Introductions & approval of meeting minutes
Updates

Katie Hokanson, Director of Trauma and Injury Prevention

Email questions to: indianatrauma@isdh.in.gov
Congratulations!!!

- Elkhart General Hospital
  - Verified Level III Trauma Center
Division staffing updates

- Keifer Taylor
  - Records Consultant
- Cassidy Johnson
  - Transitioned to Naloxone Program Manager
- Paul Nijjar
  - Records Consultant for the summer
- Audrey Rehberg
  - Transitioned to offsite Resources & Records Consultant (Texas)
- Camry Hess
  - Transitioned to offsite contractor position (Texas)

- Division interns:
  - Joey Peeters
    - INVDRS
  - Conner Tiffany
    - PDO
  - Taylor Goodman
    - Naloxone
  - Kyra Kofodimos
    - Injury Prevention

Indiana State Department of Health
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](https://www.in.gov/isdh/27849.htm)
  - Transfer agreements – must be stroke specific.

Email questions to: indianatrauma@isdh.in.gov
Evidence based falls prevention

**Stepping On**

**Population** – Older adults who want to reduce falls and increase confidence

**Sessions** – Seven 2 hour sessions and home visit. Booster session after 3 months

**Program** - home safety, fall risks, medication, etc. Exercises are emphasized.

**Group size** – 10 to 12

**Leader** – Health professional including guest lecturers.

**Materials** – Handouts, binder, information poster board, weights

**Cost** – Leader plus guest speakers, materials

**Outcomes** – Falls decreased by 31%

Wisconsin Institute of Healthy Aging. Originated in Australia
Upcoming classes

• Stepping On Leader training course

**Stepping On**
Leader Training Workshop
September 16th-18th 2019
Nasser Simulation Center at St. Vincent
11801 W. 86th Street
Indianapolis, IN 46260

Questions? Contact Pravy Nijjar, pnijjar@isdh.in.gov
For more info about Stepping On visit
https://wihealthyaging.org/stepping-on
For more information please contact
- Pravy Nijjar
  pnijjar@isdh.in.gov
  317-234-1304
Upcoming Booster Bashes

• Lake County:
  – Merrillville:
    • Date: June 26th 2019
    • Number of Seats Ordered: 76
    • Location: Chateau Banquets, 530 W. 61st Ave. Merrillville

• Vermillion County:
  – Clinton:
    • Date: August 2nd 2019
    • Number of Seats Ordered: 60
    • Location: Sportland Park, Clinton
Black & Minority Health Fair

Dates: July 18, 19, 20, and 21

Location: Indiana Convention Center, Halls J& K
Indiana State Fair

**Dates for division:** August 5, 9, 12, 13, and 14

**Location:** Indiana State Fairgrounds, Expo Hall
NASEMSO Meeting - ACS updates

- Follow up with patient 6 & 12 months after injury – focus on long-term outcomes.
- Updating trauma system consultation program.
- Injury prevention areas of focus: firearm, interpersonal violence, falls, distracted driving, burns, PTSD/suicide.
- New committee: trauma research.
- International programs.
- Military-civilian integration.

Email questions to: indianatrauma@isdh.in.gov
NASEMSO Meeting - ACS updates (continued)

- TQIP collaborative – 12 states participating.
- Creating a TQIP collaborative toolkit.
- NEMSIS & NTDB will have a unique identifier field available 2021.
- New “Stop the Bleed” course launched May 1. Geared for the general public.
  - Looking to expand instructor program to non-medical personnel.

Email questions to: indianatrauma@isdh.in.gov
NASEMSO Meeting - ACS updates (continued)

Email questions to: indianatrauma@isdh.in.gov
INSPECT Integration Initiative - Integration Request Form

INSPECT STATEWIDE INTEGRATION ANNOUNCEMENT

Effective August 24, 2017 Indiana will begin steps to implement a statewide, comprehensive platform for healthcare professionals to review patients' controlled-substance prescription history more quickly and efficiently. This platform supports Indiana's Prescription Drug Monitoring Program (INSPECT) and transfers data into electronic health records (EHR) and pharmacy management systems. Statewide integration of the INSPECT platform is a key component of Indiana's ongoing efforts to address the opioid crisis.

Integration Process:

1. Follow the instructions and complete ALL of the following (only authorized decision makers at the healthcare entity should fill out these forms):
   - Integration Request Form (located on the right of this page)
   - End User License Agreement (will be emailed to you within 24 hours)
   - PMP Gateway Licensee Questionnaire (will open in a new window)

Primary Point of Contact

* indicates required field

First Name*   Last Name*

Primary Point of Contact Email Address*

Job Title

Phone Number*

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

- District 1
- District 2
- District 3
- District 4
- District 5
- District 6
- District 7
- District 8
- District 9
- District 10

Email questions to: indianatrauma@isdh.in.gov
Emergency Preparedness update

Billy Brewer, Director
ISDH

Email questions to: indianatrauma@isdh.in.gov
ASPR Hospital Preparedness Program

Overview of Indiana

James “Billy” Brewer
Division Director
Division of Emergency Preparedness, ISDH

Megan Lytle
Director District & Local Readiness
Division of Emergency Preparedness, ISDH
What is a Coalition?

- ASPR HPP Healthcare Coalition
- HCCs are groups of health care and response organizations that collaborate to prepare for and respond to medical surge events. HCCs incentivize diverse and often competitive health care organizations to work together.

