PI Subcommittee Meeting

February 10, 2015 – 10am EST to 11am EST

Notes

1. Welcome & Introduction

<table>
<thead>
<tr>
<th>Meeting Attendees</th>
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<tbody>
<tr>
<td>Adam Weddle</td>
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<tr>
<td>Bekah Dillon</td>
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<tr>
<td>Cindy Twitty</td>
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<tr>
<td>Jennifer Mullen</td>
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<tr>
<td>Kristi Croddy</td>
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<tr>
<td>Lindsey Williams</td>
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<tr>
<td>Mary Schober</td>
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<tr>
<td>Paula Kresca</td>
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<tr>
<td>Sean Kennedy</td>
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<tr>
<td>Wendy St. John</td>
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<tr>
<td>ISDH STAFF</td>
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<tr>
<td>Katie Hokanson</td>
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<tr>
<td>Murray Lawry</td>
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2. Goals

a. Increase the number of hospitals reporting to the Indiana trauma registry
   - As of February 9th, we have 90+ hospitals consistently reporting trauma data to the trauma registry.
   i. Information on trauma registry training events
      1. 2015 Trauma Tour will have a 1 hour refresher course ahead of time
         - ISDH will do a tour in July and August. Before each event, Ramzi will lead a 1 hour refresher training for hospitals in the area that have questions about the registry.
      2. Survey to address areas of concern
         - ISDH will send out a survey monkey to ask registry users what topics they need more information on when it comes to the registry. If you get feedback from hospitals, please send that information to Ramzi.
   ii. Trauma Center mentor program
      1. Confirmation of mentorship still in process
         a. Deaconess
            i. Assists with questions from all hospitals in district 10.
         b. Memorial Hospital of South Bend
         c. Eskenazi Health
            i. Continues to support Community Health Network and Terre Haute Regional Hospital.
         d. IU Health – Ball Memorial – D6 update:
            i. Answers questions from “in the process of ACS verification” level III trauma centers or hospitals working towards “In process”. Bekah contacted all 3 hospitals in the district that
were not reporting and visited St. Vincent Randolph to answer questions/concerns.

e. IU Health – Bloomington – St. Vincent Dunn update.
   i. St. Vincent Dunn is working to identify what staff would put in the data.

f. St. Elizabeth – East

g. St. Mary’s of Evansville
   i. Continue to work with Good Samaritan and have started providing support to Memorial Hospital & Health Care Center (Jasper).

h. St. Vincent – Indianapolis – Katie spoke with both Peyton Manning & Fishers campus, no additional follow-up from either hospital at this time.
   i. Continue to reach out via email and encourage reporting to the registry.

2. Update on mentorship status
   a. IU Health – Arnett
      i. Works with IU Health – White Memorial Hospital when they have questions. Katie mentioned change in ED management, and encouraged Amanda to check in and make sure they understand the value of reporting data.

   b. IU Health – Methodist

   c. IU Health – Riley

   d. Lutheran – St. Joseph and Bluffton update?

   e. Parkview RMC – Wabash under Parkview umbrella?
      i. Parkview RMC will start collecting data for Parkview Wabash within the next 6 months. Waiting on the hospital to move to EPIC.

   f. Community North – Riverview attended the 11/20 training event
      i. Community West should start reporting data soon. Katie asked Jeremy to follow-up with Riverview Health about reporting to the registry.

   g. Others?
      i. If anybody has reached out to folks who have not reported, let Katie know. There are opportunities in D3, D5, and D9. If you have connections, please use them.

   iii. Discussion of specific hospitals (see attached excel spreadsheet):

   1. Hospitals that have not reported any data

   b. Decrease average ED LOS at non-trauma centers
      i. Transfer data NOT sent to trauma centers (& some other facilities receiving transfer patients) – working on purchasing new linking software

      ii. Review of current average ED LOS
          1. Added Min, Max, Average for critical patients
          2. Data quality issues
             a. ED LOS > 24 hours
             b. ED LOS < 0 hours
                i. ISDH has added validity rules to hopefully help reduce these issues.

             c. ED Disposition = Observation Unit
                i. Clarification in data dictionary
                ii. Discussion at upcoming ITN Registrar Conference Call

            iii. Quiz Questions (part of previous quiz, will revisit)
3. Added Body Region
   iii. Discussion of educational materials for non-trauma centers regarding timely transfers
      1. Templates that can be shared to individual hospitals – Lisa Hollister?
      2. ED managers contact list established
         a. ISDH will start sending hospital-specific data reports to ED managers AND trauma registry users for that hospital.

   c. Increase EMS run sheet collection
      i. Please send Katie list of EMS providers not leaving run sheets.
         1. Katie brought this up to the EMS Commission on Friday, February 13th and they want to know which providers are not complying.
         2. The Indiana Department of Homeland Security has a new Director, David Kane.

