Project: Indiana State Trauma Care Committee (ISTCC)  
Date: August 21, 2015 – 10:00 am

Attendance:  
Committee members present (in person): Jerome Adams, MD, MPH (Chair); Michael Garvey (proxy for David Kane, Vice Chair); R. Larry Reed, MD; Stephen Lanzarotti, MD; Chris Hartman, MD; Gerardo Gomez, MD; Spencer Grover; Thomas Rouse, MD; Jennifer Konger (proxy for Mitchell Farber, MD); Lisa Hollister, RN; Ryan Williams, RN, BSN, EMT-P; Tim Smith; Matthew Vassy, MD; Michael A. McGee, MD; and Bekah Dillon, RN, MSN, CEN

Committee members present (via webcast): David Welsh, MD

Committee members not present: David Kane (Vice Chair); Lewis E. Jacobson, MD, FACS; Donald Reed, MD, FACS; Mitchell Farber, MD; Scott Thomas, MD; and Tony Murray

ISDH Staff Present: Art Logsdon; Katie Hokanson; Camry Hess; Ramzi Nimry; and John O’Boyle

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<th>Agenda Item</th>
<th>Discussion</th>
<th>Action Needed</th>
<th>Action on Follow-up Items</th>
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<tr>
<td>1. Welcome and Introductions – Dr. Jerome Adams, Chair</td>
<td>Dr. Jerome Adams, State Health Commissioner and ISTCC Chair opened the meeting at 10:05 am. He asked for Committee member introductions attending in person and on the webcast. Dr. Adams thanked Katie Hokanson and her staff for a very successful EMS Medical Directors Conference. Art introduced Bekah Dillon, RN, MSN, CEN, from IU Health Ball Memorial Hospital in Muncie. Bekah is filling a Nurse (trauma program manager) position on the Committee, replacing Merry Addison. Art thanked Merry for service and dedication to the development of a statewide trauma system and stated that she will not be going far as she will still be participating on the various ISTCC subcommittees.</td>
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2. Approval of Minutes from the May 22, 2015 ISTCC Meeting

Dr. Adams asked comments or corrections to the minutes of the May 22, 2015, ISTCC meeting. Hearing none he entertained a motion for approval. Spencer Grover made a motion that the minutes be approved; it was seconded by Dr. McGee and passed unanimously.

Minutes Approved as Distributed.

N/A

3. District 10 Regional Trauma System Development Roadmap – Drs. Matthew Vassy and Stephen Lanzarotti

Dr. Vassy and Dr. Lanzarotti, both surgeons in the Evansville area, District 10, discussed with the Committee the District 10 (D10) “roadmap” which they have developed and followed to bring their district’s trauma care system to reality.

There are two Level II Trauma Care Centers in Evansville and both of these centers hope to provide assistance to other districts as a model to bring other health care facilities into the Indiana trauma care system as well.

They emphasized the need to develop a “trauma system” rather than “trauma care centers”. The doctors noted that their facilities not only serve the City of Evansville but southeast Illinois and northwestern Kentucky as well. And that a trauma system plan is an organized process within a geographical area that guides flow of injured patients to the proper facility for best patient care and best outcomes. “Right patient, right place, right time”.

The development of such a system plan for District 10 is based on standard guidelines set forth by the ASC-COT, for comprehensive trauma and acute care system development. The plan was also based on the premise that participation in an inclusive system to provide care of injured patients meets the needs of each rural community.

Dr. Lanzarotti discussed the evolution of D10 noting emphasis on state registry participation, drafting of by-laws, nomination of officers, forming special committees and reviewing case study

N/A

N/A
presentations with education with a performance improvement emphasis.

By 2014-2015 D10 Trauma Regional Advisory Council (TRAC) has data to review and is studying pediatric trauma in their area. They have also developed management guidelines and protocols, implemented data driving system performance improvement initiatives, assisted member organizations in attaining trauma designation at the level appropriate for the resources in their area and trauma system funding when applicable, approved and distributed funding to trauma care providers according to legislative rules.

