Introductions & approval of meeting minutes
Updates

Katie Hokanson, Director of Trauma and Injury Prevention

Email questions to: indianatrauma@isdh.in.gov
The 2020 Governor's Next Level Recovery Conference will focus on successful strategies to tackle the drug epidemic.

Participants will be able to hear from individuals who have implemented successful strategies at the local level in Indiana. There is also an opportunity to learn what Indiana is doing to combat the drug epidemic, including programming around prevention, treatment, enforcement and recovery.

Featuring keynote speaker US Surgeon General VADM Jerome M. Adams, MD, MPH

Email questions to: indianatrauma@isdh.in.gov
Title V Needs Assessment

WE WANT TO HEAR FROM YOU!

SHARE YOUR STORY, IMPROVE OUR IMPACT.

Help us better understand what women, children, and families in the state need to thrive and reach their fullest potential.

Email questions to: indianatrauma@isdh.in.gov
Public Health Accreditation

- ISDH accreditation site visit was February 5 & 6.
- Over the year we collected and prepared 357 documents for submission.
- Similar to hospital and education accreditation:
  - National standards.
  - Focused on assessing strengths and weaknesses.
  - Improving accountability and performance.
- Receive results in the coming weeks.

Email questions to: indianatrauma@isdh.in.gov
Division grant activities

- Pursuing new opportunities:
    - If awarded, starts March/April.
    - $250,000-$500,000 for 1 year.
  - Administration for Community Living: 2020 Empowering Communities to Reduce Falls & Falls Risk
    - If awarded, starts May.
    - $300,000 over 3 years.
  - STOP School Violence Grant Program
    - If awarded, starts October.
    - $500,000/year for 3 years.

Email questions to: indianatrauma@isdh.in.gov
Division grant activities

• Supporting additional new opportunities:
  – Substance Abuse and Mental Health Services Administration: Strategic Prevention Framework – Partnerships for Success
    • If awarded, starts August.
    • $1,000,000/year for 5 years.
  – Health Resources & Services Administration: Rural Communities Opioid Response Program
    • If awarded, starts September.
    • $1,000,000/year for 3 years.

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

• SHIELD – safety and health integration in the enforcement of laws on drugs.
• Evidence-based training for law enforcement officers:
  – Syringe and overdose scene safety.
  – Workplace wellness.
• Started in 2003 by Northeastern University School of Law.
  – Evidence-based.
• “Train the trainer” police officers lead the sessions.
• Starting program in Indiana this spring.

Email questions to: indianatrauma@isdh.in.gov
Forensic Pathologist Workforce Discussion

• Meeting March 5 – coordinated by ASTHO and the CDC.
• Discuss state-specific approaches to addressing forensic pathologist shortages.
• Current stakeholders:
  – Coroners.
  – Vital records.
  – State medical schools/academic partners.
  – Toxicology.
  – Others?

Email questions to: indianatrauma@isdh.in.gov
Division staffing updates

- Trinh Dinh
  - Data Analyst – backfilled Camry

- Chinazom Chukwuemeka
  - Registry Coordinator – backfill for Trinh.

- Madeline Tatum
  - Community Outreach Coordinator moved to Fatality Review & Prevention program.

- Laura Hollowell
  - Community Outreach Coordinator – backfill for Madeline.

- Overdose Data 2 Action grant - evaluator

- Division interns:
  - Caryn
  - Nicole
  - Petia
Stroke center list

• IC 16-31-2-9.5
  – Compile & maintain a list of Indiana hospitals that are stroke certified.
  – https://www.in.gov/isdh/27849.htm
  – Transfer agreements – must be stroke specific.

Email questions to: indianatrauma@isdh.in.gov
Regional Updates

Email questions to: indianatrauma@isdh.in.gov
Regional updates

- District 1
- District 2
- District 3
- District 4
- District 5
- District 7
- District 8
- District 9
- District 10

Email questions to: indianatrauma@isdh.in.gov
Indiana EMSC Updates

Margo Knefelkamp, MBA
Program Manager
Indiana Emergency Medical Services for Children
EMSC

Federal Program to reduce pediatric morbidity and mortality as a result of serious injury and illness.
Objectives

- EMSC Performance Measures
- EMSC EMS Annual Assessment
- Indiana Pediatric Facility Recognition
- Pediatric Surge Annex
- National Pediatric Readiness Assessment
- School Nurse Emergency Course
- 9th Annual Pediatric Heroes Awards Breakfast

Indiana – Emergency Medical Services for Children
The degree to which Emergency Medical Services (EMS) agencies submit National Emergency Medical Services Information System (NEMSIS) compliant version 3.x data to the State EMS Office.