      ii. Question from EMS providers: hospital access to EMS run sheets acceptable?
         1. For example, some EMS providers in district 10 give the hospitals access to the electronic run sheets. Is this suffice?
            a. Mary Schober – at Community South, 60-70% of EMS providers fax run sheets within the mandated 24 hours, but getting them into our medical records can be challenging. Our fax machine is out in the open so a lot of times folks working the ED will trash the run sheet. If they could leave them at the hospital that would be ideal.
               i. Katie – the fax machine location/process would probably be a good PI process for Community South. Could you use a different fax number?
               ii. Spencer – what about scanning them and sending them to a specific e-mail?
            b. Amanda Elikofer – we have access to the electronic records, but that doesn't help the providers giving care at the moment. We need a single page of information that includes vitals, fluids, medications given, etc.
               i. Katie – Do you have specific locations where they leave the run sheet?
                  1. Answer – It goes to the patient’s provider or the nurse.
            c. Katie – Do you all have a standard 1 sheet form?
               i. Answer – No, we just get the run sheet. That would add work for them if we added another form for the EMS provider to fill out.
               ii. Amanda E. – most of the air services have a 1 page form, but most don’t fill it out.
            d. Katie – we need to stress that access to the electronic records are helpful, but having a paper copy is most helpful.
               i. Amanda E. – timing of when mediciation is administered by EMS providers is crucial.
            e. Bekah at Ball – for the majority of our services, they are capturing their run sheet data electronically and do not leave a one page report anymore. We don’t have too many problems at the bedside. It would be double documentation to do a 1 pager. It does take them some time to finish their run sheet. If the trauma center had a 1 pager to ask them when they come in, that could be part of our process.
i. Jen Mullin – At the facility I worked at before joining Methodist Gary, ‘EMS intervention’ was been part of the trauma flow sheet in the ED. Our bedside report happens quickly. Additional paperwork would not be successful. Integrating the bedside report to the trauma flow sheet makes more sense.

2. Katie – I will ask other states how they handle this. ImageTrend has a product, where an EMS provider in the field utilizing the ImageTrend Field Bridge, as soon as you get internet/wi-fi, then the data goes into the EMS State Bridge and/or the hospital hub. The hospitals can go into the hospital hub in real time. That would be ideal if everyone uses the hub and has internet access in the ED and the EMS Provider is using the Field Bridge. There are a lot of factors to make that work.

iii. Removed run sheet calculations by hospital

1. Issues with portraying run sheet collections by hospital accurately. Any and all suggestions are welcome regarding how to improve this tracking.

3. Potential Metrics

a. Last meeting’s discussion:

i. Triage & Transport Rule – ISDH thinking how we can use trauma registry data to accurately measure EMS providers meeting requirement. Previous discussion was around identifying ZIP codes that are within 45 minutes of a trauma center no matter where they are in the ZIP code.

1. How can we look at registry data for this rule?
   a. Amanda Elikofer – we have had discussion but haven’t come up with solutions at this point.
   b. Katie – we will keep this on the radar.

ii. Identifying double transfers – new Linking Software will help us better identify these patients.

1. Once we identify what data elements will be used with the new linking software, ISDH will create a hospital-specific dashboard that shows how complete the linking data elements are. This will help with identifying double transfers.

b. Other metrics to discuss:

i. Orange Book criteria for transfers (page 31)

1. Carotid or vertebral arterial injury
2. Torn thoracic aorta or great vessel
3. Cardiac rupture
4. Bilateral pulmonary contusion with Pao₂:Fio₂ ratio less than 200
5. Major abdominal vascular injury
6. Grade IV or V liver injuries requiring transfusion of more than 6 U of red blood cells in 6 hours
7. Unstable pelvic fracture requiring transfusion of more than 6 U of red blood cells in 6 hours
8. Fracture or dislocation with loss of distal pulses
9. Penetrating injuries or open fracture of the skull
10. GCS score of < 14 or lateralizing
11. Spinal fracture or spinal cord deficit
12. Complex pelvis/acetabulum fractures
13. More than two unilateral rib fractures or bilateral rib fractures with pulmonary contusion (if no critical care consultation is available)
14. Significant torso injury with advanced comorbid disease (such as coronary artery disease, chronic obstructive pulmonary)
a. Is this something that should be looked at? ISDH would like to look at over/under triage.
   i. Amanda Elikofer – I think this is really important, but it would be hard to get this data out of the registry.
   ii. Amanda Rardon – Some of these we will keep based on our capabilities (we have neurosurgery). ISDH would not be able to compare “apples to apples.”
      1. Regina – I agree with Amanda
   iii. Amanda Elikofer – Some of these cases are more complicated when you really start getting into them. They should be transferred from a III to a I, even though both are trauma centers. I think you should look at double transfers (Rural Hospital to a Level III trauma center to a Level I trauma center).
   iv. Regina – We have had situations based on the availability of EMS, we have stabilized the patient in the OR and then shipped out the patient to a higher level of care.
   v. Amanda E. – What is the table on the 1 year progress report? ISS>25 at level III trauma centers and mortality numbers. Do we look at that now?
      1. Katie – No (not in the statewide report).
         a. Amanda – I think we should look at those for progress on transfers and overall management.