D10TRAC is also planning for the future. They want to increase public awareness of the methods to access the trauma and acute care system and injury prevention programs.

They are working to enhance communications, and provide education and certification programs for trauma care providers throughout the region based upon identified needs.

The goal of D10TRAC is:
- To have an inclusive trauma system for care of the injured patients in southern Indiana.
- Provision of technical assistance and education to regional hospitals and providers for the purposes of improving system performance.

Further goals are to improve ED/LOS, get patients to the right place quickly and collect the data that will show favorable improvement.

Dr. Vassy noted these goals would not and could not be achieved without the support of the American College of Surgeons and the Indiana State Department of Health.
Dr. Adams thanked them for their tremendous presentation and all their hard work on the system they have developed thus far showing just how much can be accomplished.

Dr. Gomez congratulated D10 on their work thus far.

### 4. Trauma Registry Implementation Research Collaborative – Dr. Peter Jenkins, IU Methodist Hospital

Dr. Peter Jenkins is a trauma surgeon at IU Methodist in Indianapolis. He stated he approached Dr. Walthall and asked that she mentor him through a grant proposal. She agreed but also invited Dr. Jenkins to be a member of her team for the research collaborative and work on research projects related to the collaborative. He agreed to join the team and was very eager to work on not only projects with “scholarly” importance but policy-level impact to the state of Indiana as well.

After review of the data, Dr. Jenkins chose “inter-hospital transfer” as his focus. He noted long standing risks associated with these types of transfers. It has been stated in a 2007 review that data on such transfers is too limited to draw any substantial conclusions. That report called for co-specifically collected data that looks at this issue in more detail and studies the risks involved.

The ISDH Registry has a very unique opportunity to provide this data by using probability matching by using that data to link patient encounters across the hospital system.

Dr. Jenkins stated he has been working with Katie Hokanson and Camry Hess for a couple of months performing probability matching and have achieved close to 80% certainty of an accurate match, and now the team is able to match almost 86% of patients in the Registry from one hospital encounter to another.

| N/A | N/A |
The next steps will be to validate those matches to understand why the 14% are not matched – could they be out-of-state patients coming to Indiana – or are patients leaving the state or are they actual miscalculations in our probability matching? They will also look closely with risks associated with inter-hospital transfers but drill down into the data and learn whether there are certain mechanisms of injuries or certain co-morbidities that are associated with increased risks. The purpose is to publish papers and provide feedback to EMS providers for use when they encounter certain types of injury mechanisms or co-morbidity so they are able to identify those patients as needing to go to a tertiary center without being directed to a low volume or a primary center.

Dr. Larry Reed stated his belief that Indiana is taking the opportunity to do this correctly. The data as reported to the Trauma Registry is designed to be system-wide and not just facility specific.

The timeline for this project is a 4 to 5 year process.

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<th>5. Designation Subcommittee Update – Dr. Gerardo Gomez</th>
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<td>Dr. Gomez began by recognizing and thanking his subcommittee members and staff from the ISDH. They have met four times so far this year and the minutes are available online. The August minutes will be up on the website soon. He also presented an overview of the process for facilities applying for “in the process” status. He reviewed the facilities that have achieved “trauma center” status thus far and those in the process currently. He continued with a review of the “one year in the process” progress report. Dr. Gomez stated that he and the subcommittee members feel all facilities “in the process” are on track for completion within the prescribed timelines.</td>
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<td>Dr. Gomez stated that Indiana needs a state designation rule.</td>
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Community Hospital of Anderson

Dr. Gomez reported on some pending issues with their one-year review.

Dr. Adams asked the representative from Community Hospital of Anderson to share thoughts with the Committee regarding the problem with the timing of the consultation visit from the American College of Surgeons (ACS) and ways to avoid this problem in the future. Dr. Adams state that the consultation visit is designed to increase the success of the certification visit and he doesn’t want this important step skipped because it could affect the outcome of the certification visit.