**Goal for this measure is that by 2021:**

_Eighty percent of EMS agencies in the state or territory submit NEMSIS version-compliant patient-care data to the State EMS Office for all 911-initiated EMS activations._
The percentage of EMS agencies in the state or territory that have a designated individual who coordinates pediatric emergency care.

**Goal for this measure is that by 2026:**

*Ninety percent of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.*

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>30% of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.</td>
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</tbody>
</table>
EMSC 03
USE OF PEDIATRIC-SPECIFIC EQUIPMENT

The percentage of EMS agencies in the state or territory that have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.

Goal for this measure is that by 2026:

*Ninety percent of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment.*

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>30% of EMS agencies will have a process that requires EMS providers to physically demonstrate the correct use of pediatric-specific equipment, which is equal to a score of 6 or more on a 0-12 scale.</td>
</tr>
</tbody>
</table>
A recent study “found that the availability of a PECC in an agency is associated with increased frequency of pediatric psychomotor skills evaluations.”


PECC = Pediatric Emergency Care Coordinator
EMS Annual Data Collection

- Nationwide EMS assessment to help us better understand how pediatric emergency care is integrated in your EMS agency.

- EMS assessment for **all** EMS agencies who respond to 911 emergency medical calls.

- NEDARC-Data Coordinating Center for EMSC State Partnership program is leading and coordinating assessment.

- Annual data collection-January to March.

- NEDARC to send survey invitations and reminder emails through emsc@hsc.utah.edu

- NEDARC to make follow-up phone calls to non-respondents.
This site is for Emergency Medical Services Professionals who have been invited to take an on-line survey for the Emergency Medical Services for Children (EMSC) Program. Please follow the directions in the dropbox.

We recommend that you PRINT a paper copy of the assessment FIRST before you take the assessment in order to assist you in compiling your answers:

⇒ Paper Version of the Assessment (for reference purposes)

Select Your State/Territory:

Select your State/Territory from the dropdown, click "Get Started."

Indiana

Get Started >>

If you do not see your state/territory in the dropdown list above, then your state/territory currently does not have any open surveys. Please contact the individual from whom you acquired this web address.

emscsurveys.org
Response-Rate Requirement

• “To provide the most accurate representation of the data, an 80 percent response rate is required for your state.”
Current State

Response Rate:

85.3%

(638/748)
Current Respondents - by County
## Collaborating Partners

<table>
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<tr>
<th>IDHS</th>
<th>MESH Coalition</th>
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<tr>
<td>ISDH</td>
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<td>IEMSA</td>
<td>IRHA</td>
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<tr>
<td>IFCA</td>
<td>IVFA</td>
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</table>
Education Opportunities

- PECC Quarterly Newsletter
- PECC Focus Sessions
- Prehospital PECC Network
- Prehospital PECC info-graphic
- IERC 2020 Prehospital PECC workshop/class proposal
EMSC 04
HOSPITAL RECOGNITION FOR PEDIATRIC MEDICAL EMERGENCIES

The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.

Goal for this measure is that by 2022:
Twenty-five percent of hospitals are recognized as part of a statewide, territorial, or regional standardized program that are able to stabilize and/or manage pediatric medical emergencies.

Indiana – Emergency Medical Services for Children
The percent of hospitals with an Emergency Department (ED) recognized through a statewide, territorial, or regional standardized system that are able to stabilize and/or manage pediatric trauma.

Goal for this measure is that by 2022:

Fifty percent of hospitals are recognized as part of a statewide, territorial, or regional standardized system that recognizes hospitals that are able to stabilize and/or manage pediatric trauma.
The percent of hospitals with an Emergency Department (ED) in the state or territory that have written interfacility transfer guidelines that cover pediatric patients and that include the following components of transfer:

- Defined process for initiation of transfer, including the roles and responsibilities of the referring facility and referral center (including responsibilities for requesting transfer and communication).
- Process for selecting the appropriate care facility.
- Process for selecting the appropriately staffed transport service to match the patient’s acuity level (level of care required by patient, equipment needed in transport, etc.)
- Process for patient transfer (including obtaining informed consent).
- Plan for transfer of patient medical record.
- Plan for transfer of copy of signed transport consent.
- Plan for transfer of personal belongings of the patient.
- Plan for provision of directions and referral institution information to family.

