

# PI Subcommittee Meeting – Notes - August 11, 2015

## 1. Welcome & Introduction

<b>Meeting Attendees</b>			
Adam Weddle	Amanda Elikofer	Amanda Rardon	Annette Chard
Bekah Dillon	Brittanie Fell	Carrie Malone	Chris Wagoner
Christy Claborn	Chuck Stein	<del>Cindy Twitty</del>	Dawn Daniels
Amy Deel	<del>Emily Dever</del>	Jennifer Mullen	Jeremy Malloch
Jodi Hackworth	Kelly Mills	Kris Hess	Kristi Croddy
<del>Latasha Taylor</del>	<del>Lesley Lopessa</del>	Lindsey Williams	<del>Lisa Hollister</del>
<del>Lynne Bunch</del>	Mary Schober	Missy Hockaday	<del>Merry Addison</del>
<del>Michele Jolly</del>	Paula Kresca	Dr. Larry Reed	Regina Nuseibeh
Roxann Kondrat	<del>Sean Kennedy</del>	<del>Spencer Grover</del>	Tracy Spitzer
<del>Wendy St. John</del>			
<b>ISDH STAFF</b>			
Katie Hokanson	Ramzi Nimry	Jessica Skiba	Camry Hess

## 2. Goals

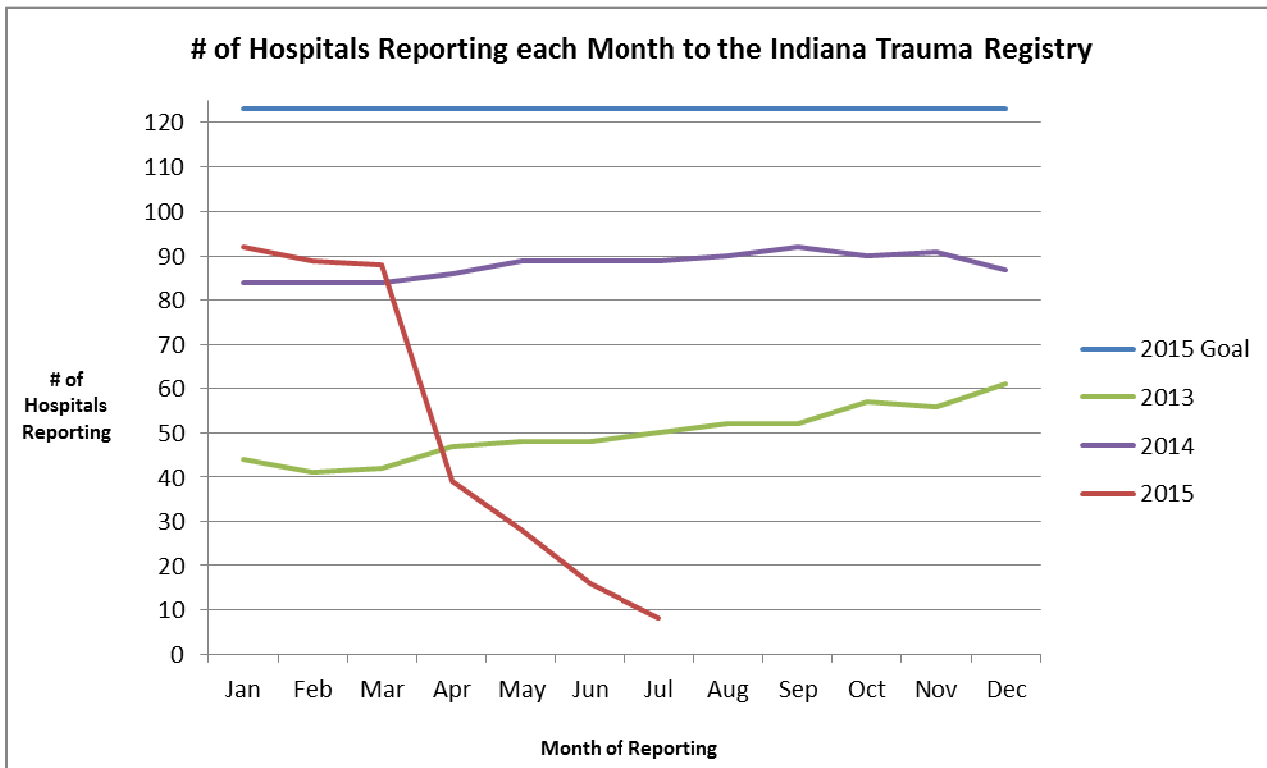
- a. Increase the number of hospitals reporting to the Indiana trauma registry
  - i. *For Quarter 1, 2015 94 hospitals reported data.*
  - ii. Summary of trauma registry training events
    1. 2015 Trauma Tour had a 1 hour refresher course ahead of time:
      - a. 6 attendees over the first 5 trauma tour events.
  - iii. Trauma Center mentor program
    1. Confirmation of mentorship still in process
      - a. Community Health – North
        - i. Community West
          1. *Still checking in to make sure they are comfortable with reporting trauma registry data.*
      - b. Memorial Hospital of South Bend
        - i. Elkhart General Hospital
        - ii. IU Health – LaPorte Hospital
        - iii. IU Health – Starke Hospital
          1. *Not on the phone.*
      - c. Eskenazi Health
        - i. Community Health Network
        - ii. Terre Haute Regional Hospital
          1. *Still mentoring.*
      - d. St. Elizabeth – East
        - i. St. Elizabeth – Crawfordsville
          1. *Providing education and trauma registry assistance.*
        - ii. *Have recently purchased Jasper County Hospital.*
      - e. St. Mary’s of Evansville
        - i. Terre Haute Regional
        - ii. Good Samaritan Hospital
        - iii. Memorial Hospital & Health Care Center (Jasper)

