Indiana State Trauma Care Committee

February 19, 2016

Indiana State Department of Health

Email questions to: **indianatrauma@isdh.in.gov**

Strategic Plan

Katie Hokanson, *Director*
Trauma and Injury Prevention

Indiana State Department of Health

Email questions to: **indianatrauma@isdh.in.gov**

The Future

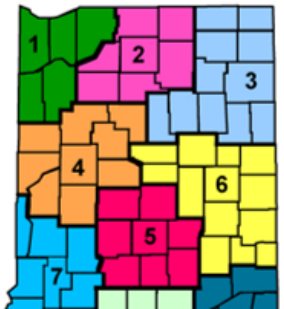

Here's what I know about the future:
it happens as a result of what we do today.

The Future

12 The Future of Indiana's Trauma System

12.1 Goals of the Trauma System

- Develop more ACS-verified trauma centers.
- Collect and analyze data on every trauma case in Indiana.
- Link EMS runs to Trauma incidents to Rehabilitation data to evaluate continuum of trauma patient care.
- Develop a Statewide Plan that covers:
  - Trauma Registry.
  - Injury Prevention.
  - System-wide issues.
  - Miscellaneous issues.
- Promulgate a Designation Rule that will go hand-in-hand with the national verification requirements.
- Identify the role of Community paramedicine in Indiana.
- Roll out the Blue Sky project: the ability to automatically transmit trauma data between the provider's server and the ISDH server that houses the trauma registry.
- Coordinate conference events, such as the Injury Prevention Conference and Annual EMS Medical Director's Conference, which increases the knowledge and expertise of Indiana's workforce.
- Provide and support trauma education opportunities throughout the state for prehospital, hospital, and rehabilitation workforce.
- Prevent injures in Indiana through collaborative efforts in leadership, education and policy, with a vision of an injury-free Indiana.
- Develop the regional trauma system that feeds into the state trauma system. These are the 10 regional trauma systems (identical to the public health preparedness districts).



Steps to a Strategic Plan

- Initial Thoughts
- Trauma System Planning subcommittee meetings
- Injury Prevention Advisory Council (IPAC) – subcommittee meetings
- Staff meetings

Indiana State Department of Health

Strategic Plan – Next Steps

- Trauma Sys nmittee review
- IPAC reviev
- ISTCC revie

Indiana State Department of Health
Trauma and Injury Prevention

- Comments **March 4**

2016-2018 Strategic Plan

As of February 12, 2016

Email questions to: **indianatrauma@isdh.in.gov**

Regional Updates

Indiana State Department of Health

Email questions to: **indianatrauma@isdh.in.gov**

Regional updates

- District 1
- District 8
- District 10

Indiana State Department of Health

Subcommittee Updates
PI Subcommittee

Katie Hokanson, *Director*
Trauma and Injury Prevention
On behalf of:
Dr. Larry Reed
IU Health – Methodist Hospital

Indiana State Department of Health

INDIANA STATE TRAUMA CARE COMMITTEE

Performance Improvement
Subcommittee Report

PI Subcommittee Co-Chair

- Interested in co-chairing the PI subcommittee with Dr. Reed?
  - Contact Dr. Reed and Katie Hokanson.

PI Subcommittee Members

PI Subcommittee Members			
Adam Weddle	Amanda Elikofer	Amanda Rardon	Annette Chard
Amy Deel	Bekah Dillon	Brittanie Fell	Carrie Malone
Chris Wagoner	Christy Claborn	Chuck Stein	Dawn Daniels
Dusten Roe	Emily Dever	Jennifer Mullen	Jeremy Malloch
Jodi Hackworth	Kasey May	Kelly Mills	Kris Hess
Kristi Croddy	Latasha Taylor	Lesley Lopossa	Lindsey Williams
Lisa Hollister	Lynne Bunch	Marie Stewart	Mary Schober
Missy Hockaday	Merry Addison	Michele Jolly	Dr. Larry Reed
Dr. Peter Jenkins	Regina Nuseibeh	Sean Kennedy	Spencer Grover
Tara Roberts	Tracy Spitzer	Wendy St. John	
ISDH STAFF			
Katie Hokanson	Ramzi Nimry	Camry Hess	

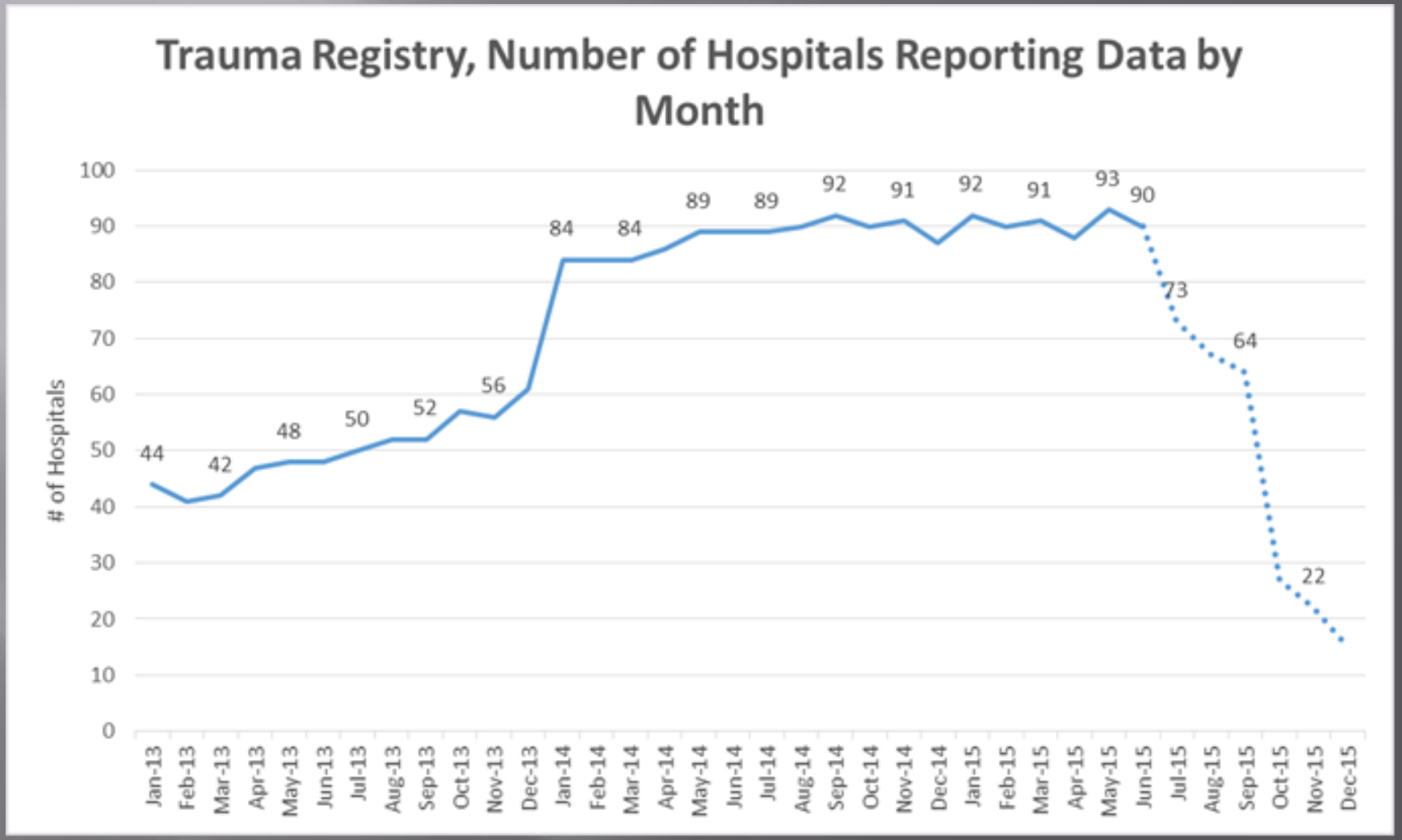
PI Subcommittee Meetings

- Met on 01/12/16 to cover the following:
  - Emergency Department (ED) Discharge Date/Time vs. ED Discharge Orders Written Date/Time.
  - Increase the number of hospitals reporting to the Indiana Trauma Registry.
  - Decrease the average ED length of stay (LOS) at non-trauma centers for transferred patients.
  - Increase EMS run sheet collection.
  - Improve trauma registry data quality.
  - Comparing ED LOS vs. Intensive Care Unit (ICU) LOS.
  - Mortality review.
  - Data quality dashboard for linking cases.
  - Additional values for “Reason for Transfer Delay”.

ED Discharge Date & Time Changes

- National Trauma Data Bank has changed "ED Discharge Date" and "ED Discharge Time" data elements to "ED Discharge Orders Written Date" and "ED Discharge Orders Written Time".
  - Indiana Trauma Registry will include both data elements in the registry.
  - Clarification document written by Dr. Reed, Camry and Ramzi.
  - Document under view by Indiana Trauma Network Registrars subcommittee.
  - Instructions will be sent out to all registry users.
  - Clarification will be added to the 2016 Indiana Trauma Registry Data Dictionary.

Increase # of hospitals reporting to the Indiana Trauma Registry



Increase # of hospitals reporting to the Indiana Trauma Registry

For Quarter 3, 2015

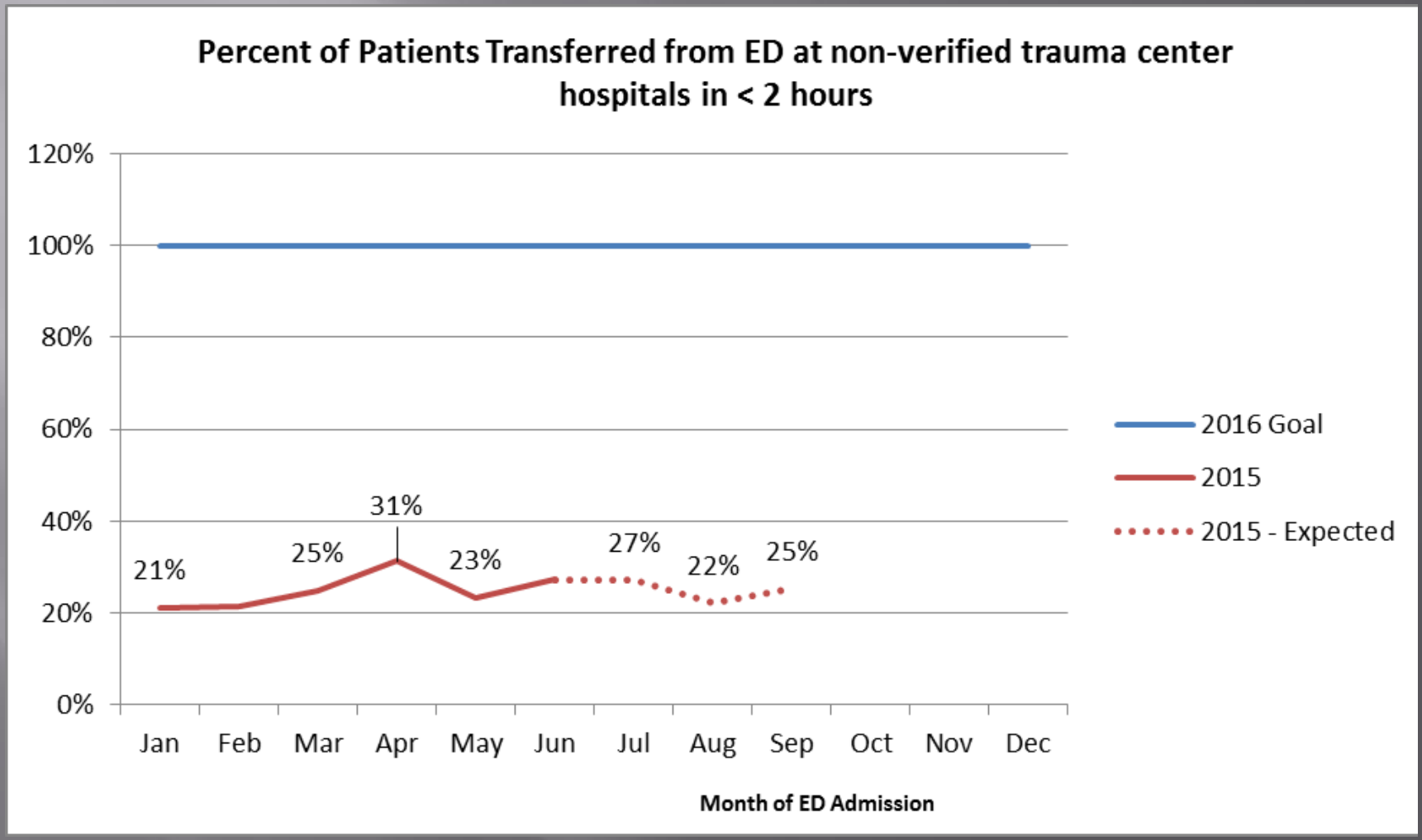
99 hospitals

reported data!!

Hospitals Not Reporting Any Data for the last 12 months

- District 1
  - Franciscan Health Rensselaer (formerly Jasper County Hospital)
  - St. Mary Medical Center (Hobart)
- District 2
  - IU Health – Goshen Hospital
- District 3
  - Adams Memorial Hospital
  - St. Joseph Hospital (Fort Wayne)
  - VA Northern Indiana Healthcare System
- District 5
  - Community Westview
  - Richard L Roudebush VA Medical Center
  - St. Vincent – Carmel Hospital
  - St. Vincent – Fishers Hospital
  - St. Vincent – Peyton Manning Children's Hospital
  - St. Vincent – Indianapolis is working with these facilities.
- District 8
  - St. Vincent – Dunn Hospital
- District 9
  - Harrison County Hospital
  - St. Vincent – Jennings Hospital
  - Kentuckiana Medical Center
- District 10
  - Gibson General Hospital

Decrease the average ED LOS at non-trauma centers



Decrease the average ED LOS at non-trauma centers

- Letter to go out to hospital CEOs from Dr. Adams and Director Kane.
  - Encourage CEOs to support initiatives in ED to decrease ED LOS.

Decrease the average ED LOS at non-trauma centers

February 19, 2016

Dear Hospital Administrator:

I last wrote on September 30, 2015 to discuss improving trauma care in Indiana by transferring seriously injured patients to a higher level of care in less than two hours. The Performance Improvement (PI) Subcommittee continues to review the data around this performance measure, and have agreed that the next step the Indiana State Department of Health (ISDH) should take to support hospitals in decreasing the Emergency Department (ED) Length of Stay (LOS) (i.e., the time from ED arrival to ED departure) is to notify the ED Manager of cases that we have identified in which a seriously injured patient was transferred from their facility to a higher level of care and experienced an ED LOS greater than two (2) hours prior to the transfer.

Below is the list of seriously injured transferred patients your facility managed during the 2nd quarter of 2015 (April 1st through June 30th) who experienced an ED LOS greater than 2 hours:

Incident Number	ED/Acute Care LOS Hours	GCS	Pulse Rate	SBP	Critical Patient (Y/N)
20150831103	4	9	130	91	Y
20150831110	10	13	75	112	N
201509312540	6	8	175	105	Y

The table above includes information about the patient's ED LOS and which vital signs triggered the patient to be identified as a "critical patient". "Critical patient" has been defined as either:

- Glasgow Coma Score ≤ 12 (pediatric and adult) or
- Shock Index > 0.9 (Shock index is defined only for adult trauma patients and is determined by the heart rate divided by the systolic blood pressure.)

If you have any questions, feel free to contact my office at 317-234-2865 or khokanson@isdh.in.gov.

