

Kansas Trauma Registry Policy Subcommittee  
January 20, 2010 10am – 2pm  
Wesley Medical Center  
Classroom F  
550 N Hillside  
Wichita, Kansas

**Present:** Dr. James Haan, Dan Clark, Lois Towster, Joe Moreland, Janelle Dimond, Deb Trujillo, Dee Vernberg, Rosanne Rutkowski, Dan Robinson, Debby Helton, Tracy Rodgers (in place of Liz Carlton), Scott Harrison, Michelle Schrag, Dr. Ramona Warren

**Absent:** Janet Jilka, Sharon Gehring, Dr. Sean Herrington, Dr. Dennis Allin, Dr. Paul Harrison, Chris Alexander, Dan Leong, Cathy Heikes

**Call to order:**

**Dr. James Haan**

Dr. Haan called the meeting to order at 10:09am.

**Introduction and vision for the policy group**

**Dr. James Haan**

Dr. Haan introduced himself to the committee and talked about the importance of the registry for making decisions about the trauma system. In particular, Dr. Haan stated that the registry is useful in guiding prevention activities and in identifying issues that could improve trauma care in the regions. Dr. Haan identified some issues with the registry that will need to be addressed: incomplete data sets, lack of linkages, and outdated data elements. He believes with everyone's help the trauma registry can become a dynamic tool for driving the Kansas trauma system well into the future.

**State Program Update:**

**Rosanne Rutkowski**

Rosanne thanked Dr. Haan for chairing the committee and agreed with Dr. Haan's beginning sentiments. Rosanne mentioned there are several hospitals that are reporting zero submissions when in fact data analysis suggests otherwise.

A hearing on HB 2413 (the same bill introduced last year that jeopardized Trauma's funding) is scheduled for today (01/20/10). Representatives from KDOT and KDHE will be in attendance during the hearing to support the Trauma Program. A bill has been created detailing 911 fees on cell phone and land line bills - Money goes to dispatch centers. Rosanne mentioned the NBC special on 911 dispatching that identified states such as Kansas that do not mandate pre-arrival instructions from 911 dispatchers.

**Collector Update Progress Report:**

**Dee Vernberg**

[Click here to view presentation.](#) The update is tentatively scheduled for release in spring 2010. AIS 2005 has been postponed until 2011.

Dee reviewed the key changes in the update. There will be substantial changes in collecting data for coding diagnoses and whether or not a trauma team leader is on time. There are two new data fields: 1) transport mode at discharge, and 2) secondary payor source. Other changes include additions choices for QA/QI core fields.

These changes will require that registrars receive training to know how to use the new features.

Regarding the **Trauma Team Leader on time** data element, Lois Towster pointed out that sometimes registrars do not have the times for the trauma team leader and asked whether the update will allow for “unknown” or “not applicable” entries. Dan Clark said for direct admissions they would not have the times and this field would be marked as not applicable. Dee said she will check. **The group decided the update needs to allow “unknown” and “not applicable” entries.**

Regarding the **QA/QI core options: Unplanned/planned readmission:** Dee asked if the unplanned or planned readmission under QA/QI should have a time frame (e.g., 24 or 48 hours). Dr. Haan said that face and orthopedic cases might be planned readmissions, but most cases would fall under unplanned readmissions. Scott Harrison stated that any admission, regardless of time frame, should be looked at. The group agreed with Scott’s statement. **The group decided to not include a time frame for unplanned/planned readmission.** This decision will affect Collector training.

**Discharge to:**  
(Collector update progress report)

Background

**Hospital Data Report Indicator: Transfers**

Performance Review Indicators

The following clinical indicators have been chosen as filters for institutional performance review. The number of records that met, did not meet or could not be evaluated for the indicator are shown for your institution, your region and for the state. Outliers are patient records that did not meet the indicator and should be reviewed by medical/nursing staff. *Outliers do not imply less than standard of care but serve to identify cases where clinical review is warranted.* The trauma number for each outlier is reported in the attached spreadsheet. Details on outlier determination can be found in the report documentation.

Transfers

For all transferred patients, elapsed time between emergency department arrival and discharge to another acute care facility does not exceed 6 hours.

	Hospital		Region		State	
Met Benchmark:	x/y	%%	x/y	%%	x/y	%%
Outlier:	x/y	%%	x/y	%%	x/y	%%
Qualified for Benchmark (cases):	x		x		x	
Did Not Qualify (cases):	x		x		x	
Couldn't Evaluate Due to Missing Data:	x		x		x	

**Note: We calculate the time above only for those patients who are discharged to another acute care facility.**

*April, 2009 KTR Meeting*

Issues:

This indicator captures too many cases, because “discharge to acute care facility” may include transfers to an acute care facility for *non-definitive care*.

Data element (discharge to acute care facility) in Collector does not adequately measure discharge to acute care facility for definitive care.

Recommended changes:

Modify the option “other acute care facility” in the variable (field), *discharge to*.

**07. Other Acute Care Facility for definitive care, 21. Other Acute Care Facility for non-definitive care, 22. Other Acute Care Facility- unknown whether for definitive care or not**

*May, 2009 ACT recommendations*

Do not implement this change. Registrars will not know if transfer is for definitive care or not.

Return to policy group for more discussion

### ***August KTR recommendation***

In next update, change discharge to options

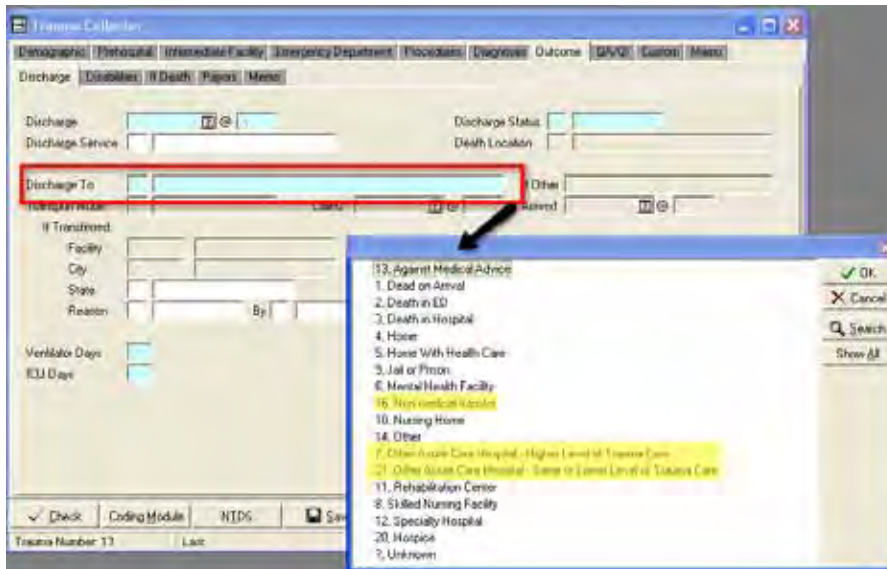
#7. Other acute care hospital to 7. Other acute care hospital – higher level of trauma care.