- 1. *Not on the phone.*
    - f. Deaconess
      - i. *Memorial Hospital of Jasper*
    - g. IU Health – Bloomington
      - i. St. Vincent Dunn
        - 1. *Not on the phone during this part of the discussion.*
    - h. IU Health – Arnett
      - i. IU Health – White Memorial
        - 1. *Checking in with the hospital monthly.*
    - i. IU Health – Methodist
      - i. *IU Health system-level support.*
  - 2. Update on mentorship status
    - a. Parkview Regional Medical Center
- iv. Discussion of specific hospitals (see attached excel spreadsheet):
  - 1. Hospitals that have not reported any data
    - a. District 1
      - i. Jasper County Hospital
      - ii. St. Mary Medical Center (Hobart)
        - 1. *Jennifer Mullen will get in contact with the facilities.*
    - b. District 2
      - i. IU Health – Goshen Hospital
        - 1. Missy Hockaday will contact the facility. Potentially hiring a system registrar.
    - c. District 3
      - i. Adams Memorial Hospital
      - ii. Bluffton Regional Medical Center
        - 1. Annette Chard will get in contact with facility.
          - a. *Ramzi is scheduled to train the facility later this month.*
      - iii. St. Joseph Hospital (Fort Wayne)
        - 1. Annette Chard will get in contact with facility.
          - a. *The facility is currently working to identify a registrar.*
      - iv. VA Northern Indiana Healthcare System
      - v. Wabash County Hospital
    - d. District 5
      - i. Community Westview
        - 1. Will start reporting data in Q1 2015.
      - ii. IU Health – West Hospital
        - 1. Missy Hockaday will contact the facility. Potentially hiring a system registrar.
      - iii. Richard L Roudebush VA Medical Center
      - iv. St. Vincent – Carmel Hospital
      - v. St. Vincent – Fishers Hospital
      - vi. St. Vincent – Peyton Manning Children’s Hospital
        - 1. Judi Holsinger is working with the St. Vincent Health network to get these facilities reporting.
    - e. District 8
      - i. St. Vincent – Dunn Hospital
    - f. District 9

