Indiana State Trauma Care Committee

February 21, 2020

Indiana State Department of Health

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

Introductions & approval of meeting minutes

Indiana State Department of Health

Updates

Katie Hokanson, *Director of Trauma and Injury Prevention*

Indiana State Department of Health

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

2020 Governor's Next Level Recovery Conference

Thursday, April 23, 2020
JW Marriott, Indianapolis

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.

Division grant activities

- Pursuing new opportunities:
  - U.S. Department of Transportation: State & Local Government Data Analysis Tools to Support Policy & Decision Making for Roadway Safety
    - 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.

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.

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?

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

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
  - Transfer agreements – must be stroke specific.

Indiana State Department of Health

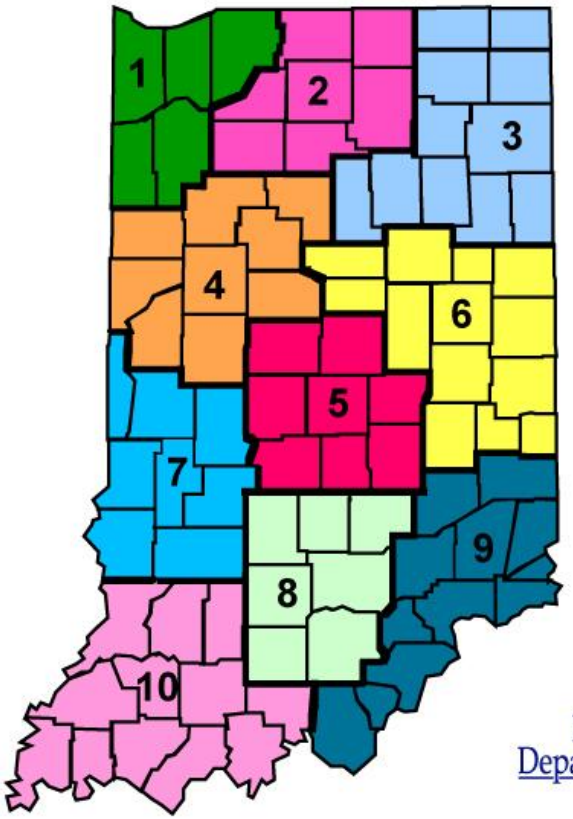
Regional Updates

Indiana State Department of Health

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



Indiana State Department of Health

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Indiana EMSC Updates

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

Indiana – Emergency Medical Services for Children

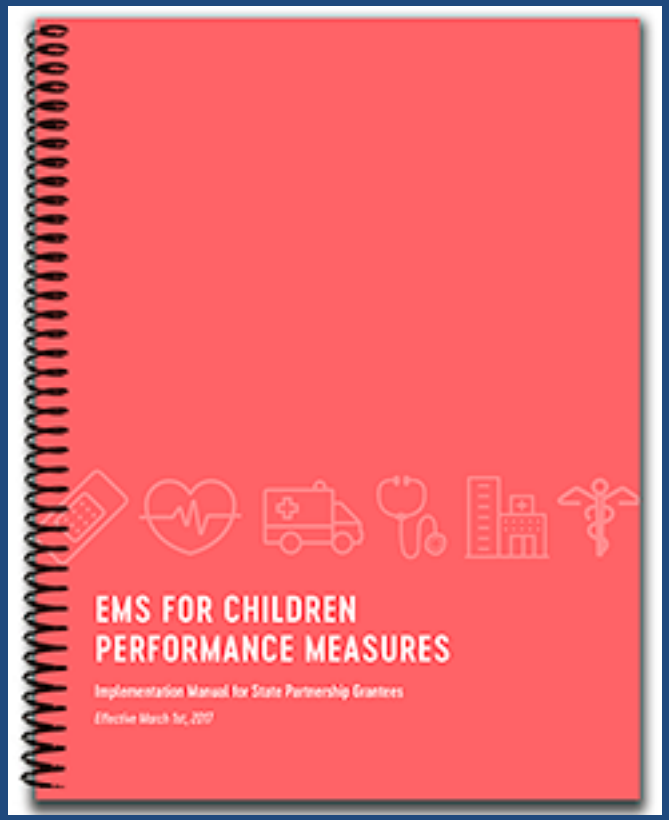
EMSC

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

New Performance Measures



IEMSC Emergency Medical Services for Children

Indiana – Emergency Medical Services for Children

EMSC 01

SUBMISSION OF NEMSIS COMPLIANT VERSION 3.X DATA

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.

