

Trauma Registry Users Group
SRS Learning Center
Room 3
June 9, 2010
1pm – 3pm

Present: Janelle Dimond, Tereasa DeMeritt, Paula Mills, Rachel Reimer, Shawn Sill, Vicki Richards, Voncille Dirks, Lois Towster, Alvina Fant, Debra Edwards, Debby Trujillo, Kandy Worchester, Amy Bucholtz, Stacey Ary, Dan Robinson, Dan Russell, Dee Vernberg

Dan Robinson called the meeting to order at 1:00pm.

Trauma Program Update:

Dan Robinson

Rosanne was unable to attend the meeting due to a schedule conflict. Dan Robinson gave the program report in her stead. The policy group committee is scheduled to meet in July. Dan explained the policy group makes recommendations regarding the direction of the registry encompassing data collection ideas, more efficient means of feedback, and research topics. The policy group meetings are open meetings and all registrars are invited to attend.

The contract with DI will be renewed for another year.

KEMIS and Collector Bridge

Dan Russell

Dan Russell summarized the linking project between Collector and KEMIS's prehospital data collection system. Currently, work is underway mapping the data sets between the two systems. Dan expressed the program is very excited about the project and believes it will be a great benefit for registrars while improving the overall data accuracy.

-The remainder of the topics have corresponding slides in the attached powerpoint presentation. Please view the presentation to see the material that was displayed during the meeting. A synopsis of each topic is included below.-

Inclusion Criteria

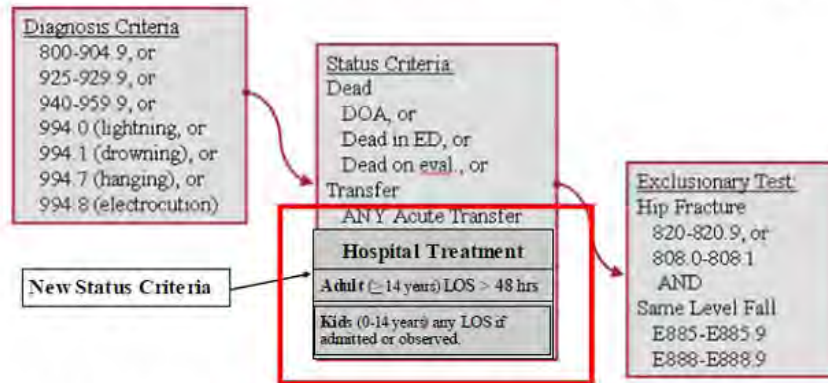
Dan Robinson

Hospital admission (Hospital Treatment as illustrated below) under the status portion of the inclusion criteria was altered due to observed changes in hospital admission practices. Formal admission to the hospital is no longer an inclusionary consideration for adult patients. Instead, hospital length of stay is used to determine inclusion. Adult patients who meet the diagnoses criteria must have a hospital length of stay greater than or equal to 48 hours.

The admission portion for including pediatrics did not change, but was re-worded for clarity. The element of time was removed entirely leaving only admission status for inclusionary considerations. Pediatric patients who meet the diagnosis criteria must also have an admission status of "in-patient" or "observation."

Dan reiterated these changes are only for the “hospital treatment” portion under the status criteria as illustrated below.

Inclusion Criteria Change



- Adults: hospital length of stay greater than or equal to 48 hours
- Pediatrics: admission status of in-patient or observation

Altered and New Data Elements

Dan Robinson

Trauma Team Leader:

The Trauma Team Leader is identified by using one of the following criteria:

- If your hospital has an identified trauma team, the team leader is the individual selected as that trauma team’s leader.
- If your hospital does not have an identified trauma team, the team leader is the physician (mid-level practitioner or higher) responsible for managing the patient’s immediate care. The term immediate care encompasses the decision to triage through providing ED care.

Collector determines timeliness by comparing the team leader’s arrival date and time to the EMERGENCY DEPARTMENT ARRIVAL date and time (entered in the demographic tab). The team leader’s arrival time is defined as the time the physician sees the patient.

There are several differences between the local and web versions for the trauma team leader that warrant further discussion.

- The local version allows for each member of the trauma team to be identified. The team leader is then specified by selecting the trauma leader’s role.
- The local version also allows the facility to decrease the threshold. Facilities can only decrease the threshold, they cannot increase it.

- The web version only asks for the role or position of the team leader.
- The web version only allows for a threshold of 30 minutes.

Several questions asked concerning the trauma team leader follow below.

- What if the leader is required to be present before the patient arrives?
 - The policy committee and ACT have approved a change that will allow the software to collect a leader's arrival of 30 min prior to the patient's arrival without triggering a check.
 - In the interim, validate the check.
- What if the ED physician was already in the ER when the patient arrived?
 - Enter the patient's EMERGENCY DEPARTMENT ARRIVAL date and time for the leader's arrival time.
- Can an RN be considered a trauma leader for this data element?
 - No. A trauma leader for this data element must be a mid-level practitioner or higher.

DI Coder:

The update locked the injury narrative and the coding section under the Anatomical Diagnosis tab and added the coding module button to assist in accurate data collection. The movement of the element did not affect how injury data is entered into Collector.