Decrease the average ED LOS at non-trauma centers

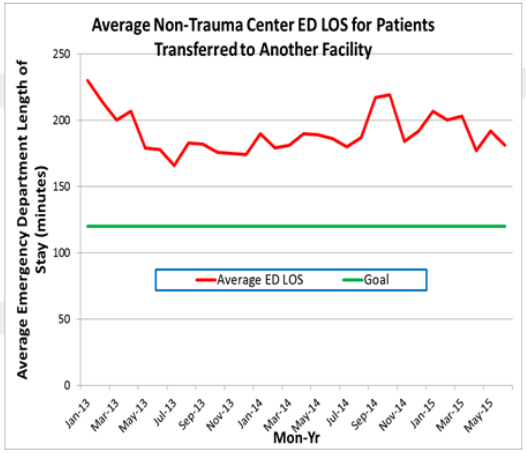
- Letter to go out to hospital CEOs from Dr. Adams and Director Kane.
  - Encourage CEOs to support initiatives in ED to decrease ED LOS.
- Letter to go out to ED Managers from division of trauma and injury prevention.
  - Develop and deliver individual facility reports for ED LOS > 2 hours.

Decrease the average ED LOS at non-trauma centers

December 3, 2015

Dear ED Manager,

I last wrote on September 30th (see attached) to discuss improving trauma care in Indiana by reducing the Emergency Department (ED) lengths of stay (LOS) to less than two hours for those seriously injured patients who require transfer to a higher level of care. The Indiana Trauma Registry uses data submitted to it regarding injured patients from emergency departments throughout the state. The data we've tracked for the last 2½ years indicates that no improvement has been achieved toward this goal:



The Performance Improvement (PI) Subcommittee agrees that the Indiana State Department of Health (ISDH) needs to take the next step in supporting hospitals in decreasing the ED LOS for their seriously injured transferred patients. We will now initiate a program of notifying the ED Managers of cases identified wherein the duration between the ED arrival time and the transfer departure time was greater than 2 hours for their seriously injured patients being transferred to trauma centers.

Below is the list of the seriously injured patients transferred during the 2nd quarter of 2015 (April 1st through June 30th) who had an ED LOS longer than 2 hours at your facility:

Incident Number	ED/Acute Care LOS Hours	GCS	Pulse Rate	SBP	Critical Patient (Y/N)
20150831103	4	9	130	91	Y
20150831110	10	13	75	112	N
201509312540	6	8	175	105	Y

The table above includes information about the patient's ED LOS and which vital signs triggered the patient to be identified as a "critical patient". A "critical patient" is defined as either:

- Glasgow Coma Score (GCS) ≤ 12 (pediatric and adult) or
- Shock Index] > 0.9 (Shock Index is defined as the heart rate divided by the systolic blood pressure).

In order to reduce the ED lengths of stay at hospitals throughout the state, we need to identify the root causes for these delays. The ISTCC PI Subcommittee would greatly appreciate your assistance in tackling this problem. We request that you review the above case(s) and identify the primary reason(s) for the excessive ED LOS in these seriously injured patients.

The attached table (Page 3) provides a list of conditions we have created that could identify and categorize the reasons for the delay. Please use this list in completing the report requested on Page 4.

If you have any questions, feel free to contact my office at 317-234-2865 or khokanson@isdh.in.gov.

Sincerely,

Katie Hokanson
Director, Division of Trauma and Injury Prevention
Indiana State Department of Health

Decrease the average ED LOS at non-trauma centers

Potential Reasons for Prolonged Emergency Department Lengths of Stay

- EMS issue
  - No response for transfer
  - Out of county
  - Unavailable
  - Ground critical care not available
  - Shortage of ground transport availability
  - Air transport not available due to weather
  - Air Transport ETA > Ground Transport TAT
  - Condition of patient warranted securing higher level of transport than what was immediately available (i.e. pediatric transport specialists)
- ED volume/capacity at time of event
- Patient not identified as trauma patient at time of event
- Imaging
- New staff in ED
- Communication issue
  - Nursing delay in calling for/arranging transport
  - Nursing delay in contacting EMS
- Referring Facility issue
  - Surgeon availability
  - Radiology workup delay
  - Priority of transfer
  - Referring physician decision-making
- Receiving Hospital Issue
  - Bed availability
  - Surgeon decision making
  - Difficulty obtaining accepting MD
  - Difficultly obtaining accepting hospital
- Time required to ensure stability of patient prior to transfer
- Change in patient condition
- Transport/Triage Decision – low triage for transfer

Reasons for prolonged ED LOS in identified patients

Incident Number	ED/Acute Care LOS (Hours)	Reason for prolonged ED LOS
20150831103	4	
20150831110	10	
201509312540	6	

Please complete the Reason for prolonged ED LOS for each case using the items listed on page 3 or, if appropriate, provide an alternative reason.

Return the completed document to:

Katie Hokanson
Director
Trauma and Injury Prevention
Indiana State Department of Health
(*put address/e-mail here***)**

Increase EMS run sheet collection

- Please continue to send Katie a list of EMS providers not leaving run sheets.
- We are seeking to provide list to EMS Commission at their next meeting.
- Would like to start including facility name with list so that IDHS and ISDH can connect the EMS provider with the hospital to address process issues.

Improve Trauma Registry Data Quality

- Information to go out with data reports on how other hospitals are using the statewide data reports – best practices.
- Frequency Reports.

Improve Trauma Registry Data Quality (continued)

Frequency Report Sample

ICD-9 Location Ecode	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Home	137	30.58	137	30.58
Industry	7	1.56	144	32.14
Other	40	8.93	184	41.07
Public Building	23	5.13	207	46.21
Residential Institution	6	1.34	213	47.54
Street	186	41.52	399	89.06
Unspecified	42	9.38	441	98.44
Place of Recreation or Sport	3	0.67	444	99.11
Farm	2	0.45	446	99.55
Unidentified	2	0.45	448	100.00

Compare ED LOS vs. ICU LOS

# of Patients Admitted to ICU from ED: 6790		
ED LOS (Hours)	ICU LOS (Days) Average	# of Patients
< 1	5	617
1 - 2	4	2814
3 - 5	4	2503
6 - 11	3.6	640
12+	3	101

***note: 51,985 incidents in the registry from January 1, 2014 to November 8, 2015 as of: 11/09/15**

2014 Mortality Review

Mortality Review - All Indiana Patients

2014 Data

Pediatric (< 15 years) - Number of Patients:		3160
Location of Death	# of Mortalities	Percentage Mortality
DOA	13	0%
Died in ED	14	0%
Died in Hospital (Including OR	31	1%
Died	58	2%

2014 Data

Geriatric (> 64 years) - Number of Patients:		13730
Location of Death	# of Mortalities	Percentage Mortality
DOA	55	0%
Died in ED	58	0%
Died in Hospital (Including OR	448	3%
Died	561	4%

2014 Data

All Patients:		33,079
Location of Death	# of Mortalities	Percentage Mortality
DOA	213	1%
Died in ED	240	1%
Died in Hospital (Including OR	808	2%
Total	**1261**	**4%**

Mortality Review - All US Patients

2014 Data

Pediatric (< 15 years) - Number of Patients:		143996
Location of Death	# of Mortalities	Percentage Mortality
DOA	986	1%
Died in ED	1188	1%
Died in Hospital (Including OR	1578	1%
Died	3752	3%

2014 Data

Geriatric (> 64 years) - Number of Patients:		255880
Location of Death	# of Mortalities	Percentage Mortality
DOA		0%
Died in ED		0%
Died in Hospital (Including OR)		0%
Died	17527	7%

2014 Data

All Patients:		1,004,690
Location of Death	# of Mortalities	Percentage Mortality
DOA	7866	1%
Died in ED	10649	1%
Died in Hospital (Including OR	24485	2%
Total	**43000**	**4%**

Mortality Review - All Indiana Patients

2014 Data

Injury Severity Scale (ISS) Summary Table

ISS	# of Patients	# of Mortalities	Percentage Mortality
0 - 9	25089	307	1%
10 - 15	4197	69	2%
16 - 24	2242	93	4%
≥25	1515	339	22%
Null	36	0	0%
Total	33043	808	

Mortality Review - All US Patients

2014 Data

Injury Severity Scale (ISS) Summary Table

ISS	# of Patients	# of Mortalities	Percentage Mortality
1 - 8	396861	4403	1%
9 - 15	273004	7323	3%
16 - 24	118686	6569	6%
≥25	66165	18412	28%
Null	5978	412	7%
Total	860694	37119	

2014 Mortality Review
Pediatric Patients (<15 Years)

	IN (Count)	IN (Percent)	USA (Count)	USA (Percent)
Number of Patients:	3160		14,3996	
Dead on Arrival	13	0%	986	1%
Died in ED	14	0%	1188	1%
Died in Hospital	31	1%	1578	1%
TOTAL DIED:	58	2%	3752	3%

Not Statistically Significant

2014 Mortality Review
Geriatric Patients (>64 Years)

	IN (Count)	IN (Percent)	USA (Count)	USA (Percent)
Number of Patients:	13,730		25,5880	
Dead on Arrival	55	0%		
Died in ED	58	0%		
Died in Hospital	448	3%		
TOTAL DIED:	561	4%	17,527	7%

Not Statistically Significant

2014 Mortality Review
All Patients

	IN (Count)	IN (Percent)	USA (Count)	USA (Percent)
Number of Patients:	33,079		1,004,690	
Dead on Arrival	213	1%	7,866	1%
Died in ED	240	1%	10,649	1%
Died in Hospital	808	2%	24,485	2%
TOTAL DIED:	1261	4%	43,000	4%

Not Statistically Significant

2014 Mortality Review
All Patients – Injury Severity Scale (ISS) Summary Table

INDIANA

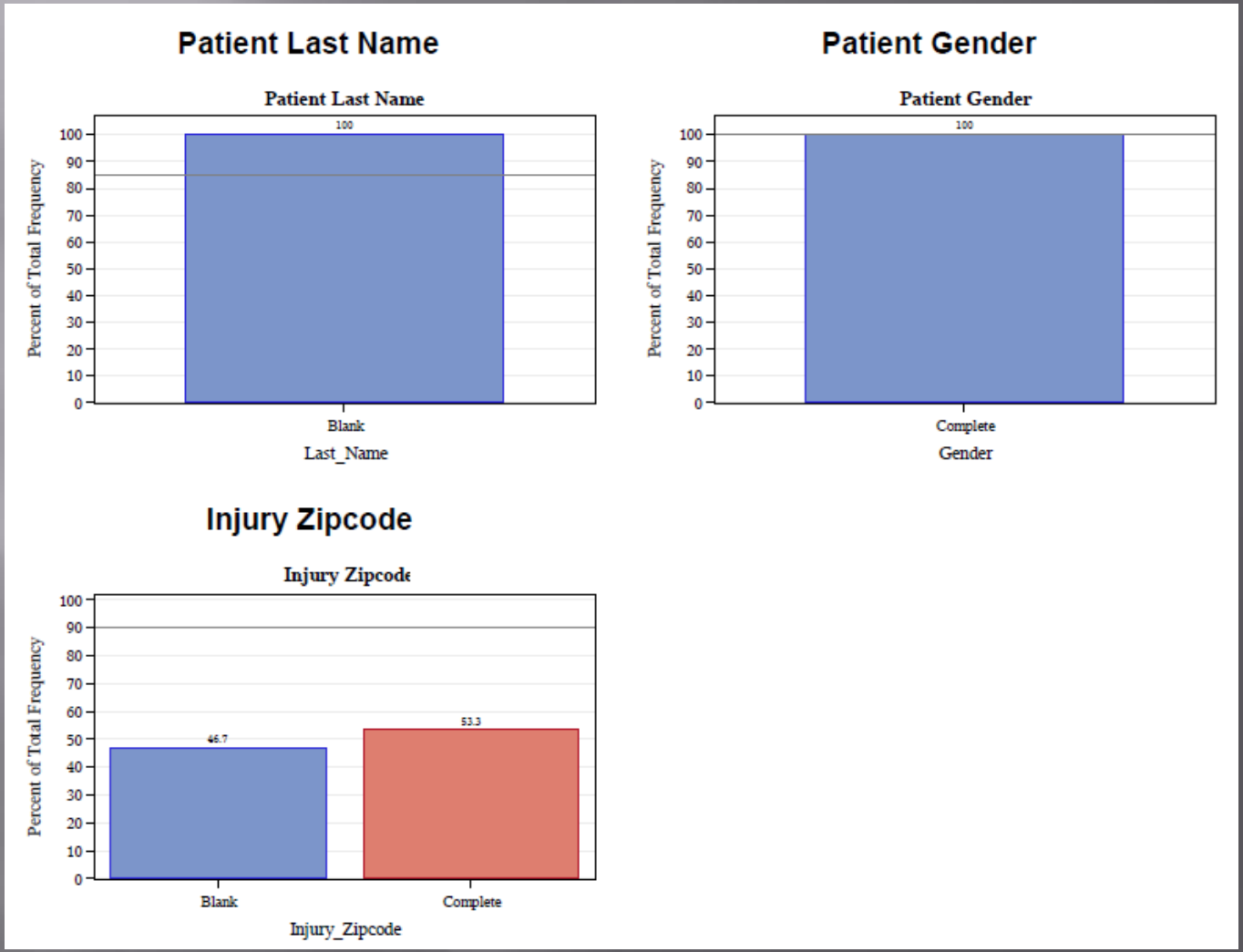
ISS	# of Patients	# of Mortalities	Percent
0 – 9	25,089	307	1%
10 – 15	4,197	69	2%
16 – 24	2,242	93	4%
≥25	1,515	339	22%
Null	36	0	0%
TOTAL	33,043	808	

USA

ISS	# of Patients	# of Mortalities	Percent
1 – 8	396,861	4,403	1%
9 – 15	273,004	7,323	3%
16 – 24	118,686	6,569	6%
≥25	66,165	18,412	28%
Null	5,978	412	7%
TOTAL	860,694	37,119	

Not Statistically Significant

Data Quality Dashboard – Linking Cases



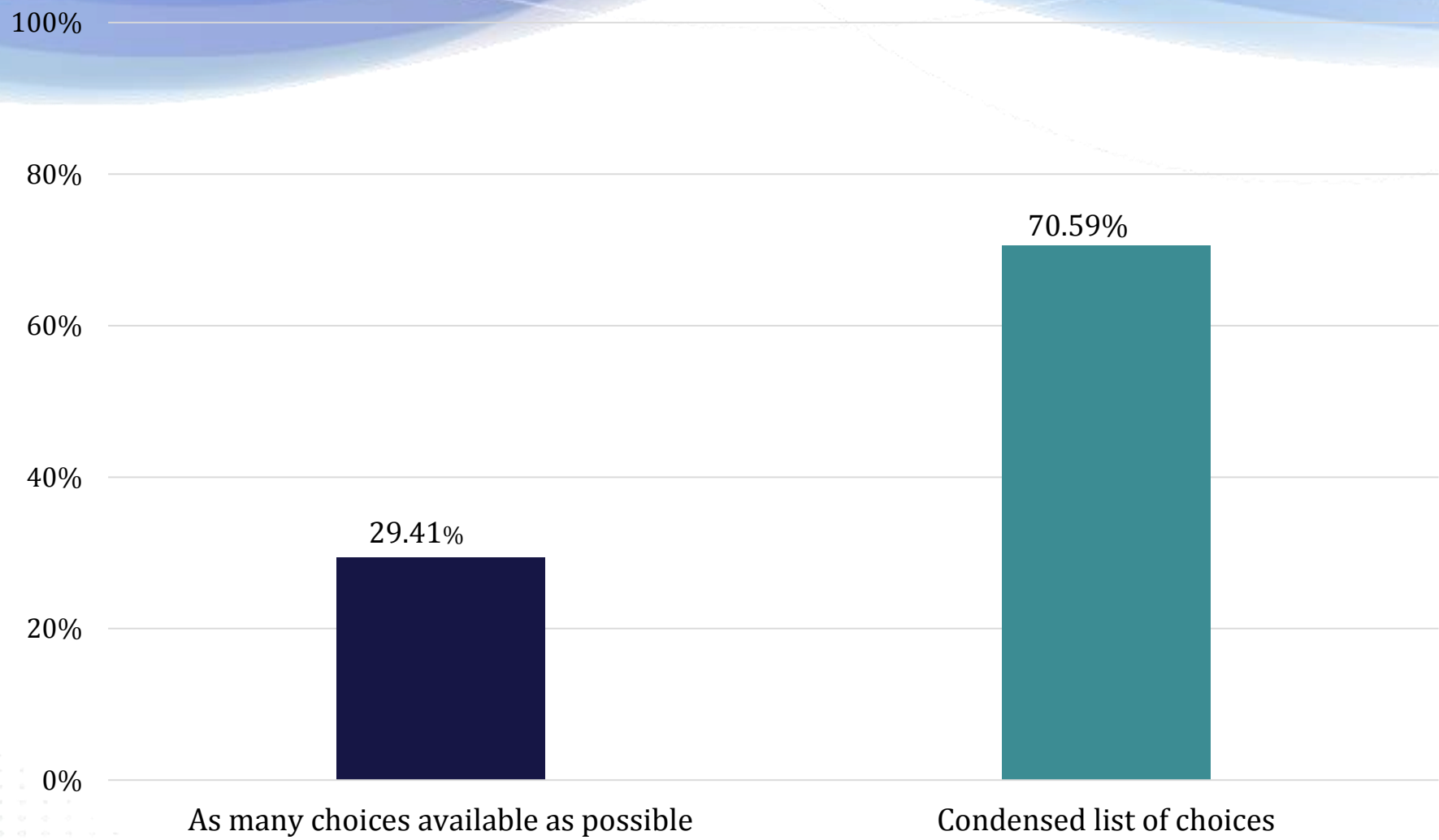
Current Values for "Reason for Transfer Delay"

