Kansas Trauma Registry Subcommittee
August 12, 2009
St. Francis Hospital, Meeting Room 1
Topeka, Kansas
Minutes

Present: Deb Helton, Joe Moreland, Scott Harrison, Amy Bucholtz, Liz Carlton, Dr. Paul Harrison, Chris Alexander, Dan Robinson, Dee Vernberg, Rosanne Rutkowski, Lois Towster, Dr. Chris Bandy, Michelle Schrag, Dr. Don Fishman, Dr. Shawn Herriton, Dr. Dr. Dennis Allin.

Call to order: **Dr. Chris Bandy**
Dr. Bandy called the meeting to order at 1:13pm .

Program Update: **Rosanne Rutkowski**
The contract with DI was renewed, June, 2009. The program continues to work with the Board of EMS on how to build an interface that would allow EMS data (collected with ImageTrend software) to download into the Trauma Registry Collector software (a Digital Innovation product). Many questions and concerns still linger. Rosanne reported that according to Dan Russell, who works with the Trauma Program on database issues, this interface could be created. Dan Russell will play a vital role in guiding this process. Joe Moreland commented that ImageTrend said they have successfully implemented this interface in Mississippi. Scott Harrison asked if all prehospital providers use the prehospital software provided by the Board of EMS. Joe Moreland reported, no – the KEMSIS project is voluntary. A prerequisite for pre-hospital providers to download data through the proposed interface will be gold or silver compliance.

Rosanne reported that KDOT is interested in a project that would link trauma registry data, prehospital data and their crash data. They might be a source of funding for this project.

Rosanne informed the committee that Steve Schwarm will speak at the ACT meeting on transfer agreements.

Rosanne reported that injury prevention grants are available and the communities should apply for these from the KDHE Injury program. If anyone needs information from the registry for a grant, they should contact Dee Vernberg. Liz Carlton inquired about the definition of community for these grants and whether or not one region or community could receive more than one grant. Rosanne will check with Lori Hasket.

Discussion of dates for future policy Group meetings: **Dee Vernberg**
Dr. Bandy asked who will chair the subcommittee since he is leaving in September. The program is searching for volunteers and Rosanne mentioned she might ask Dr. Haan to chair the committee. Dr. Bandy said he will talk to Dr. Haan about this when he sees him at the end of the month. Future meeting dates will be set with the new chair.

Liz Carlton suggested that some future meetings be held using online meeting tools such as GoTo Meeting to decrease travel time and expense for KTR subcommittee members. While some hospital firewalls do not allow online meeting tools, overall, the committee liked this suggestion. It was decided that some of the future meetings will be held using online meeting tools, but the group will occasionally (at least once a year) meet face-to-face.

Hospital Data Report Indicators Review: Dee Vernberg

1. **Transfer Flow**

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

April, 2009 KTR Meeting

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.

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

Discharge to (field)		
Current options relevant to issue		
Other acute care hospital	Change to →	Other acute care hospital—Higher Level of trauma care
Non-medical transfer	Change to →	Other acute care hospital—Same or lower level of trauma care (repatriation, non-definitive care for trauma, etc)

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2. Unstable transfers

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

April, 2009 KTR Meeting

Recommended changes: (change 1 hour to 2 hours)

For transfers with Initial Systolic Blood Pressure < 90, elapsed time between emergency department arrival and discharge to another acute care facility does not exceed 2 hours.

May, 2009 ACT recommendations

Keep *unstable transfers* indicator at 1 hour. It is a standard to strive for even if difficult to accomplish.

August KTR recommendation

Keep unstable transfer at 1 hour.

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3. On time

Trauma surgeon response time is timely.

April, 2009 KTR Meeting

Delete due to subjective nature of indicator.

May, 2009 ACT recommendations

Take back to policy committee to discuss.
Need a new field capturing date and time of on call physician/surgeon.