NATIONAL PARTICIPATION RATE OF HCC CORE MEMBERS

- 85% of hospitals
- 82% of local health departments
- 56% of emergency management organizations
- 27% of EMS

85% of hospitals nationwide participate in HCCs

HCCS ACROSS THE UNITED STATES
Background & Summary

• 2002 – 2011 Hospital Preparedness Program
  • Program awarded to each State for providing funds and initiatives to individual hospitals
  • Intent for Hospitals to purchase tangible resources like ventilators, mobile medical units, and pharmaceutical caches
• 2007 – 2008 Formation of 10 District Hospital Preparedness Planning Committee (501c3)
Background & Summary

• 2012 – 2016 Hospital Preparedness Program
  • Program award to each State for providing funds and initiatives to Healthcare Coalitions to promote the development of healthcare capabilities
  • Shifting focus towards developing and formalizing regional healthcare coalitions
  • Indiana funds directly to each 10 District Hospital Corporation, sub award funds to primarily hospitals

• 2015 HPP Ebola Preparedness and Response Activities
  • Ebola Assessment Centers and Healthcare System Preparedness funding
Background & Summary

• 2017-2019 Hospital Preparedness Program
  • Program award to each State for providing funds and initiatives to Healthcare Coalitions on operationalizing coalitions for response through optimizing membership and geographic coverage
  • Updated healthcare capability guidance and focus
  • Formal minimum membership requirements:
    • Acute care hospitals (2)
    • Emergency Management Organization (1)
    • Public Health Department (1)
    • Emergency Medical Services (1)
Background & Summary

- 2017-2019 Hospital Preparedness Program (Cont.)
  - 10 District Healthcare Coalitions Developed (unincorporated)
  - Fiscal Agent – District Hospital Corporations (501c3)
  - Funding project based with no direct allocations to members
  - Funding restrictions on CMS required activities
ASPR HPP Today

- Grant Budget Period July 1st – June 30th
- Hospital Preparedness Program Grant (ASPR)
  - $3.1M awarded to Coalitions
  - 10 Healthcare Coalitions
  - Membership includes hospitals, local health depts., emergency management agencies, emergency medical services, long term care facilities, dialysis, mental health, outpatient healthcare delivery, and many others
ASPR HPP Today

• Single Facility/Agency funding is not permitted
• Funding activities to meet CMS Rule is not permitted
• All funds must be associated with HCC Work Plan Activity or Identified Gap through planning, exercise or real-world event
HCC Annual Activities

- Annual Hazards & Vulnerability Assessment
- Coalition Surge Test
- Annual Training & Exercise Plan
- Host multiple training opportunities
- Plan and Share Information
- Annual Workplan Development
Current Requirements

- HCC Core Members
  - Acute Care Hospitals (2)
  - Public Health
  - EMS (Emergency Medical Services)
  - EMA (Emergency Management Agency)

- Should be Led or Co-Led by Hospital

- 2 Employees equaling 1.0 FTE
  - HCC Readiness & Response Manager
  - Clinical Advisor
Clinical Advisor

- Clinical Advisor Requirements
  - Must be Registered Nurse, Nurse Practitioner/Physician Assistant or Physician
  - Should be currently employed with Lead or Co-Lead hospital
  - Currently seeking 8 hours per month minimum
  - Must be in place by 7/30/2019

- Role/ Duties
  - Provide clinical leadership to the HCC and serve as liaison to healthcare medical directors & leadership
  - Engage healthcare delivery system leaders in HCC Strategic & Operational roles in acute medical surge planning
Clinical Advisor (continued)

- Role/ Duties (continued)
  - Assure HCC Mass Casualty/Surge plans align with trauma center capability & capacity
  - Engage subject matter experts on specialty surge planning (i.e. burn, pediatric)
  - General HCC participation and engagement
Current Initiatives and Projects

- Information Sharing Annex (to Response Plan)
  - Essential Elements of Information

- Pediatric Surge Annex (to Response Plan)

- Emergency System: EMResources/ eICS
  - Resource (Facility) Status
  - Sub-Resource Inventory & Availability
  - Manage your own facility emergency plans and incidents
  - Situational Awareness
Trauma Center Best Practices

- Knowing your Hospital Preparedness Coordinator and/or Hospital HCC representative
- Trauma Rep attending HCC Meeting and vice versa
- Agenda item on Trauma/HCC meetings for report outs
- Sharing upcoming events and/or requirements
Quick Links

- ISDH Division of Emergency Preparedness website:
  - [https://www.in.gov/isdh/17855.htm](https://www.in.gov/isdh/17855.htm)
  - Healthcare Coalition Contact List
  - ISDH DEP Newsletter Signup

- ASPR Technical Resource, Assistance Center and Information Exchange (ASPR TRACIE):
  - [https://asprtracie.hhs.gov/](https://asprtracie.hhs.gov/)

- Indiana Health Alert Network (IHAN):
  - [https://ihan-in.org/](https://ihan-in.org/)
OPEN DISCUSSION/ QUESTIONS?

James “Billy” Brewer  
Division Director  
Division of Emergency Preparedness, ISDH  
jambrewer@isdh.in.gov

Megan Lytle  
Director District & Local Readiness  
Division of Emergency Preparedness, ISDH  
mlytle@isdh.in.gov
Progress Update: Risk factors for inter-facility transfer patients

Dr. Peter Jenkins, General Surgery
IU Health Methodist Hospital

Email questions to: indianatrauma@isdh.in.gov
Association of urban influence and transfer patterns of trauma patients treated at non-trauma hospitals (& other project updates)

Peter C. Jenkins MD, MSc
K12 Emergency Care Research Scholar
National Heart, Lung, and Blood Institute

June 20, 2019
Outline

1. Trauma comorbidity index update
2. Urban influence project
3. Extended Trauma Quality Improvement Project (E-TQIP) proposal
1. Trauma Comorbidity Index

- AAST 2019 - Accepted for quickshot podium presentation, Dallas, TX

- Manuscript submission to Journal of Trauma and Acute Care Surgery

![Graph showing predicted mortality by tertile for CCI, ECI, and TCI]
2. Association of urban influence and transfer patterns of trauma patients treated at non-trauma hospitals

**Introduction:** To examine the association between the urbanicity of non-trauma hospitals and the likelihood to transfer injured patients to an acute care facility.