- EMS Issue
- Other
- Receiving Hospital Issue
- Referring Physician Decision-Making
- Referring Hospital Issue-Radiology
- Weather or Natural Factors

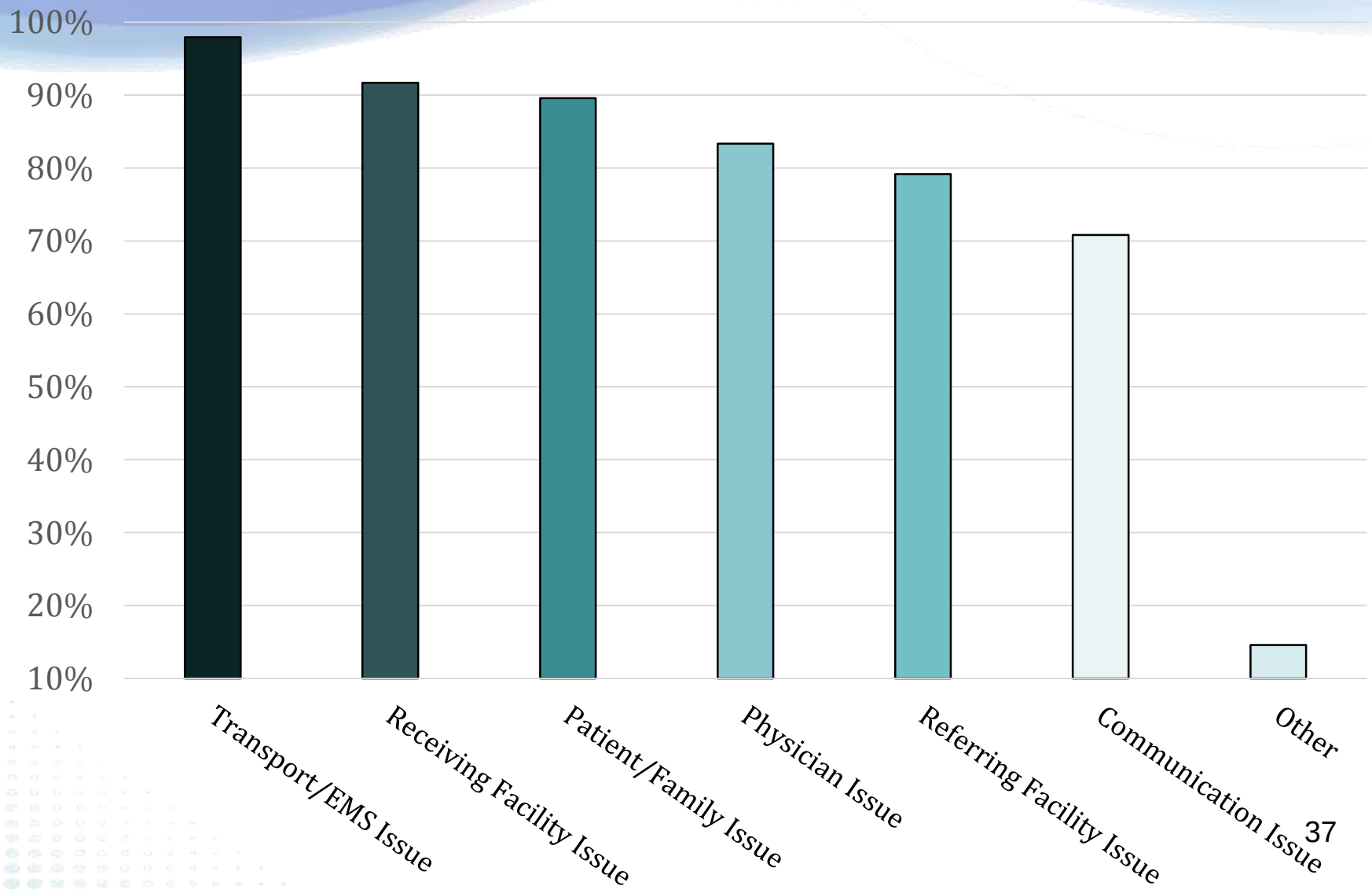
“Reason for Transfer Delay” next steps

- Sent out survey to PI subcommittee to select values.
- Sent out survey to ImageTrend users to select values.

Regarding the number of values for "Reason For Transfer Delay," do you think that:



Please select which values would be beneficial to have the ability to choose from under "Reason for Transfer Delay":



Current Values for “Reason for Transfer Delay”

- EMS Issue
- Other
- Receiving Hospital Issue
- Referring Physician Decision-Making
- Referring Hospital Issue-Radiology
- Weather or Natural Factors
- Transport / EMS Issue
- Other
- Receiving Facility Issue
- Referring Facility Issue
- Physician Issue
- Patient / Family Issue
- Communication Issue

Subcommittee Updates
Designation Subcommittee

Dr. Gerardo Gomez, *Trauma Medical Director*
Eskenazi Health

Indiana State Department of Health

Trauma Designation Subcommittee Update

February 19, 2016
Gerardo Gomez, MD, FACS
Committee Chair

Dr. Lewis Jacobson, Dr. R. Lawrence Reed, Spencer Grover, Wendy St. John, Jennifer Mullen, Lisa Hollister, Amanda Elikofer, Katie Hokanson, Ramzi Nimry, Missy Hockaday, Teri Joy, Art Logsdon, Judy Holsinger, Jennifer Conger, Dr. Emily Fitz, Dr. Matthew Sutter, Dr. Christopher Hartman

Other participants: Dr. Kevin Loeb, Ryan Williams, Tim Smith

ISDH Trauma Designation Subcommittee Meeting Agenda

1) **Trauma Triage and Transport Rule**
    a) Trauma Center Definition
    b) Section 4b (Transported to a Trauma Center)
    c) Transport Time
2) **Union Hospital Level III Application Review**
3) **Creation of Trauma Service Areas / Regional Trauma Agencies**

1.) Trauma Triage and Transport Rule Trauma Center Definition

"**Trauma Center** means a hospital that is verified by the ACS as meeting its requirements to be a trauma center, or is designated a trauma center under a state designation system that is substantially equivalent to the ACS verification process, or is in the ACS verification process."

Trauma Center Definition Change

Trauma Center means a hospital that is verified by the ACS as meeting its requirements to be a trauma center, or is designated a trauma center under a state designation system that is substantially equivalent to the ACS verification process, or has been approved by the EMS Commission as an Indiana in process Trauma Center.

Section 4 (b)

Patients determined to need trauma center care by virtue of their satisfying either step one or step two of the field triage decision scheme shall be transported to a trauma center, unless transport time exceeds 45 minutes or, in the judgment of the emergency medical services certified responder, a patient's life will be endangered if care is delayed by going directly to a trauma center, in which care the patient shall be transported to the nearest appropriate hospital as determined by the provider's protocols.

Section 4 (b) Change

Patients determined to need trauma center care by virtue of their satisfying either step one or step two of the field triage decision scheme shall be transported to a Level I or Level II trauma center, unless transport time exceeds 45 minutes or, in the judgment of the emergency medical services certified responder, a patient's life will be endangered if care is delayed by going directly to a trauma center, in which care the patient shall be transported to the nearest appropriate hospital as determined by the provider's protocols.

Review of 49 States and DC
33 States information available regarding Triage and Transport Time

1) Alabama
2) Alaska
3) Arkansas
4) Colorado
5) Connecticut
6) Hawaii
7) Illinois
8) Iowa
9) Kansas
10) Kentucky
11) Louisiana
12) Maine
13) Maryland
14) Massachusetts
15) Michigan
16) Minnesota
17) Missouri
18) Nevada
19) New Hampshire
20) New Jersey
21) New Mexico
22) New York
23) North Dakota
24) Oklahoma
25) Pennsylvania
26) Rhode Island
27) Tennessee
28) Texas
29) Utah
30) Vermont
31) Washington
32) West Virginia
33) District of Columbia

22 States triage and transport time data / “transfer time exceeds___”

12 States → 30 minutes

3 States → 20 minutes

2 States → 45 minutes

Section 4 (b) Transport Time

Patients determined to need trauma center care by virtue of their satisfying either step one or step two of the field triage decision scheme shall be transported to a trauma center, unless transport time exceeds 45 minutes or, in the judgment of the emergency medical services certified responder, a patient's life will be endangered if care is delayed by going directly to a trauma center, in which care the patient shall be transported to the nearest appropriate hospital as determined by the provider's protocols.

Section 4 (b) Transport Time Change

Patients determined to need trauma center care by virtue of their satisfying either step one or step two of the field triage decision scheme shall be transported to a trauma center, unless transport time exceeds 30 minutes or, in the judgment of the emergency medical services certified responder, a patient's life will be endangered if care is delayed by going directly to a trauma center, in which care the patient shall be transported to the nearest appropriate hospital as determined by the provider's protocols.

Proposed Language
(September 30, 2015 meeting)

(c) Patients determined to need trauma center care by virtue of their satisfying either step three ~~or step four~~ of the field triage decision scheme shall be transported to ~~either~~ a trauma center, unless transport time exceeds 30 minutes or, in the judgment of the emergency medical services certified responder, a patient's life will be endangered if care is delayed by going directly to a trauma center, in which case the patient shall be transported to the nearest appropriate hospital ~~or the nearest appropriate hospital~~, as determined by the provider's protocols.

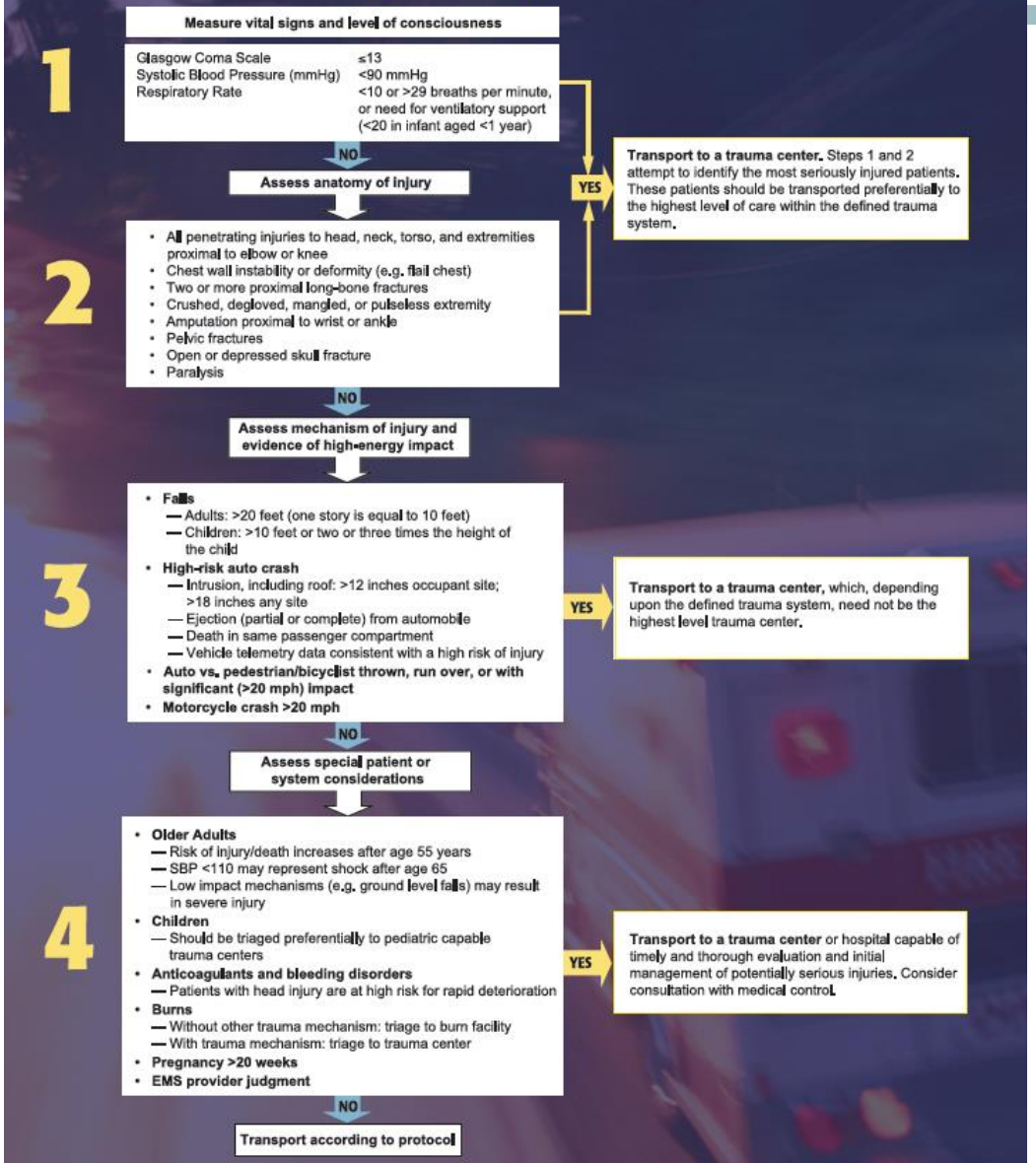
Proposed Language
(September 30, 2015 meeting)

(d) Patients determined to need trauma center care by virtue of their satisfying step four of the field triage decision scheme shall be transported to a trauma center or the nearest appropriate hospital as determined by the provider's protocols.

Proposed Language
(January 26, 2016 meeting)

Patients determined to need trauma center care by virtue of their satisfying step one or step two of the field triage decision scheme shall be transported to a level I or level II trauma center, unless transport time exceeds 30 minutes or, in the judgment of the emergency medical services certified responder, a patient's life will be endangered if care is delayed by going directly to a level I or level II trauma center, in which case the patient shall be transported to a level III trauma center. If transport time to a level III trauma center exceeds 30 minutes or, in the judgment of the emergency medical services certified responder a patient's life will be endangered if care is delayed by going directly to a level III trauma center, the patient shall be transported to the nearest appropriate hospital as determined by the provider's protocol.

2011 Guidelines for Field Triage of Injured Patients



When in doubt, transport to a trauma center.

Find the plan to save lives, at www.cdc.gov/Fieldtriage

ational Center for Injury Prevention and Control
ivision of Injury Response

2.) Union Hospital Level III Application Review

After review of further documentation, the ISDH Trauma Designation Subcommittee recommends Union Hospital, Terre Haute to be a Level III in the process Trauma Center.