Add option 21. Other acute care hospital same or lower level of trauma care (repatriation, non-definitive care for trauma, etc.).

Delete 16. Non-medical transfer.

### **January 20, 2010 KTR issue**

### **Collector Update Image of “discharge to”**



### **Questions to consider:**

1. Are the new acute care hospital options an improvement or solve the problem of having a registrar make clinical decisions?

The assumption is that 7. Other acute care hospital – higher level of trauma care would capture transfers for definitive care and 21. Other acute care hospital – same or lower level of care would capture transfers for non-definitive care.

**Issue:** How to define higher or lower level of trauma care? Many registrars in smaller facilities don't make clinical decisions when collecting data.

**Higher level of care –**

- a) Non-designated trauma center to trauma center.
  - b) Non-designated trauma hospital to non-designated trauma hospital with more resources (this requires registrar decision making to decide whether or not this transfer is a higher level of care).
2. Is **other acute care hospital – same or lower level of trauma care** replacing **non-medical transfer** and should be defined as (transfer due to insurance, repatriation, treatment that is not acute trauma care)? This requires registrar decision-making.

**January, 2010 policy group recommendations:**

- 1) The two new options for “discharge to” are an improvement over a single “discharge to acute care facility”.
- 2) Delete “nonmedical transfer.”

Note: These were previous recommendations approved by the ACT. This was a discussion prior to release of the Collector update for training purposes.

## What is a Trauma Admission?:

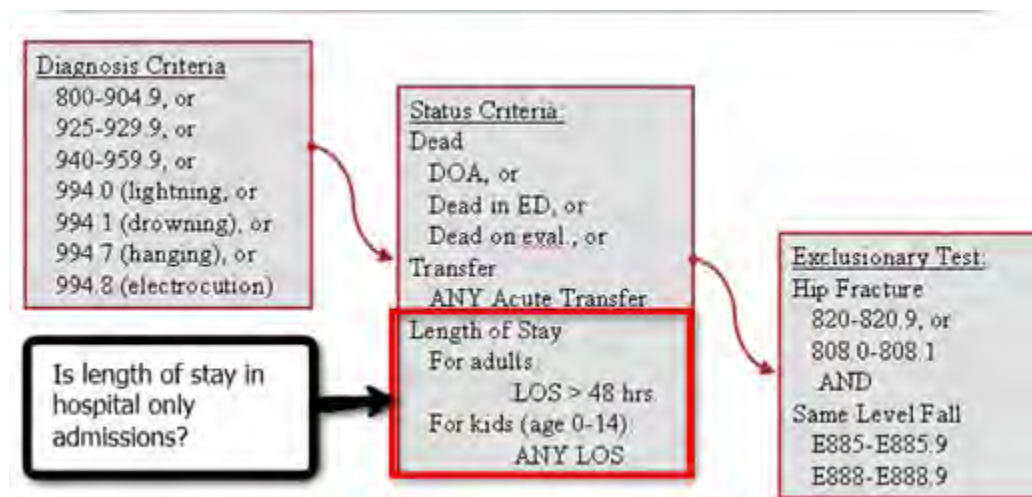
[Click here to view presentation.](#)

Dee Vernberg

### Length of Stay Issue

### **Nature of Issue**

Currently, the trauma registry inclusion criteria contain a length of stay (LOS) status criteria that is associated with admission to the hospital. The intent is to exclude patients who are treated and release from the ED (unless they are transferred from another acute care hospital or die in the ED).



Sometimes, patients are discharged from the ED to a hospital floor bed or to the ICU but for billing purposes are considered to be out-patients.

In training, the trauma program has considered admission to be **in-patient status** but we may be missing an important group of trauma patients (many trauma centers consider the out-patients who are treated on hospital floors to be trauma patients that should be sent to the state).

### **What changes are proposed?**

In training, patients transferred from the ED to a hospital floor or ICU for observation and billed as an out-patient will meet State trauma registry inclusion criteria.

### **January, 2010 Policy Group recommendation:**

Agree with propose change:

In training, patients transferred from the ED to a hospital floor or ICU for observation and billed as an out-patient will meet State trauma registry inclusion criteria.

## Over and Under Triage:

Dee Vernberg

[Click here to view the presentation.](#)

### Nature of Issue:

Over and under triage is an important trauma system performance measure.

Conceptually, over triage includes trauma patients who are transferred to Level I or II trauma centers for definitive care but these patients did not need to be transferred. Under triage includes severely injured patients who should be transferred to a Level I or II center for definitive care and were not transferred.

The question concerns how to use trauma registry data to measure over and under triage.

### What approaches have been taken?

#### Over-triage:

- A. Non-Level I or II trauma center patients transferred to Level I or II trauma centers and discharged from the ED within 24 hours.
- B. Non-Level I or II trauma center patients with ISS <9 who are transferred to Level I or II trauma centers.

#### Under-triage:

- A. Unstable patients (ED SBP <90 or ED GCS  $\leq$ 8) in **non**-Level I or II trauma centers who are not transferred for definitive care to a Level I or II trauma center.
- B. Patients with ISS >15 in **non**-Level I or II trauma centers who are not transferred for definitive care to a Level I or II trauma center.

### January, 2010 Policy Group Recommendations

Use approach B using ISS.