August KTR recommendation

Add three new fields (core and comprehensive): 1) Date and 2) time fields for when trauma team leader arrives, and 3) subjective field "trauma team leader on time that will be automatically populated from the date and times entered.

On time is defined as 30 minutes or less for all hospitals. While Level I and II hospitals respond 15 minutes or sooner for full trauma activations, 30 minutes was chosen because the central site can not filter patients by trauma activation. This is because trauma activation (trauma response field) is not part of the core data set.

The trauma team leader is the physician who is in charge of managing the trauma care for the patient in the emergency department. In Level I and II trauma centers, this person frequently will be the trauma surgeon. For hospitals not designated as a Level I or II hospital, the trauma team leader may be a physician other than a trauma surgeon (e.g., physician on call in the emergency department), or in some critical access hospitals, the trauma team leader may be a Physician Assistant or Nurse practitioner.

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7. Open fractures

Open fractures undergo debridement within 8 hours of ED arrival. Excludes patients who were discharged or who died within 8 hours or ED arrival.

May, 2009 ACT recommendations

Delete this indicator as irrigation and debridement is not the issue. The issue is giving the correct antibiotic. Since we do not have registry data regarding appropriate antibiotic use, the suggestion was to delete this indicator.

August KTR recommendation

Agree to delete this indicator from the data report.

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4. Non-Operative Management of Low-Grade Spleen Injuries.

Patients with low-grade splenic laceration, AIS $\leq$ 3, do not undergo splenectomy.

April, 2009 KTR Meeting

Edit description to include only AIS 1 or 2 severity to match current query.

May, 2009 ACT recommendations

Change query to include AIS =3 in the query.

August KTR recommendation

Agree to include AIS=3 in the query.

Add the following AIS predot codes to the data report query:

AIS predot code – 544214 Contusion
subcapsular, >50% surface area or expanding; ruptured subcapsular or parenchymal; intraparenchymal>5 cm in diameter or expanding; major ; (OIS grade III)

AIS predot code 544224 - Laceration
No hilar or segmental parenchymal disruption or destruction; >3 cm parenchymal depth or involving major (i.e., trabecular) vessels; moderate (OIS Grade III)

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5. **Documentation**

The following measure will be documented in EMS record.

Injury Date & Time

The following clinical measures will be documented in the ED.

Glasgow Coma Scale
ED Arrival Date & Time
Respiratory Rate
Systolic Blood Pressure
Heart Rate
Temperature
Procedure Start Time (for any procedure)
Discharge Date and Time

April, 2009 KTR Meeting

Procedure Start Time (for any benchmark procedure: definitive airway, chest tube, irrigation of fracture, reduction of dislocation, splenectomy, laparotomy).

May, 2009 ACT recommendations

Keep current indicator of start time for ANY procedure.

Take back to policy group for discussion.

August KTR recommendation

Keep this indicator as is.

New Indicator for hospitals that are not a Level I or II
Undertriage: Patients with initial ED systolic blood pressure <90 or GCS ≤ 8 are transferred to a Level I or Level II trauma center.

April, 2009 KTR Meeting

Add to data report

May, 2009 ACT recommendations

Take back to policy group to discuss

August KTR recommendation

Data were presented for this proposed indicator. The policy group will make a decision on this indicator the next meeting.

Recommended New Indicator for hospitals that are a Level I or Level II trauma center
Overtriage: Patients transferred to a Level I or Level II trauma center from another acute care hospital are not discharged within 1 day of ED arrival.

April, 2009 KTR Meeting

Include new indicator in data reports for Level I and Level II trauma centers.

May, 2009 ACT recommendations

What will Level I and Level II centers do with this information. Will individual hospitals or a trauma committee talk with referring hospitals about outliers?

August KTR recommendation

Data were presented for this proposed indicator. The policy group will make a decision on this indicator the next meeting.

Proposed changes for Readmissions
Core Data Set

Nature of Issue:

Issue: Currently, the central site is unable to determine if a trauma patient is readmitted to a hospital for the same trauma. While this is not a common occurrence, we have no way of quantifying how uncommon this is.