**Methods:**
- IN state trauma registry data (2013-2015)
- AHA hospital data
- Urban influence codes (UIC)
  - Developed by the U.S. Department of Agriculture
  - Measures county-level access to goods and services (1-12)
- Multivariable logistic regression
2. Association of urban influence and transfer patterns of trauma patients treated at non-trauma hospitals

Results:
• 30,507 patients treated at 92 non-trauma hospitals
• 62 hospitals (67.4%) were urban and accounted for 80.3% of the patients.
• Urban hospitals were significantly less likely to transfer injured patients to tertiary referral centers than non-urban hospitals (odds ratio, 0.4 [95% confidence interval, 0.21-0.77])
2. Association of urban influence and transfer patterns of trauma patients treated at non-trauma hospitals

**Results:**
- 30,507 patients treated at 92 non-trauma hospitals
- 62 hospitals (67.4%) were urban and accounted for 80.3% of the patients.
- Urban hospitals were significantly less likely to transfer injured patients to tertiary referral centers than non-urban hospitals (odds ratio, 0.4 [95% confidence interval, 0.21-0.77])
2. Association of urban influence and transfer patterns of trauma patients treated at non-trauma hospitals

Comparison of predicted probability of transfer of injured patients between urban and non-urban non-trauma hospitals with 95% confidence intervals
2. Association of urban influence and transfer patterns of trauma patients treated at non-trauma hospitals

Future directions:
• Examine mortality at hospitals (urban v. non-urban)
• Use UIC to identify “high-risk” hospitals
• Submit to EAST Annual Conference

Acknowledgements:
Pat Murphy, MD
Elisa Sarmiento, MS
Aaron Carroll, MD, MPH
Mark Hemmila, MD
Lava Timsina, PhD
3. Extended Trauma Quality Improvement Project (E-TQIP) proposal

“Development of a regionalized quality improvement program for injured patients treated at non-trauma hospitals”

• Submitted to AHRQ (K08) as a 3-year proposal
• Timeline:

<table>
<thead>
<tr>
<th>Research</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage stakeholders to identify key outcomes for E-TQIP (Aim 1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop E-TQIP dissemination &amp; implementation toolkit (Aim 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilot E-TQIP to evaluate acceptability and feasibility (Aim 3)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Extended Trauma Quality Improvement Project (E-TQIP) proposal

• Aim 1: Engage stakeholders to identify key outcomes associated with optimal trauma care at non-trauma hospitals that will inform a modified TQIP process.

• Methods:
  
  Phase I: Interviews with Patients and Non-trauma Hospital Personnel and 3 non-trauma hospitals

  Phase II: Stakeholder Panel Sessions

• Outcome: E-TQIP hospital performance report design
3. Extended Trauma Quality Improvement Project (E-TQIP) proposal

• Aim 2: Develop a D&I toolkit to facilitate E-TQIP-directed quality improvement initiatives that promote optimal trauma care at non-trauma hospitals.

• Methods:
  - Key Informant Interviews – Organizational and Cultural Barriers/Facilitators
  - Provider Surveys – Individual-level Barriers/Facilitators

• Outcomes:
  1. Identify barriers and facilitators to participation in the E-TQIP-directed QI initiatives
  2. Identify the optimal format for E-TQIP conferences
3. Extended Trauma Quality Improvement Project (E-TQIP) proposal

- **Aim 3**: Pilot E-TQIP to evaluate the acceptability and feasibility (IUH West and Johnson Memorial Hospitals)

- E-TQIP Conference will include:
  1. Hospital Performance Report (Aim 1) -
     a) *Facility information* (i.e., resources and organizational processes that can impact patient outcomes)
     b) *Patient demographic information and injury characteristics*
     c) *Clinical outcome measures* (e.g., rates of mortality and inter-facility transfer and time-to-transfer)
     d) *Process measures* (e.g., missingness of data, data validity, timeliness of data submission to the state)

  2. Planning hospital-based QI projects
3. Extended Trauma Quality Improvement Project (E-TQIP) proposal

- **Aim 3: Pilot E-TQIP to evaluate the acceptability and feasibility** (IUH West and Johnson Memorial Hospitals)

  Outcomes – Refined E-TQIP process intended for broader statewide implementation under the auspices of the Indiana Chapter of the ACS-COT
Acknowledgements

*ISDH* – Dr. Box and Mrs. Hokanson

*ACS-COT* – Dr. Thomas

*IUH* – Mrs. Castor and Dr. Bearden

Johnson Memorial Hospital – Mrs. McKinney

**Mentorship Team**

Dr. Aaron Carroll

Dr. Robin Newhouse

Dr. Malaz Boustani

Dr. Mark Hemmila
Thank you!
Trauma system planning subcommittee update

Dr. Scott Thomas, Trauma Medical Director
Memorial Hospital of South Bend

Dr. Matt Vassy, Trauma Medical Director
Deaconess Hospital

Email questions to: indianatrauma@isdh.in.gov
EMS Medical Director Updates

Dr. Michael Kaufmann, EMS Medical Director
Indiana Department of Homeland Security

Email questions to: indianatrauma@isdh.in.gov
EMS Certifications/Licensure

Training Institutions - 117
Supervising Hospitals - 91
Provider Agencies - 833
Vehicles - 2,600

Personnel
EMR – 5,055
EMT - 14,416
Advanced EMT - 605
Paramedic - 4,490
Primary Instructor - 584
Data
EMS System Metrics

- EMS provider agencies reporting as of 6/21/2019
- 11/332 not reporting!