- i. St. Vincent – Jennings Hospital
    - ii. Kentuckiana Medical Center
  - b. Decrease average ED LOS at non-trauma centers
    - i. Review of current average ED LOS
      - 1. *Suggested that the state identify specific facilities that are consistently having long ED LOS.*
      - 2. *Stated that the ownership needs to be on the non-trauma center to identify their barriers and come up with ways to overcome the issue.*
      - 3. *Facilities need to perform a Root-Cause Analysis to identify the barriers in timely transfers.*
      - 4. *Suggested that facilities look at outliers during each phase of the transfer process.*
        - a. *The state will develop a process of identifying facilities that are consistently having long ED LOS and contact that facility.*
      - 5. Data quality issues
        - a. ED LOS > 24 hours
        - b. ED LOS < 0 hours
      - 6. ED LOS Analysis
        - a. *Dr. Reed asked that the ISDH put this information in graph format.*
          - i. *The state will compile this information into graph format for the next PI subcommittee meeting. They will show the data by quarter and for each quarter show the average and standard deviation for each category (shock index, GCS, ISS).*
      - 7. Added Body regions by patient age groupings.
        - a. *The state will provide the percentage and count for each body region by patient age groupings.*
        - b. *The state will graph the severity by body region.*
      - 8. RTTDC data analysis.
        - a. *The state will provide the range and average ED LOS.*
        - b. *The state will list the number of patients with an ED LOS > 2 hours.*
        - c. *The state will address outliers.*
        - d. *The state will find out the classifications of WHO attended the RTTDC and see if that made an impact on the data.*
        - e. *Should the state compare like-size hospitals?*
          - i. *PI subcommittee agreed that what is most important is that the patient is transferred out quickly, regardless of the size of the facility.*
    - ii. Discussion of educational materials for non-trauma centers regarding timely transfers
      - 1. Created a letter from ISDH to your hospital stressing the importance of timely transfers.
        - a. Letter was sent out to facilities on June 15<sup>th</sup>.
- c. Increase EMS run sheet collection
  - i. *Facilities are not seeing the EMS run sheet in the ED, they are going directly to the Medical Records department.*
  - ii. *It is important for the facility to get basic information about the patient, including prehospital vitals.*
  - iii. **Please send Katie list of EMS providers not leaving run sheets.**