Over triage: Non-Level I or II trauma center patients with ISS <9 who are transferred to Level I or II trauma centers.

Under triage: Patients with ISS >15 in **non**-Level I or II trauma centers who are not transferred for definitive care to a Level I or II trauma center.

## Data Issues Review:

Dee Vernberg

[Click here to view the presentation.](#)

## Type of EMS Service

### Nature of Issue

Issue: Currently, the central site is unable to determine the provider level of EMS responders that transport trauma patients. This information would be useful to describe the capability of EMS responders in providing trauma care in the field.

Who proposed? University of Kansas.

What type of data currently are being collected?

A field for capturing this information is available in the comprehensive data set.

To allow “provider level” to be collected by the state, this field must be included in the core data set.

**Note:** Shaded fields below are core data elements. Non-shaded fields are comprehensive data elements.

The screenshot displays the 'Trauma Collector' software interface. The main window has a menu bar with options: Demographic, Prehospital, Intermediate Facility, Emergency Department, Procedures, Diagnoses, Outcome, QA/QI, Custom, and Memo. Below the menu bar are tabs for Incident, Location/Devices, Transport Provider 1, Provider 1 - Vitals, Transport Provider 2, Provider 2 - Vitals, Transport Provider 3, and Provider 3. The main area contains several input fields. The 'Mode' field is set to '2 Helicopter Ambulance' and is shaded. The 'Report Available' field is set to '1 Received, Complete and Legible, in a Timely Manner' and is shaded. The 'Agency' and 'Provider Level' fields are currently empty. A dropdown menu is open for the 'Provider Level' field, showing a list of options: 1. 1st Responder, 2. BLS, 3. ILS, 4. ALS, 5. Other, and ?. Unknown. The 'Call Received' through 'Arrived Hospital' fields are also shaded. The bottom of the window features a toolbar with buttons for Check, Coding Module, NIDS, Save, Save and Exit, Print, Close, Prev, and Next. At the very bottom, there are fields for Trauma Number: 15, Last:, First:, Record Status:, and Arrival Date:.

**What changes are proposed?**

1) Add provider level to the core for transport provider 1, transport provider 2 and transport provider 3.

**How will the proposed changes be useful to hospitals?**

If the central site has access to information on provider level, then EMS care can be more adequately described to the regions and to statewide committees (policy group and ACT).

**What software modifications will be necessary to accommodate the change?**

1) Activate the provider level field for core data collection.

**What procedural changes will be necessary to accommodate the changes?**

1) Update the data dictionary and training materials.

**January, 2010 policy group recommendations:**

This issue needs more consideration before making a recommendation.

## Pre-hospital MAST use

### Nature of Issue

#### Issue:

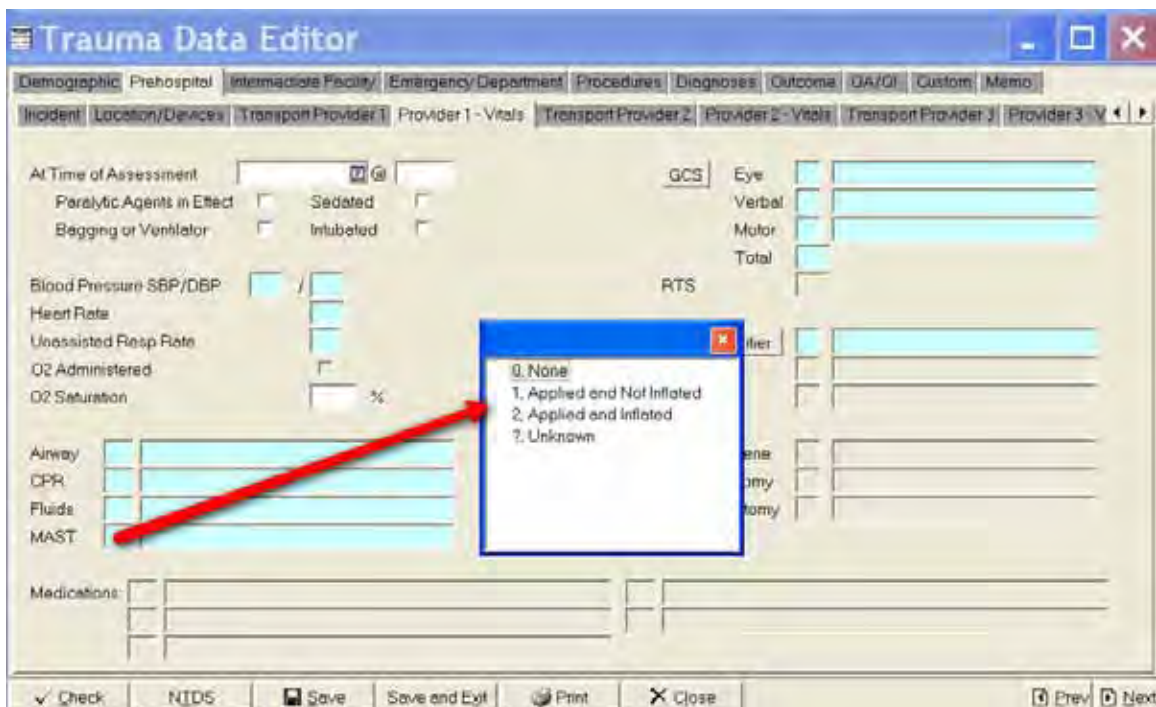
MAST (Medical anti-shock trouser) is a rarely used pre-hospital intervention, because this intervention does not appear to decrease mortality or length of stay<sup>1,2</sup>. Trauma registry data for 2008 suggest that less than 1% of records (n=15) are coded as having a MAST applied.

Although a MAST may cause adverse cardiovascular effects due to increased intra-abdominal pressure, it may not be necessary to have a core variable to capture the small number of cases receiving this intervention.

Who proposed? Trauma Program

What type of data are currently being collected?

Currently, MAST is a core data element with four options (as shown below). This field is found in the Pre-hospital provider vital tab for provider 1, provider 2 and provider 3.