Goal for this measure is that by 2021:

* Ninety percent of hospitals in the state or territory have written interfacility transfer guidelines that cover pediatric patients and that include specific components of transfer.
The percent of hospitals with an Emergency Department (ED) in the state or territory that have written interfacility transfer agreements that cover pediatric patients.

Goal for this measure is that by 2021:

* Ninety percent of hospitals in the state or territory have written interfacility transfer agreements that cover pediatric patients.*
The degree to which the state or territory has established permanence of EMSC in the state or territory EMS system.

Annual goal for this measure is:
*To increase the number of states and territories that have established permanence of EMSC in the state or territory EMS system.*

Components of this Measure:
*The purpose of this measure is to establish permanence of EMS for Children in your state or territory by establishing the following components:*

1. A state or territory EMSC Advisory Committee that meets regularly
2. A pediatric representative on the state or territory EMS Board
3. A full-time EMSC program manager
The degree to which the state or territory has established permanence of EMSC in the state or territory EMS system by integrating EMSC priorities into statutes or regulations.

Goal for this measure is that by 2027:

*EMSC priorities will be integrated into existing EMS or hospital and healthcare facility statutes or regulations.*
2006 Report “Growing Pains”

“Unfortunately, although children make up 27 percent of all visits to the ED, many hospitals and EMS agencies are not well equipped to handle these patients.”
Not Ready for Everyday Means…

• Not ready for disasters
• Not ready for pandemics
Consider...

- 83% of children are seen in community hospitals
- 69% of hospitals see < 15 kids/day
- The FEWER kids you see, the MORE READY you need to be!
Joint Policy Statement—Guidelines for Care of Children in the Emergency Department

abstract
Children who require emergency care have unique needs, especially when emergencies are serious or life-threatening. The majority of ill and injured children are brought to community hospital emergency departments.

2009 Policy Statement
2009 Guidelines for Care of Children in the Emergency Department

1. Administration and Coordination
2. Physicians, Nurses, and Other Healthcare Providers
3. Quality Improvement
4. Patient Safety
5. Policies, Procedures, and Protocols
6. Support Services
7. Equipment, Supplies, and Medications
Pediatric Readiness Project

- Coordinated effort to benchmark and improve pediatric care for children nationally
- Combined effort ENA/ACEP/AAP/EMSC
2013 National Survey

- Coordinated through EMSC programs
- Comprehensive web-based assessment
- Compliance with 2009 guidelines
- 5107 hospitals, 83% response rate! (87.6% in Indiana)
- Weighted scale 0-100
- Will be REPEATED IN 2020!
Assessment Tool

• 189 Items on the assessment
• 82 Items Scored for “Pediatric Readiness”
• Perfect Score = 100

• 6 Major Sections
  – Coordination (19 pts)
  – Staffing (10 pts)
  – QI/PI (7 pts)
  – Safety (14 pts)
  – Policies (17 pts)
  – Equipment (33 points)
Indiana Results (INFLATED)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Number of Hospital Respondents</td>
<td>106</td>
</tr>
<tr>
<td>Number of Hospitals Assessed</td>
<td>121</td>
</tr>
<tr>
<td>Response Rate</td>
<td>87.6%</td>
</tr>
</tbody>
</table>

**STATE SCORE AND COMPARATIVE SCORES:**

- **State Average Hospital Score Out of 100:** 66
- **State Median Hospital Score Out of 100:** 67
- **National Median of Participating Hospitals:** 69

n = 4,143
The Big Secret
Pediatric Readiness & Facility Recognition
FRC Nationally

- Wide variation in # levels
- High degree of agreement of individual criteria
Facility Recognition

Indiana – Emergency Medical Services for Children

Map showing facility recognition across the United States with stars marking specific locations such as Alaska and Delaware/NJ.
Illinois

- 3-tiered process in place since 1998
- In partnership with IDPH
- 110 of 185 hospitals participate
  - PCCC (Pediatric Critical Care Center) – 10
  - EDAP (Emergency Department Approved for Pediatrics) – 87
  - SEDP (Standby Emergency Department Approved for Pediatrics) – 13
Indiana’s Process

Established workgroup
Local and National outreach
Iterative development of criteria/levels
Consensus Conference
Revision
Final Version Now Accepting Applications to Pilot the Process
Indiana’s Facility Recognition Work Group