Locations of ACS Verified and "In the Process of ACS Verified" Trauma Centers in Indiana

Trauma Centers
in Indiana

Level I

Indianapolis
Eskenazi Health
IU Health Methodist Hospital
Riley Hospital for Children at IU Health

Level II

Evansville
Deaconess Hospital
St. Mary's Medical Center of Evansville

Ft. Wayne
Lutheran Hosptial of Indiana
Parkview Regional Medical Center

Indianapolis
St. Vincent Indianapolis Hospital

South Bend
Memorial Hospital of South Bend

Level III

Lafayette
IU Health - Arnett Hospital

Muncie
IU Health - Ball Memorial Hospital

In the process of ACS Verification

Level II

Terre Haute
Terre Haute Regional

Level III

Anderson
Community Hospital - Anderson
St. Vincent Hospital

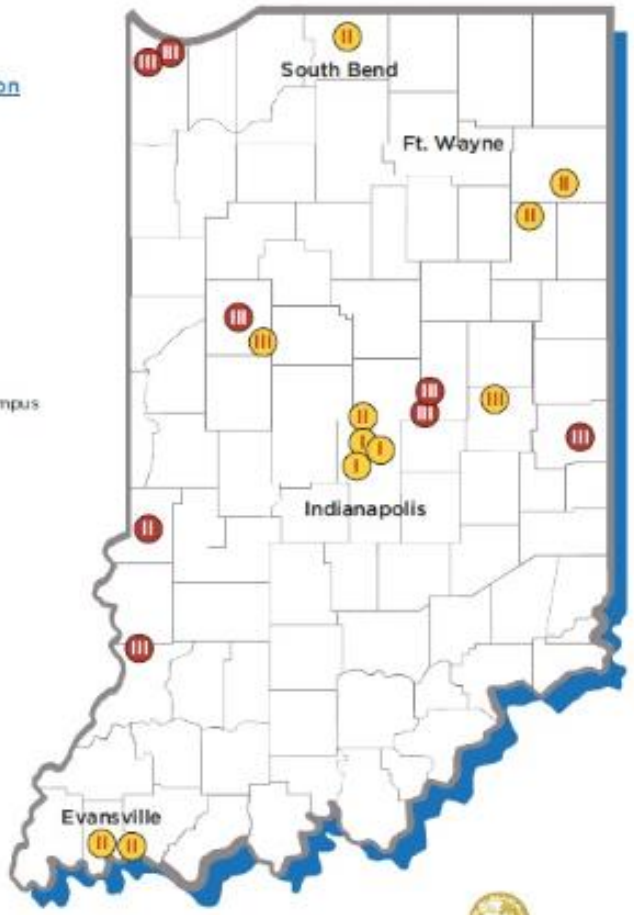
Gary
Methodist Hospital - Northlake Campus

Lafayette
Franciscan St. Elizabeth - East

Vincennes
Good Samaritan Hospital

Richmond
Reid Health

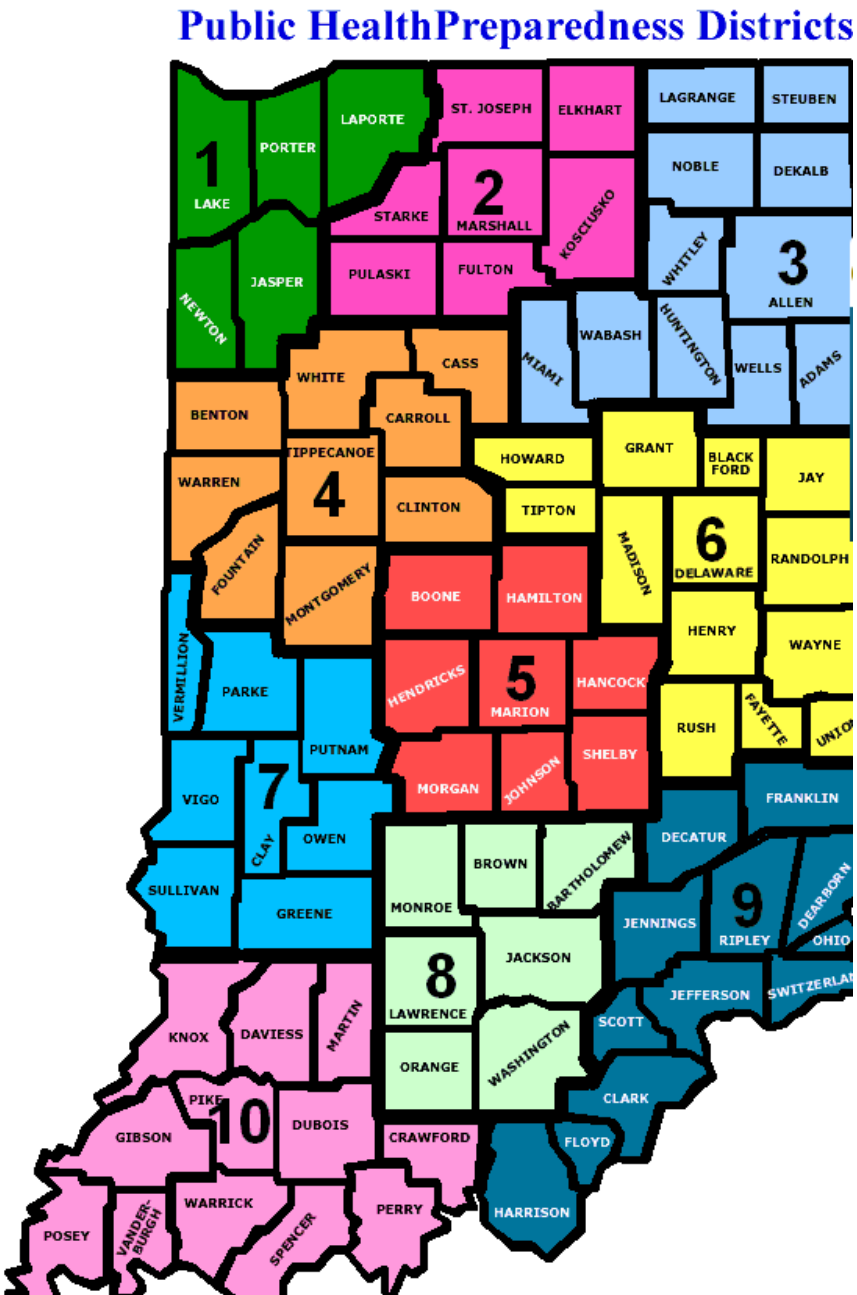
Crown Point
Franciscan St. Anthony Health



Indiana State Department of Health
Trauma and Injury Prevention

3.) Creation of Trauma Service Areas / Regional Trauma Agencies

INDIANA'S PUBLIC HEALTH PREPAREDNESS DISTRICTS



Trauma Registry Report

Camry Hess, *Database Analyst*
Division of Trauma and Injury Prevention

Indiana State Department of Health

Email questions to: **indianatrauma@isdh.in.gov**

Indiana Trauma Care Committee Meeting

February 19, 2016

Indiana State Department of Health

Division of Trauma and Injury Prevention

Indiana State Department of Health

Email questions to: **indianatrauma@isdh.in.gov**

Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2015

District 1

Community Hospital - Munster

Franciscan St. Anthony – Crown Point

Franciscan St. Anthony – Michigan City

Franciscan St. Margaret –Dyer

Franciscan St. Margaret - Hammond

IU Health – La Porte

Jasper County

Methodist Hospital Northlake

Methodist Hospital Southlake

Portage Hospital

Porter Regional Hospital (Valparaiso)

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Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2015

District 2

Community Hospital of Bremen

Elkhart General Hospital

IU Health – Goshen

IU Health – Starke Hospital

Kosciusko Community Hospital

Memorial Hospital South Bend

Pulaski Memorial Hospital

St. Catherine Regional – East Chicago

St. Joseph Regional Medical Center (Mishawaka)

St. Joseph Regional Medical Center (Plymouth)

Woodlawn Hospital

Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2015

District 3

Bluffton Regional Medical Center

Cameron Memorial Community Hospital

DeKalb Health

Dukes Memorial Hospital

Dupont Hospital

Lutheran Hospital of Indiana

Parkview Huntington Hospital

Parkview LaGrange Hospital

Parkview Noble Hospital

Parkview Randallia

Parkview Regional Medical Center

Parkview Wabash Hospital

Parkview Whitley Hospital

District 4

Franciscan St. Elizabeth - Crawfordsville

Franciscan St. Elizabeth – Lafayette East

IU Health – Arnett Hospital

IU Health – White Memorial

Memorial Hospital (Logansport)

St. Vincent Frankfort

St. Vincent Williamsport Hospital

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Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2015

District 5

Community East Health Network
Community Hospital

Community North health Network
Community Hospital

Community South health Network
Community Hospital

Eskenazi Health

Franciscan St. Francis Health –
Indianapolis

Franciscan St. Francis Health –
Mooresville

Hancock Regional Hospital

Hendricks Regional Health

IU Health – Methodist Hospital

IU Health – Morgan Hospital

IU Health – North Hospital

IU Health – Riley for Children

IU Health - Saxony Hospital

IU Health – West Hospital

Johnson Memorial Hospital

Major Hospital

Riverview Hospital

St. Vincent Hospital and Health Services
Indianapolis

Witham Health Services

Witham Health Services at Anson

Email questions to: **indianatrauma@isdh.in.gov**

Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2015

District 6

Community Hospital of Anderson & Madison Co.

Community Howard Regional Health

Fayette Regional Health System

Henry County Memorial Hospital

IU Health – Ball Memorial Hospital

IU Health – Blackford Hospital

IU Health – Tipton Hospital

Jay County Hospital

Marion General Hospital

Reid Hospital and Health Care Services

Rush Memorial Hospital

St. Vincent Anderson Regional Hospital

St. Vincent Kokomo

St. Vincent Mercy Hospital

St. Vincent Randolph Hospital

Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2015

District 7

Greene County General Hospital

Putnam County Hospital

St. Vincent Clay Hospital

Sullivan County Community Hospital

Terre Haute Regional Hospital

Union Hospital (Terre Haute)

Union Hospital Clinton

Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2015

District 8

Columbus Regional Hospital

IU Health – Bedford Hospital

IU Health – Bloomington Hospital

IU Health – Paoli Hospital

Monroe Hospital

Schneck Medical Center

St. Vincent Salem Hospital

District 9

Clark Memorial Hospital

Dearborn County Hospital

Decatur County Memorial Hospital

Floyd Memorial Hospital and Health Services

Harrison County

King's Daughters' Health

Margaret Mary Community Hospital

Scott County Memorial Hospital

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Hospitals reporting to the Indiana Trauma Registry - Quarter 3 2015

District 10

Daviess Community Hospital

Deaconess Hospital

Deaconess Gateway Hospital

Gibson General

Good Samaritan Hospital

Memorial Hospital & Health Care Center

Perry County Memorial Hospital

St. Mary's Medical Center of Evansville

St. Mary's Warrick Hospital

Summary of Hospitals Reporting Status- Q3 2015

New to Reporting / Started Reporting Again

- Columbus Regional Hospital
- IU Health – Starke Hospital
- IU Health – West Hospital
- Margaret Mary Community Hospital
- Parkview Wabash Hospital
- Portage Hospital

Dropped off

- Community Howard Regional Health
- St. Vincent Mercy Hospital

Email questions to: **indianatrauma@isdh.in.gov**

Quarter 3 2015 Statewide Report

- 9,555 incidents
- July 1, 2015 – September 30, 2015
- 99 total hospitals reporting
  - 9 Level I and II Trauma Centers
  - 7 Level III Trauma Centers
  - 83 Non-Trauma Hospitals

Indiana State Department of Health

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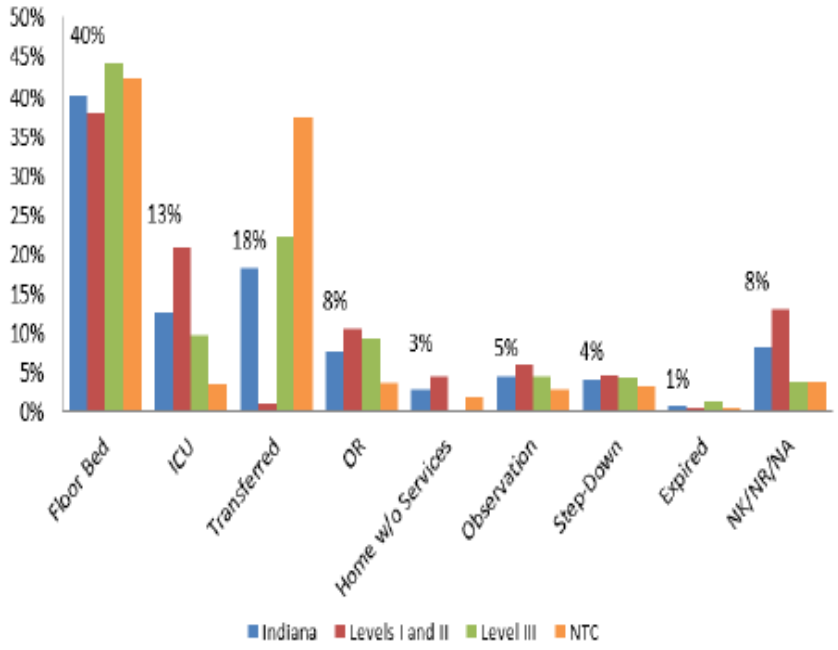
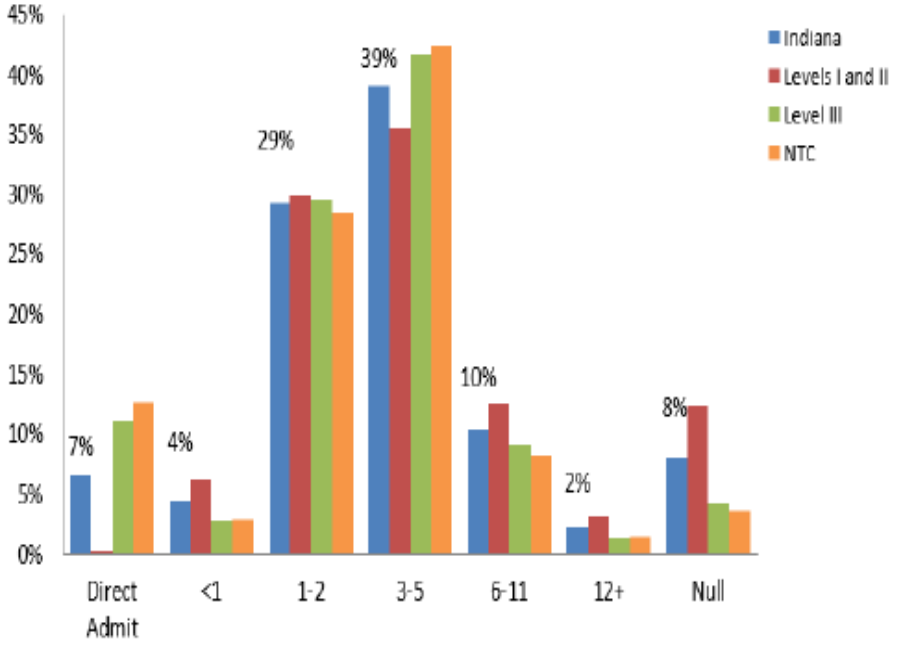
ED: Disposition / Length of Stay - Page 2

ED Disposition by Percentage



ED Length of Stay (Hours)