The screenshot displays the 'Trauma Data Editor' software interface. The window title is 'Trauma Data Editor'. The interface is divided into several tabs: 'Demographic', 'Prehospital', 'Intermediate Facility', 'Emergency/Department', 'Procedures', 'Diagnoses', 'Outcome', 'QA/QI', 'Custom', and 'Memo'. The 'Prehospital' tab is active, and within it, the 'Provider 1 - Vitals' sub-tab is selected. The main area contains various data entry fields for patient vitals and clinical status. A red arrow points to the 'MAST' field, which has a dropdown menu open. The dropdown menu lists four options: '0. None', '1. Applied and Not Inflated', '2. Applied and Inflated', and '3. Unknown'. The 'MAST' field is currently empty. Other fields visible include 'Airway', 'CPR', 'Fluids', 'Medications', 'GCS' (with sub-fields for Eye, Verbal, Motor, Total), and 'RTS'. The bottom of the window features a toolbar with buttons for 'Check', 'NIDS', 'Save', 'Save and Exit', 'Print', 'Close', 'Prev', and 'Next'.

<sup>1</sup> Dickinson K, Roberts I. Medical anti-shock trousers (pneumatic anti-shock garments) for circulatory support in patients with trauma (Cochrane Review). *The Cochrane Library* 2002;4.

<sup>2</sup> Chang FC, Harrison PB, Beech RR, Helmar SD. PASG: does it help in the management of traumatic shock? *Journal of Trauma* 1995;39(3):453-456

**What changes are proposed?**

Delete the MAST data element from the core and comprehensive data set. The MAST data element appears under each transport provider vitals tab (provider 1, provider 2, provider 3).

**How will the proposed changes be useful to hospitals?**

Hospitals will no longer collect information for this data element.

**What software modifications will be necessary to accommodate the change?**

- 1). Delete the MAST data element from all the transport provider vital tabs.

**What procedural changes will be necessary to accommodate the changes?**

- 1). Update training materials.
- 2). Update Data Dictionary.

**January, 2010 Policy Group Recommendations**

Delete MAST variable (field) from collector.

## Definition of positive CT Scans

### Nature of Issue

Issue: Currently, the core data set has data on whether or not ED CT scans of the head and abdomen are performed and whether the results are positive or negative. The ED chest CT is not part of the core data set.

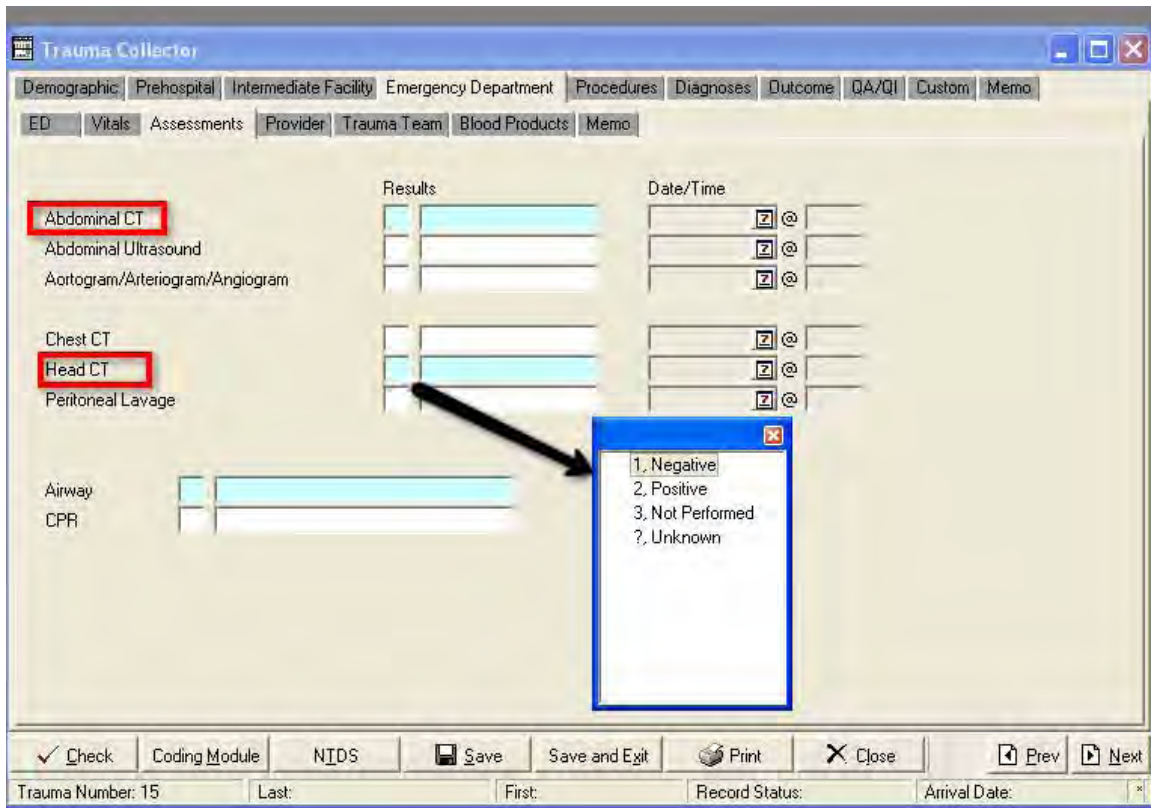
Some coders define, a *positive CT scan* as “any space occupying lesion” such as air, fluid, blood, tumor/neoplasm/mass, consolidation, foreign body/material, contrast or injuries to organs as opposed to fractures, dislocations, and skeletal. Others code CT results with isolated skeletal abnormalities as positive.

The question of whether a positive CT scan is only an organ injury rather than an isolated skeletal injury is a national debate. Other states are having discussions about this and are making recommendations to registrars based on how the data will be used.

Who proposed? Trauma Program

What type of data currently are being collected?

Currently, the core data set consists of two ED CT scan results (Abdominal and Head). Registrars may code these results as positive, negative or not performed. Chest CT is not included in the core data set.



### **What changes are proposed?**

- 1) Add options for different types of positive findings for all ED CT scan findings, eg., negative findings, positive organ abnormality, positive skeletal abnormality, positive organ & skeletal abnormality, not performed, unknown.
- 2) Include Chest CT in core data set so core will have head, abdominal and chest ED CT scan findings.