- ISDH
- IRHA
- IHA
- ACEP
- AAP
- Indianapolis Patient Safety Coalition

- ENA
- Pediatric Intensivists
- Pediatric Hospitalists
- Pediatric EM

National working group partnerships;
18 month iterative process
Facility Recognition Indiana

• 2-Tiered Process*
  – Pediatric Ready
    • Minimal preparedness to treat, stabilize and transfer as needed
  – Pediatric Advanced
    • Pediatric Ready with additional resources to care for children

* Development of 3rd Tier under consideration
Facility Recognition Indiana

- Organized in 7 Domains
- VOLUNTARY
- Reverification every 3
Site Verification Process

1. Hospital expresses interest, receives online application
2. Hospital completes and submits application
3. Application is reviewed by 2 team members
4. Written feedback, including gaps provided within 90 days of submission. If meets criteria, scheduled for site visit.
5. ½ day site visit
6. Formal written feedback within 60 days
7. Hospital given 90 days to address any deficiencies
Indiana – Emergency Medical Services for Children

Coalition Level Pediatric Annex

2017-2022 Health Care Preparedness and Response Capabilities – HCCs”

“should promote …members’ planning for pediatric medical emergencies and foster relationships and initiatives with emergency departments that are able to stabilize and/or manage pediatric medical emergencies.”
2.6 Operations-Medical Care

• 2.7 Transportation
  – Safe inter-facility transport of stable, unstable, potentially unstable pediatric patients and prioritization methods.
August’s issue of *Pediatrics* contains both a commentary by the EIIC’s Dr. Kate Remick and a retrospective cohort study examining the relationship between focusing on hospital-specific pediatric readiness and encounter mortality emergency care for children. The research found that children who presented to an ED with lower pediatric readiness scores had an increased risk-adjusted mortality with critical illness. Continued efforts to improve ED pediatric readiness may reduce mortality for children.


EMSC Innovation and Improvement Center

2020 National Pediatric Readiness Assessment

Is your Emergency Department ready? The 2020 National Pediatric Readiness Assessment will launch June 1, 2020!

GET READY FOR 2020!
Get Ready for 2020!

National Pediatric Readiness Project

Ensuring Emergency Care for All Children

The Countdown has Begun!

234 Days 14 Hours 06 Minutes

About the EMSC
What is the EMSC
Fact Sheet (PDF)
History of the EMSC (PDF)
Target Issues

2020 Assessment
2020 Assessment (PDF)
2018 Pediatric Readiness Guidelines (AAP.org)

Selected Publications
Literature In Support of Pediatric Readiness

Resources
Critical Crossroads Toolkit: Mental Health Care in the ED (PDF)
AAP Children & Disasters

Indiana – Emergency Medical Services for Children
School Nurse Emergency Course

School Nursing Services –
2019 Summary of Emergency Course (Online and Live)

Online Part of Emergency Course -
Number of School Nurses Passing the Course

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of School Nurses</td>
<td>223</td>
<td>116</td>
<td>97</td>
<td>153</td>
</tr>
</tbody>
</table>

Indiana – Emergency Medical Services for Children
School Nurse Emergency Course

Total Number Trained

- Online = 589 School Nurses Trained
- Live = 194 School Nurses Trained

Live Part of Emergency Course - Number of School Nurses Attending

<table>
<thead>
<tr>
<th>Dates of Training</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/25/2015</td>
<td>40</td>
</tr>
<tr>
<td>7/8/2016</td>
<td>44</td>
</tr>
<tr>
<td>4/24/2017</td>
<td>26</td>
</tr>
<tr>
<td>11/2/2017</td>
<td>39</td>
</tr>
<tr>
<td>10/22/2018</td>
<td>45</td>
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</tbody>
</table>
9th Annual Pediatric Heroes Awards Breakfast

Welcome to Indiana Emergency Medical Services for Children

EMSC focuses on improving the quality of emergency care for children with serious injury and illness, by integrating children's interests into the existing hospital and EMS system. We represent the unique needs of children within the healthcare community throughout the state, working to ensure that all children everywhere in Indiana have timely access to appropriate emergency medical care.

Education Opportunities

To learn more about Indiana EMSC please click here to watch our new information videos!