Another Acute Care Higher or Lower:

The 2010 update changed "another acute care facility" to "another acute care facility for higher level of care" and added "another acute care facility same or lower level of care" as a different option under the "discharge to" data element. A registrar can discern the two options by reviewing if additional resources were the cause of the transfer.

"Another acute care facility for higher level of care" refers purely to the resources needed in caring for the patient and does not refer to the actual designated level of a facility. If a level 1 center transfers a patient to another facility for services not offered at the level 1, that transfer would be considered "to another acute care facility for higher level of care."

"Another acute care facility same or lower level of care" describes incidents of repatriation or transfers for reasons of insurance.

Secondary Payor:

Secondary payor is now a state required field, which activates once data is entered into the primary payor field.

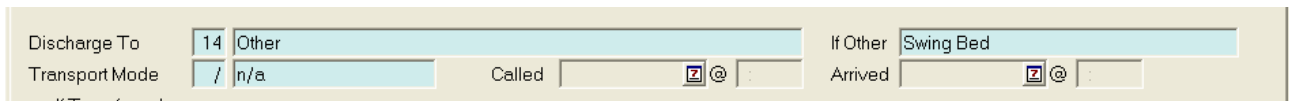
Proper use of the Discharge to "Other" option

Dan Robinson

Dan explained analysis of trauma submissions has shown there is confusion among some facilities about which part of a patient's acute care is captured by the trauma record. It is important for registrars to remember the trauma record captures a patient's acute care stay, which does not necessarily end after the ED. The "discharge to" field captures where the patient was released after discharged from the facility, which should involve

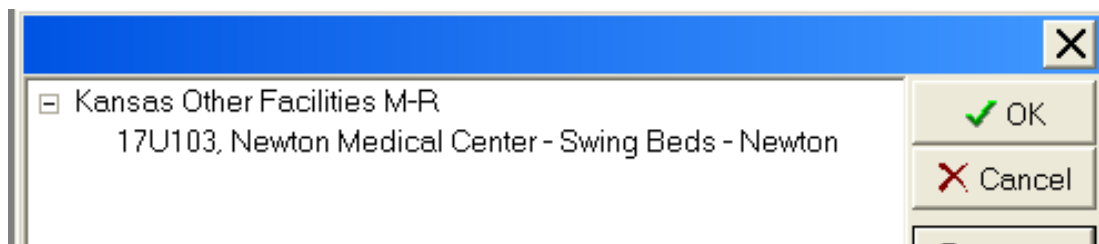
either the end of the patient's acute care stay or a transfer to another facility for additional resources. The end of an acute care stay should be identified by a discharge to home (which also encompasses institutional residencies), rehabilitation center, skilled nursing facility, etc.

The current pick list in Collector for the "discharge to" field is rather extensive and should cover most scenarios. However, registrars can use the "other" option if a case involves a destination not covered in the pick list. An example of such a case is a patient who is discharged to a swing bed. A patient discharged to a swing bed is accurately annotated in Collector by choosing "other" from the pick list in the discharge to field and typing the words "swing bed" in the "other" text field as illustrated below.



The screenshot shows a software interface with several input fields. The 'Discharge To' field contains '14 Other'. The 'If Other' field contains 'Swing Bed'. Below these are fields for 'Transport Mode' (containing '/ n/a'), 'Called', and 'Arrived', each with a small icon and a '@' symbol.

The only exception to using "other" for swing bed is for Newton Medical Center. The Kansas Other Facilities category holds an option for Newton-Swing Bed as illustrated below. Newton is currently the only facility that has a swing bed option.



Dan made note that the policy group will discuss entering swing bed facility numbers into Collector during July's meeting. He also stated if facilities want their swing bed facility numbers included in Collector to send the request along with the swing bed CMS number to either Dan Russell or Dee Vernberg.

The bulleted items below are examples of inappropriate "other" destinations. These examples also indicate an incomplete record because the patient's stay has not been fully documented.

- Patient was moved from ED to floor bed
- Patient was moved to surgery
- Patient was moved to OR
- Patient's status changed to acute status at same hospital
- Patient was admitted to the facility
- Patient was admitted to acute bed at the facility
- Patient status changed to in-patient

All of the above examples indicate the patient is still receiving acute care at that facility. Thus, the records are incomplete and do not adequately portray the complete acute care received by those patients.

The key point to remember is the “discharge to” field is where the patient is released after discharge from the facility not moved from the ER.

A question was asked about collecting times for transport modes other than EMS for the transport mode field under the outcomes tab. Dan explained the policy group will revisit the options in the pick list for this field during July’s meeting. In the mean time, the state is only concerned with the times for the transport of unstable patients, which should only involve EMS as the transport mode.

Regarding the arrival time for transport mode under the outcomes tab, registrars should collect the time EMS arrived at the facility to pick up the patient.

Using Data Reports for Completeness and Accuracy Dan Robinson

The data reports can be used as a tool to measure data completeness and accuracy. The documentation section lists the percentage of times each reported ED variable is recorded in the record. This percentage can give the registrar a completeness snap-shot of their ED data.

If low percentages are observed for any of the listed items in the documentation section, the registrar can review the records in an effort to assess if the missing ED data is due to a lack of documentation or interpretation errors.