### **How will the proposed changes be useful to hospitals?**

Consistent coding of what positive means for CT scans will make this field more useful at the regional and state level. Additional options for positive will allow hospitals to categorize patients according to the type of positive CT findings. Adding the ED chest CT scan results will make the core data on ED CT scans more complete.

### **What software modifications will be necessary to accommodate the change?**

- 1) Will need to add new options under CT scan fields.
- 2) ED chest CT scan will need to be activated as core variable.

### **What procedural changes will be necessary to accommodate the changes?**

Update data dictionary and training material.

## **January, 2010 Policy Group Recommendations**

1. Add new options for positive results of ED CT scans.
2. Add ED chest CT to core variables.

**Repeat CT's as a trauma system issue:****Dee Vernberg**[Click here to view the presentation.](#)

This issue involves patients being scanned at a primary hospital before being transferred to another acute care facility for definitive care. This is a national issue because of concerns about cost, risks due to exposure to large amounts of radiation, delay to transfer (scanning at primary hospital may delay transfer to definitive care). Some of the reasons for repeating CT scans performed at the primary hospital are: poor quality of the original scans, incompatible software at the referring hospital preventing reading of disks with CT scan images, the transferring hospital sending a report without a scan, and possible legal ramifications for physicians using a scan from another hospital. Dr. Haan said his experience on the east coast showed that insurance reimbursement can effectively regulate this problem for certain types of injuries by only reimbursing the facility that made the original scan. Appeals can be made for poor quality scans but if quality is an issue, then the hospital with the poor CT scan image will not get paid.

Dr. Haan suggested a possible solution that would involve a central database where hospitals could upload and view CT scans via web access. This would involve all the participating hospitals to agree on a common policy and access, and probably would require a statewide policy.

Currently, there is no easy way to study the issue of repeat CT scans using registry data because of lack of unique identifiers. To address this issue, there were several suggestions:

- 1) Add the fields from intermediate facility to the core.
- 2) A focused study among Level I trauma centers to study the issue. The Level I centers will follow up on this suggestion.

Dr. Haan will lead a discussion of repeat CT scans at the February ACT meeting.

**Journal of Trauma Nursing Special Issue on Trauma Article: Dee Vernberg**[Please click here to view presentation.](#)

- The Journal of Trauma Nursing will have a special issue on Trauma systems. Articles are due April 1, 2010. Topics may include but are not limited to the following types of issues: Utilization of HRSA trauma systems model by all states in country, best practices by states, the evolution of a trauma system, trauma systems funding, and international trauma systems.
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Dee asked the group for potential topics they felt would adequately portray Kansas's trauma system. The following were suggested topics:

- How Kansas focused on developing a statewide trauma registry when developing the trauma system and the effect this has had on the evolution of the trauma system.
- The effect of Level III centers in improving outcomes of trauma patients.
- The inclusive nature of the Kansas Trauma System: special rural trauma issues.

**EMS-Trauma Registry Bridge & Proposed Data Sharing: Rosanne Rutkowski/  
Joe Moreland**

Rosanne briefly described the bridge currently being pursued by the Board of EMS and the Trauma Program that would allow hospitals to download EMS data found on run sheets into Collector. A grant application was submitted to KDOT for assistance in funding this interface. KDOT was approached because of their interest in how long it takes the patient to arrive at the hospital from time of crash. Once the grant has been approved, DI will send a timeline for the project.

Dee asked the group if they had any questions or comments on Collector. The following bullet items are suggestions for additional data elements in Collector:

- A lab results page
- Update medication list
- Additional option under GCS qualifier for chronically demented patients

Dee reminded everyone with suggestions to fill out the request form and to submit it to her so that she could put these issues on a policy group agenda for discussion.

Below are the remaining meeting dates for the policy subcommittee in 2010:

- April 28 in the Jay Hawk Room at Wesley Medical Center
- July 21, Wesley Medical Center
- October 20, Wesley Medical Center

Adjourn: 1:15pm

## Collector update progress report

### B. Issue – Discharge to acute care facility

#### Background

#### Hospital Data Report Indicator: Transfers

### Performance Review Indicators

The following clinical indicators have been chosen as filters for institutional performance review. The number of records that met, did not meet or could not be evaluated for the indicator are shown for your institution, your region and for the state. Outliers are patient records that did not meet the indicator and should be reviewed by medical/nursing staff. *Outliers do not imply less than standard of care but serve to identify cases where clinical review is warranted.* The trauma number for each outlier is reported in the attached spreadsheet. Details on outlier determination can be found in the report documentation.

#### Transfers

For all transferred patients, elapsed time between emergency department arrival and discharge to another acute care facility does not exceed 6 hours.

Number of Outliers	Your Institution		Region		State	
	Met	Did Not Meet	Met	Did Not Meet	Met	Did Not Meet
Qualified for Benchmark (n=...)	...	...	...	...	...	...
Did Not Qualify (n=...)	...	...	...	...	...	...
Couldn't Evaluate Due to Missing Data (n=...)	...	...	...	...	...	...

**Note:** We calculate the time above only for those patients who are discharged to another acute care facility.

*April, 2009 KTR Meeting*

#### Issues:

This indicator captures too many cases, because “discharge to acute care facility” may include transfers to an acute care facility for *non-definitive care*.

Data element (discharge to acute care facility) in Collector does not adequately measure discharge to acute care facility for definitive care.

#### Recommended changes:

Modify the option “other acute care facility” in the variable (field), *discharge to*.  
**07. Other Acute Care Facility for definitive care, 21. Other Acute Care Facility for non-definitive care, 22. Other Acute Care Facility- unknown whether for definitive care or not**

### May, 2009 ACT recommendations

Do not implement this change. Registrars will not know if transfer is for definitive care or not.