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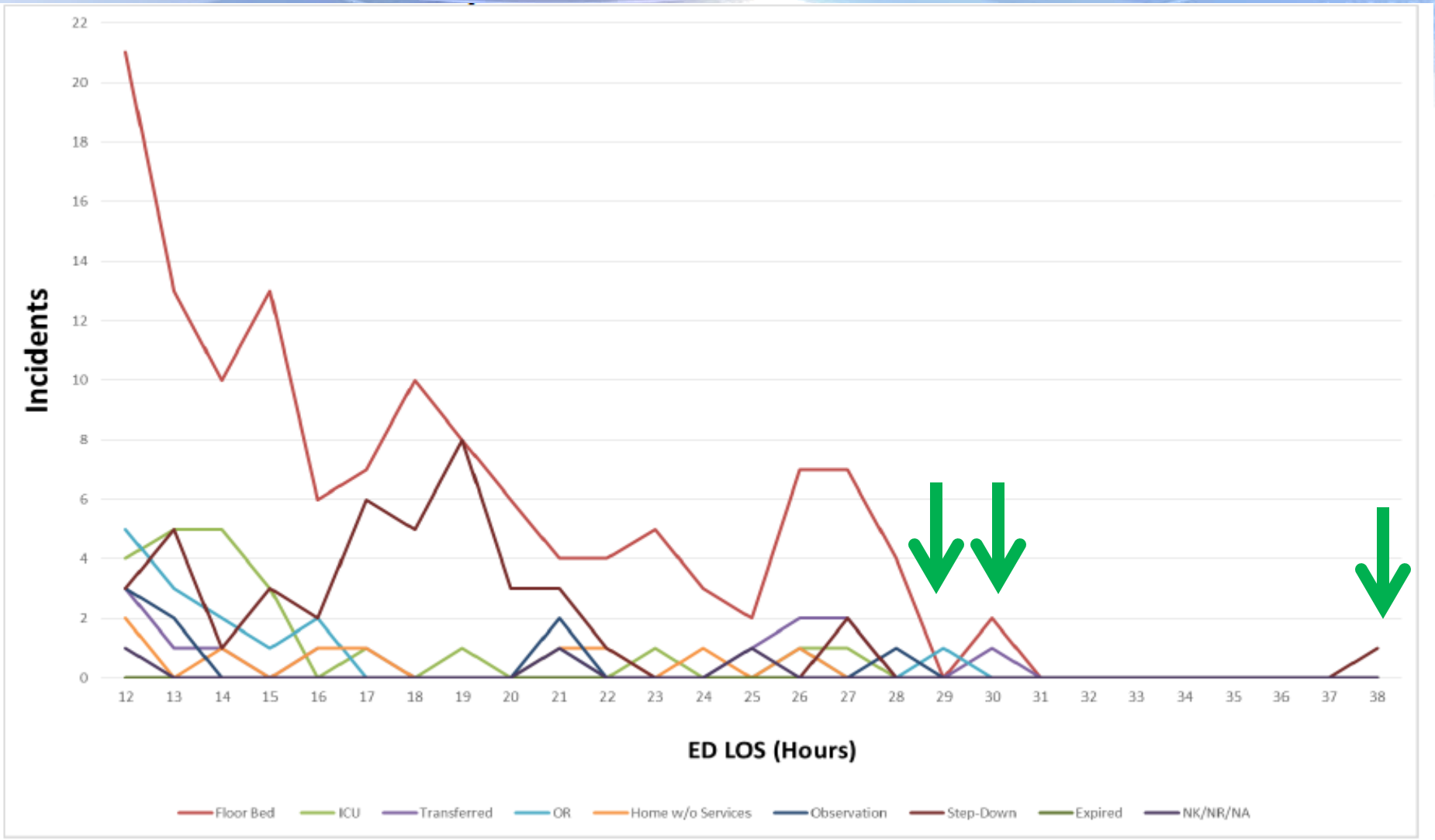
ED LOS > 12 Hours - Page 3



N=219 *No cases expired

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ED LOS > 12 Hours - Page 4

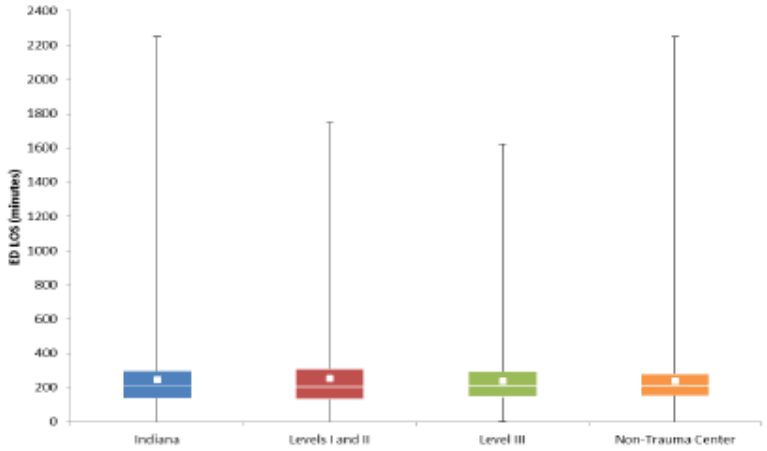
ED LOS > 12 Hours, N=218

Facilities	147 Level I and II 13 Level III 58 Non-trauma Centers	**ISS**	99 (1-8 cat); 90 (9-15 cat); 26 (16-24); 2 (25-44); 1 (No ISS)
Average Distance from Scene to Facility	38.8 Miles	**GCS Motor**	2 (1 cat); 1 (4 cat); 7 (5 cat); 165 (6 cat); 43 (unknown)
Transport Type	160 Ambulance; 9 Helicopter, 43 Private Vehicle/Walk-In; 6 Unknown	**RTS—Systolic**	4 (2-4)
Trauma Type	197 Blunt; 19 Penetrating; 1 Burn; 10 Other; 1 Unknown	**RTS—GCS Scale**	3.9 (3-4)
Cause of Injury	111 Fall; 53 MVC; 16 Struck; 3 Firearm; 12 Transport; 6 Cut/Pierce; 2 Machinery; 6 Bicyclist; 1 Burn; 1 Bite/Sting; 7 Unknown	**RTS—Resp. Scale**	3 (3-4)
Signs of Life	195 Yes; 13 No; 10 Unknown	**RTS**	7.5 (3—7.8)
Age	55.6 Years (0.4-104 Years)	**B Value**	3.99 (0-5.7)
Gender	102 Female; 116 Male	**Ps**	0.97 (0.46—1)
Interfacility Transfer	173 Yes; 45 No	**Resp. Assistance**	6 Yes; 29 No; 183 Unknown
Region	27 North; 122 Central; 37 South; 32 Unknown	**ED LOS**	18.5 (12-37.5)
		ED Disposition	1 AMA; 117 Floor; 1 Home w/ Services; 7 Home w/o Services; 19 ICU; 2 NA; 8 Observation; 12 OR; 40 Telemetry; 11 Transferred

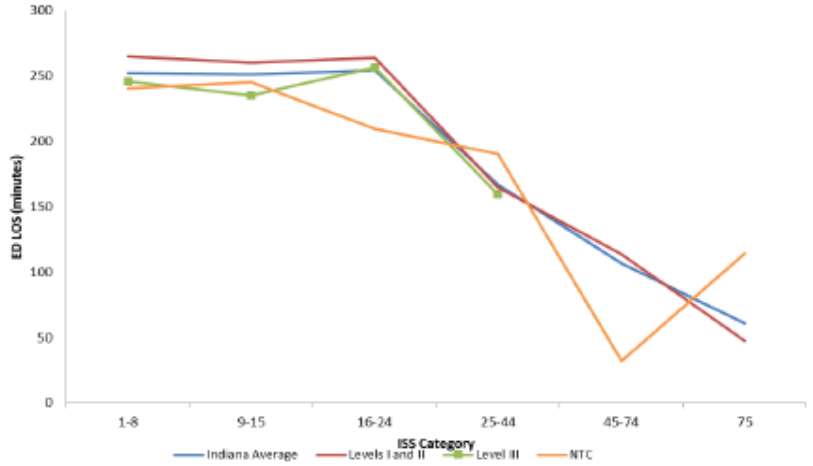
-Region was created from injury zip code. Missing = no injury zip or injury zip from out of state.
-Numbers represent counts per category or mean with minimum and maximum in parentheses.
-No signs of life is defined as having none of the following: organized EKG activity, papillary responses, spontaneous respiratory attempts or movement, and unassisted blood pressure. This usually implies the patient was brought to the ED with CPR in progress (2015 Trauma Registry Data Dictionary, page 185).

ED Length of Stay: Bar & Whisker - Page 5

ED LOS (Minutes) - All Patients



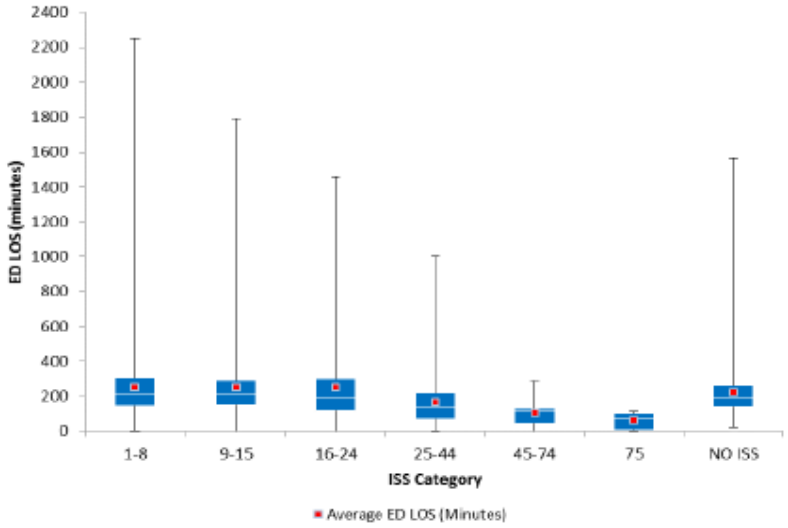
ED LOS (Minutes) by ISS



A table with all the values for ED LOS is found on page 49.

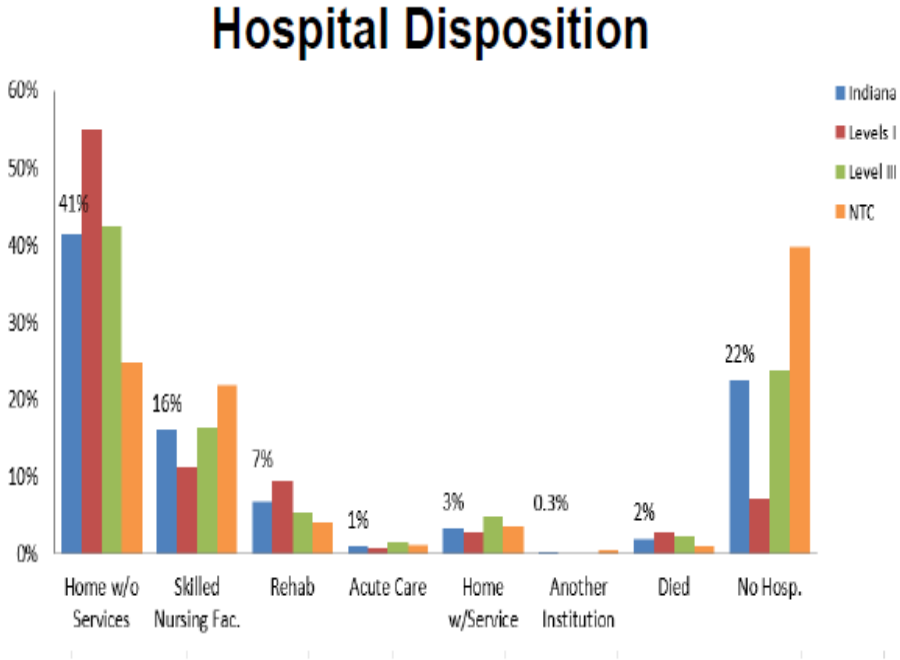
Note for EDLOS by ISS, there were 5 cases with ISS of 75; one was at non-trauma centers.

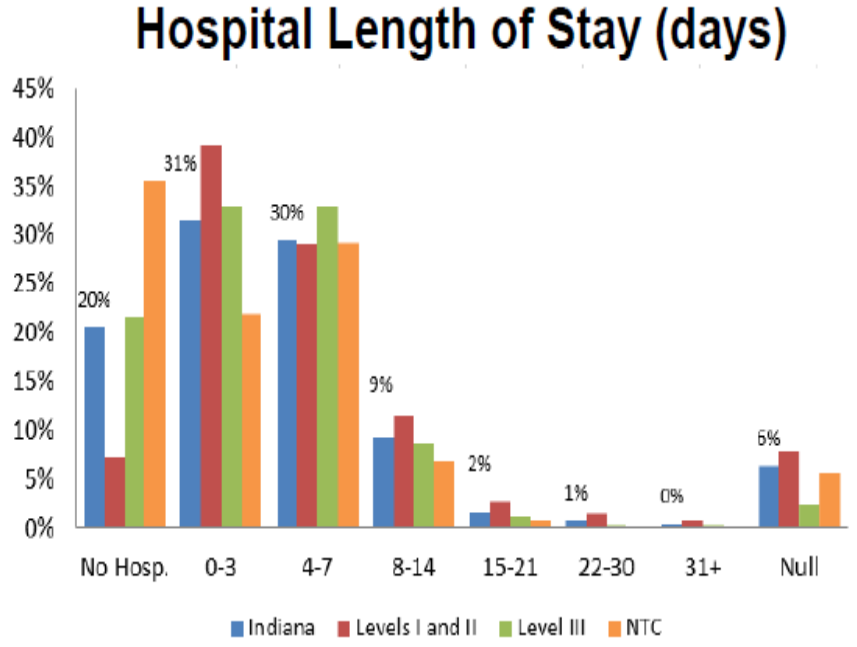
ED LOS (Minutes) by ISS



A table with values for ED LOS by ISS may be found on page 50.

Hospital Disposition and LOS - Page 6





*There are new categories for the Hospital Disposition for the 2014 Data Dictionary
<1%: null, psych., long term care hospital, AMA, hospice and intermediate care.

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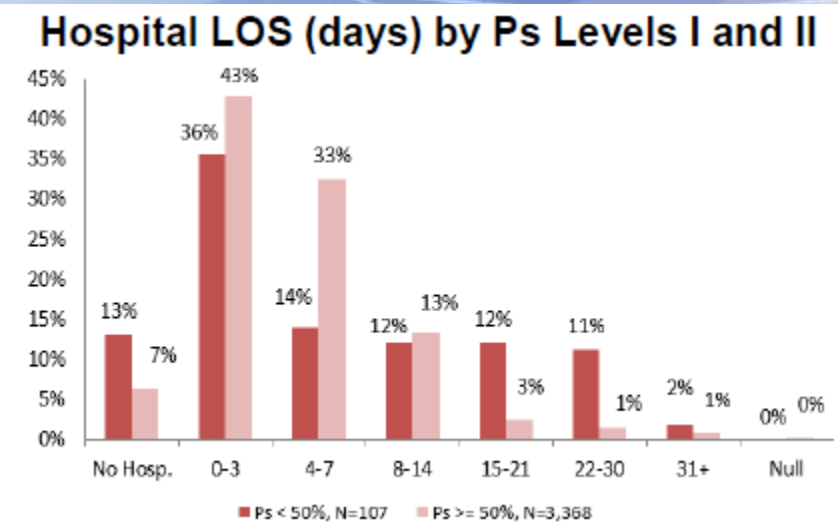
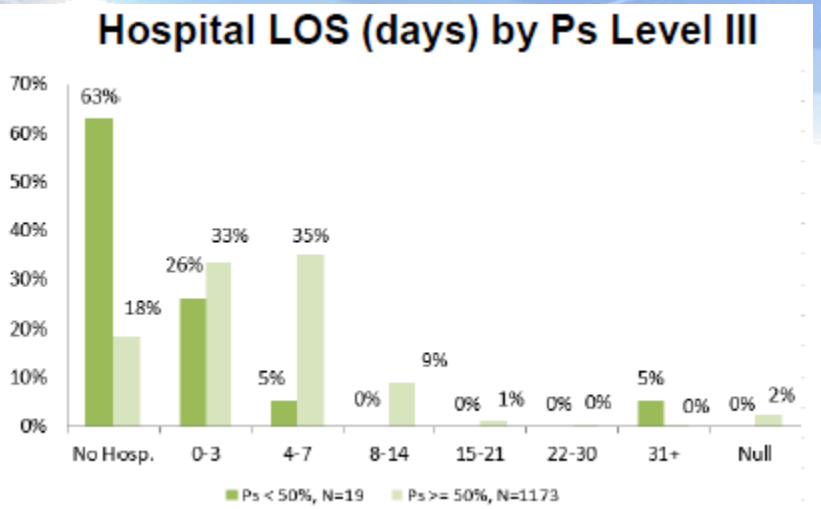
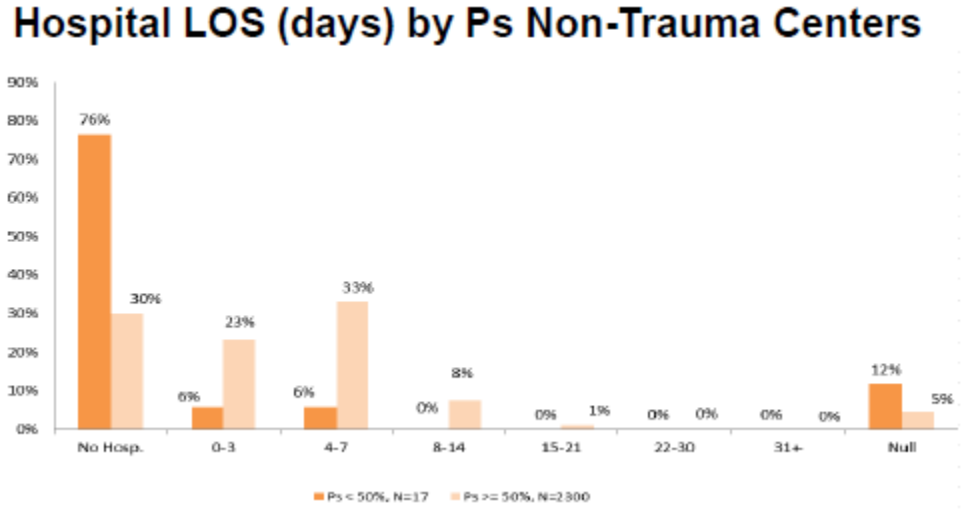
Hospital LOS by Ps - Page 7