Dan moved the discussion to the PI worksheet. [Click here to view the PI worksheet](#). The data reports have several pages dedicated to PI. The PI section is composed of multiple PI indicators of which every record submitted to the state is compared. A record will appear under the outlier section of the data report if it does not fit the criteria or business rules set by a PI indicator. Some facilities confuse this section of the data report as an evaluation. The outlier section only lists records that may need additional review. Not all the records listed in the outlier section are due to hospital performance. The PI worksheet gives critical thinking points for why a record may be an outlier.

Data Accuracy: Injury Narrative Dan Robinson

An obvious but crucial part of the registry is the accuracy of the entered data. Data analysis maybe hindered or misleading if the entered data is inaccurate, vague, or incomplete. The injury narrative is a section of the registry that is extremely susceptible to inaccurate or vague data.

Data inaccuracy can occur regardless if a facility uses ICD 9 codes or the injury description in entering injury data. Below are some examples of vague injury data found in the registry and the affects that data has on the record.

- Fx of bones of trunk closed NFS
 - No ISS because Tri-Code does not recognize the injury

- Head Injury NOS
 - No ISS
 - Frequently Observed In the Registry

- Intracranial injury NOS closed
 - No ISS
- Intracranial injury NOS closed loc unspecified
 - No ISS

- Fx unspecified bone, closed
 - No ISS
 - Collector will only recognize this injury through ICD9 codes 829.0 and 829.1 which will still not yield an ISS
- 959-959.3 and 959.6-959.9 (Injury Other and Unspecified) will not code at all
 - No ISS

- Late effect of tendon injury (905.8)
 - No ISS

!!LATE EFFECTS INJURIES ARE NOT INCLUDED IN THE CRITERIA!!

Registrars can search the physician and nurses notes as well as the radiology reports for more detailed information if such a vague injury description is found on the record.

Guidance was asked for cases that only include “Head Injury NOS” in the physician notes. Dan instructed to enter the vague injury if “Head Injury NOS” or some other nondescript injury is the only additional information that can be found in the notes.

Future Projects

Dee Vernberg

Dee discussed two future projects that concern the registry. The Rural Trauma Team Development Course (RTTDC) instructors are requesting data from the registry for the facility undergoing the course. They are also requesting that registrars participate in the first part of the course. Dee explained the PI worksheet will play a part in the PI portion of the course.

The South Central region is planning another linkage project. This project involves the creation of a communication network between hospital registrars to efficiently move information.

QA/QI Comp/Core

Dee Vernberg

The trauma program is working on a mapping between the QA/QI comprehensive and the QA/QI core tabs that will automatically populate data into the core tab from the comprehensive tab. Currently, registrars must manually enter the data into both tabs. The program is hopeful the mapping will be a part of the 2010 patch projected for July. In the mean time, registrars can use the QA/QI worksheet to help translate the comprehensive options to the core options. [Click here to view the QA/QI worksheet.](#)

Off-Road Vehicle Findings

Dee Vernberg

Dee described some of the off-road finds she has seen in the past year. Some registrars have found problems where Collector will lock the off-road field for certain ecodes

(animal ridden and pedal cycle) but require an entry for the off-road field during the checks process.

Announcement of *Impact Registry*

Dan Robinson

[Click here to view *Impact Registry May 2010 Edition*](#). The trauma program has released the first edition of the registry specific newsletter, *Impact Registry*. Dan asked the group for suggestions on disseminating registry information through the state. Some attendees suggested using a listserv or other email oriented mediums.

Registry Training Schedule

Dan Robinson

No comments were made on the training schedule for 2010 and 2011.

Scenarios

Dan Robinson

See the scenario portion of the attached presentation.

Adjourned: 2:30pm.

Users Group Meeting June 9, 2010 SRS Learning Center

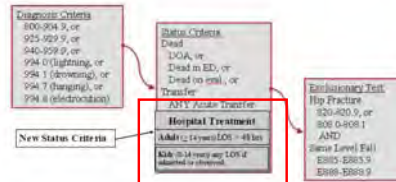


Dan Robinson
Dan Russell
Dee Vernberg

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Inclusion Criteria Change



- Adults: hospital length of stay greater than or equal to 48 hours
- Pediatrics: admission status of in-patient or observation

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Altered and New Data Elements

Trauma Team Leader

Local Version

Web Version

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Trauma Team Leader Cont.

Definition:

This element is defined based on the existence of a trauma team at your facility.

- If your facility has a trauma team, the trauma team leader identifies the individual selected as the team leader.
- If your facility does not have a trauma team, the trauma team leader is the physician (MLP or higher) responsible for managing the patient's immediate care.

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Trauma Team Leader Cont.

Questions Brought up after Release

- What if the leader is required to be present before the patient arrives?
 - The policy committee and ACT have approved a change that will allow the software to collect a leader's arrival of 30 min prior to the patient's arrival without triggering a check.
 - In the interim, validate the check.

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Trauma Team Leader Cont.

Questions Brought up after Release

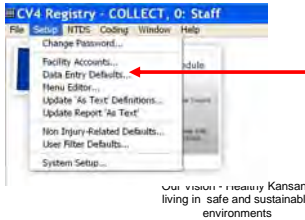
- What if the ED physician was already in the ER when the patient arrived?
 - Enter the patient's EDA date and time for the leader's arrival time.
- Can an RN be considered a trauma leader for this data element?
 - No. A trauma leader for this data element must be a mid-level practitioner or higher.