97%
Facilities Code List

- Facility List with Destination Codes.
- Developed in coordination with ISDH.
- There is a list now of 3,117 Facilities that an EMS provider can drop a patient off for either non-emergency or emergency transports.
- Destinations for landing zones/strips, intercepts, morgue, and private residence all have a destination code.
- This will go a long way to better understanding where EMS patients are taken.
NEMSIS

NEMSIS Submission Summary 6/3/2019 - 6/16/2019

- Failed Submissions: 0.00%
- Active Agencies: 66.8%
- PCR Warnings: 82.1%

Patient Care Reports (PCR)

Average: 2,337

Current Composition Summary

- Total Percent EMS Agencies Accepted To Date: 103.3%
- Total Patient Care Reports Accepted, Year To Date: 795,550

NEMSIS
Powered by NHTSA’s Office of EMS
Naloxone Sustainability

Currently working with FSSA to establish a reimbursement mechanism for naloxone administration!
Reported Naloxone Administrations
Last EMS Incident in Data: 10/31/2018

22 naloxone administrations
72.73% Decrease from Previous YTD

1,433 EMS incidents
10.75% Increase from Previous YTD

1.54% of incidents included naloxone administration
Down from 2.97% for the previous YTD

Year to Date

Show all reported EMS incidents or only those where naloxone was administered?
All Reported EMS Incidents

All Reported EMS Incidents

Filter Counties...

Hamilton

EMS Incident Rate per 10,000 County Residents
7

Naloxone or All Incident Count
Naloxone or All Incident Rate per 10,000 County Residents
Percent of EMS Incidents Where Naloxone was Administered

Hamilton

<table>
<thead>
<tr>
<th>Year</th>
<th>Naloxone or All Incident Count</th>
<th>Naloxone or All Incident Rate per 10,000 County Residents</th>
<th>Percent of EMS Incidents Where Naloxone was Administered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1,204</td>
<td>44</td>
<td>2.41%</td>
</tr>
<tr>
<td>2015</td>
<td>1,308</td>
<td>48</td>
<td>2.14%</td>
</tr>
<tr>
<td>2016</td>
<td>1,793</td>
<td>65</td>
<td>2.51%</td>
</tr>
<tr>
<td>2017</td>
<td>1,300</td>
<td>47</td>
<td>2.92%</td>
</tr>
<tr>
<td>2018</td>
<td>1,433</td>
<td>52</td>
<td>1.54%</td>
</tr>
</tbody>
</table>

Demographic Information

<table>
<thead>
<tr>
<th>Demographic Group</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 Year</td>
<td>639</td>
</tr>
<tr>
<td>1-4 Years</td>
<td>1,356</td>
</tr>
<tr>
<td>5-14 Years</td>
<td>2,756</td>
</tr>
<tr>
<td>15-24 Years</td>
<td>8,039</td>
</tr>
<tr>
<td>25-34 Years</td>
<td>8,694</td>
</tr>
<tr>
<td>35-44 Years</td>
<td>6,795</td>
</tr>
<tr>
<td>45-54 Years</td>
<td>4,496</td>
</tr>
<tr>
<td>55-64 Years</td>
<td>9,450</td>
</tr>
<tr>
<td>65-74 Years</td>
<td>15,033</td>
</tr>
<tr>
<td>75-84 Years</td>
<td>16,435</td>
</tr>
<tr>
<td>&gt;=85 Years</td>
<td>13,560</td>
</tr>
</tbody>
</table>

Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>3,657</td>
</tr>
<tr>
<td>Male</td>
<td>3,289</td>
</tr>
</tbody>
</table>

Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>878</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>49</td>
</tr>
<tr>
<td>Other Race</td>
<td>720</td>
</tr>
<tr>
<td>White</td>
<td>5,391</td>
</tr>
</tbody>
</table>
Naloxone Dashboard

2019
Stroke Rules Draft

• Upon EMS arrival at the scene of a patient with suspected stroke, a provider must perform and document
  • An initial Stroke Screening Tool (i.e. CPSS, FAST, LA Stroke Severity Scale, NIH, or other appropriate scale approved by the agencies medical director
  • Obtain a blood glucose if available
  • Identify and document time last known well and time of symptom discovery.

• If the patient screens positive the provider may then perform an evidence based nationally recognized Large Vessel Occlusion (LVO) Stroke Scale

• Patients determined to need stroke center care by virtue of their stroke screening tool, shall be transported to an appropriate stroke hospital.
To meet the below standards, local EMS medical directors shall develop protocols based on an assessment of local and regional hospital stroke capabilities. The appropriate stroke hospital destination shall be based on local and regional protocols which shall consider:

- Capability to administer TPA (alteplase) accurately, promptly, and safely
- Nationally recognized evidence based science
- Nationally recognized guidelines
- The list of available certified stroke centers and network participating hospitals published by ISDH.

Emergency medical services personnel shall provide early advance notification to the receiving hospital or stroke center whenever possible to allow appropriate activation of resources prior to patient arrival.
**Public Hearing**

| Public hearing information: July 17, 2019 10 a.m. Indiana Government Center South 302 W. Washington Street Conference Center Room Indianapolis, Indiana 46204 |

**Relevant Scientific and Technical Findings**

None

<table>
<thead>
<tr>
<th><strong>Timetable For Action</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipated date of publishing of proposed rule</td>
</tr>
<tr>
<td>Anticipated date of public hearing</td>
</tr>
<tr>
<td>Anticipated date of final adoption by the Commission</td>
</tr>
<tr>
<td>Anticipated date of submitting with the Office of the Attorney General</td>
</tr>
<tr>
<td>Anticipated date of review by the Governor</td>
</tr>
<tr>
<td>Anticipated effective date</td>
</tr>
</tbody>
</table>
Rule Making Update

• **836 IAC Re-write currently underway**
  • EMS rules last updated more than a decade ago.
    • **ARTICLE 1. EMERGENCY MEDICAL SERVICES**
    • **ARTICLE 2. ADVANCED LIFE SUPPORT**
    • **ARTICLE 3. AIR AMBULANCES**
    • **ARTICLE 4. TRAINING AND CERTIFICATION**
• Adopted by the EMS Commission 2019
• Currently undergoing fiscal impact review
Clinical Data
Update of State of Indiana First EVER CQI Report started
Indiana EMS Quality Improvement Program