Click any opportunity for more information

Indiana School Nurse Emergency Care Course
Indiana EMSC and the Indiana Department of Education are pleased to announce the Indiana School Nurse Emergency Care course. This course is a hybrid course with an online portion to be completed prior to attending a one-day in-person session that will be

Latest News Updates

NOW ACCEPTING NOMINATIONS!
All nominations will be considered for the 2020 9th Annual Pediatric Heroes Awards Breakfast. Do you know someone that goes above and beyond for children, or has done something extraordinary for a child? If so, please nominate that pediatric hero. You can nominate your healthcare hero by completing this nomination form and emailing to mango@state.k12.in.us pediatrician.emsc.org

Indiana – Emergency Medical Services for Children
Resources

- EMSC Newsletter/PECC Community
- Indianaemsc.org
- www.pediatricreadiness.org
- https://emscimprovement.center/domains/planning/training-scenarios/
Questions?
Margo.Knefelkamp@indianapolis.ems.org
Indiana Trauma System

Project Updates

Peter C. Jenkins MD, MSc
Outline

1. Comparison of mortality at Level III versus Level I and II trauma centers
2. Indiana TQIP – program update
3. Future directions (action items)
   a. I-TQIP Hospital reports
   b. E-TQIP activities
Outline

1. Comparison of mortality at Level III versus Level I and II trauma centers
2. Indiana TQIP – program update
3. Future directions (action items)
   a. I-TQIP Hospital reports
   b. E-TQIP activities
Comparison of Mortality at Level III Versus Level I And II Trauma Centers: A Propensity Matched Analysis

• Patrick B. Murphy, MD, MPH, MSc
• Lava R. Timsina, MPH, PhD
• Mark R. Hemmila, MD
• Craig D. Newgard, MD
• Daniel N. Holena, MD
• Aaron E. Carroll, MD
• Peter C Jenkins, MD, MSc
Background

- Level III centers have increased access to care.
- Their outcomes, however, are unclear.
- Compare in-hospital mortality (Level III v. Level I and II)
- Identify specific, at-risk populations
Methods

- Indiana trauma registry data (2013-2015)
- Excluded transfer patients
- Propensity matched
- Multivariable logistic regression
- Subgroup analyses:
  - age ≥ 65 years
  - penetrating injuries
  - Hypotension
  - blunt injuries with hypotension
Results

• Propensity matched 10,992 patients
• ISS slightly greater in Level III hospitals in matched cohort (7.4 v. 7.0 [p<0.001])
• Level III trauma centers had slight but significantly higher odds of mortality (OR 1.37 [CI 1.02-1.82])
• Difference attributable to patients age ≥ 65 years (3% v. 2% mortality)
Results

Figure 1: Risk-adjusted odds of mortality at Level III versus Level I/II trauma centers with 95% confidence intervals.
Conclusions

• Level III centers are doing a good job.
• Small mortality difference exists, due to patients age $\geq 65$ years
• Study does NOT control for risks associated with interfacility transfer or patient preferences
• Focus QI efforts at Level III centers on the care of patients age $\geq 65$ years
Outline

1. Comparison of mortality at Level III versus Level I and II trauma centers
2. Indiana TQIP – program update
3. Future directions (action items)
   a. I-TQIP Hospital reports
   b. E-TQIP activities
I-TQIP – program update

- General overview (program mission and structure)
- Data usage (data use agreement and hospital de-identification)
- Finance ($1500 per hospital for an initial 3-year period and long-term funding)
- Outcomes of interest (ACS v. ISDH data)
I-TQIP – overview

• Under the auspices of Indiana Chapter of ACS-COT
• Includes all adult level I and II trauma centers
• Benchmarked reports provided by ACS-COT
I-TQIP Structure

• Participation agreement
• Remote access agreement (data validation)


• Hospital performance index
• Meeting schedule
  - 3 meetings annually (TMD & TPM)
  - 1 meeting annually (Registrars)
# Michigan Trauma Quality Improvement Program (MTQIP)
## 2015 Performance Index
### January 1, 2015 to December 31, 2015