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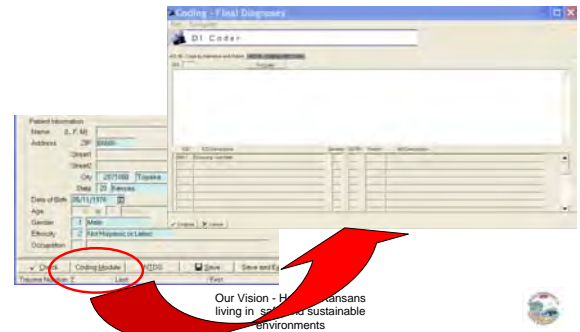
Trauma Team Leader Cont.

Any guesses on how to change the default 30min threshold for the local version of Collector?



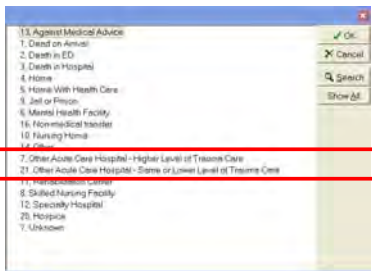
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DI Coding Module



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Discharge to: Higher or Lower Level?



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Discharge to: Higher or Lower Level?

The two options for other acute care hospital were created to better determine transfers to another acute care hospital for definitive care.

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Discharge to: Higher or Lower Level?

- **Other acute care facility for higher level of care**
 - This option refers purely to the resources needed in caring for the patient and does not refer to the actual designated level of a facility. If a level 1 center transfers a patient to another facility for services not offered at the level 1, that transfer would be considered "to another acute care facility for higher level of care."
- **Other acute care facility for same or lower level of care**
 - This option would be chosen for incidents of repatriation or transfers for reasons of insurance.

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New Core Element: Secondary Payor

- Secondary Payor is now a core element
 - Activates after Primary Payor is entered



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Discharge to "Other"

What is this element asking?

- The trauma record captures the patient's acute care stay
- The question to consider for this field
 - Is the patient's acute care complete or was the patient transferred for further acute care needs

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Discharge to "Other"

- Discharge to
 - the place where the patient is released when discharged from your facility.
 - Transferred to another acute care facility for additional resources
 - Completion of acute care (discharged home, rehab, nursing home, etc...)

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Discharge to "Other"

Current List of options for the discharge to field

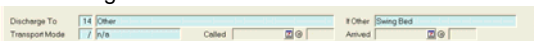


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Discharge to "Other"

- Choose "other" for a destination not specified in the current list
- Example:
 - Swing Bed



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Discharge to "Other"

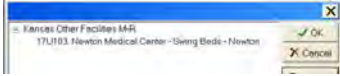
- Would a record capture a patient as discharged to a floor bed?
- More examples of inappropriate destinations for discharge to "other:"
 - Patient was moved from ED to floor bed
 - Patient was moved to surgery
 - Patient was moved to OR
 - Patient's status changed to acute status at same hospital
 - Patient was admitted to the facility
 - Patient was admitted to acute bed at the facility
 - Patient status changed to in-patient

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Discharge to "Other"

- Doesn't Newton have a Swing Bed option in the "Kansas Other Facilities" category?



- Swing Bed facility numbers will be discussed at the next policy committee meeting

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Using Data Reports for Completeness and Accuracy

Run down of the Data Report

- Feedback on the data submitted to the State
- Compare hospital case mix
- Performance Review Indicators
 - Filters for identifying cases for review

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Using Data Reports for Completeness and Accuracy

- Documentation Section
 - % time the following variables are recorded in ED

Documentation						
The following clinical measures will be documented in the ED.						
	Hospital		Region		State	
Glasgow Coma Scale	100%	100%	100%	100%	100%	100%
ED Arrival Date & Time	100%	100%	100%	100%	100%	100%
Injury Date & Time	100%	100%	100%	100%	100%	100%
Respiratory Rate	100%	100%	100%	100%	100%	100%
Systolic Blood Pressure	100%	100%	100%	100%	100%	100%
Heart Rate	100%	100%	100%	100%	100%	100%
Temperature	100%	100%	100%	100%	100%	100%
Procedure Start Time (for any procedure)	100%	100%	100%	100%	100%	100%
Discharge Date & Time	100%	100%	100%	100%	100%	100%

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PI Review

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PI Review

Topline Reasons for Outliers							
Transfer	Transfer	Transfer	Transfer	Transfer	Transfer	Transfer	Transfer
20%	20%	20%	20%	20%	20%	20%	20%
20%	20%	20%	20%	20%	20%	20%	20%
20%	20%	20%	20%	20%	20%	20%	20%

- Lists records for review
- Not records that "failed"
- Are possible reasons for the outliers aside from hospital performance

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PI Review Worksheet

Data Report Indicator	Reasons for Outlier
For all transferred patients: elapsed time between emergency department arrival and discharge to another acute care hospital does not exceed 6 hours.	<ol style="list-style-type: none"> 1. Weather that does not permit travel, e.g., high winds prevent helicopter from flying. 2. Road conditions, e.g., icy. 3. No EMS is available to travel (mutual aid agreements?) 4. Referral facility acceptance, bed availability, physician availability. 5. Patient too unstable, e.g., actively coding, uncontrolled bleeding. 6. Decision to transfer based on diagnosis, findings – Number of procedures performed or time to perform procedure (e.g., radiology (CT scan); ETOH withdrawal, as necessary (as available), OR, etc.) to do plans failed to identify job as EMT alert busy. 7. Delay in recognition that patient needs specialized care in hospital with higher level of care – missed injury. 8. Patient deterioration – change in patient status. 9. Patient or patient's family did not want to travel but then condition indicated that transportation was not an option.
For transfers with initial SBP <90 or GCS <8: elapsed time between ED and discharge to another acute care hospital does not exceed 1 hour.	<p>Same as above plus:</p> <ul style="list-style-type: none"> • Delay in specialist consultation.