ii. Required Trauma Center PIPS Core Measures (page 119)
   1. Mortality Review
      a. All in process and trauma centers are looking at this. Do non-trauma centers look at this data?
         i. Dawn – My guess is that non-trauma centers look at this, but not from the same perspective. They would look at it from a joint commission standpoint. The level of review would vary by hospital.
         ii. Amanda Elikofer – At a non-trauma center, if they had a death, would they know the injury? This is why IU Health - Methodist does the post-mortem CTs. That can skew the non-trauma center information for sure.

iii. Recommended Outcome Measures (page 127)
   1. ED mortality rate
   2. Total EMS time (EMS hospital arrival time – dispatch time)
      a. Already a part of the statewide trauma registry data report.
   3. Total EMS Scene Time (EMS Hospital arrival time – scene arrival time)
      a. Already a part of the statewide trauma registry data report.
   4. Hospital LOS
      a. Already a part of the statewide trauma registry data report.
   5. ED LOS
      a. Already a part of the statewide trauma registry data report.
   6. ICU LOS
      a. Already a part of the statewide trauma registry data report.
   7. Vent Days
      a. Already a part of the statewide trauma registry data report.

iv. Data Quality dashboard for linking cases
1. Katie - I envision having a section in the hospital reports, that lists the elements that are used for linking and how complete the elements are for that hospital. Put them in color codes (for example, 80%+ is green, 60-79% is yellow, <59% would be red).
   a. Jen Mullin – Has the state considered setting goals for ED LOS? It has helped us to transfer faster by knowing that the state’s goal is 2 hours. This put the heat on our throughput people here.
   i. Katie – We have set a goal of 2 hours. This will be discussed at the next TCC meeting. Dr. Walthall is working with us to bring on Dr. Jenkins, who has done a lot with NTDB data and metrics to determine overall what the national system looks like. He will do something similar for Indiana with the trauma registry data. For example, do patients that leave the initial facility ED within 2 hours have better outcomes? He will come on in the next month or so and will be a part of the subcommittee meetings.

2. Dawn – I like looking at ED LOS and how that impacts ICU LOS. My question is, does the collection system easily identify the ICU units.
   a. Katie – we have the data element ED disposition with a value of ICU, but it does not break out which ICU unit that is.
   i. Jodi – What happens to the kids that go first to the OR and then the ICU? You should be able to identify these cases based off of ICU days>1.
   v. Dr. Jenkins project
      1. Discussed above.
   vi. ACS Needs Assessment Tool review
      1. Katie – we are reviewing the metrics laid out in this tool. For example, is this something we have the data for? Are these useful for Indiana? We’ll provide an update at the next PI subcommittee meeting.

4. Additional Discussion
   a. Amanda Elikofer – back to Mortality Review. Are you going to break it down like the Orange book, pediatric, (p. 119) geriatric, overall. I think all of the trauma centers will be doing that.
   i. Katie – this is definitely something we can look at for the next meeting.
      1. Lisa – will that table be risk-adjusted? With Probability of Survival? If it’s just raw rates, it doesn’t have any meaning.
         a. Amanda Elikofer – you will need to look at 119 to see how they split up the DOA. I think we need to mirror the Orange Book in my opinion.
      2. Dawn – the one group I would pull out are pediatric patients < 15 years of age.
      3. Jennifer Mullen – I’m looking at this table. The challenge is when we get the Coroners reports 6 months later. We would need to be continuously updating and looking at the reports. We need the final ISS scores so the information can tell us something. Average time frame from the coroner’s office is 6 months. Who else has experienced that around the state? That would affect data.
         a. Jodi – It takes us 3-4 months to get Marion County reports back. We submit 2 quarters of data to the state trauma registry to update any of our deaths.
   b. Lisa – Will Indiana start doing TQIP at the state level like Michigan?
i. Katie – I had a follow-up call with the ACS after I attended TQIP in 2013. There are only a couple of states doing TQIP at the state level. It is a very expensive process and we currently do not have state funding. Also, in 2013 there was no TQIP for level III trauma centers or any level of pediatric trauma centers. TQIP has expanded to Level IIIs and Pediatric trauma centers, but I have not heard how that is going.