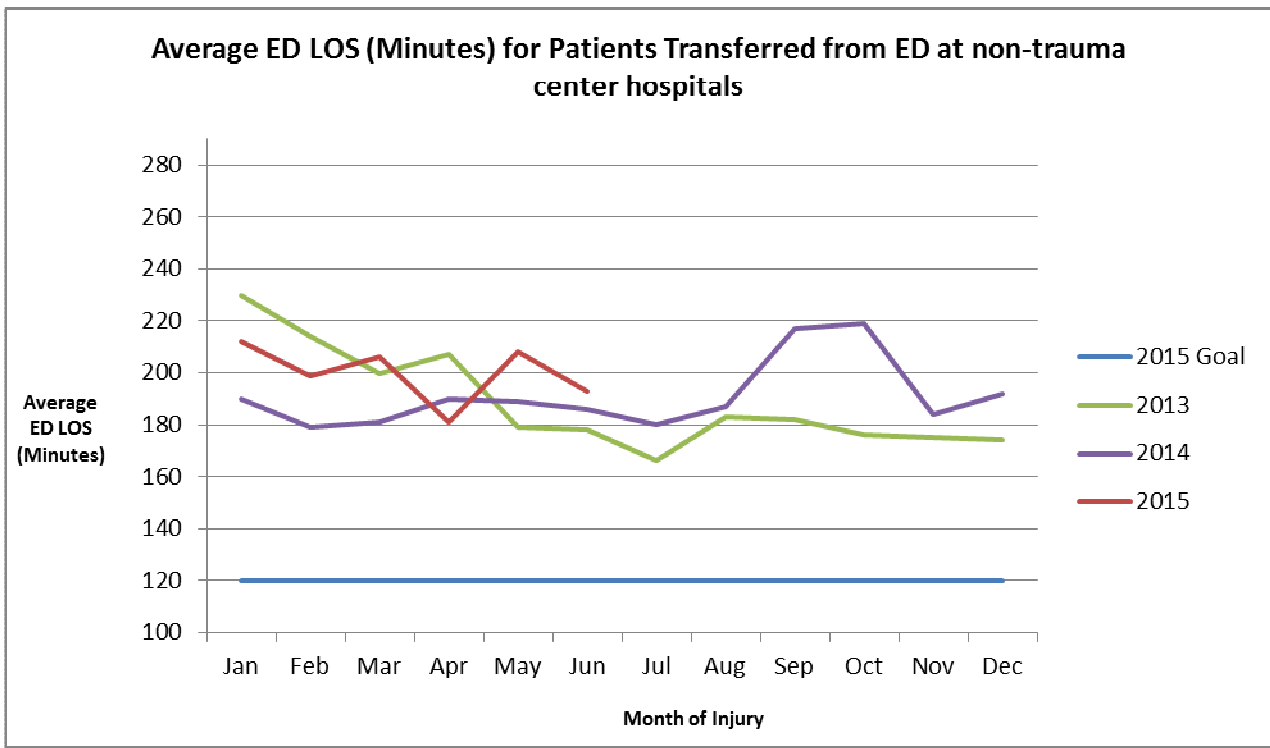
1. Sent email to Mike Garvey and Lee Turpen on March 26, 2015 with EMS providers not leaving run sheets and again on June 18<sup>th</sup>.
  - a. Mike Garvey encouraged EMS Providers to leave run sheets at the April 17<sup>th</sup> EMS Commission meeting.
2. Also sent list of Hospital contact information for EMS providers to know where to send run sheets.
3. Would like to provide this list to the EMS Commission at their **August** meeting!
  - a. *The state is collecting this information through September 9<sup>th</sup> and will send to Lee Turpen & Mike Garvey at that time.*
3. Review of Modifications to New Metrics:
  - a. ED LOS vs. ICU LOS
    - i. Added patients that had an ICU LOS >0, but did not have an ED Disposition = ICU.
      1. *The state will break this information down by ED Disposition (OR, Floor Bed, etc.)*
  - b. Mortality Review
    - i. Compared 2013 Indiana Trauma Registry data (**Based on the ACS Orange Book breakdown**) to NTDB Data.
      1. *Is this information statistically significant?*
        - a. *The state will investigate.*
4. Potential Metrics
  - a. Last meeting's discussion:
    - i. Staying on our radar: 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. Katie is analyzing some data and working with Dr. Walthall on this project at this time.
        - a. *Analyzing patients that met Step 1 Criteria in the field from January 1, 2014 to December 31, 2014.*
        - b. *The state will share findings at a future PI meeting.*
    - ii. Identifying double transfers – new Linking Software will help us better identify these patients.
      1. Camry has received training on the software and will share with the group what she has learned so far.
    - iii. Data Quality dashboard for linking cases
      1. Camry has started developing a data quality dashboard.
5. \*NEW\* Discussion– EMS Commission member asked that we consider separating Isolated Hip Fracture cases from all patients ED LOS calculations. Thoughts?
  - a. *PI subcommittee agreed that these patients should NOT be separated out – they should be getting to definitive care quickly.*
6. **PLEASE NOTE: This section was not discussed during this meeting and will be discussed at the November meeting.**
  - a. \*NEW\* What does PI on a regional level look like?
    - i. Illinois' model:
      1. Cases Reviewed:
        - a. Deaths caused by traumatic injury
          - i. Excluding DOA

- ii. Excluding head AIS > 3
    - b. TRISS > .75
  - 2. Each trauma center (trauma medical director and/or coordinator) presents to the region 6 months' worth of completed data 2x/year on:
    - a. Unexpected deaths.
    - b. Other interesting cases (ex: unexpected survivors).
  - 3. Data is presented during the regular district meeting and all members can be involved in the discussion.
  - 4. Data are confidential and bound by the Medical Studies Act – indicated by the disclaimer on all paperwork.
  - 5. Conclusions (minus the identifiers) are included in the regular meeting minutes.
- 7. Next Meeting: Tuesday, November 10<sup>th</sup>, Larkin, ISDH.



Action	Owner	Status
Letter from Dr. VanNess to non-reporting hospitals	ISDH	Complete 02/2013
2nd Letter from Dr. VanNess to non-reporting hospitals about trauma registry rule	ISDH	Complete 12/2013
Trauma registry training events around the state	ISDH	Complete 3/2014
Trauma registry refresher training events around the state	ISDH	In progress (summer 2015)
<u>Mentorship Program between trauma centers and non-reporting hospitals</u>	<u>trauma centers</u>	<u>In progress</u>
IU Health - North mentorship	IU Health - Methodist	Completed 2013
Community Health - North, Community Health - East, St. Elizabeth-East mentorship	St. Vincent - Indy	Completed 2013
Perry County, St. Mary's – Warrick, & Terre Haute Regional mentorship	St. Mary's	Completed 2013
Deaconess Gateway mentorship	Deaconess	Completed 2015