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PI Review Worksheet

Data Report Indicator	Reasons for Outlier
A definitive airway will be established before transfer of a conscious patient (GCS ≥ 8). Definitive airways include EMTA, nasotracheal, oral endotracheal tube, nasal endotracheal tube.	1. Never possible or acceptable always a variance
Patients with suspected traumatic brain injury (moderate to severe conc, initial GCS < 12) are transferred to a level I or level II trauma center for treatment.	<ol style="list-style-type: none"> 1. Patient may have initial GCS < 12, but after a short period of time, the patient's level of consciousness increased and there were no significant signs of brain injury on diagnostic tests. 2. Decision to treat patient. 3. Patient did not want to be transferred.
Patients with pneumothorax or hemothorax/effusion receive a chest tube before transfer to another acute care facility.	1. No provider with available skill set (referring facility)
Trauma team leader response is timely. (Team leader in ED)	<ol style="list-style-type: none"> 1. Multiple incident to mass casualty event. Triage'd but not treated immediately. 2. Patient system malfunction. 3. Other exams not responding to page or call. 4. Weather affected travel in physician on call.
Patients with hip, knee, shoulder, elbow or ankle dislocations receive reduction within 6 hours of ED arrival. Excludes patients who died or who were discharged within 6 hours of ED arrival.	<ol style="list-style-type: none"> 1. Other more severe injuries are being treated first. 2. No provider with available skill set. 3. Failed attempt to reduce. 4. Delay in transfer.
Patients with a low-grade spine, ischemic, AIS < 3 undergo splenectomy.	<ol style="list-style-type: none"> 1. Physician preference. Depending on patient status, comorbidity, etc. 2. Other associated injuries that would indicate need for splenectomy (such as severe associated head or thoracic injury). 3. Shock.

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PI Review Worksheet

Data Report Indicator	Reasons for Outlier
Patients with penetrating abdominal injury and GCS < 9, unstable vitals or hypotension within 60 minutes of ED arrival.	<ol style="list-style-type: none"> 1) No provider with available skill set 2) Unable to stabilize (e.g.,) 3) Availability of OR. 4) Expectation not indicated because abdominal injury not severe. 5) Blood pressure increases after initial ED visits blood pressure. 6) Delay in transfer.

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Data Accuracy: Injury Data

- Fx of bones of trunk closed NFS
 - No ISS because Tri-Code does not recognize the injury
- Head Injury NOS
 - No ISS
 - Frequently Observed
- Intracranial injury NOS closed
 - No ISS

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Data Accuracy: Injury Data

- Intracranial injury NOS closed loc unspecified
 - No ISS
- Fx unspecified bone, closed
 - No ISS
 - Collector will only recognize this injury through ICD9 codes 829.0 and 829.1 which will still not yield an ISS

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Data Accuracy: Injury Data

- 959-959.3 and 959.6-959.9 (Injury Other and Unspecified) will not code at all
 - No ISS

- Late effect of tendon injury (905.8)
 - No ISS

NOT INCLUDED IN CRITERIA!!

- 800-904.9, or
- 925-929.9, or
- 940-959.9, or
- 994.0 (lightning strikes), or
- 994.1 (drowning), or
- 994.7 (hanging), or
- 994.8 (electrocution)

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Data Accuracy Injury Data

- Places to look for additional information:
 - Nurse's notes
 - Physician's notes
 - Radiology reports

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Projects

- South Central Region Linking Project
- Rural Trauma Team Development

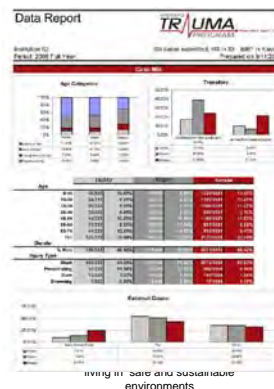
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Rural Trauma Team Development

- Rural Hospitals are important part of Kansas Trauma System
- Rural Trauma Team Development Class
 - Help rural hospitals with trauma team development
 - Timely and organized response to trauma patient
 - Improve care of injured patient in rural environment
- Registrars are integral part of these classes because trauma registry data are used in class

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Performance Review Indicators

The following performance review indicators are shown for reference in performance review. The amount of activity that has occurred in each area will be compared for the previous year to the current year. The indicators are shown in a table format. The table is divided into four sections: Trauma, Triage, Triage, and Triage. The table is divided into four sections: Trauma, Triage, Triage, and Triage. The table is divided into four sections: Trauma, Triage, Triage, and Triage.