There is an option for coding whether a patient is a readmit in the comprehensive data set but not in the core.

To address this issue, an additional option would need to be added to the field, Non-injury related occurrence-Core. In addition, we would like to include a QA/QI memo field in the core data set so registrars can describe the situation and send this information to the state. QA/QI memo field that is present for the comprehensive data set would need to be activated for core data collection.

Who proposed: Trauma Program

What type of data currently are being collected?

Currently there is a field for Non-injury related occurrence-Core , there is NO core QA/QI memo field

Non-injury related occurrence – Core		
01 Bleeding	08 Pneumonia	15 Coma
02 Coagulopathy	09 Superficial surgical site infection	16 Cardiac Arrest with CPR
03 Decubitus	10 Systemic sepsis	17 Deep Vein Thrombosis (DVT)/Thrombophebitis
04 Deep Surgical site infection	11 Wound Disruption	18 Myocardial infarction
05 Extremity compartment syndrome	12 Abdominal compartment syndrome	19 Pulmonary Embolism
06 Graft/prosthesis/ flap failure	13 Acute renal failure	20 Stroke/CVA
07 Organ/space surgical site infection	14 Acute Respiratory distress syndrome (ARDS)	21 Unplanned intubation

What changes are proposed?

1) Add to the options list for Non-injury related occurrence – Core "readmit"
2) For local users, activate the QA/QI memo field for the core data set. For web users, add a QA/QI memo field.

How will the proposed changes be useful to hospitals?

These changes will allow hospitals to more accurately report about trauma patients who are readmitted for the same injury within 24 hours of discharge from the hospital.

What software modifications will be necessary to accommodate the change?

1) Adding an option to an existing field, Non-injury related occurrence – Core, in the core data set.
2) For local users activating the QA/QI memo field to the core data set that currently exists in the comprehensive data set. For web users, adding a QA/QI memo field.

What procedural changes will be necessary to accommodate the changes?

1) Update the data dictionary and training materials.

August KTR recommendation

1) Add the option "readmission" for the field Non-injury related occurrence-Core.
2) Do not add or activate a QA/QI memo field.

Proposed changes in codes for decubitus ulcer
Non-injury related occurrence - Comprehensive

Nature of Issue:

Who proposed: Wesley Medical Center

What type of data currently are being collected?

Currently, there are 4 options to code a decubitus ulcer under the Non-injury related occurrence – comprehensive.

6502- Decubitus (minor): Erythema not resolving within 30 minutes of pressure relief. Epidermis remains intact. Reversible with intervention.

6503 Decubitus (blister): Partial- thickness loss of skin layers involving epidermis and possibly penetrating into but not through dermis. May present as blistering with erythema and/or induration; wound base moist and pink, painful, free of necrotic tissue.

6504 Decuibus (open sore): Full thickness tissue loss extending through dermis to involve subcutaneous tissue. Presents as shallow crater unless covered by eschar. May include necrotic tissue, undermining sinus tract formation, exudate, and/or infection. Wound base is not painful.

6505 Decubitus (deep): Deep tissue destruction extending through subcutaneous tissue to fascia and may involve muscle layers, joint, and/or bone. Presents as a deep crater. May include necrotic tissue, undermining, sinus tract formation, exudate, and/or infection. Wound base is usually not painful.

What changes are proposed? The National Pressure Ulcer Advisory Council has redefined the definition of a pressure ulcer and the stages of pressure ulcers. The new staging includes the original 4 stages and proposes 2 additional stages on deep tissue injury and unstageable pressure ulcers. http://www.npuap.org/pr2.htm

How will changes in option categories be useful to hospitals? The current staging system was defined by Shea in 1975[1] that described the amount of anatomical tissue loss. The original definitions were confusing to many clinicians and lead to inaccurate staging of ulcers associated or due to perineal dermatitis and those due to deep tissue injury.