IU Health - Bedford mentorship	IU Health - Bloomington	Completed 2015
"in the process of ACS verification" trauma centers; St. Vincent Randolph	IU Health - Ball Memorial	Completed 2015
Community West	Community Health - North	In progress (as of 02/2015)
Elkhart General, IU Health - LaPorte, & IU Health - Starke mentorship	Memorial South Bend	In progress (as of 02/2015)
Community Health Network, Terre Haute Regional mentorship	Eskenazi Health	In progress (as of 02/2015)
St. Elizabeth - Crawfordsville mentorship	St. Elizabeth - East	In progress (as of 02/2015)
Terre Haute Regional; Good Samaritan Hospital; Memorial Hospital & Health Care Center (Jasper)	St. Mary's	In progress (as of 02/2015)
District 10	Deaconess	In progress (as of 02/2015)
St. Vincent Dunn	IU Health - Bloomington	In progress (as of 02/2015)
IU Health - White Memorial Hospital	IU Health - Arnett	In progress (as of 02/2015)
Franciscan St. Francis - Indianapolis	IU Health - Methodist	In progress (as of 3/11/2015)
St. Vincent Anderson & St. Joseph Kokomo mentorship	St. Vincent - Indy	In progress (as of 05/2015)
Community Health - North, Community Health - South, St. Francis - Indianapolis, Good Samartan Hospital mentorship	IU Health - Ball Memorial	In progress (as of 05/2015)
Answering pediatric questions as they come in.	IU Health - Riley	(as of 05/2015)
Reaching out to St. Joseph (Fort Wayne) & Bluffton Regional Medical Center about data collection	Lutheran	(as of 05/2015)
<b><u>Waiting on mentorship status</u></b>	<b><u>Parkview RMC</u></b>	-



