $50 per user. Need to determine how this will affect data entry/reporting.
   (i) Questions were raised regarding the Level I Trauma Center requirement to capture both AIS 2005 and ICD-9-CM diagnosis codes and the time it takes to enter both codes. This item can be addressed at the next rule change, but for now, the requirement is in effect per trauma registry rules.

l) Co-morbidities/Complications - matching the NTDS definition for 2009? NTDS instructions for the data entry of co-morbidities and complications changed in the middle of 2008. The ASTR 2009 data entry instructions for these fields will be updated, effective for ED/Hospital Arrival Dates January 1, 2009 forward. 2009 Changes:
   (a) Not Applicable will be used when patient has no known co-morbidities or complications.
   (b) "Other co-morbidities exist not on this list" and "Other complications exist not on this list" will be added to the 2009 picklist.
   (c) The options of "No NTDS Co-morbidities…" and "No NTDS Complications…" will be removed from these picklists.
   (d) If it becomes necessary to capture additional co-morbidities or complications at the state level, the discussion will be brought to TRUG for discussion.

F) User question regarding child abuse cases documented as suspected, probable, possible – how often is this happening and how are these being coded?
   1) Hospital staff indicated that E-codes for child abuse can only be used if confirmed in the medical record. Some hospitals are documenting probable or suspected abuse in the injury narrative field, but only the confirmed abuse is being coded in the E-codes. Thus, actual child abuse cases in trauma registries will likely be underreported.

G) User question regarding coding duplicate diagnoses or procedures according to new ICD-9 guidelines (ex: code for each splint and ORIF – left ankle, right ankle, wrist?)
   1) Discussion was held. The same procedure code may be entered more than once per record.
   2) The new ICD-9 guidelines do not allow the same diagnosis code to be used twice in one record. TRUG members requested that duplicate diagnosis codes be allowed, when applicable. Decision was made that ASTR will allow duplicate entry of the same diagnosis code (for situations such as bilateral injuries where the patient has more than one injury categorized under the same ICD-9 or AIS code.)

H) User request: Definitions for NTDS alternate residence picklist (undocumented citizen, migrant, foreign visitor). Per NTDS, field is only required when zip code is unavailable. We do not have AZ definitions for this NTDS required field. An email was sent several months ago to NTDB requesting clarification.

I) Further questions, concerns or database problems to report?
   1) Question was posed regarding what EMS agency to enter if only the First Responder run sheet is received but patient was transported by another provider. Example: Glendale Fire turns in a run sheet to a hospital. The registrar knows that Glendale Fire did not transport the patient, but no run sheet is received from the EMS Transporter.
      a) Discussion was held and the decision was made to continue data entry according to the data dictionary instructions. Unless the First Responder actually transported the patient, the First Responder should not be entered as the EMS Transporter. An entry should be made for the EMS First Responder, with the transport fields flagged as Not Applicable. A second entry would be made for the EMS Transporter. "Unknown EMS Ground Transport (not specified)" would be selected for the EMS Agency.

J) The 2009 TRUG meeting schedule will be emailed and posted online.