Indicator	2013	2014	2015
Trauma	100	100	100
Triage	100	100	100
Triage	100	100	100
Triage	100	100	100

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Trauma Numbers for Outliers

Transfer	Transfer	Transfer	Transfer	Transfer	Transfer	Transfer	Transfer	Transfer	Transfer
100	100	100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100
100	100	100	100	100	100	100	100	100	100

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Registrar's Role

- Provide information so medical records can be pulled to review outliers in class
- Attend PI part of class
- The data you collect is used to improve trauma care

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South Central Linking Project

- Goal: To evaluate method for linking TR pts
- Status
 - Developing methods for conducting study
 - Registrars may be contacted if your facility transfers patients to Level I hospitals in Wichita to collect some information to make it easier to link trauma patients
 - More on this later

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QA/QI Comprehensive/Core

- Only an issue if you are a Local User and collect comprehensive data
- If you collect comprehensive data, you need to enter QA/QI information twice
 - In Core QA/QI tab
 - In Comprehensive QA/QI tab
- Working on a mapping so eventually you won't have to do this

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Core QA/QI



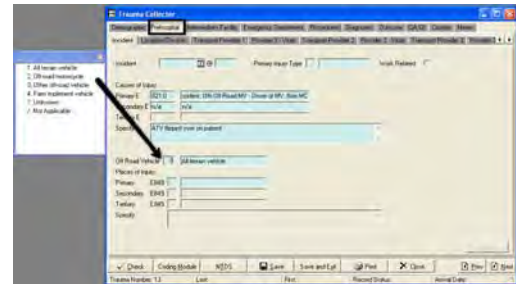
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Worksheet for coding QA/QI

KS Core	Corresponding KS comprehensive	Related but not exact match comprehensive (KS)
01 Bleeding	8508 - unexpected post operative hemorrhage 7501 Anastomosis hemorrhage, 4001 Anastomotic Leak	3512 Anemia, Acute blood loss (in data dictionary not in Collector, 4007, 4008
02 Coagulopathy	5001 (Intraoperative coagulopathy), 5002 Other coagulopathy), 5003	
03 Decubitus	6502, 6503, 6504, 6505	
04 Deep surgical site infection	5597	6509
05 Extremity compartment syndrome	6501	
06 Graft/prosthesis/flap failure	7506	
07 organ/space surgical site infection		5597, 6510, 5503
08 pneumonia	3008, 3003	5598, 3003, 3098
09 superficial surgical site infection	5509, 5509	
10 systemic sepsis	5502, 5506, 5507	5507, 5502
11 wound disruption	4003,	4003, 6511

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Off Road Vehicle Findings

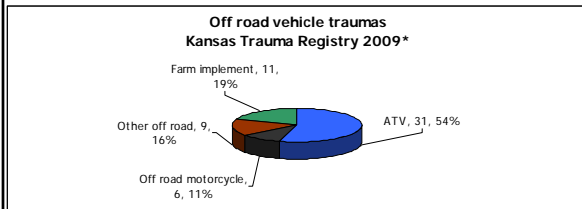


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Off Road Vehicle

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Off-road vehicle



* Data provided provisionally

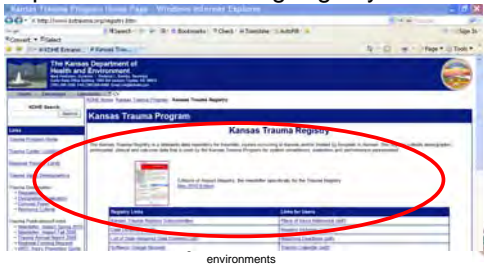
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Impact Registry

- Located on Registry Site
- <http://www.kstrauma.org/registry.htm>



Registry Training Schedule

http://www.kstrauma.org/download/registry_train_sched.pdf

2010 Training Schedule			
Topic	Date	Time	Location
Cv4*	June 3, 2010	9am-12pm	Salina Highway Patrol 2025 East Iron Salina, KS 785-822-1700
Cv4*	September 29, 2010	9am-12pm	Topeka

2011 Training Schedule			
Topic	Date	Time	Location
RW*	January 26, 2011	10am-3pm	Salina
Cv4*	June 8, 2011	9am-12pm	TBA
Cv4*	September 28, 2011	9am-12pm	TBA
RW*	January 25, 2012	10am-3pm	Topeka

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Scenarios

- What would be the best method of entering a poisoning in the registry
- Should an RN who called the on-call physician be considered a Trauma Team Leader

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Scenarios

- An elderly individual is brought to the ER by their family for an infection from multiple cat bites to the back of the leg. The patient received the bites several days before they were brought in by the family.
 - Are animal bites part of the inclusion criteria
 - Ecode vs ICD9 code

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Scenarios

- A pediatric patient is brought to the ER for a broken arm. The patient is treated in the OR and then is discharged home within four hours of arrival. Patient was not held for observation.
- How would you annotate discharging a patient to Wesley Rehabilitation Center

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Scenarios

- A patient was temporarily dragged before falling out of a car traveling at low speeds while attempting to escape the driver who became hostile during an argument. The patient sustained multiple head and arm fractures along with multiple lacerations.
- How would you code the cause of injury?
 - E968.5 Pushed in front of, thrown from, or dragged by moving vehicle with intent to injure.
 - Two Ecodes: Primary 818.1 passenger falling from vehicle Secondary 968.5

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Data Report indicators and PI Worksheet

Instructions: Please indicate reasons why a patient might be an outlier for each data report indicator. These reasons would be issues that a quality director or trauma nurse coordinator would look for to review a case or to decide how to improve trauma care in an institution.