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<thead>
<tr>
<th>Measure</th>
<th>Weight</th>
<th>Measure Description</th>
<th>Points Earned</th>
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<td></td>
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<td></td>
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<td>#3</td>
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<td>Meeting Participation-Trauma Program Manager or Registrar</td>
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<td>#4</td>
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<td>Surgeon Lead Presents MTQIP Reports at Hospital Board, Administrative and or Trauma QI Meetings ( signed attestation required at year end)</td>
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<td>Site Specific Quality Initiative Using MTQIP Data (Feb 2015-Feb 2016)</td>
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<td>Mean Ratio of Packed Red Blood Cells (PRBC) To Fresh Frozen Plasma (FFP) In Patients Transfused &gt;5 Units RBC In First 4 Hrs (18 Months Data)</td>
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<td></td>
<td>Tier 4: &gt;2.5</td>
<td>0</td>
</tr>
<tr>
<td>#8</td>
<td>10</td>
<td>Admitted Patients (Trauma Service-Cohort 2) With Initiation Of Venous Thromboembolism (VTE) Prophylaxis &lt;48 Hours After Arrival (18 Months Data)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;50%</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;40%</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;40%</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total (Max Points) = 100</td>
<td></td>
</tr>
</tbody>
</table>
## I-TQIP Structure (MTQIP 2015)

<table>
<thead>
<tr>
<th>Site Specific Quality Initiative Using MTQIP Data (Feb 2015-Feb 2016)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed and implemented with evidence of improvement</td>
<td>10</td>
</tr>
<tr>
<td>Developed and implemented with no evidence of improvement</td>
<td>5</td>
</tr>
<tr>
<td>Not developed or implemented</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean Ratio of Packed Red Blood Cells (PRBC) To Fresh Frozen Plasma (FFP) In Patients Transfused ≥5 Units RBC In First 4 Hrs (18 Months Data)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1: &lt; 1.5</td>
<td>10</td>
</tr>
<tr>
<td>Tier 2: 1.6-2.0</td>
<td>10</td>
</tr>
<tr>
<td>Tier 3: 2.1-2.5</td>
<td>5</td>
</tr>
<tr>
<td>Tier 4: &gt;2.5</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Admitted Patients (Trauma Service-Cohort 2) With Initiation Of Venous Thromboembolism (VTE) Prophylaxis &lt;48 Hours After Arrival (18 Months Data)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;50%</td>
<td>10</td>
</tr>
<tr>
<td>≥40%</td>
<td>5</td>
</tr>
<tr>
<td>&lt;40%</td>
<td>0</td>
</tr>
</tbody>
</table>
# I-TQIP Structure (MTQIP 2019)

<table>
<thead>
<tr>
<th>Serious Complication Rate-Trauma Service Admits (3 yr: 7/1/16-6/30/19)</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-score: &lt; -1 (major improvement)</td>
<td></td>
</tr>
<tr>
<td>Z-score: -1 to 1 or serious complications low-outlier (average or better rate)</td>
<td>7</td>
</tr>
<tr>
<td>Z-score: &gt; 1 (rates of serious complications increased)</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mortality Rate-Trauma Service Admits (3 yr: 7/1/16-6/30/19)</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z-score: &lt; -1 (major improvement)</td>
<td></td>
</tr>
<tr>
<td>Z-score: -1 to 1 or mortality low-outlier (average or better rate)</td>
<td>7</td>
</tr>
<tr>
<td>Z-score: &gt; 1 (rates of mortality increased)</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Open Fracture-Antibiotic Timeliness from ED Arrival (12 mo: 7/1/18-6/30/19)</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% patients (Antibiotic type, date, time recorded, and administered ≤ 120 min)</td>
<td></td>
</tr>
<tr>
<td>80% patients (Antibiotic type, date, time recorded, and administered ≤ 120 min)</td>
<td>7</td>
</tr>
<tr>
<td>70% patients (Antibiotic type, date, time recorded, and administered ≤ 120 min)</td>
<td>5</td>
</tr>
<tr>
<td>&lt; 70% patients (Antibiotic type, date, time recorded, and administered ≤ 120 min)</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>First Head CT Scan Performed in Traumatic Brain Injury (TBI) Patients On Anticoagulation (12 mo: 7/1/18-6/30/19)</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>90% patients (Head CT scan in ED with date and time recorded)</td>
<td></td>
</tr>
<tr>
<td>80% patients (Head CT scan in ED with date and time recorded)</td>
<td>7</td>
</tr>
<tr>
<td>70% patients (Head CT scan in ED with date and time recorded)</td>
<td>5</td>
</tr>
<tr>
<td>&lt; 70% patients (Head CT scan in ED with date and time recorded)</td>
<td>0</td>
</tr>
</tbody>
</table>
# I-TQIP Structure (MTQIP 2020)