1. Lisa – Could ISDH take a couple of parameters and apply risk yourself?
   a. Katie – we would need to know how to apply that risk. TQIP is not going to share that because that is how they can charge the big bucks for hospitals to participate in the program.

5. Next Meeting: Tuesday, May 12th at 10am EST

Call-in number: 1-877-422-1931, participant code is 2792437448# (music will be heard until the moderator joins the call)
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<thead>
<tr>
<th>Action</th>
<th>Owner</th>
<th>Status</th>
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<tbody>
<tr>
<td>Letter from Dr. VanNess to non-reporting hospitals</td>
<td>ISDH</td>
<td>Complete 02/2013</td>
</tr>
<tr>
<td>2nd Letter from Dr. VanNess to non-reporting hospitals about trauma registry rule</td>
<td>ISDH</td>
<td>Complete 12/2013</td>
</tr>
<tr>
<td>Trauma registry training events around the state</td>
<td>ISDH</td>
<td>Complete 3/2014</td>
</tr>
<tr>
<td><em>Mentorship Program between trauma centers and non-reporting hospitals</em></td>
<td><em>trauma centers</em></td>
<td><em>In progress</em></td>
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<tr>
<td>IU Health - North mentorship</td>
<td>IU Health - Methodist</td>
<td>Completed 2013</td>
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<tr>
<td>St. Vincent Anderson mentorship</td>
<td>St. Vincent - Indy</td>
<td>Completed 2013</td>
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<tr>
<td>Perry County, St. Mary’s – Warrick, &amp; Terre Haute Regional mentorship</td>
<td>St. Mary’s</td>
<td>Completed 2013</td>
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<tr>
<td>Deaconess Gateway mentorship</td>
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<tr>
<td>Elkhart General, IU Health - LaPorte, &amp; IU Health - Starke mentorship</td>
<td>Memorial South Bend</td>
<td>In progress</td>
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<tr>
<td>Community Health Network, Terre Haute Regional mentorship</td>
<td>Eskenazi Health</td>
<td>In progress (as of 10/2014)</td>
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<tr>
<td>Community Health - North mentorship</td>
<td>IU Health - Ball Memorial</td>
<td>In progress (as of 10/2014)</td>
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<td>Mentorship</td>
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<tr>
<td>IU Health - Bedford mentorship</td>
<td>IU Health - Bloomington</td>
<td>In progress</td>
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<tr>
<td>St. Elizabeth - Crawfordsville mentorship</td>
<td>St. Elizabeth - East</td>
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<tr>
<td>Terre Haute Regional</td>
<td>St. Mary's</td>
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<tr>
<td>Community Health - North, Community Health - East, St. Vincent Anderson, St. Joseph Kokomo, St. Elizabeth - East mentorships</td>
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<tr>
<td>Waiting on mentorship status</td>
<td>IU Health - Arnett</td>
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<tr>
<td>Waiting on mentorship status</td>
<td>Parkview RMC</td>
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**Action Owner** Status

- RTTDC completion by non-trauma center hospitals
  - Trauma Centers
  - Ongoing

- Evaluate critical patients (transfers & non-transfers)
  - ISDH & trauma centers
  - Ongoing

- Develop educational material for non-trauma centers regarding timely transfers
  - ISDH & trauma centers
  - Not started

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<td>ISDH &amp; trauma centers</td>
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### January 1, 2014 to January 29, 2015

**Total # of Patients Transferred for 2014:** 5576

<table>
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<tr>
<th>Measure</th>
<th># of Patients</th>
<th>Avg ED LOS (Minutes)</th>
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<tbody>
<tr>
<td>Initial Hospital: Shock Index &gt; 0.9</td>
<td>572</td>
<td>164</td>
</tr>
<tr>
<td>Initial Hospital: GCS Total Score ≤ 12</td>
<td>287</td>
<td>129</td>
</tr>
<tr>
<td>Initial Hospital: ISS ≤ 15</td>
<td>5102</td>
<td>191</td>
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<tr>
<td>Initial Hospital: ISS &gt; 15</td>
<td>474</td>
<td>149</td>
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### January 1, 2014 to January 29, 2015

**Total # of **CRITICAL**Patients Transferred for 2014:** 1003

<table>
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<th>Measure</th>
<th>Value</th>
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<tr>
<td>Min</td>
<td>14</td>
</tr>
<tr>
<td>Max</td>
<td>835</td>
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**Average** | 159
---|---

**CRITICAL** GCS ≤ 12, Shock Index >0.9, ISS > 15

| January 1, 2014 to January 29, 2015 |
|---|---|
| **Body Region** | **# of Patients** |
| Extremity | 2146 |
| External | 1865 |
| Head | 1600 |
| Chest | 699 |
| Face | 442 |
| Abdomen | 290 |