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



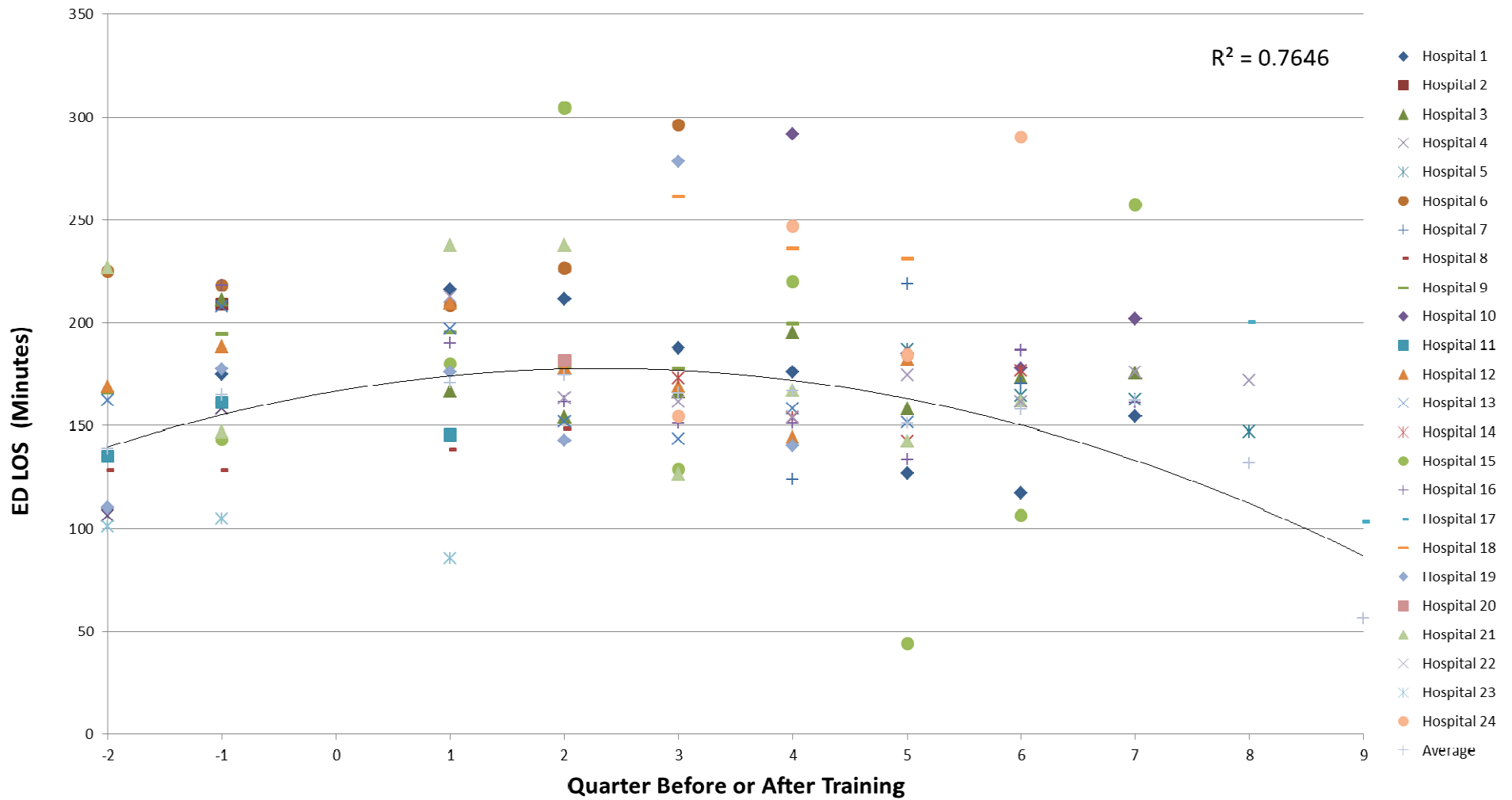
# ED LOS Analysis

June 1, 2014 to June 30, 2015			April 1, 2014 to April 30, 2015			January 1, 2014 to January 29, 2015		
<i>Total # of Patients Transferred:</i> 7072			<i>Total # of Patients Transferred:</i> 6376			<i>Total # of Patients Transferred:</i> 5576		
Measure	# of Patients	Avg ED LOS (Minutes)	Measure	# of Patients	Avg ED LOS (Minutes)	Measure	# of Patients	Avg ED LOS (Minutes)
Initial Hospital: Shock Index > 0.9	974	186	Initial Hospital: Shock Index > 0.9	637	202	Initial Hospital: Shock Index > 0.9	572	164
Initial Hospital: GCS Total Score ≤ 12	366	148	Initial Hospital: GCS Total Score ≤ 12	315	138	Initial Hospital: GCS Total Score ≤ 12	287	129
Initial Hospital: ISS ≤ 15	6233	199	Initial Hospital: ISS ≤ 15	5611	199	Initial Hospital: ISS ≤ 15	5102	191
Initial Hospital: ISS > 15	566	178	Initial Hospital: ISS > 15	478	207	Initial Hospital: ISS > 15	474	149
<b>June 1, 2014 to June 30, 2015</b>			<b>April 1, 2014 to April 30, 2015</b>			<b>January 1, 2014 to January 29, 2015</b>		
<i>Total # of **CRITICAL** Patients Transferred</i>	1614		<i>Total # of **CRITICAL** Patients Transferred</i>	1223		<i>Total # of **CRITICAL** Patients Transferred for 2014</i>	1003	
<i>Min</i>	0		<i>Min</i>	0		<i>Min</i>	14	
<i>Max</i>	1814		<i>Max</i>	192		<i>Max</i>	835	
<i>Average</i>	182		<i>Average</i>	4392		<i>Average</i>	159	
<b>**CRITICAL** GCS ≤ 12, Shock Index &gt;0.9, ISS &gt; 15</b>			<b>**CRITICAL** GCS ≤ 12, Shock Index &gt;0.9, ISS &gt; 15</b>			<b>**CRITICAL** GCS ≤ 12, Shock Index &gt;0.9, ISS &gt; 15</b>		
<b>June 1, 2014 to June 30, 2015</b>			<b>April 1, 2014 to April 30, 2015</b>			<b>January 1, 2014 to January 29, 2015</b>		
Body Region	# of Patients		Body Region	# of Patients		Body Region	# of Patients	
<i>Extremity</i>	2435		<i>Extremity</i>	2271		<i>Extremity</i>	2146	
<i>External</i>	2200		<i>External</i>	2151		<i>External</i>	1865	
<i>Head</i>	1715		<i>Head</i>	1730		<i>Head</i>	1600	
<i>Chest</i>	836		<i>Chest</i>	775		<i>Chest</i>	699	
<i>Face</i>	476		<i>Face</i>	482		<i>Face</i>	442	
<i>Abdomen</i>	426		<i>Abdomen</i>	363		<i>Abdomen</i>	290	