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ED Disposition Expired - Page 8

ED Disposition = Expired for Ps ≥ 50%, N=7

Facilities	1 Non-Trauma Centers 6 Trauma Centers	**ISS**	4 (1-8 cat.); 1 (9-15 cat.); 2 (25-44)
Average Distance from Scene to Facility*	11.7 Miles	**GCS Motor**	4 (1 cat); 1 (5 cat); 1 (6 cat); 1 Unknown
Transport Type	6 Ambulance; 1 Helicopter	**RTS—Systolic**	3.7 (2-4)
Trauma Type	6 Blunt; 1 Penetrating	**RTS—GCS Scale**	2 (0-4)
Cause of Injury	2 Fall; 3 MVC; 1 Firearm; 1 Transport	**RTS—Resp. Scale**	2.4 (0-4)
Signs of Life	3 Yes; 4 No	**RTS**	4.5 (2.3-7.8)
Age	35.4 Years (10—73 Years)	**B Value**	2 (1-3.8)
Gender	2 Female; 5 Male	**Ps**	0.9 (0.7—0.98)
Interfacility Transfer	1 Yes; 6 No	**Resp. Assistance**	1 Yes; 1 No; 5 Unknown
Region	4 North; 1 Central; 1 Unknown	**ED LOS**	1.41 hours (0.2-2.2 hours)

-Region was created from injury zip code. Missing = no injury zip or injury zip from out of state.
-Numbers represent counts per category or mean with minimum and maximum in parentheses.
-No signs of life is defined as having none of the following: organized EKG activity, papillary responses, spontaneous respiratory attempts or movement, and unassisted blood pressure. This usually implies the patient was brought to the ED with CPR in progress (2015 Trauma Registry Data Dictionary, page 185).

Trauma Centers - Page 9

ED Dispo ≠ Expired, Hospital Dispo = Expired for Ps ≥ 50%, N=78, Trauma Centers

Interfacility Transfer	29 Yes		Interfacility Transfer	49 No
Average Distance from Scene to Facility	41.5 Miles		Average Distance from Scene to Facility	16 Miles
Transport Type	17 Ambulance; 10 Helicopter; 2 Unknown		Transport Type	36 Ambulance; 7 Helicopter; 5 Private; 1 Unknown
Trauma Type	29 Blunt		Trauma Type	45 Blunt; 4 Penetrating
Cause of Injury	19 Fall; 7 MVC; 2 Struck; 1 Transport		Cause of Injury	29 Fall; 12 MVC; 2 Struck; 3 Firearm; 2 Transport; 1 Cut/Pierce
Signs of Life	23 Yes; 2 No; 2 Unknown		Signs of Life	32 Yes; 2 No; 2 Unknown
Age	62.4 Years (2-89 Years)		Age	68.3 Years (15-98 Years)
Gender	10 Female; 19 Male		Gender	15 Female; 34 Male
Region	3 North; 11 Central; 7 South; 8 NK		Region	17 North; 20 Central; 8 South; 4 NK
ISS	5 (1-8); 4 (9-15); 56(16-24); 14 (25-44)		ISS	5 (1-8); 21 (9-15); 7 (16-24); 16 (25-44)
GCS Motor	7 (1 cat); 1 (2 cat); 2 (4 cat); 1 (5 cat); 17 (6 cat); 1 (unknown)		GCS Motor	7 (1 cat); 1 (3 cat); 2 (4 cat); 4 (5 cat); 34 (6 cat); 1 (unknown)
RTS—Systolic	3.9 (2-4)		RTS—Systolic	3.9 (2-4)
RTS—GCS Scale	2.6 (0-4)		RTS—GCS Scale	3.3 (0-4)
RTS—Resp. Scale	2.8 (0-3)		RTS—Resp. Scale	2.9 (0-4)
RTS	6.1 (2.9-7.6)		RTS	6.8 (2.9-7.6)
Ps	0.8 (0.5– .995)		Ps	0.9 (0.5– .995)
Resp. Assistance	29 Unknown		Resp. Assistance	1 Yes; 6 No; 42 Unknown
ED LOS	2.8 Hours (0.2—6.6 Hours)		ED LOS	4.2 Hours (0.3—19 Hours)

Email questions to: **indianatrauma@isdh.in.gov**

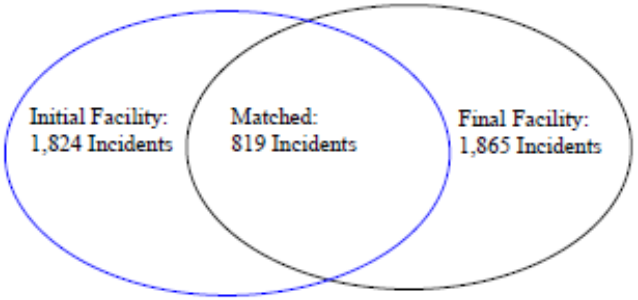
Non-Trauma Centers - Page 10

ED Dispo ≠ Expired, Hospital Dispo = Expired for Ps ≥ 50%, N=21, Non-trauma Centers

Interfacility Transfer	2 Yes		Interfacility Transfer	19 No
Average Distance from Scene to Facility	9.7 Miles		Average Distance from Scene to Facility	9.2 Miles
Transport Type	23 Ambulance; 20 Helicopter		Transport Type	15 Ambulance; 3 Private; 1 Unknown
Trauma Type	2 Blunt		Trauma Type	19 Blunt
Cause of Injury	2 Fall		Cause of Injury	18 Fall; 1 Struck
Signs of Life	1 Yes; 1 No		Signs of Life	17 Yes; 2 No
Age	75 Years		Age	83 (67-93 Years)
Gender			Gender	13 Female; 6 Male
Region			Region	4 North; 12 Central; 3 South
ISS	1 (1-8); 1 (9-15)		ISS	6 (1-8); 9 (9-15); 3 (25-44); 1 Unknown
GCS Motor	1 (1 cat); 1 (5 cat)		GCS Motor	1 (3 cat); 1 (5 cat); 17 (6 cat)
RTS—Systolic	4 (4)		RTS—Systolic	3.8 (2-4)
RTS—GCS Scale	1.5 (0-3)		RTS—GCS Scale	3.9 (3-4)
RTS—Resp. Scale	3 (3)		RTS—Resp. Scale	3 (3)
RTS	5.2 (3.8-6.6)		RTS	7.3 (6-7.6)
Ps	0.7 (0.5– .9)		Ps	0.94 (0.85 –0.98)
Resp. Assistance	1 Yes; 1 Unknown		Resp. Assistance	2 Yes; 6 No; 11 Unknown
ED LOS	2 Unknown		ED LOS	4.3 (1.6-7.3)

Linking - Page 11

For Quarter 3, 2015, of the 9,555 incidents reported to the Indiana Trauma Registry, 1,824 cases that had an ED Disposition of "Transferred to another acute care facility" at the initial facility or that had the Inter-Facility Transfer equal to "Yes" at the Trauma Center. Of those transferred, 819 cases were probabilistically matched. The linked cases make up 22% of the Q3 2015 data. All public health preparedness districts are represented. The diagram below illustrates the overlap between the transfers reported from the initial facility and from the final facility that can be matched.



The initial facility in which transfers come from may be considered Critical Access Hospitals (CAHs). All Indiana CAHs are considered Rural, and must meet additional requirements to have a CAH designation, such as having no more than 25 inpatient beds and being located in a rural area. Facilities that are highlighted indicate that these facilities reported data for Quarter 3, 2015.

Within this transfer data section, the purple columns represent the transfer cases and the single percentages represent the percent for the transfer cases. For two demographic variables, patient age groupings and gender, the Indiana average is included to provide more insight to this transfer population.

Indiana Critical Access Hospitals (CAHs)

Adams Memorial Hospital	Perry County Memorial Hospital
Cameron Memorial Community Hospital Inc	Pulaski Memorial Hospital
Community Hospital of Bremen Inc	Putnam County Hospital
Decatur County Memorial Hospital	Rush Memorial Hospital
Dukes Memorial Hospital	Scott Memorial Hospital
Gibson General Hospital	St Vincent Frankfort Hospital Inc
Greene County General Hospital	St Vincent Jennings Hospital Inc
Harrison County Hospital	St Vincent Mercy Hospital
IU Health Bedford Hospital	St Vincent Randolph Hospital Inc
IU Health Blackford Hospital	St Vincent Salem Hospital Inc
IU Health Paoli Hospital	St. Mary's Warrick Hospital Inc
IU Health Tipton Hospital	St. Vincent Clay Hospital Inc
IU Health White Memorial Hospital	St. Vincent Dunn Hospital Inc
Jasper County Hospital	St. Vincent Williamsport Hospital, Inc.
Jay County Hospital	Sullivan County Community Hospital
Margaret Mary Community Hospital Inc	Union Hospital Clinton
Parkview LaGrange Hospital	Woodlawn Hospital
Parkview Wabash Hospital	

Rural Hospitals

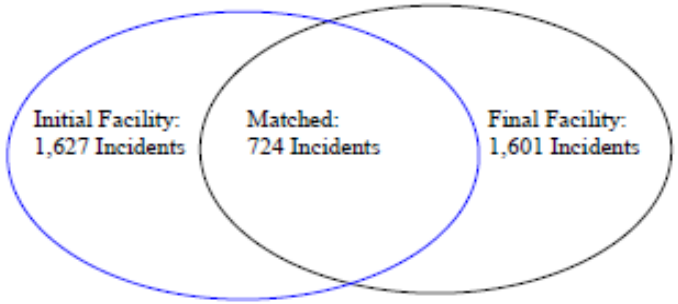
Columbus Regional Hospital	King's Daughters' Health
Daviess Community Hospital	Kosciusko Community Hospital
Fayette Regional Health System	Marion General Hospital
Franciscan St Anthony Health - Michigan City	Memorial Hospital
Franciscan St Elizabeth Health - Crawfordsville	Memorial Hospital and Health Care Center
Good Samaritan Hospital	Parkview Noble Hospital
Henry County Memorial Hospital	Reid Hospital & Health Care Services
Indiana University Health La Porte Hospital	Saint Joseph RMC - Plymouth
Indiana University Health Starke Hospital	Schneck Medical Center

Historical Links - Page 12

Historical Links

For Quarter 4, 2014, of the 8,052 incidents reported to the Indiana Trauma Registry, 1472 cases that had an ED Disposition of "Transferred to another acute care facility" at the initial facility or that had the Inter-Facility Transfer equal to "Yes" at the Trauma Center. Of those transferred,
200 cases were probabilistically matched. The linked cases make up 6.7% of the Q4 2014 data. All public health preparedness districts are represented. The diagram below illustrates the overlap between the transfers reported from the initial facility and from the final facility that can be matched.

For Quarter 1, 2015, of the 7,050 incidents reported to the Indiana Trauma Registry, 1,329 cases that had an ED Disposition of "Transferred to another acute care facility" at the initial facility or that had the Inter-Facility Transfer equal to "Yes" at the Trauma Center. Of those transferred,
430 cases were probabilistically matched. The linked cases make up 17% of the Q1 2015 data. All public health preparedness districts are represented. The diagram below illustrates the overlap between the transfers reported from the initial facility and from the final facility that can be matched.



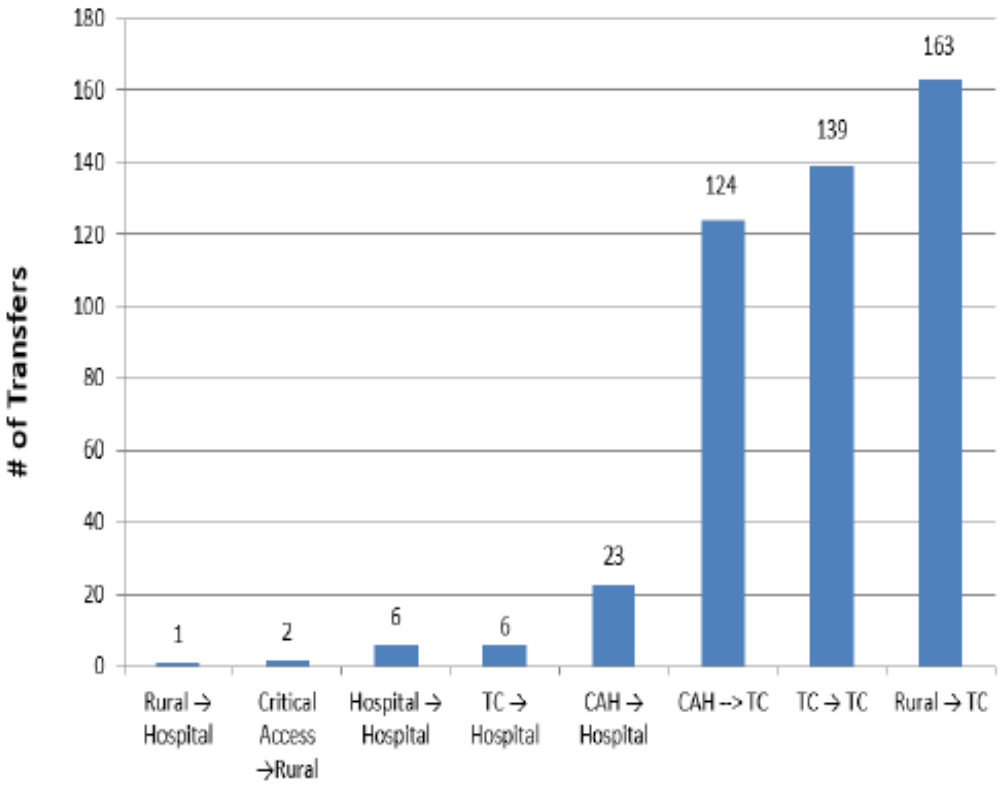
For Quarter 2, 2015, of the 8,605 incidents reported to the Indiana Trauma Registry, 1,627 cases that had an ED Disposition of "Transferred to another acute care facility" at the initial facility or that had the Inter-Facility Transfer equal to "Yes" at the Trauma Center. Of those transferred,
724 cases were probabilistically matched. The linked cases make up 22% of the Q2 2015 data. All public health preparedness districts are represented. The diagram below illustrates the overlap between the transfers reported from the initial facility and from the final facility that can be matched.