Return to policy group for more discussion

### August KTR recommendation

In next update, change discharge to options

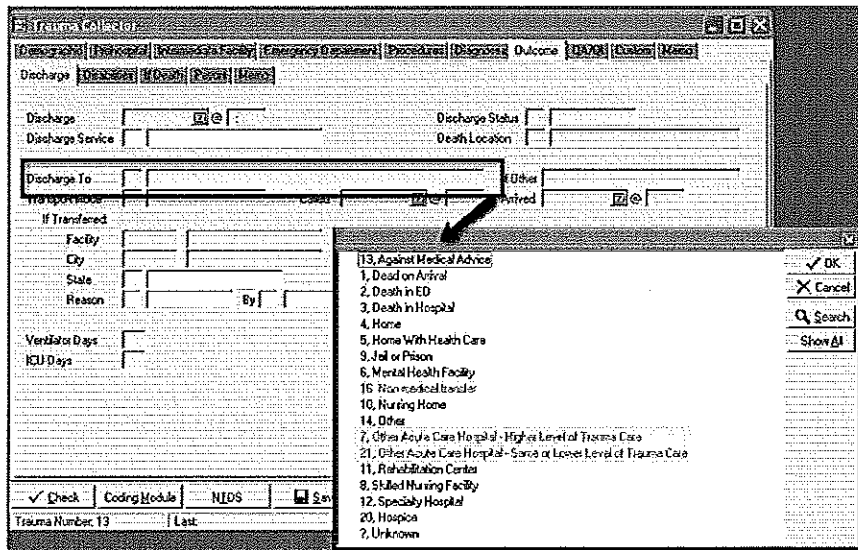
#7. Other acute care hospital to 7. Other acute care hospital – higher level of trauma care.

Add option 21. Other acute care hospital same or lower level of trauma care (repatriation, non-definitive care for trauma, etc.).

Delete 16. Non-medical transfer.

### January 20, 2010 KTR issue

### Collector Update Image of “discharge to”



### Questions to consider:

1. Are the new acute care hospital options an improvement or solve the problem of having a registrar make clinical decisions?

The assumption is that 7. Other acute care hospital – higher level of trauma care would capture transfers for definitive care and 21. Other acute care hospital – same or lower level of care would capture transfers for non-definitive care.

**Issue:** How to define higher or lower level of trauma care? Many registrars in smaller facilities don't make clinical decisions when collecting data.

**Higher level of care –**

- a) Non-designated trauma center to trauma center.
  - b) Non-designated trauma hospital to non-designated trauma hospital with more resources (this requires registrar decision making to decide whether or not this transfer is a higher level of care).
2. Is other acute care hospital – same or lower level of trauma care replacing non-medical transfer and should be defined as (transfer due to insurance, repatriation, treatment that is not acute trauma care)? This requires registrar decision-making.

## Type of EMS Service

### Nature of Issue

Issue: Currently, the central site is unable to determine the provider level of EMS responders that transport trauma patients. This information would be useful to describe the capability of EMS responders in providing trauma care in the field.

Who proposed? University of Kansas.

What type of data currently are being collected?

A field for capturing this information is available in the comprehensive data set.

To allow "provider level" to be collected by the state, this field must be included in the core data set.

**Note:** Shaded fields below are core data elements. Non-shaded fields are comprehensive data elements.

The screenshot shows the 'Trauma Collector' application window. The 'Incident' tab is active, and the 'Provider Level' field is highlighted in a shaded box. A dropdown menu is open for this field, displaying the following options:

- 1, 1st Responder
- 2, BLS
- 3, ILS
- 4, ALS
- 5, Other
- ?, Unknown

Other visible fields in the form include:

- Mode: 2 Helicopter Ambulance
- Report Available: 1 Received, Complete and Legible, in a Timely Manner
- Agency: [Empty]
- Report Number: [Empty]
- Traged by EMS:
- Call Received: [?] @ :
- Dispatched: [?] @ :
- In Route: [?] @ :
- Arrived Location: [?] @ :
- Patient Contact: [?] @ :
- Departed Location: [?] @ :
- Arrived Hospital: [?] @ :

The bottom of the window features a toolbar with buttons for Check, Coding Module, NIDS, Save, Save and Exit, Print, Close, Prev, and Next. The status bar at the bottom shows Trauma Number: 15, Last, First, Record Status, and Arrival Date.

**What changes are proposed?**

1) Add provider level to the core for transport provider 1, transport provider 2 and transport provider 3.

**How will the proposed changes be useful to hospitals?**

If the central site has access to information on provider level, then EMS care can be more adequately described to the regions and to statewide committees (policy group and ACT).

**What software modifications will be necessary to accommodate the change?**

1) Activate the provider level field for core data collection.

**What procedural changes will be necessary to accommodate the changes?**

1) Update the data dictionary and training materials.

**Pre-hospital MAST use**

**Nature of Issue**

**Issue:**

MAST (Medical anti-shock trouser) is a rarely used pre-hospital intervention, because this intervention does not appear to decrease mortality or length of stay<sup>1,2</sup>. Trauma registry data for 2008 suggest that less than 1% of records (n=15) are coded as having a MAST applied.

Although a MAST may cause adverse cardiovascular effects due to increased intra-abdominal pressure, it may not be necessary to have a core variable to capture the small number of cases receiving this intervention.