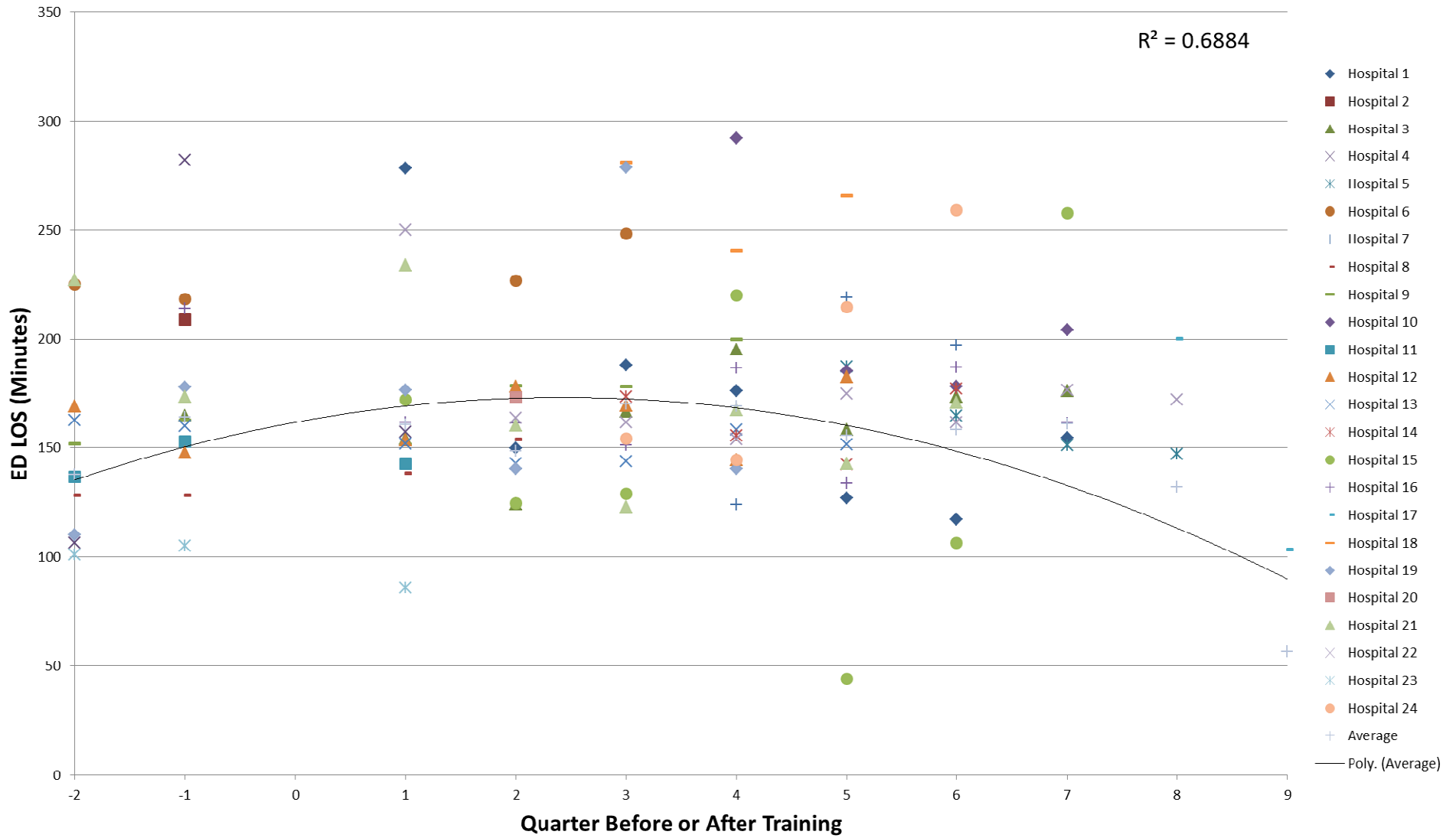
<b>June 1, 2014 to June 30, 2015</b>				
Body Region	# of Patients	<15 Years	15 - 65 Years	>65 Years
<i>Extremity</i>	2435	301	1176	958
<i>External</i>	2199	262	1310	627
<i>Head</i>	1713	203	905	605
<i>Chest</i>	836	26	566	244
<i>Face</i>	476	75	302	99
<i>Abdomen</i>	426	25	309	92