- Started 3/2018
- EMS Registry
- EMS Compass Indicators
  - Hypoglycemia
  - Med Error
  - Peds Respiraoty
  - Seizure
  - Stroke
  - Trauma
  - Pain
  - Safety

EMS Compass

Improving Patient Care & Demonstrating Value to Your Community

Using Data to Make a Difference

The EMS Compass initiative is not simply about designing performance measures for the present. EMS Compass will create a process for the continual design, testing and evaluation of performance measures—and guidance for how local systems can use those measures to improve—so EMS can continue to provide the highest quality care to patients and communities in the future.
Patients Meeting CDC Step 1 or 2 or 3 Criteria Originating from a 911 Request Transported to a Trauma Center - April 2018 (411 Reports)

- Patients transported to a trauma center, 331, 81%
- Patient not transported to a trauma center or disposition hospital capability not reported, 79, 19%
Working within IDHS to obtain funding for ImageTrend add on feature called “Hospital Hub”

Would allow ePCR exchange between EMS and healthcare facilities

“Fix” for lack of printed ePCR.

More info at

• Meeting with IHIE leadership
• Discussions are underway to integrate EMS data
• Exploratory team looking at EMS data for a CCD
• Integration would allow EMS data to be accessible from CareWeb
• Funding may be an obstacle
• More details to come in 2019
What is the Indiana Authenticated Access Hub?

The Indiana Authenticated Access Hub is a web-based portal that provides a secure sharing mechanism for sensitive datasets, allowing the state to leverage the expertise of external researchers and entities while maintaining appropriate levels of privacy and security.

Maintained by the Indiana Management Performance Hub and similar to the Indiana Data Hub in look, the Authenticated Access Hub enhances functionality by enabling access to detailed datasets that hold greater value for researchers. After successful completion of a vetting and authentication process, users will be granted access to one of four distinct tiers that provide differing levels of data granularity to inform their research initiative. Within those tiers, specific use cases will be assigned to rooms with room access granted based on the vetting and authentication result. The MPH Team will coordinate dataset tier classification with approval of the agency data owner.

Indiana Authenticated Access Portal

- Indiana EMS Data is now accessible via the AAH.
- Public data set can be downloaded directly
- [https://hub.mph.in.gov/dataset](https://hub.mph.in.gov/dataset)
- Other tiers of data can be requested at
- [https://www.in.gov/mph/935.htm](https://www.in.gov/mph/935.htm)
Model Guidelines

- Developed by NASEMSO in November 2017
- Evidence Based
- EMS Compass Quality Indicators
- NEMSIS Database Referenced
- Complete Protocol Manual

- Available for use
- Suspected Overdose
- Stroke
- IFT Stroke
- Anaphylaxis/Allergic Reaction
- Chest Pain
Workforce Development

- Working to identify barriers restricting EMTs and Paramedics from entering the workforce in Indiana.
- Looking at licensing and certification process to remove obstacles.
- Looking for ways to align Indiana with other organizations such as NREMT to simply the continuing education and certification/licensure process.
- REPLICA
• The Recognition of EMS Personnel Licensure Interstate CompAct (REPLICA) is the nation's first and only multi-state compact for the Emergency Medical Services profession.

• REPLICA provides qualified EMS professionals licensed in a "Home State" a legal "Privilege To Practice" in "Remote States".

• Home States are simply a state where an EMT or Paramedic is licensed;

• Remote States are other states that have adopted the REPLICA legislation.
REPLICA Next Steps

• Learning Lab took place on December 11th
  • National Governors Association
  • National Conference of State Legislatures
  • Council of State Governments
• Compacts discussed
  • REPLICA Nursing
  • Medical Licensing
• Was introduced as SB 510
• Dead in committee
• Continued efforts needed now for next session
Patient Safety Focus

CONDUCT SURVEY
The survey takes about 15 minutes and your agency's members will have 3 weeks to complete it. CPS monitors and shares the number of responses.

ASSESS PROGRESS
Perform re-assessment after 1 year to gauge improvement, identify new areas to focus on and adjust action plan.

ANALYZE RESULTS
CPS reviews assessment results with you and provides benchmark metrics so that you can compare your numbers with national averages.

DEVELOP & EXECUTE A PLAN
Using feedback to identify priorities and opportunities, create a plan to improve your patient safety culture.

SHARE INSIGHTS
You control which results are shared with your team. CPS offers best practices for how to approach delivering that information.
Patient Safety Proposal

- Indiana EMS Statewide Assessment
  - $7500
- Indiana Regional Workshops
  - $6000
- Indiana Just Culture Training
  - $6000
- Indiana Follow Up Assessment
  - $6000
FSSA SDH Assessment Pilot

- Working with FSSA Office of Social Determinants of Health
- Pilot program for EMS collection of SDH question answers
- Information will be integrated with FSSA data

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes / No / NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food?</td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, has your utility company shut off your service for not paying your bills?</td>
<td></td>
</tr>
<tr>
<td>Are you worried that in the next 2 months, you may not have stable housing?</td>
<td></td>
</tr>
<tr>
<td>Do problems getting child care make it difficult for you to work or study? (leave blank if you do not have children)</td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, have you needed to see a doctor but could not because of cost?</td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, have you ever had to go without health care because you didn’t have a way to get there?</td>
<td></td>
</tr>
<tr>
<td>Do you ever need help reading hospital materials?</td>
<td></td>
</tr>
<tr>
<td>Are you afraid you might be hurt in your apartment building or house?</td>
<td></td>
</tr>
<tr>
<td>During the last 4 weeks, have you been actively looking for work?</td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, other than household activities or work, do you engage in moderate exercise (walking fast, jogging, swimming, biking or weight lifting) at least three times per week?</td>
<td></td>
</tr>
</tbody>
</table>
Expanding Acadis Training

- LMS coordinator approved
- POST course in beta testing
- Dementia Friends course now in production
- DOSE course update started
• Controlled Substance Issues
• DEA 222 Forms
• EMS Medical Directors

• Public Law No: 115-83 (11/17/2017)
Planning for DEA/CSR for EMS Providers

• This law amends the Controlled Substances Act.
• Specifies that EMS agencies are permitted to have one DEA registration, rather than having separate registrations for each EMS location.
• Ongoing discussions with the DEA
• Ongoing discussions with the Indiana Board of Pharmacy
• BOP rule must change for EMS Provider Agency CSR
The Indiana Department of Homeland Security is proud to be a supporting partner of the Stop the Bleed Program.