Transfer Patient: Facility Type - Page 13

Facility to Facility Transfers

For Transfer Patients:		
Initial Hospital Type	Final Hospital Type	Incident Counts
Rural	Hospital	1
Critical Access Hospital	Rural Hospital	2
Hospital	Hospital	6
Trauma Center	Hospital	6
Critical Access Hospital	Hospital	23
Critical Access Hospital	Trauma Center	124
Trauma Center	Trauma Center	139
Rural Hospital	Trauma Center	163
Hospital	Trauma Center	355

Facility Transfer Type



Rural = Rural Hospital; TC = ACS Verified or In Process Trauma Center;

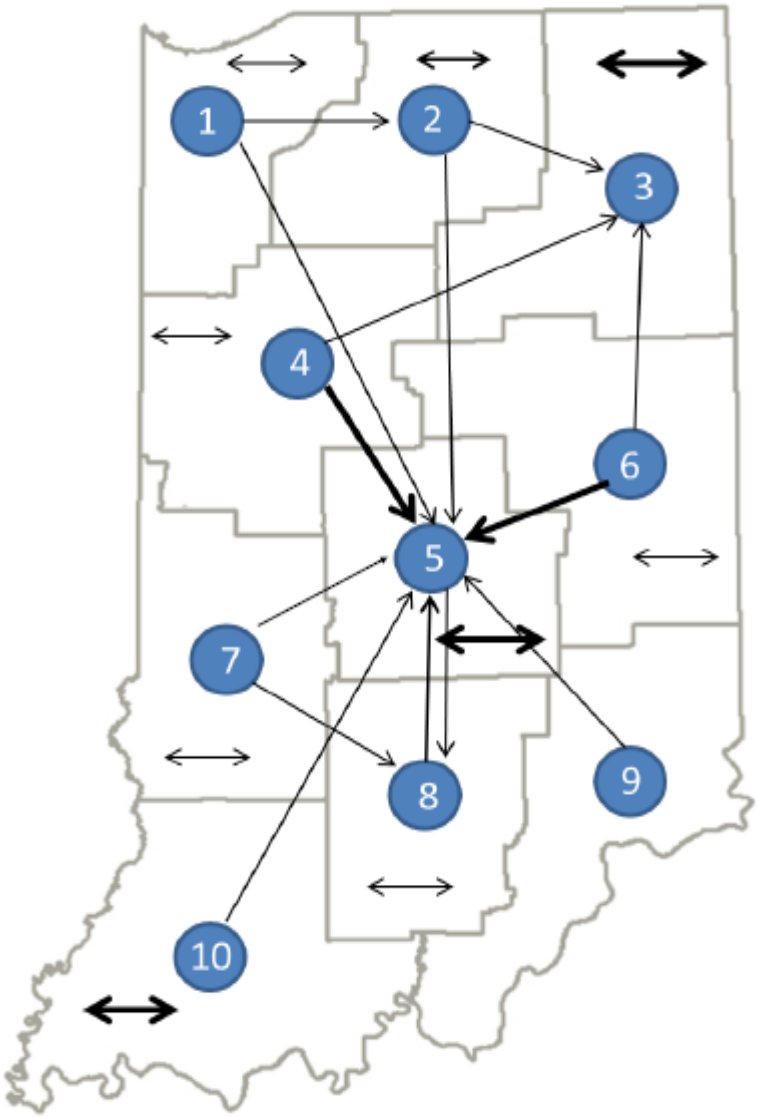
Linked Transfer Patient Averages - Page 14

For Linked Transfer Patients:

For Transfer Patients:					
	All Transfer Patients	Critical*	Physiological Critical**	ISS Critical***	*Ps <0.5***
Number of Patients	819	446	411	65	4
EMS Notified to Scene	12.2 minutes	9.5 minutes	9.4 minutes	9.1 minutes	5.5 minutes
EMS Scene Arrival to Departure	19.4 minutes	16.1 minutes	16.3 minutes	13.7 minutes	17.5 minutes
EMS Scene Departure to Initial Hospital ED Arrival	18.2 minutes	17.7 minutes	17.6 minutes	16.6 minutes	10 minutes
Initial Hospital ED Arrival to Departure	3 hours 5.1 minutes	3 hours 2.6 minutes	3 hours 6 minutes	2 hours 25.6 minutes	41.7 minutes
Initial Hospital ED Departure to Final Hospital ED Arrival	58.5 minutes	1 hour 1.6 minutes	1 hour 2.9 minutes	57.9 minutes	49.3 minutes
TOTAL TIME	4 hours 53.4 minutes	4 hours 47.5 minutes	4 hours 52.2 minutes	4 hours 2.9 minutes	2 hours 4 minutes

*Critical patient is defined as having a GCS ≤ 12, OR Shock Index > 0.9 OR ISS >15 at the initial hospital.
**Physiological Critical Transfer patient is defined as having a Shock Index > 0.9 OR GCS ≤ 12 at the initial hospital.
***ISS Critical Transfer patient is defined as having an ISS > 15. at the initial hospital
****Patients with a probability of survival ≤ 0.5 at the initial hospital.

Transfer Patient Data - Page 15



*The thickness of the line indicates the frequency of transfers out of or within the public health preparedness district The circles represent transfers from a specific PHPD, not of a specific hospital or county.

For Transfer Patients:		
Public Health Preparedness District Initial Hospital	Public Health Preparedness District Final Hospital	Incident Counts
1	1	7
1	2	7
1	5	11
2	2	22
2	3	12
2	5	7
3	3	124
3	5	3
4	3	8
4	4	12
4	5	76
5	5	148
6	3	9
6	5	108
6	6	15
7	5	54
7	7	14
7	8	2
8	5	56
8	8	8
9	5	8
9	9	1
10	5	15
10	10	92

Transfer Patient Data - Page 16

For Linked Transfer Patients:

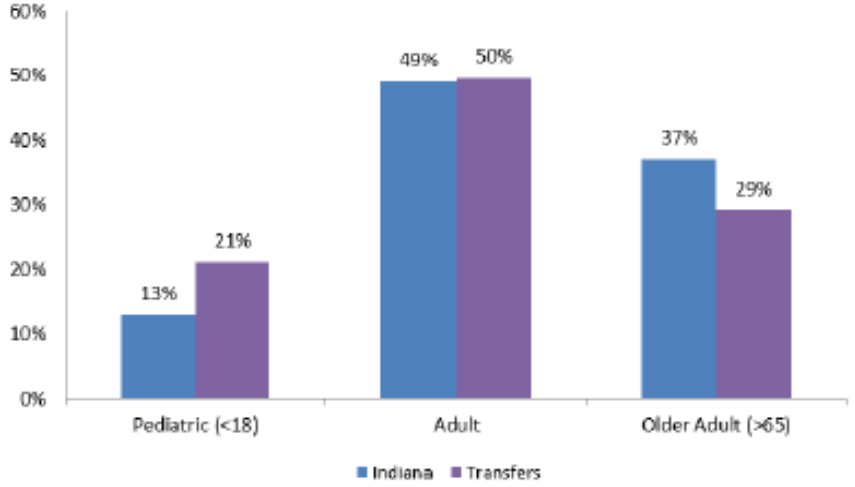
For Transfer Patients:	All Transfer Patients	*Critical**	*Physiological Critical***	*ISS Critical****	*Ps <0.5*****
Number of Patients	819	446	411	65	4
Total Time	4 hours 53.4 minutes	4 hours 47.5 minutes	4 hours 52.2 minutes	4 hours 2.9 minutes	2 hours 4 minutes
Total Mileage	54.4	57.3	57.8	57.9	76.4
Injury Scene to Initial Hospital Mileage**	7.3	6.9	6.9	7.2	7.4
Initial Facility to Final Facility Mileage	47.1	50.5	50.9	50.7	74

Estimated Average Distance (miles) by Region (region of final hospital):					
Region	Injury Scene to Initial Facility Mileage†	Initial Facility to Final Facility Mileage	Total Mileage	Drive Count	Air Count
Indiana Average	7.3	47.1	54.4	676	125
North Region	4.2	34.0	38.2	172	12
Central Region	7.8	53.3	61.1	423	101
South Region	10.7	37.7	48.5	80	12

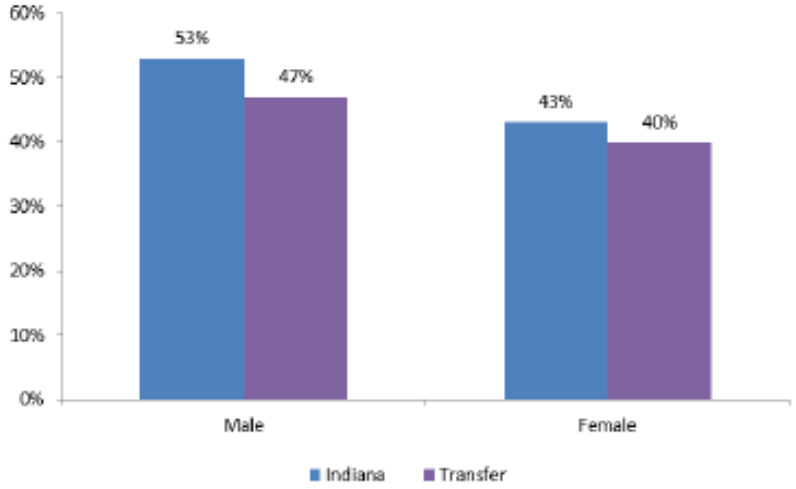
*Critical patient is defined as having a GCS ≤ 12, OR Shock Index > 0.9 OR ISS >15 at the initial hospital.
**Physiological Critical Transfer patient is defined as having a Shock Index > 0.9 OR GCS ≤ 12 at the initial hospital.
*** ISS Critical Transfer patient is defined as ISS > 15 at the initial hospital.
****Probability of Survival < 0.5
†Injury Scene to Initial Facility Mileage location estimated by zip code centroid
Statistics for Estimated Average Distance by Region calculated by Public Health Geographics, Epidemiology Resource Center, ISDH

Transfer Patient Population - Page 17

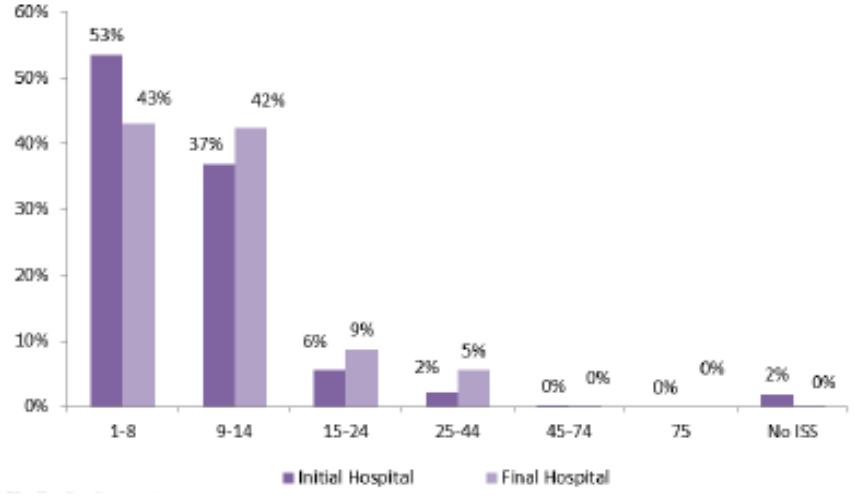
Patient Age Groupings



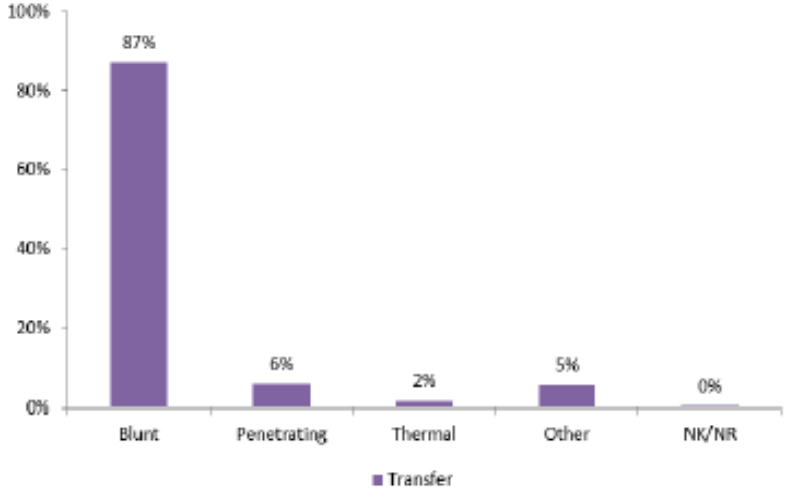
Patient Gender



Injury Severity Score (ISS)



Trauma Type- Final Hospital



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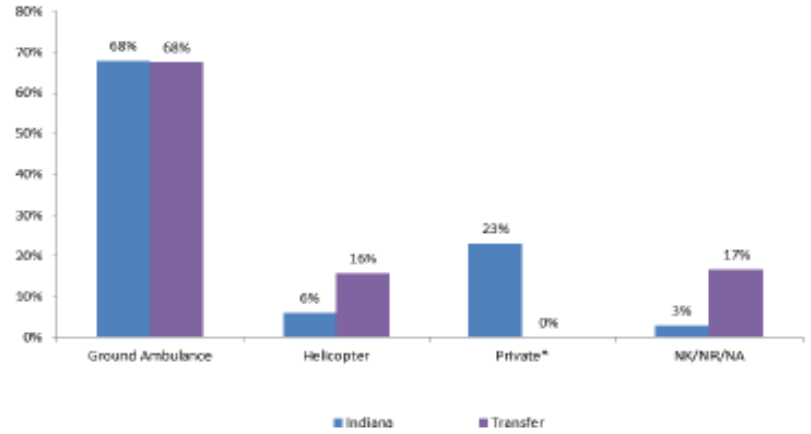
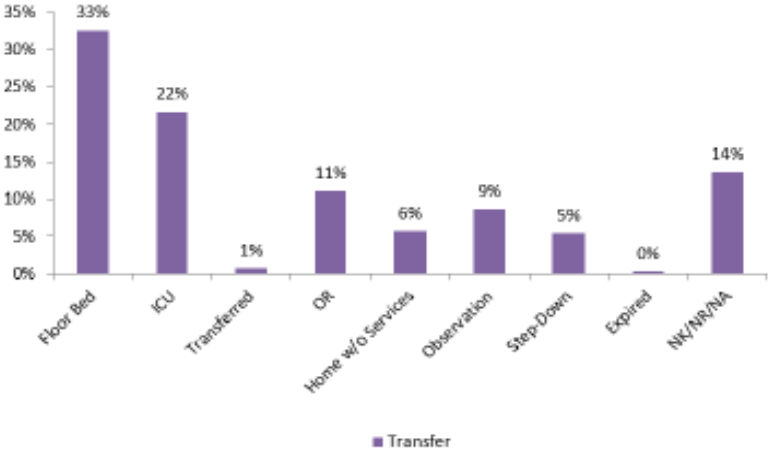
Transfer Patient Population - Page 18

Transport Mode– Final Hospital

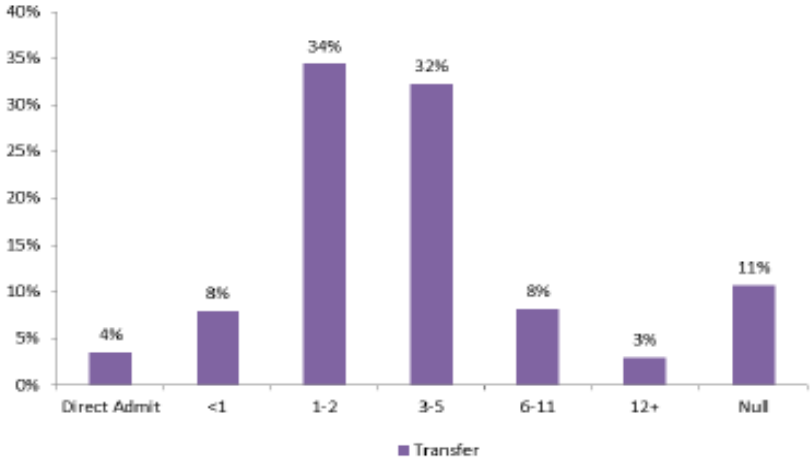


<1% Transport Mode: Police, Other * Indicates Private/ Public Vehicle, Walk-in

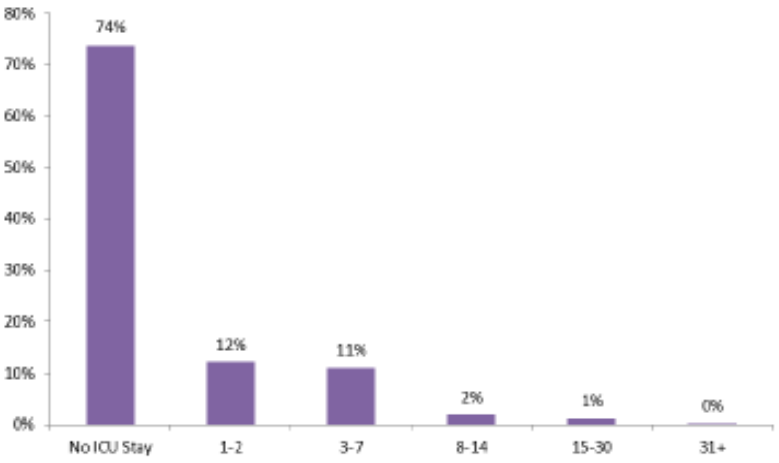
ED Disposition by Percentage- Final Hospital