| Mortality Z-Score Trend in Trauma Service Admits (3 yr: 7/1/17-6/30/20) |  
| < -1 (major improvement) | 10  
| -1 to 1 or mortality low-outlier (average or better) | 7  
| > 1 (rates of mortality increased) | 5  
| **Timely Head CT in TBI Patients on Anticoagulation Pre-Injury** (12 mo: 7/1/19-6/30/20) |  
| ≥ 90% patients (≥ 120 min) | 10  
| ≥ 80% patients (≥ 120 min) | 7  
| ≥ 70% patients (≥ 120 min) | 5  
| < 70% patients (≥ 120 min) | 0  
| **Timely Antibiotic in Femur/Tibia Open Fractures - Collaborative Wide Measure** (12 mo: 7/1/19-6/30/20) |  
| ≥ 85% patients (≥ 120 min) | 10  
| < 85% patients (≥ 120 min) | 0  

Michigan Trauma Quality Improvement Program (MTQIP) 2020 Performance Index  
January 1, 2020 to December 31, 2020  
≥ 85% patients (≥ 120 min)  
< 85% patients (≥ 120 min)  

Total (Max Points) = 100
I-TQIP – program update

• General overview (program mission and structure)
• Data usage (data use agreement and hospital de-identification)
• Finance ($1500 per hospital for an initial 3-year period and long-term funding)
• Outcomes of interest (ACS v. ISDH data)
Outline

1. Comparison of mortality at Level III versus Level I and II trauma centers
2. Indiana TQIP – program update
3. Future directions (action items)
   a. I-TQIP Hospital reports
   b. E-TQIP activities
Future directions (Proposed action items)

- I-TQIP – Adult level I and II trauma centers
- E-TQIP – Non-trauma hospitals
Future directions (Proposed action items)

• I-TQIP – Adult level I and II trauma centers
• E-TQIP – Non-trauma hospitals

*Question: How are we doing?*
Future directions (Proposed action items)

A. Hospital reports (I-TQIP) – 3x annually

- Focus on reporting and loop closure processes
- Goals: establish trust and refine communication
- Outcomes

<table>
<thead>
<tr>
<th>Establish trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Total trauma volume #</td>
</tr>
<tr>
<td>- Mortality #</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assess data quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Timeliness of data submission</td>
</tr>
<tr>
<td>- Validity score</td>
</tr>
<tr>
<td>- ED-LOS &gt;24 hrs (identify outliers)</td>
</tr>
<tr>
<td>- H-LOS &gt;60 days (identify outliers)</td>
</tr>
<tr>
<td>- Missing initial GCS with ISS &gt;15</td>
</tr>
<tr>
<td>- Missing initial SBP/HR</td>
</tr>
</tbody>
</table>
Future directions (Proposed action items)

B. E-TQIP – Aim 1. Engage stakeholders to identify key outcomes associated with optimal trauma care.

1. Phase I – Identify outcomes of interest to non-trauma hospitals. Participating hospitals:
   - IUH White
   - Community East
   - IUH Saxony
   - Major Hospital (Shelbyville)
   - Daviess Community Hospital

2. Research assistant and I will interview patients (n=20) and providers (n=25) and code transcribed interviews. Starting June 2020.
Future directions (Proposed action items)

B. E-TQIP – Aim 1.

• Phase II – **Stakeholder Panel Sessions.** Identify measures for inclusion in the E-TQIP performance report.

• **Participants.** 12-member panel will include:
  - 5 health care professionals from non-trauma hospitals recruited from Phase I work
  - 5 individuals from the ISDH Trauma Care Committee
  - 2 patient representatives recruited from Phase I work
Future directions (Proposed action items)

B. E-TQIP – Aim 2. Develop a dissemination and implementation toolkit to facilitate E-TQIP-directed quality improvement initiatives.

- Research assistant and I will interview providers (n=25), conduct a survey (n=125), and code transcribed interviews. Starting June 2020.
Future directions (Proposed action items)

B. E-TQIP — Aim 3: Pilot E-TQIP to evaluate the acceptability and feasibility.

• Participating hospitals:
  - IUH West
  - Johnson Memorial
## Future directions (Proposed action items)

### B. E-TQIP – timeline

<table>
<thead>
<tr>
<th>Activity</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project startup (IRB approval and staff training)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aim 1. Patient interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aim 1. Hospital staff interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aim 1. Stakeholder panel sessions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aim 2. Key informant interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aim 2. Provider surveys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aim 3. On-site data validation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aim 3. Generate hospital performance reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aim 3. E-TQIP conference/Post-implementation assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R01 application preparation and submission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completion of Training Aims 1-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions?