Stop the Bleed is a national campaign with two main goals:

- Inform and empower the general public to become trained on basic trauma care.
- Increase bystander access to bleeding control kits.
Suicide Prevention Training

2019

Suicide Prevention
For first responders

Indiana Department of Homeland Security
Michael A. Kaufmann, MD, FACEP, FAEMS
State EMS Medical Director

• Satisfies HEA 1430/SB 230
• Peer Reviewed
• Fully narrated
• Available via Acadis
• >13,500 course completions
Know the facts.
UNDERSTANDING OPIOID USE DISORDER

First Responder Fact Card
Information course now available online via Acadis
Community Paramedicine/MIH

• The time is now to plan and develop the infrastructure for Mobile Integrated Health/Community Paramedicine
  • 836 Rule re-write is pending
  • Alternate reimbursement models are being developed
  • EMS Registry is improving in quantity and quality
  • Local data has proven the benefits of this program
  • Increased medical director involvement
  • Community Health Worker status

• With the passage of SEA498 work has begun to lay the foundation for MIHP programs.
  • Currently working on a meta-analysis of other states
  • Hope to have recommendations to the EMS Commission by Q3 2019
Universal Transfer Form

- Developed by collaborative committee made up of representation from Ascension St. Vincent, Franciscan, IU Health, SNFs, Emergency Department.
- Intended to improve communication when sending patients to hospitals.
- Garnering support and educating stakeholders
Biospatial

- National Collaborative for Bio-preparedness
  - NCBP provides operational and clinical insight to state and local data owners to help improve operations and patient outcomes.
  - NCBP provides alerts to anomalous health events, visualization of syndromic events and trends, and clinical and operational dashboards.
  - The collaborative data network widens the context of events by enabling sharing of data and syndromic trends with neighboring jurisdictions.
  - NCBP also enables new health- and safety-related insights through multi-agency collaboration, such as linking motor vehicle crash records with injury severity derived from the EMS Revised Trauma Score.
AED Registry

AED location information comes from the Atrus National AED Registry™.

Organizations with AEDs use this free online tool to comply with registration requirements, easily and efficiently manage AED location and maintenance information, and receive battery and electrode expiration reminders.

This registered AED data is available to 911 agencies that subscribe to the AED Link.
2018 National Scope of Practice for EMS Providers

• The National EMS Scope of Practice Model is the floor or the minimum for EMS provider skills, knowledge and procedures. States can add to the scope of practice or even continue previous practices.

• The draft document, proposed by the expert panel, represents the final recommended revision to the 2018 National EMS Scope of Practice Model submitted to the National Highway Traffic Safety Administration. View the draft document, which is pending final federal review, below or download a prepublication PDF version.

• Each state, following its legislative mandates or administrative rules, will follow those processes to adopt or update the scope for their state. The rate of adoption or revision is state specific.
EMS Field Guide (App Version 1.0)

Beta version being updated.
First year funded!

Hospital locator with capabilities
Helicopter locator
Easy call links!
IDHS/EMS Division 2018-2019 Goals

• Rewrite of the 836 IAC Articles 1 through 4
• Obtain 90% data reporting compliance of the Indiana certified ambulance service providers
• Develop a statewide quality improvement program for EMS utilizing patient data submitted to the EMS registry.
• In cooperation with the public safety training academy expand the executive leadership course to include EMS specific topics
• Develop the automated electronic interface between Acadis and National Registry database to facilitate a more efficient certification process.
• Develop rule language clarifying the EMS training institution’s responsibilities for improving student outcomes.
• Promote and encourage expanded practice opportunities for EMS providers with a focus on integrated health care, public health and chronic care management.
• Further develop education and training for both patient and EMS provider mental health awareness.
• Explore additional or alternative mechanisms of reimbursement for EMS provider care based on care rendered not miles transported.
• Promote recruitment and retention of EMS and other public safety professions.
• Continue the development of the online application process for EMS provider and institutional organization certifications.
• Implement the recognition of EMS personnel interstate licensure compact act (REPLICA).
• Continue to encourage and promote EMS planning and participation in disaster preparedness.
Thank you!

- Your input and participation in the Indiana EMS System is vitally important.
- Mkaufmann@dhs.in.gov
- 317-514-6985

Indiana Government Center South
302 W. Washington St. Room E241
Indianapolis, Indiana  46204
Trauma Registry

Katie Hokanson, Director

Email questions to: indianatrauma@isdh.in.gov
Quarter 1 2019

• Initial submission date was June 30th but hospitals will have until July 12th to submit their Q1 2019. Ramzi is currently working with vendors and ImageTrend to resolve importing issues.
Summary of Hospitals Reporting Status - Q4 2018

New to Reporting / Started Reporting Again
- Goshen Health
- IU Health Jay
- St Vincent Salem Hospital

Did not Report
- Green County General Hospital
- Major Hospital
- Reid health
- St Joseph Hospital (Fort Wayne)
- Woodlawn Hospital

Email questions to: indianatrauma@isdh.in.gov
Quarter 4 2018 Statewide Report

- 9,218 incidents
- October 1 2018 – December 31, 2018
- 105 total hospitals reporting
  - 10 Level I and II Trauma Centers
  - 12 Level III Trauma Centers
  - 83 Non-Trauma Hospitals

Email questions to: indianatrauma@isdh.in.gov
The majority of patients in the ED go to a floor bed.