ED Length of Stay (hours)- Final Hospital



ICU Length of Stay (days)- Final Hospital



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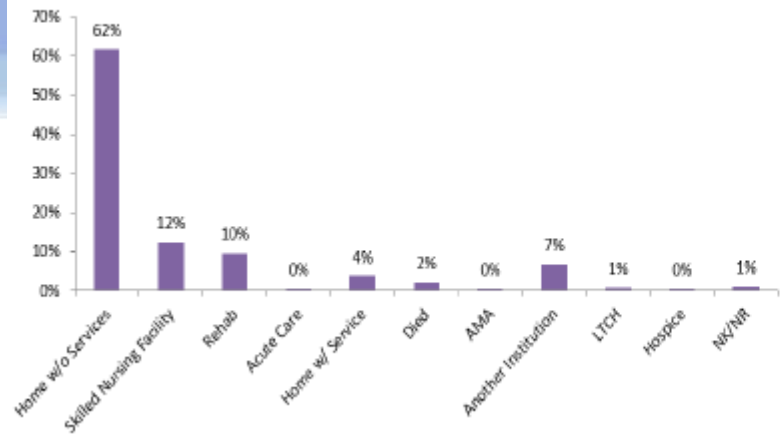
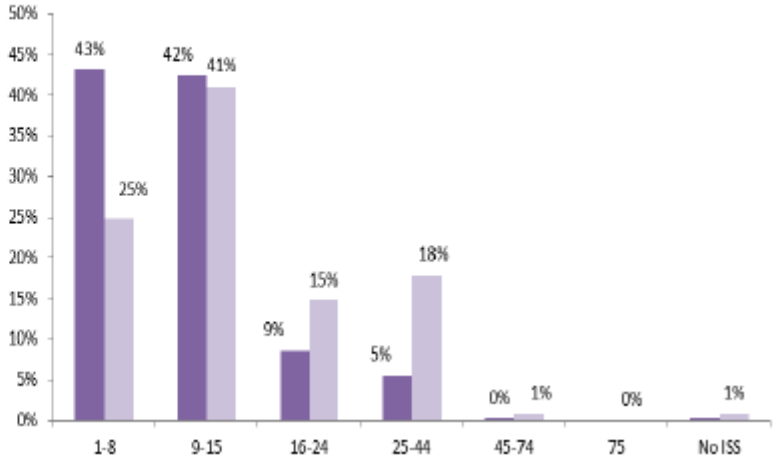
Transfer Patient Population - Page 19

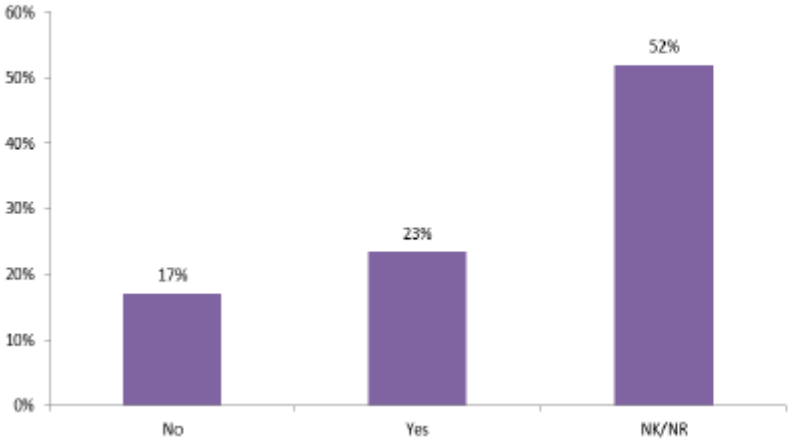
Discharge Disposition– Final Hospital



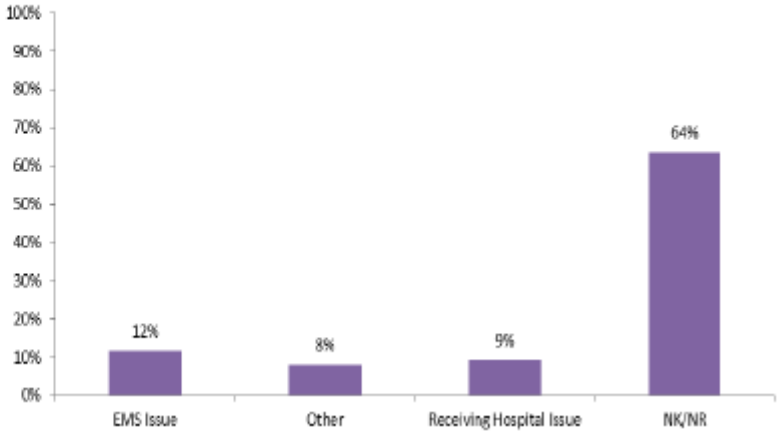
Helicopter Transfers by ISS– Final Hospital



Transfer Delay Indicated- Initial Hospital



Initial Facility Transfer Delay Reason

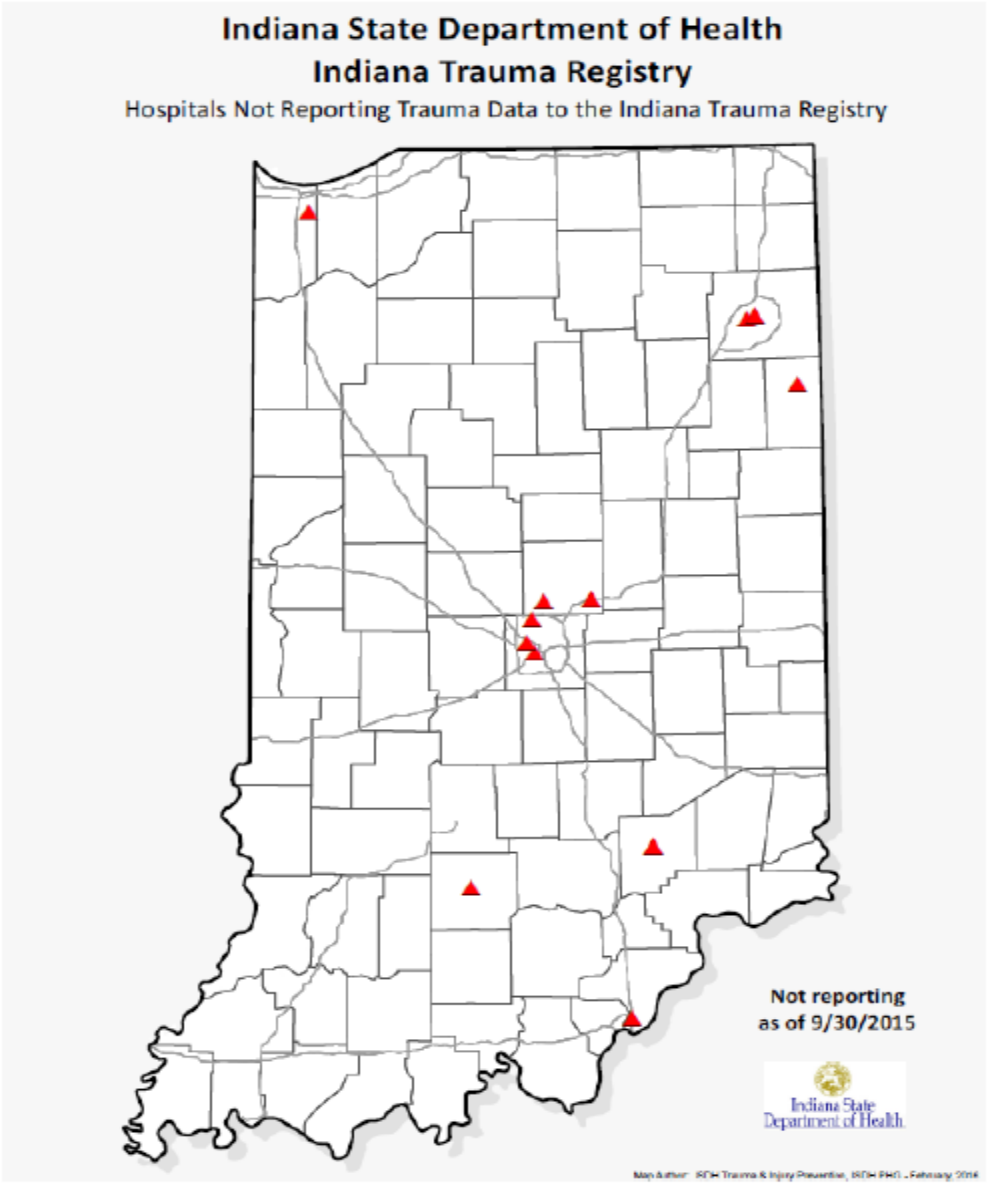


Higher than Average ED LOS for Transferred Patients

Hospital ID

ID 1
ID 4
ID 11
ID 26
ID 34
ID 41
ID 44
ID 49
ID 55
ID 59
ID 61
ID 62
ID 69
ID 70
ID 73
ID 84
ID 92
ID 97
ID 112
ID 122

Not Reporting Map - Page 20



Reporting Map - Page 52

Indiana State Department of Health
Indiana Trauma Registry

Hospitals Reporting Trauma Data
Quarter 3, 2015
July 1, 2015 - September 30, 2015

I II Level I and II Trauma Centers

Deaconess Hospital
Eskenazi Health
IU Health - Methodist Hospital
Lutheran Hospital of Indiana
Memorial Hospital of South Bend
Parkview Regional Medical Center
Riley Hospital for Children at IU Health
St Mary's Medical Center of Evansville
St Vincent Indianapolis Hospital & Health Services

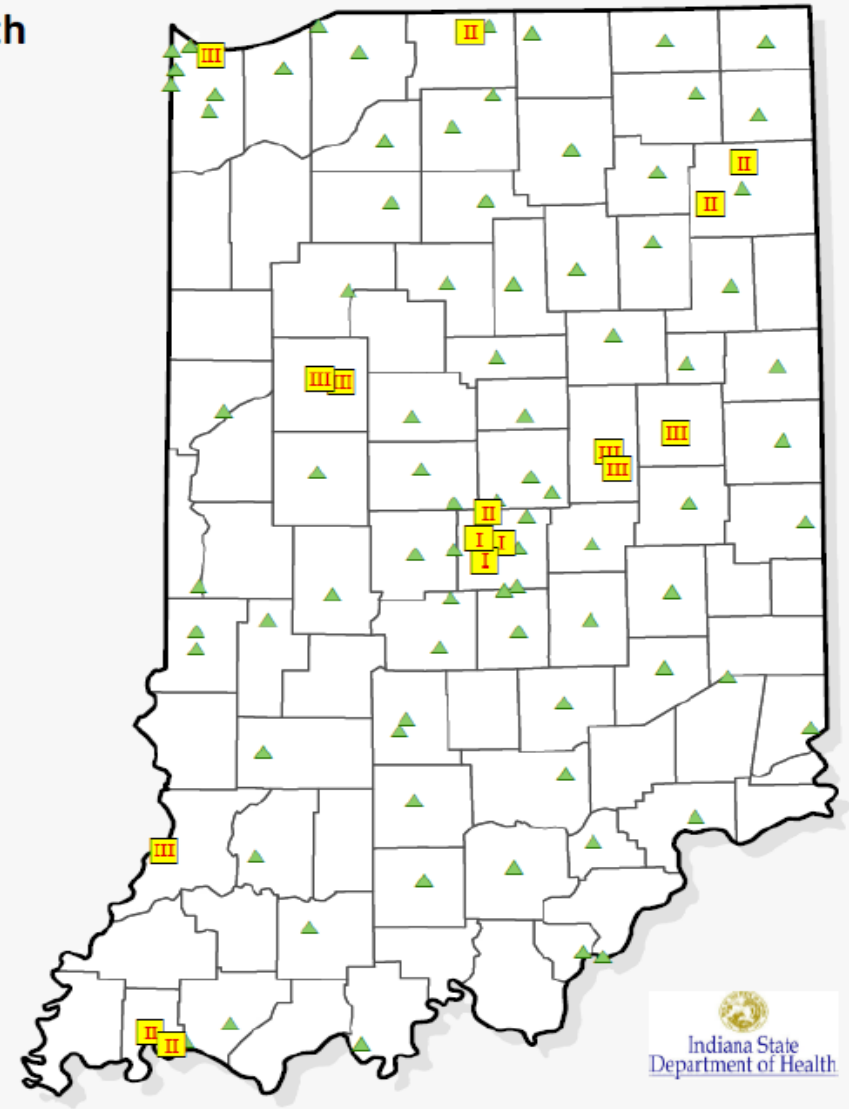
III Level III Trauma Centers

Community Hospital of Anderson & Madison Co.
Franciscan St Elizabeth Health - Lafayette East
Good Samaritan Hospital
IU Health - Arnett Hospital
IU Health - Ball Memorial Hospital
Methodist Hospitals - Northlake Campus
St Vincent Anderson Regional Hospital

▲ Non-Trauma Hospitals

84 Non-Trauma Hospitals

Hospital categories include Verified and "In the Process" Trauma Centers



Map Author: ISDH Trauma & Injury Prevention. ISDH PHG - February, 2016

Questions?

Indiana State Department of Health

Updates

Indiana State Department of Health

Email questions to: **indianatrauma@isdh.in.gov**

Injury Prevention Updates

Lauren Savitskas, MPH , Injury Prevention Program Coordinator

Division of Trauma and Injury Prevention

Indiana State Department of Health

Email questions to: **indianatrauma@isdh.in.gov**

Injury Prevention Program Tour

- Travel to trauma centers to learn about their injury prevention programs.
- Share division priority areas:
  - Child Passenger Safety.
  - Older Adult Falls.

Indiana State Department of Health

Injury Prevention Program Tour (continued)

Trauma Centers:

- Eskenazi Health
- IU Health Arnett Hospital
- IU Health Ball Memorial Hospital
- IU Health Methodist Hospital
- Lutheran
- Memorial Hospital South Bend
- Parkview Regional Medical Center
- St. Mary's Medical Center of Evansville
- St. Vincent Indianapolis Hospital

"In Process" Trauma Centers:

- Franciscan St. Elizabeth Health – East
- Franciscan St. Anthony Health – Crown Point
- Methodist Hospital – Northlake Campus
- St. Vincent Anderson Hospital
- Terre Haute Regional

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Injury Prevention Program Tour (continued)

- Leading Mechanisms of Injury
  - Older adult falls
  - MVC related
  - Varied (penetrating trauma, ATV injury, pedestrian/bike related and TBI)
- Statewide Falls Initiative

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Injury Prevention Program Tour (continued)

- Areas of Opportunities
  - Child Passenger Safety Inspection Stations
  - Violence Prevention Programming
  - Trauma Survivors Network Growth
  - Highlight Trauma Centers in Trauma Times

CS CoIIN

Child Safety Collaborative
Innovation & Improvement Network

Child Safety COIIN

Indiana State
Department of Health

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Children's Safety CoIIN
Strategy Teams

- Strategy Team Recruitment & Development:
  - Teen Driver Safety
  - Child Passenger Safety
  - Interpersonal Violence Prevention

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Other Updates?

Indiana State Department of Health

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