The representative of Community Hospital of Anderson stated that his understanding is that the College is changing from the Green Book to the Orange Book and there is a moratorium on conducting consultation visits until July 2015 and this caused a backlog of visits that is months long. He also stated their tentative visit was set for the first week in January 2016 with the verification visit set for May 2016; however the ACS withdrew that plan stating a rule existed requiring a year (12 months) between the two visits. The consultation visit has been cancelled with no reschedule date offered at this point. He concluded that if Community Hospital of Anderson is committed to adhere to the two-year process at this time they will need to proceed without a consultation visit and proceed directly to the verification visit.

Dr. Lawrence Reed stated that as long as Community Hospital of Anderson is receiving trauma patients, even if the facility were to lose its “in the process” status, it doesn’t affect whether or not they can become certified. He stated that when the Triage and Transport Rule guidelines were put in place, the idea was for EMS providers to
bypass some hospitals to get to a trauma center. However, wording within the Triage and Transport Rule plus the “45-minute Rule” has precluded this from happening.

Dr. Adams proposed extending the “In the Process” timeline on the state’s side so that both visits can take place with the ACS.

Katie Hokanson noted conversations from a previous Designation Subcommittee meeting - if a facility has good documentation between themselves and the ACS, whether written or electronic, it shows the effort made by the hospital to get these visits scheduled.

The consensus from the Committee was that a consultation visit is crucial to the success of the verification visit.

Dr. Hartman stated that a hospital should not be penalized because of issues created by changes with the ACS’s process.

Dr. Gomez also stated the state needs to develop a rule for state trauma center designation of its own.

| 6. Traumatic Exposure: The Importance of Trauma-Informed Care – Michelle Hirsch, Office of Women’s Health, US Depart. of Health and Human Services (HHS) | Laura Chavez, ISDH Office of Women’s Health, introduced Michelle Hoersch. She has been with HHS since 1986 and brings much knowledge and experience to the women’s health arena. The vision is to enable every health and social service provider and institutions with knowledge and resources and support to provide services that are gender-responsive and trauma-informed so as to provide the best possible care for trauma-affected individuals. Michelle’s presentation highlighted the “epidemics of trauma” including rape and sexual assault, intimate partner violence, child sexual abuse, street violence and poverty to name a few. | N/A | N/A |
She noted the impact of trauma is dramatically underestimated. During her presentation she focused on the effects of these types of trauma throughout a victims’ life. Some of which can begin with child abuse.

Stress can be positive, tolerable or toxic. Toxic stress occurs when someone experiences prolonged stress.

Individuals in the US will have multiple exposures to trauma in their lifetime. What is the impact on the brain and behavior? There is no single body system that is affected.

The Adverse Childhood Experience (ACE) study was sentinel research done at Kiser Permanente. People would lose weight but then regain it beginning at 3-4 months. The weight gain was linked to childhood adverse experiences. There are ten types of childhood trauma measured in the ACE study.

The ACE study was replicated in Philadelphia. They found linear relationships between ACE scores and smoking, teen pregnancy and heart disease.

What is trauma-informed care? It uses a shift from the question, “What is wrong with you?” to “What happened to you?”

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<th>7. PI Subcommittee Updates – Dr. Lawrence Reed</th>
<th>Dr. Lawrence Reed recognized and thanked his subcommittee members and the ISDH staff. The Subcommittee met on August 11, 2015 and they reviewed the 3 goals of the subcommittee, which are:</th>
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<td>(1) Increase the number of hospitals reporting to the Registry (2) Decrease the average ED LOS at non-trauma centers (3) Increase the EMS run sheet collection.</td>
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During the first quarter of 2015, 94 hospitals were reporting data to the Registry.

During the first 5 Trauma Tour events there were 6 participants in the refresher courses. Dr. Reed encouraged everyone to make other hospitals aware of this training opportunity.