Statewide categories <10% include: OR, home w/o services, observation, step-down, expired, and NK/NR/NA.

Email questions to: indianatrauma@isdh.in.gov
The majority of patients in the ED stay for **1-5 hours**.

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)
Most patients in the ED>12 hours go to a floor bed or step-down unit.

<table>
<thead>
<tr>
<th>Location</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Bed</td>
<td>154</td>
</tr>
<tr>
<td>Step-down</td>
<td>43</td>
</tr>
<tr>
<td>OR</td>
<td>26</td>
</tr>
<tr>
<td>Transferred</td>
<td>26</td>
</tr>
<tr>
<td>Home w/o Services</td>
<td>16</td>
</tr>
<tr>
<td>ICU</td>
<td>16</td>
</tr>
<tr>
<td>Observation</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
</tbody>
</table>

None of these patients died or had a disposition of AMA, Other, Home with Services or a Null value.
The majority of patients were at a level I or II trauma center.

- Level I and II: 208
- Level III: 14
- Non-Trauma Center: 75

Email questions to: indianatrauma@isdh.in.gov
The average patient age was 19 years.

- Minimum Age: 12
- Average Age: 19
- Maximum Age: 42

Email questions to: indianatrauma@isdh.in.gov
Falls were the most common cause of injury.

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>168</td>
</tr>
<tr>
<td>Transportation</td>
<td>84</td>
</tr>
<tr>
<td>Struck by/against</td>
<td>11</td>
</tr>
<tr>
<td>Cut/Pierce</td>
<td>10</td>
</tr>
</tbody>
</table>

Counts <10 include: Fire/burn, firearm, machinery, natural, overexertion, suffocation, other specified, and other.

Email questions to: indianatrauma@isdh.in.gov
The majority of patients are transported by *ambulance* or *private vehicle*.

- **Ambulance**: 231
- **Private**: 54
- **Other**: 10
- **Police**: 2

Email questions to: indianatrauma@isdh.in.gov
ED LOS > 12 Hours. N=297

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

Email questions to: indianatrauma@isdh.in.gov
Interpretation: revised trauma scores (RTS) are based on the patient’s severity of injury. Higher categories indicate a lower chance of mortality. The majority of patients had a moderate RTS respiratory category, a moderate systolic blood pressure, and an unknown GCS motor score.
Transfers have a higher percent of male patients than Indiana.

Male
- Indiana: 52%
- Transfer: 54%

Female
- Indiana: 48%
- Transfer: 46%
The final hospital has patients with higher injury severity score than the initial hospital.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Initial Hospital</th>
<th>Final Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-8</td>
<td>42%</td>
<td>38%</td>
</tr>
<tr>
<td>9-14</td>
<td>40%</td>
<td>44%</td>
</tr>
<tr>
<td>15-24</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>25-44</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>45-74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No ISS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Most transfers do not go to the ICU.

- No ICU Stay: 72.7%
- 1-2: 10.3%
- 3-7: 13.5%
- 8-14
- 15-30
- 31+

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>Duration</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Admit</td>
<td>15%</td>
</tr>
<tr>
<td>&lt;1</td>
<td>8%</td>
</tr>
<tr>
<td>1-2</td>
<td>32%</td>
</tr>
<tr>
<td>3-5</td>
<td>29%</td>
</tr>
<tr>
<td>6-11</td>
<td>10%</td>
</tr>
<tr>
<td>12+</td>
<td>6%</td>
</tr>
<tr>
<td>Null</td>
<td>%</td>
</tr>
</tbody>
</table>

Email questions to: indianatrauma@isdh.in.gov
The majority of transfer patients go to a **floor bed** or the **ICU**.

<table>
<thead>
<tr>
<th>Transfer Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Bed</td>
<td>35%</td>
</tr>
<tr>
<td>ICU</td>
<td>21%</td>
</tr>
<tr>
<td>NK/NR/NA</td>
<td>15%</td>
</tr>
<tr>
<td>OR</td>
<td>11%</td>
</tr>
<tr>
<td>Home w/o Services</td>
<td>8%</td>
</tr>
<tr>
<td>Step-Down</td>
<td>5%</td>
</tr>
<tr>
<td>Observation</td>
<td>5%</td>
</tr>
</tbody>
</table>

Email questions to: [indianatrauma@isdh.in.gov](mailto:indianatrauma@isdh.in.gov)
A small portion of transfers had a *delay indicated*.
Most delay reasons were not completed.

52% NA/NK/NR

48% Other

Email questions to: indianatrauma@isdh.in.gov
Average ED LOS (Minutes)

Districts:

*Black line represents the 120 minute performance improvement filter
**Blue line represents the state average

Email questions to: indianatrauma@isdh.in.gov
The mortality rate from traumatic injuries has decreased as traumatic injuries have increased and leveled off.

Email questions to: indianatrauma@isdh.in.gov
American College of Surgeons - Committee on Trauma

Dr. Scott Thomas

Email questions to: indianatrauma@isdh.in.gov
Other Business
2019 ISTCC & ITN Meetings

- Location: Indiana Government Center – South, Conference Room B.
- Webcast still available.
- Time: 10:00 A.M. EST.
- 2019 Dates:
  - August 16
  - October 11
  - December 13

Email questions to: indianatrauma@isdh.in.gov
Mobility
Why It Is Important

- Early Mobility decreases risk of:
  - Debility (weakness, contractures)
  - Longer ICU & Hospital LOS
  - Prolonged Vent days
  - Hospital Acquired Pressure Ulcers
  - Pneumonia
  - Delirium
  - DVT & PE
  - Constipation
  - CAUTI (due to urinary retention from being in bed)
  - Mortality
  - Falls
Many survivors of trauma requiring ICU stays never return to their baseline function limiting them from returning to work or other societal functions.
University of Kentucky Study: Walking A Road to Recovery