Data Report Indicator	Reasons for Outlier
For all transferred patients, elapsed time between emergency department arrival and discharge to another acute care hospital does not exceed 6 hours.	<ol style="list-style-type: none"> 1. Weather that does not permit travel, e.g., high winds prevent helicopters from flying. 2. Road conditions, e.g., icy. 3. No EMS is available to travel (mutual aid agreements?) 4. Referral facility acceptance, bed availability, physician availability. 5. Patient too unstable, e.g., actively coding, uncontrolled bleeding. 6. Decision to transfer based on diagnostic findings -- Number of procedures performed or time to perform procedures(e.g., radiology (CT scans b/c ETOH involvement, no neurosurgeon available), OR,). O.k. to do plain films to identify pelvis fx or chest x-ray. 7. Delay in recognition that patient needs specialized care in hospital with higher level of care – missed injury. 8. Patient deterioration. – change in patient status. 9. Patient or patient’s family did not want transfer but then condition indicated that non-transfer was not an option.
For transfers with initial SBP <90 or GCS ≤8, elapsed time between ED and discharge to another acute care hospital does not exceed 1 hour.	<p>Same as above, plus</p> <ul style="list-style-type: none"> • Delay in specialist consultation.

Data Report Indicator	Reasons for Outlier
A definitive airway will be established before transfer of a comatose patient (GCS \leq 8). Definitive airways include: LMA, combitube, oral endotracheal tube, nasal endotracheal tube, tracheostomy/cricothyroidotomy.	1. Never justifiable or acceptable always a variance
Patients with suspected traumatic brain injury (moderate to severe coma, initial GCS \leq 12) are transferred to a level I or level II trauma center for treatment.	<ol style="list-style-type: none"> 1. Patient may have initial GCS \leq12, but after a short period of time, the patient's level of consciousness increased and there were no significant signs of brain injury on diagnostic tests. 2. Decision to treat patient. 3. Patient did not want to be transferred.
Patients with pneumothorax or hemopneumothorax receive a chest tube before transfer to another acute care facility.	1. No provider with available skill set (referring facility)
Trauma team leader response is timely. (Team leader in ED)	<ol style="list-style-type: none"> 1. Multiple incident or mass casualty event. Triage but not treated immediately. 2. Paging system malfunction 3. Other reasons not responding to page or call. 4. Weather affecting travel in physician on call. ..
Patients with hip, knee, shoulder, elbow or ankle dislocation receive reduction within 6 hours of ED arrival. Excludes patients who died or who were discharged within 6 hours of ED arrival.	<ol style="list-style-type: none"> 1. Other more severe injuries are being treated first. 2. No provider with available skill set 3. Failed attempt to reduce. 4. Delay in transfer
Patients with a low-grade splenic laceration, AIS \leq 3 undergo splenectomy.	<ol style="list-style-type: none"> 1) Physician preference Depending on patient status, comorbidities, etc. 2) Other associated injuries that would indicate need for splenectomy (such as, severe associated head or thoracic injury) 3) Shock

Data Report Indicator	Reasons for Outlier
Patients with penetrating abdominal injury and SBP \leq 90 mmHg undergo laparotomy within 60 minutes of ED arrival.	<ol style="list-style-type: none"> 1) No provider with available skill set 2) Unable to mobilize OR 3) Availability of OR. 4) Laparotomy not indicated because abdominal injury not severe. 5) Blood pressure increases after initial ED systolic blood pressure. 6) Delay in transfer

Worksheet for coding QA/QI

KS Core		Corresponding KS comprehensive	Related but not exact match comprehensive (KS)
0 1	Bleeding	8508 - unexpected post operative hemorrhage 7501 Anastomosis hemorrhage, 4001 Anastomotic Leak	3512 Anemia, Acute blood loss (in data dictionary not in Collector , 4007, 4008
0 2	Coagulopathy	5001 (Intraoperative coagulopathy), 5002 Other coagulopathy), 5003	
0 3	Decubitus	6502, 6503, 6504, 6505	
0 4	Deep surgical site infection	5597	6509
0 5	Extremity compartment syndrome	6501	
0 6	Graft/prosthesis/flap failure	7506	
0 7	organ/space surgical site infection		5597, 6510, 5503
0 8	pneumonia	3008, 3003	5598, 3003, 3098
0 9	superficial surgical site infection	5509, 6509	
10	systemic sepsis	5502, 5506, 5507	5507, 5502
11	wound disruption	4003,	4003, 6511

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Issue: 1

Volume: 1

May 2010

Impact Registry

A Newsletter Delivering Registry Specific Information

In this issue of *Impact Registry* :

- ⇒ Data completeness: Does your trauma record have an ISS?
- ⇒ What is an Admission: Clearing up LOS in the status criteria.
- ⇒ Demystifying the “other acute care hospital” riddle.
- ⇒ Future meeting dates: User group and Policy subcommittee.

Welcome and Thank you:

Welcome to the first issue of *Impact Registry*, the Trauma Program’s newsletter exclusively dedicated to the Kansas Trauma Registry addressing issues in training, software operation, data entry, and policy. We are very happy to release *Impact Registry* and believe it will help disseminate pertinent registry information building a more consistent standard of data entry.