The revised descriptions have clinical face validity, utility and discrimination. The NPUAP (National Pressure Ulcer Advisory Panel) believes that these stages would be useful in practice, education and research.
Adding these two additional national staging standards would allow trauma registry data to be consistent with skin staging standards used by hospital wound care services.

[1] Shea, JD. (1975). Pressure Sores: Classification and management. Clin. Orthop Relat Res. Oct.; 112: 89-100.

What type of Collector user is the issue affecting? Comprehensive users.

Code	Name	Definition	Stage	Definition for Pressure Ulcer Stages Revised by NPUAP
6502	Decubitus minor	Erythema not resolving within 30 minutes of pressure relief. Epidermis remains intact. Reversible with intervention.	I	Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have visible blanching; its color may differ from surrounding area.
6503	Decubitus blister	Partial- thickness loss of skin layers involving epidermis and possibly penetrating into but not through dermis. May present as blistering with erythema and/or induration; wound base moist and pink, painful, free of necrotic tissue.	II	Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as n intact or open/ruptured serum-filled blister.
6504	Decubitus open sore	Full thickness tissue loss extending through dermis to involve subcutaneous tissue. Presents as shallow crater unless covered by eschar. May include necrotic tissue, undermining sinus tract formation, exudate, and/or infection. Wound base is not painful.	III	Full thickness tissue loss. Subcutaneious fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling.
6505	Decubitus deep	Deep tissue destruction extending through subcutaneous tissue to fascia and may involve muscle layers, joint, and/or bone. Presents as a deep crater. May include necrotic tissue, undermining, sinus tract formation, exudate, and/or infection. Wound base is usually not painful	IV	Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunneling.
			Unstageable	Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed. Until enough slough and/or eschar is removed to expose the base of the wound, the true depth and therefore stage cannot be determined.
			Suspected deep tissue injury	Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.

Proposed Change in options under Non-injury related occurrence- comprehensive:

Adding two additional codes for decubitus under the field "non-injury related occurrence – comprehensive.

August KTR recommendation

For the Non-injury related occurrence- comprehensive field, change the existing options code descriptions to be consistent with the National Pressure Ulcer Advisory Council schema and add the two new additional stages (unstageable and suspected deep tissue injury).

Proposed changes regarding financial information
Core Data Set

Nature of Issue:

Issue: Currently, the central site receives primary payor source information as a core variable. An unknown number of trauma patients have more than one type of insurance coverage.

By having more information regarding payor source, the central site will be able to describe better the insurance coverage of trauma patients. Having information regarding additional insurance coverage would be especially helpful when auto insurance is listed as a primary payor source, because auto insurance coverage alone is rarely enough to cover hospital charges for trauma treatment and care as measured by the core variable H_CHRG.

To address this issue, we are proposing to add Secondary payor source to the core data set.

Who proposed: Trauma Program

What type of data currently are being collected?

Primary payor (pay_01) is a core variable.
Comprehensive users collect information regarding secondary payor and other payor source.

What changes are proposed?

3) Add a new variable, secondary payor", to the core data set.

This will not change data collection for local collector users, but will be an additional data point for web users.

How will the proposed changes be useful to hospitals?

This change will allow the central site to present more specific information to hospitals about regional and state insurance coverage for trauma patients.

What software modifications will be necessary to accommodate the change?

3) Adding a field, Secondary Payor– Core, in the core data set.
4) For local users activating the secondary payor source so that this information can be submitted to the State Trauma Program.

What procedural changes will be necessary to accommodate the changes?

1) Update the data dictionary and training materials.

August KTR recommendation

Add "Secondary Payor source" to the core.

Scott Harrison asked about a time limit for collecting financial data. Lois replied the College of Surgeons recommends six months as a cut-off in gathering the charges collected for patients. Rosanne said we will adopt the six month time limit for financial collections.

Adjourn: 3:10pm