- Level 1 trauma center
- Completed an Early Mobility program in their Trauma ICU
- 2 ICUs that care for trauma with 12 beds each (24 beds)

https://uknowledge.uky.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1146&context=dnp_etds
Project consisted of:

- All patients verticalized immediately as soon as BP permitted by raising HOB at least 30 degrees or reverse Trendelenburg
- Mobility assessment completed within 24 hours
- 24-48 hours post admission to ICU:
  - Core was engaged by at least sitting EOB or chair, feet on the floor twice per day in addition to therapy
  - Multi-disciplinary approach, no added staff or equipment, leadership and physicians assisted if necessary
  - Physicians discussed importance of mobility with patients if non-compliant
- Exclusion criteria:
  - NWB BLE (can still sit in a chair or EOB)
  - Unstable spine fractures (until stabilized)
  - Comfort measures
  - CRRT
  - Open abdominal wall
Results

Examined Metrics:
- ICU LOS and Hospital LOS
- ICU Readmissions (floor back to ICU)
- Vent days
- Pneumonia
- VTE
- Disposition at D/C (home, outpt rehab, acute rehab, LTAC, SNF)
- Mobility score at ICU and Hospital discharge
Results

- Data was 8 months pre project and 8 months post project
- 232 patients pre project and 228 post project
- Improvements:
  - ICU Mobility Score: Pre mean score 5.5 vs post mean score 7.1
  - Pneumonia: Pre 98.3% vs post 96.5%
  - Vent Days: pre mean 2.2 days vs post mean days 1.9
- Non-statistically significant changes:
  - LOS
  - VTE
  - Disposition to home
Proposal

- Complete a Mobility Pilot for Trauma Patients in our TICU
- Timeframe: Compare 6 months of data pre project with 6 months post project
- Metric: Debility: compare first filed BMAT mean score and last filed BMAT mean score on discharge
- Metric: Compare mobility compliance BID pre and post
Proposal

- Project:
  - 24-48 hours post admission to ICU:
    - Core engaged by at least sitting EOB or chair, feet on the floor twice per day in addition to therapy
    - Multi-disciplinary approach, leadership and physicians assisted if necessary
    - Physicians discussed importance of mobility with patients if non-compliant
  - Exclusion criteria:
    - NWB BLE (can still sit EOB and/or chair)
    - Unstable spine fractures (until stable)
    - Comfort measures
    - CRRT
    - Open abdominal wall
**BMAT Assessment**

### BMAT- Picture Guide: Adult

#### Assessment Level 1: Sit and Shake
1. From a semi-reclined position, ask patient to sit up and rotate to a seated position at the side of the bed. *May use the bedrail.*
2. Ask patient to reach out and grab your hand and shake making sure patient reaches across his/her midline.

#### Assessment Level 2: Stretch and Point
1. With patient in seated position at the side of the bed, have patient place both feet on the floor (or stool) with knees no higher than hips.
2. Ask patient to stretch one leg and straighten the knee, then bend the ankle/foot and point the toes. If appropriate, repeat with the other leg.

#### Assessment Level 3: Stand
1. Ask patient to elevate off the bed or chair (seated to standing) using an assistive device (cane, bedrail).
2. Patient should be able to raise buttocks off bed and hold for a count of five. May repeat once.

#### Assessment Level 4: Walk
1. Ask patient to march in place at bedside.
2. Then ask patient to advance step and return each foot. (There are medical conditions that may render a patient unable to step backward; use your best clinical judgment.)

**PASS** = Patient is able to come to a seated position, maintain core strength. Maintains seated balance while reaching across midline. Move on to Assessment Level 2.

**FAIL** = Patient unable to perform tasks, patient is MOBILITY LEVEL 1.

**PASS** = Patient is able to demonstrate appropriate quad strength on intended weight bearing limb(s). Move onto Assessment Level 3.

**FAIL** = Patient unable to complete task. Patient is MOBILITY LEVEL 2.

**PASS** = Patient maintains standing stability for at least 5 seconds, proceed to assessment level 4.

**FAIL** = Patient unable to demonstrate standing stability. Patient is MOBILITY LEVEL 3.

**PASS** = Patient demonstrates balance while shifting weight and ability to step, takes independent steps, does not use assistive device patient is MOBILITY LEVEL 4.

**FAIL** = Patient not able to complete tasks OR requires use of assistive device. Patient is MOBILITY LEVEL 3.
Nurse Driven Mobility

**Mobility by Nursing**
- On Admission, ask baseline (1 week prior to admit) mobility questions on navigator, and complete BMAT on admission assessment
  - Nursing will order Physical Therapy (PT) if BPA is received due to a loss in mobility function from baseline
- Assess mobility using BMATBID, change in level of condition, or transition of care
- Based on BMAT level, perform recommended interventions

**Mobility Team**
- Patients requiring ROM (Level 1)
- Patients requiring total assist for mobility (Level 2)
- Exclude patients with comfort measures ordered
- Mobility Tech will generate a list in Epic based on filed BMAT levels to locate patients needing to be treated

**Consult PT/OT**
- Patients with functional loss by 1 or more levels from baseline function
- Patient may benefit from new assistive devices (cane, walker) or gait/balance training
- Patient must be able to participate in Therapy
- Patient expected to recover from medical compromise
- Disposition needs: Patient will not be able to discharge to the same place pre-admission
  - Case Management will assist during MDR
  - PT will assess the need for OT and order as appropriate

---

*Note: Vented patients will receive Early Mobility*
Discussion

- Reduced amount of inappropriate PT/OT consults
- Engaged bedside nursing staff to get patients moving
- Nursing have the autonomy to drive mobility and therapy consults
- Utilized a BPA in our EMR to use technology to help drive mobility

Next steps:
- Measure debility to see if it has decreased
- Monitor Falls and LOS to see impact
References


References


References


References


References


References


References


References