We at the Trauma Program would like to sincerely thank all the registrars for their hard work, which is a vital component in the Kansas’s trauma system. From its inception, the Trauma Program has been data driven - analyzing trauma data to address areas such as injury prevention and quality improvement. Without your efforts, Kansas could not benefit from the level of acute care available today through the trauma system.

No ISS score could mean your records are Incomplete!

An ISS score indicates the injury narrative was completed correctly.

If an ISS score does not appear as illustrated in Figure 1, either the TriCode button was not used, the injury data was entered incorrectly, or an injury that does not translate to an AIS 98 code was entered.

In order for Collector to calculate an ISS score, the patient’s injuries must be entered in the injury narrative as illustrated in Figure 1.

Why is this important? The ISS measures injury severity, which is an important calculation used in trauma research. A trauma registry containing multiple records without an ISS score fails to provide a dimension of severity to the collected data, limiting the usefulness of injury centered research conducted with that registry.

Figure 1: Entering Injury Diagnoses

Coding - Final Diagnosis
Coding Module

DI Coder

AIS 90 - Code by Narrative and Rubrik: ISS 33
AIS 90 - Code by AIS Coder: []
Tri-Code: []

fractured skull with LOC
lacerated spleen open
lacerated heart valve open
punctured stomach open

ISS

Injuries entered in the injury narrative (ICD9 codes can be used in place of the injury description)

ICD	ICD Description				Description
803.06	Closed skull Fx NEC, LOC unsp	5	3	441200	Intracardiac Valve Laceration
865.12	Spleen injury with rupture of cap				tion, NFS
861.13	Laceration of heart with penetration of chambers open				
863.1	Injury to stomach open	2	4	544420	Stomach, Laceration, NFS

Continue Cancel



Impact Registry

February ACT votes to update admission under status criteria.

A new definition of hospital admission under status criteria.

The February 10, 2010 ACT meeting helped clarify the inclusion criteria by voting to include length of stay (LOS) for adult patients as well as describing detailed admission status for pediatrics. Visit http://www.kstrauma.org/registry_criteria.htm for the full inclusion criteria.

New definition for admission:

Adult patients (>14 years of age): Include all adult patients who meet diagnostic criteria and have a hospital length of stay greater than 48 hours. Length of stay is the time between arrival time (EDA arrival date and time) and discharge date and time.

Pediatric patients (< 14 years of age): Include all pediatric patients who meet diagnostic criteria and have an admission status of “in-patient” or “observation.”

Demystifying the “another acute care hospital” riddle.

The 2010 Collector update has two new options for the discharge to field in the outcomes tab. You will now see “another acute care hospital—for higher level of care” and “acute care hospital—same or lower level of care.” This division of “another acute hospital” has caused some confusion among the registrar community leading some registrars to think of the “higher level” option in terms of a hospital’s trauma level designation, while leading others to perceive the “same or lower level of care” option as anything other than acute care.

The two options were created to determine whether additional resources were the reason in the transfer to another hospital for acute care. This clarification helps provide more accurate data which can benefit the performance improvement process of the trauma system .

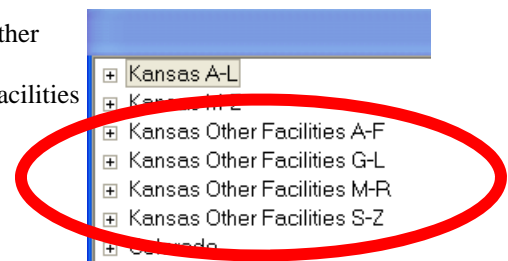
If the patient was transferred because the referring facility lacked the necessary resources for the patient’s acute care, then the “higher level” option should be used. This option does not account for a hospital’s level of designation. A level I center can transfer to another level I center because the initial center may lack a specialty surgeon.

If the patient was transferred for reasons other than additional resources, then the “same or lower level” option should be used. Examples that would fall under this option are transfers due to insurance or repatriation.

The caveat for the “same or lower level” option is that the facility must still be an acute care hospital. Nursing homes and rehabilitation centers are not acute care hospitals. The confusion here mostly lies in that nursing homes and rehabilitation centers are often associated with acute care hospitals. However, nursing homes and rehabilitation centers have different facility numbers, therefore they should be captured as different facilities than their affiliates. Collector categorizes these facilities under the “other facilities” in the facilities pick list (figure 2).

By asking if a patient’s transfer revolved around the need of additional resources, the “another acute care hospital” enigma will be unraveled once and for all.

Figure 2: “Other Facilities” in Collector’s facilities pick list



Future Meetings

We encourage everyone working with the trauma registry or interested in registry’s direction to attend our meetings.

User Group Meetings (2010): The user group meetings are a great opportunity for registrars to learn about new software developments, data entry techniques and share lessons learned with each other. You can attend a user group meeting either in person or via conference call. For more information, please call Dan Robinson at 785-296-3180 or email: drobinson@kdheks.gov .

June 9 - SRS Learning Center, Room 3
September 8 - TBA
December 8 - TBA

Registry Policy Subcommittee Meetings (2010): The policy subcommittee meetings are sessions where committee members make recommendations on changes to the registry and research using the data. Voting is limited to committee members, but everyone is welcome to attend.

July 21 - Wesley Medical Center
October 20 - Wesley Medical Center