1. Comparison of mortality at Level III versus Level I and II trauma centers
2. Indiana TQIP – program update
3. Future directions (action items)
   a. I-TQIP Hospital reports
   b. E-TQIP activities
Subcommittee Update
Designation Subcommittee

Dr. Lewis Jacobson, *Trauma Medical Director*
St. Vincent Indianapolis Hospital

Email questions to: indianatrauma@isdh.in.gov
Franciscan Health Indianapolis

- Located: Indianapolis
- Seeking: Level III adult trauma center status
- Application was reviewed and the following issues were identified:
  - Operations meeting attendance.
  - Peer review meeting attendance.
  - Trauma surgeon response times.
  - Disaster committee meeting attendance.
  - ICU coverage for trauma patients.
- Consultation & Verification Visits: TBD

Email questions to: indianatrauma@isdh.in.gov
Trauma Registry

Ramzi Nimry, Trauma and Injury Prevention Program Director

Email questions to: indianatrauma@isdh.in.gov
Quarter 3 2019

- 108 hospitals reported (ties Q3 2018)
  - 10 Level I and II trauma centers
  - 13 Level III trauma centers
  - 85 non-trauma centers
- 11,442 incidents

Email questions to: indianatrauma@isdh.in.gov
The majority of patients in the ED go to a floor bed or ICU at non-trauma centers.

Statewide categories <10% include: OR, home w/o services, observation, step-down, expired, and NK/NR/NA.
The majority of patients in the ED stay for **1-5 hours**.
Most patients in the ED>12 hours go to a **floor bed** or **the OR**.

- **Floor Bed**: 448
- **OR**: 113
- **Step-down**: 73
- **Transferred**: 22
- **Home w/o Services**: 25
- **ICU**: 26
- **Observation**: 17

*This data includes both trauma and non-trauma centers*

**None of these patients died or had a disposition of Null, Home with Services, or Expired.**

***Categories with counts <10 include AMA and Other.***

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)
ED LOS > 12 Hours, N=731

The majority of patients have an ISS score of 1-15.

Email questions to: indianatrauma@isdh.in.gov
The majority of patients were at a level I or II trauma center.

The average patient age was 57 years.

Falls were the most common cause of injury.

The majority of patients are transported by ambulance.

Email questions to: indianatrauma@isdh.in.gov
Most transfer patients are in the ED for **1-5 hours** at the final hospital.

<table>
<thead>
<tr>
<th>Direct Admit</th>
<th>14%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>6%</td>
</tr>
<tr>
<td>1-2</td>
<td>29%</td>
</tr>
<tr>
<td>3-5</td>
<td>27%</td>
</tr>
<tr>
<td>6-11</td>
<td>15%</td>
</tr>
<tr>
<td>12+</td>
<td>9%</td>
</tr>
<tr>
<td>Null</td>
<td></td>
</tr>
</tbody>
</table>

Email questions to: **indianatrauma@isdh.in.gov**
A small portion of transfers had a delay indicated.

- No: 61%
- Yes: 24%
- NK/NR: 14%

Email questions to: indianatrauma@isdh.in.gov
Transfer delay reasons

- Referring Physician Decision Making: 1.73%
- Delay Issue: 2.16%
- Referring Hospital Issue-Radiology: 3.03%
- Referring Facility Issue: 6.06%
- Receiving Facility Issue: 6.49%
- Other: 12.12%
- EMS Issue: 12.55%
- Not Known/Not Recorded/Not Applicable: 36.36%

Email questions to: indianatrauma@isdh.in.gov
ED LOS by District

Average ED LOS (Minutes)

District

Minutes

0 50 100 150 200 250 300 350

1 2 3 4 5 6 7 8 9 10

ALL
Transfers
Critical Transfers

Email questions to: indianatrauma@isdh.in.gov
Other Business
2020 ISTCC & ITN Meetings

- Location: Indiana Government Center – South, Conference Room B.
- Webcast still available.
- Time: 10:00 A.M. EST.
- 2020 Dates:
  - April 17
  - June 19
  - August 21
  - October 16
  - December 11

Email questions to: indianatrauma@isdh.in.gov