**Who proposed?** Trauma Program

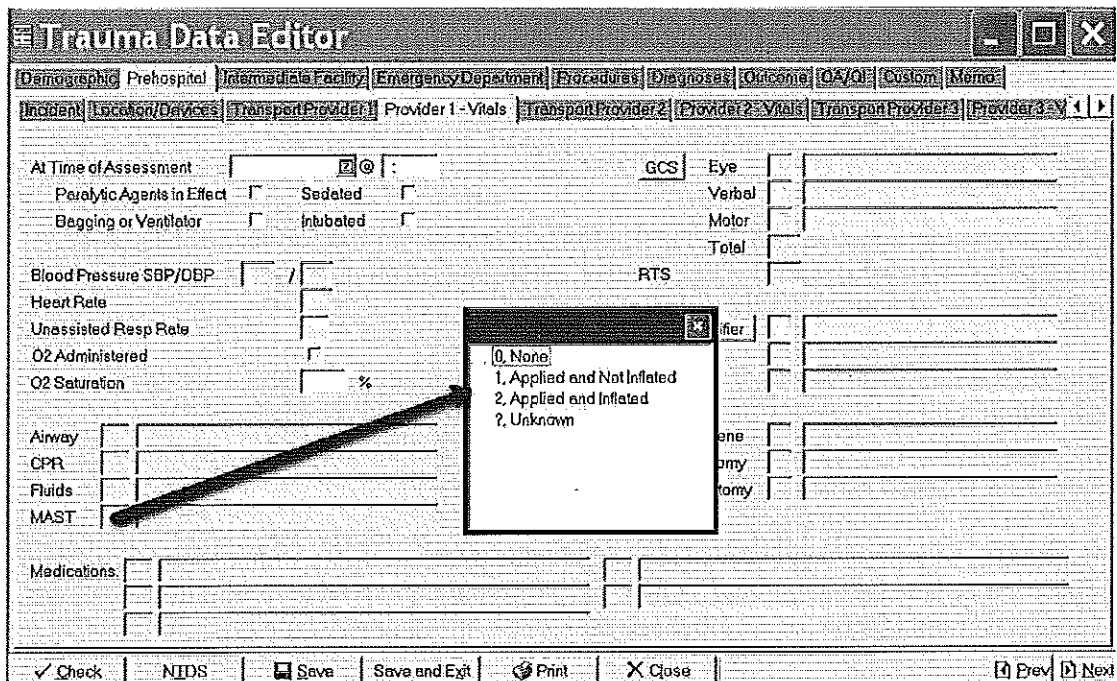
**What type of data are currently being collected?**

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**What changes are proposed?**

Delete the MAST data element from the core and comprehensive data set. The MAST data element appears under each transport provider vitals tab (provider 1, provider 2, provider 3).

**How will the proposed changes be useful to hospitals?**

Hospitals will no longer collect information for this data element.

**What software modifications will be necessary to accommodate the change?**

- 1). Delete the MAST data element from all the transport provider vital tabs.

**What procedural changes will be necessary to accommodate the changes?**

- 1). Update training materials.
- 2). Update Data Dictionary.

## Definition of positive CT Scans

### Nature of Issue

Issue: Currently, the core data set has data on whether or not ED CT scans of the head and abdomen are performed and whether the results are positive or negative. The ED chest CT is not part of the core data set.

Some coders define, a *positive CT scan* as “any space occupying lesion” such as air, fluid, blood, tumor/neoplasm/mass, consolidation, foreign body/material, contrast or injuries to organs as opposed to fractures, dislocations, and skeletal. Others code CT results with isolated skeletal abnormalities as positive.

The question of whether a positive CT scan is only an organ injury rather than an isolated skeletal injury is a national debate. Other states are having discussions about this and are making recommendations to registrars bases on how the data will be used.

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### How will the proposed changes be useful to hospitals?

Consistent coding of what positive means for CT scans will make this field more useful at the regional and state level. Additional options for positive will allow hospitals to categorize patients according to the type of positive CT findings. Adding the ED chest CT scan results will make the core data on ED CT scans more complete.

### What software modifications will be necessary to accommodate the change?

- 1) Will need to add new options under CT scan fields.
- 2) ED chest CT scan will need to be activated as core variable.

### What procedural changes will be necessary to accommodate the changes?

Update data dictionary and training material.

## Collector Update



KTR subcommittee  
January, 2010

Our Vision - Healthy Kansas living in safe and sustainable environments



## Status

- Delayed – projected, April, 2010
- AIS 2005
  - Will not activate AIS-2005 until 2011
  - Substantial changes in coding diagnoses in this update
  - Easy to upgrade to AIS 2005

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## Changes

- Sneak Preview
  - Trauma Team Leader on time
  - Transport mode at discharge
  - QA/QI core – readmission
  - Secondary payor source
- Issues
  - Discharge\_to field

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## Trauma Team Leader on time core data collection

The screenshot shows the 'Trauma Collector' application window. The 'Medical Record Number' field is highlighted with a red box. Other fields include Facility, Trauma Number, ED Arrival/Discharge, Social Security Number, Patient Information (Name, Address, City, State), Date of Birth, Age, Gender, Ethnicity, and Occupation. The bottom status bar shows 'Trauma Number: 13' and 'Record Status: Active - N'.

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## Trauma Team Leader - Core

The screenshot shows the 'Trauma Collector' application window with annotations. A red box highlights the 'Emergency Physician' section with an arrow pointing to it and the text 'Enter data here'. Another red box highlights the 'Team Leader' section with an arrow pointing to it and the text 'Autopopulated here'. A third red box highlights the 'Team Leader Arrival' field with the text 'Default 30 minutes unless web & set'. The bottom status bar shows 'Trauma Number: 13' and 'Record Status: Active - N'.

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## Trauma Team Leader two physicians

The screenshot shows the 'Trauma Collector' application window. The 'Emergency Physician' section is highlighted with a red box. The 'Medical Record Number' field is also highlighted with a red box. The bottom status bar shows 'Trauma Number: 13' and 'Record Status: Active - N'.

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### Data Report

**Chest Tube**

Patients with pneumothorax (or hemothorax) receive a chest tube before transfer to another acute care facility.

	Hospital	Region	State
Met Benchmark:	87%	92%	87%
Qualified for Benchmark (cases):	8	8	8
Did Not Qualify (cases):	0	0	0
Couldn't Evaluate Due to Missing Data:	0	0	0

**On Time**

Trauma surgeon response is timely.

	Hospital	Region	State
Met Benchmark:	87%	92%	87%
Qualified for Benchmark (cases):	8	8	8
Did Not Qualify (cases):	0	0	0
Couldn't Evaluate Due to Missing Data:	0	0	0

**Change to Trauma team leader arrival is timely**

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### Transport mode at discharge

Discharge Services: [Other Acute Care Hospital - Higher Level of Trauma Care]

Transport Mode: [Other Acute Care Hospital - Higher Level of Trauma Care]

Facility: [Other Acute Care Hospital - Higher Level of Trauma Care]

City: [Other Acute Care Hospital - Higher Level of Trauma Care]

State: [Other Acute Care Hospital - Higher Level of Trauma Care]

Reason: [Other Acute Care Hospital - Higher Level of Trauma Care]

Intention to transfer

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### Core QA/QI readmission

Readmission: [Unplanned]

Readmission Date: [01/11/2010]

Readmission Time: [15:00]

Readmission Reason: [Unplanned]

Unplanned readmission -- 24 hours or 48 hours?  
Planned readmission -- 24 hours or 48 hours or longer?