He also reviewed the Trauma Center Mentor program. This project urges all hospitals to report data in order for more data to be shared and analyzed. “If you can’t measure it you can’t improve it”.

Dr. Reed also discussed the list of hospitals not reporting to the Registry. Some are understandable, others are not, but those receiving trauma patients should be reporting. He noted that in some districts, all hospitals are reporting data which is commendable.

While looking at ED LOS at non-trauma centers they are seeing that some patients are receiving services at appropriate facilities, but the LOS is still upwards of 2 hours – and this time needs to decrease.

Dr. Reed stated the group has been looking at this issue for 3 years and it is now time to look at the root cause of the problem. He expressed the need to include more categories for reasons for longer ED LOS.

He then discussed the EMS run sheet collection issue. He began by asking everyone to notify Katie if they know of EMS providers who are not leaving run sheets. Mike Garvey stated that at the last EMS Commission meeting on March 17, 2015 he urged everyone to begin this practice if they were not already doing so.
Dr. Reed also let the Committee know that a list of EMS providers has been requested from the IDHS so the ISDH will have a complete listing of all providers that should be leaving run sheets. Mike Garvey and Lee Turpen were given lists of EMS providers not leaving run sheets on March 25, 2015 and July 18, 2015.

Other topics being reviewed by the Subcommittee are:
- Metrics between ED LOS and ICU LOS
- Compare 2013 Indiana Trauma Registry (ITR) data to National Trauma Data Bank (NTDB) data
- Reevaluate the EMS Triage and Transport Rule
- Identifying double transfers
- Data quality dashboard for transferred cases

New issues for the Subcommittee are:
- Separating hip fractures from other trauma categories

Dr. Reed shared his belief that separating this injury from others was not necessary.

Dr. Reed complimented Dr. Lanzarotti and Dr. Vassy for their work in adopting the Illinois model of trauma systems and modifying it for their area in southwest Indiana.

He also noted that the key to developing the regional system is to gather all hospitals together to form a work group and have regular meetings where they will review specific cases during peer review sessions to discuss things that could have been done differently, especially with inter-facility transfers. Minutes of these meetings are helpful as well for the group to use as a reference.
8. Trauma Registry Report – Camry Hess and Ramzi Nimry

Ramzi Nimry reported that District 7 is the only district in Indiana with 100% of the district’s facilities reporting data to the Registry.

Camry Hess reported on the latest data as shown in her PowerPoint presentation. Page 4 in the report had emergency department (ED) length of stay (LOS) over 12 hours. There were 91 patients in this group.

Page 7 had hospital LOS (days) by probability of survival (Ps) for non-trauma centers. All patients with Ps <= 50% had a no hospital stay. This is good - these patients are being recognized and transferred out.

Page 8 had ED disposition of expired and Ps >= 50%. There were 5 cases this quarter and 7 cases last quarter.

Page 9 has patients who did not expire in the ED, but did expire in the hospital and came in with a Ps >/= 50. There were 69 such cases at trauma centers. A discussion ensued about falls in older patients. The age range was wide; from 22 to 93 years.

Page 10 has the same population as page 9 but for non-trauma centers. There were 36 cases.

Camry Hess asked the Committee members to please let she or Katie know if there was any additional information they would like included in the presentation.

9. Updates – Katie Hokanson

Katie provided an update on the 2015 Trauma Tour and the Blue Sky Project.

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<td>9. Updates – Katie Hokanson</td>
<td>Katie provided an update on the 2015 Trauma Tour and the Blue Sky Project.</td>
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<td>10. Other Business</td>
<td>None</td>
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<td>ISTCC meeting dates for 2015</td>
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<td>October 30, 2015</td>
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<td>December 11, 2015</td>
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<td>12.</td>
<td>Adjournment</td>
<td>Hearing no further comments or business to come before the Committee, Dr. Adams adjourned the meeting at 12:05 pm and thanked everyone for their attendance and participation.</td>
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