# RTTDC Analysis

## All Transferred Patients



# All Critical Transferred Patients



## Mortality Review

## Mortality Review - All Indiana Patients

### 2013 Data

<i>Pediatric (&lt; 15 years) - Number of Patients:</i>		2219
<b>Location of Death</b>	<b># of Mortalities</b>	<b>Percentage Mortality</b>
DOA	6	0%
Died in ED	12	1%
Died in Hospital (Including OR)	15	1%
<u>Died</u>	<u>33</u>	<u>1%</u>

### 2013 Data

<i>Geriatric (&gt; 64 years) - Number of Patients:</i>		9367
<b>Location of Death</b>	<b># of Mortalities</b>	<b>Percentage Mortality</b>
DOA	30	0%
Died in ED	36	0%
Died in Hospital (Including OR)	362	4%
<u>Died</u>	<u>428</u>	<u>5%</u>

### 2013 Data

<i>All Patients:</i>		24,313
<b>Location of Death</b>	<b># of Mortalities</b>	<b>Percentage Mortality</b>
DOA	148	1%
Died in ED	209	1%
Died in Hospital (Including OR)	719	3%
<u>Total</u>	<u>1076</u>	-

## Mortality Review - All US Patients

### 2013 Data

<i>Pediatric (&lt; 15 years) - Number of Patients:</i>		89148
<b>Location of Death</b>	<b># of Mortalities</b>	<b>Percentage Mortality</b>
DOA		0%
Died in ED		0%
Died in Hospital (Including OR)		0%
Died	1537	2%

### 2013 Data

<i>Geriatric (&gt; 64 years) - Number of Patients:</i>		228218
<b>Location of Death</b>	<b># of Mortalities</b>	<b>Percentage Mortality</b>
DOA		0%
Died in ED		0%
Died in Hospital (Including OR)		0%
Died	15915	7%

### 2013 Data

<i>All Patients:</i>		814,586
<b>Location of Death</b>	<b># of Mortalities</b>	<b>Percentage Mortality</b>
DOA	5655	1%
Died in ED	10232	1%
Died in Hospital (Including OR)	21887	3%
<u>Total</u>	<u>37774</u>	-

## Mortality Review

### Mortality Review - All Indiana Patients

<b><u>2013 Data</u></b>			
<i>Injury Severity Scale (ISS) Summary Table</i>			
ISS	# of Patients	# of Mortalities	Percentage Mortality
0 - 9	17858	255	1%
10 - 15	3295	89	3%
16 - 24	1814	109	6%
≥25	1346	420	31%
<u>Total</u>	<u>24313</u>	<u>873</u>	-

### Mortality Review - All US Patients

<b><u>2013 Data</u></b>			
<i>Injury Severity Scale (ISS) Summary Table</i>			
ISS	# of Patients	# of Mortalities	Percentage Mortality
1 - 8	380943	5070	1%
9 - 15	252542	7096	3%
16 - 24	111671	6061	5%
≥25	62680	17664	28%
Null	6827	516	8%
<u>Total</u>	<u>814663</u>	<u>36407</u>	-

## ED LOS vs. ICU LOS

<i># of Patients Admitted to ICU from ED: 5513</i>		
<b>ED LOS (Hours)</b>	<b>ICU LOS (Days) Average</b>	<b># of Patients</b>
< 1	5	504
1 - 2	4	2172
3 - 5	4	1859
6 - 11	4	427
12+	4	61

\*note: 38,794 incidents in the registry from January 1, 2014 to July 28, 2015 as of: 07/28/15

<i># of Patients Admitted to ICU NOT from ED</i>	
<b>ICU LOS (Days) Average</b>	<b># of Patients</b>
<b>6</b>	1576