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### Secondary Payor Source

Primary Payer: [Auto]

Secondary Payer: [Auto]

Account Number: [Auto]

Payor Type: [Auto]

Payor Code: [Auto]

Payor Name: [Auto]

Payor Address: [Auto]

Payor City: [Auto]

Payor State: [Auto]

Payor Zip: [Auto]

Payor Phone: [Auto]

Payor Email: [Auto]

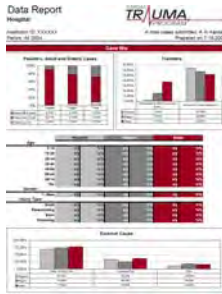
Payor Website: [Auto]

Payor Contact: [Auto]

Payor Notes: [Auto]

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## Discharge to



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## Performance Review Indicators

The following clinical indicators have been chosen as filters for institutional performance review. The number of records that met, did not meet or could not be evaluated for the indicator are shown for your institution, your region and for the state. Outliers are patient records that did not meet the indicator and should be reviewed by medical/nursing staff. Outliers do not imply less than standard of care but serve to identify cases where clinical review is warranted. The trauma number for each outlier is reported in the attached spreadsheet. Details on outlier determination can be found in the report documentation.

**Transfers**

For all transferred patients, elapsed time between emergency department arrival and discharge to another acute care facility does not exceed 6 hours.

	Hospital	Region	State
Met Benchmark:	87%	75%	87%
Outlier:	13%	25%	13%
Qualified for Benchmark (cases):	1	1	1
Did Not Qualify (cases):	1	1	1
Couldn't Evaluate Due to Missing Data:	0	0	0

**Unstable Transfers**

For transfers with Initial Systolic Blood Pressure < 90 or Glasgow Coma Score ≤ 8, elapsed time between emergency department arrival and discharge to another acute care facility does not exceed 1 hour:

	Hospital	Region	State
Met Benchmark:	87%	75%	87%
Outlier:	13%	25%	13%
Qualified for Benchmark (cases):	1	1	1
Did Not Qualify (cases):	1	1	1
Couldn't Evaluate Due to Missing Data:	0	0	0

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## Transfer Indicators

- **Transfer Flow** - For all transferred patients, elapsed time between emergency department arrival and discharge to another acute care facility does not exceed 6 hours.
- **Issues:**
  - This indicator captures too many cases that are not transfers to acute care facility for definitive care.
  - Data element (discharge to acute care facility) in Collector does not adequately measure discharge to acute care facility for definitive care.
- **Proposed solutions:**

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## Transfer Flow

- **Proposed Solutions (April, 2009 Policy group)**
  - Modify the option “other acute care facility” in the variable (field), “discharge to” to include an option for discharge to acute care facility for definitive care
  - ACT decision – No – registrars would not be able to make decision re: definitive care.

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## Transfer Flow Discharge to

### Options currently available

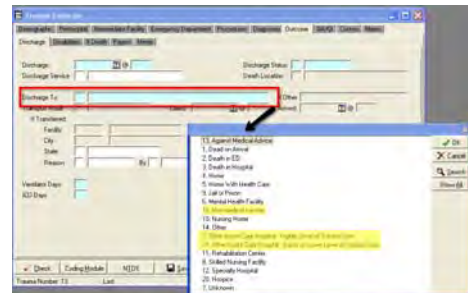
- Dead on arrival
- Death in ED
- Death in Hospital
- Home
- Home with health care
- Mental Health Facility
- Other Acute Care Facility
- Skilled Nursing Facility
- Jail or Prison
- Nursing Home
- Rehabilitation Center
- Specialty Hospital
- Against Medical Advice
- Other
- **Non-medical transfer**
- Hospice
- ? Unknown

### August KTR Recommendations

- **Discharge to acute care hospital higher level of trauma care**
- **Discharge to acute care hospital same or lower level of trauma care**
- **Delete Non-medical transfer**

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## Update image



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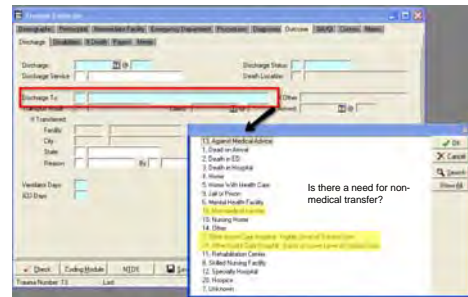
## Are new options an improvement?

- Higher level of Care - definitions
  - Non-designated trauma center to designated trauma center.
  - Non-designated trauma hospital to non-designated trauma hospital with more resources (requires registrar decision making)
- Same or lower level of trauma care
  - Designated trauma center to non-designated trauma center
  - Repatriation, insurance, non-acute medical or trauma care that is not rehabilitation, skilled nursing, etc. (registrar decision-making)

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## Update image



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## National Trauma Data Standard

### HOSPITAL DISCHARGE DISPOSITION

Data Format [combo] single-choice

National Element

0\_05

#### Definition

The disposition of the patient when discharged from the hospital.

XSD Data Type xs:integer XSD Element / Domain (Simple Type) HospitalDischargeDisposition  
 Multiple Entry Configuration No Accepts Null Value Yes, common null values  
 Required in XSD Yes

#### Field Values

- |  |   |
|--|---|
| 1 Discharged/Transferred to a short-term general hospital for inpatient care | 6 Discharged home with no home services   |
| 2 Discharged/Transferred to an Intermediate Care Facility (ICF)              | 7 Discharged/Transferred to Skilled Nursing Facility                                  |
| 3 Discharge/Transferred to home under care of organized home health service  | 8 Discharged/ Transferred to hospice care   |
| 4 Left against medical advice or discontinued care                           | 9 Discharged/Transferred to another type of rehabilitation or long-term care facility |
| 5 Expired  |   |

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