EMSC 02

PEDIATRIC EMERGENCY CARE COORDINATOR (PECC)

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.

YEAR	TARGET
2020	30% of EMS agencies in the state or territory have a designated individual who coordinates pediatric emergency care.

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.

YEAR	TARGET
2020	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.

A recent study "found that the availability of a PECC in an agency is associated with increased frequency of pediatric psychomotor skills evaluations."

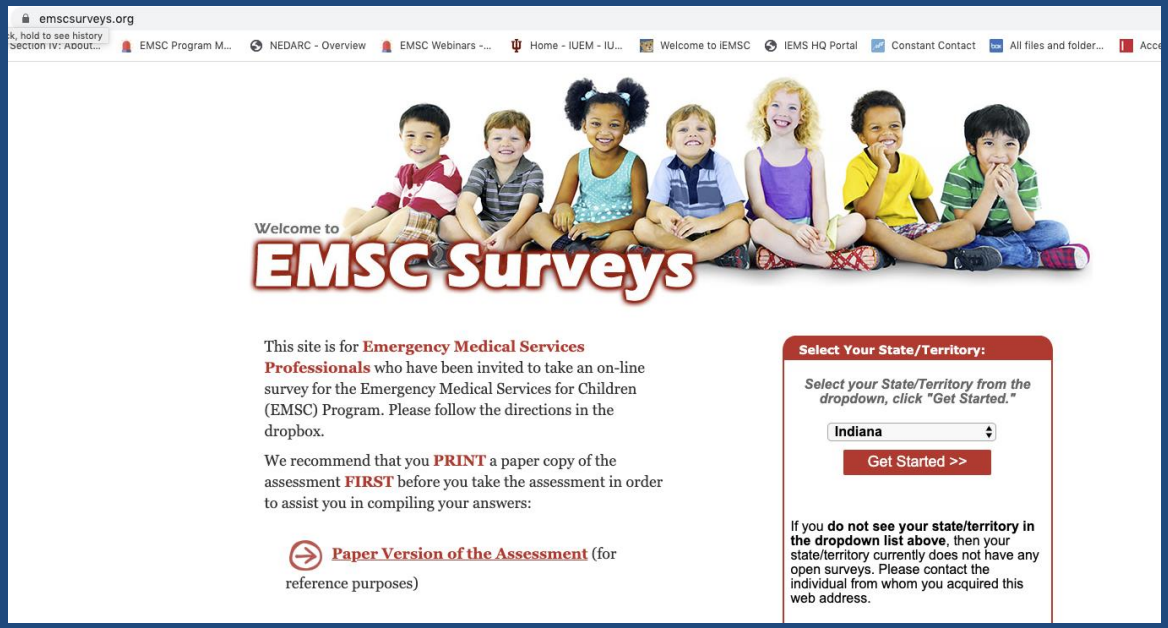
Hilary A. Hewes, Michael Ely, Rachel Richards, Manish I. Shah, Stephanie Busch, Diane Pilkey, Katherine Dixon Hert & Lenora M. Olson (2018): Ready for Children: Assessing Pediatric Care Coordination and Psychomotor Skills Evaluation in the Prehospital Setting, Prehospital Emergency Care, DOI: 10.1080/10903127.2018.1542472

PECC = Pediatric Emergency Care Coordinator

Performance Measure 03

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.



emscsurveys.org

iEMSC Emergency Medical Services for Children

Indiana – Emergency Medical Services for Children

Response-Rate Requirement

- *"To provide the most accurate representation of the data, an 80 percent response rate is required for your state."*

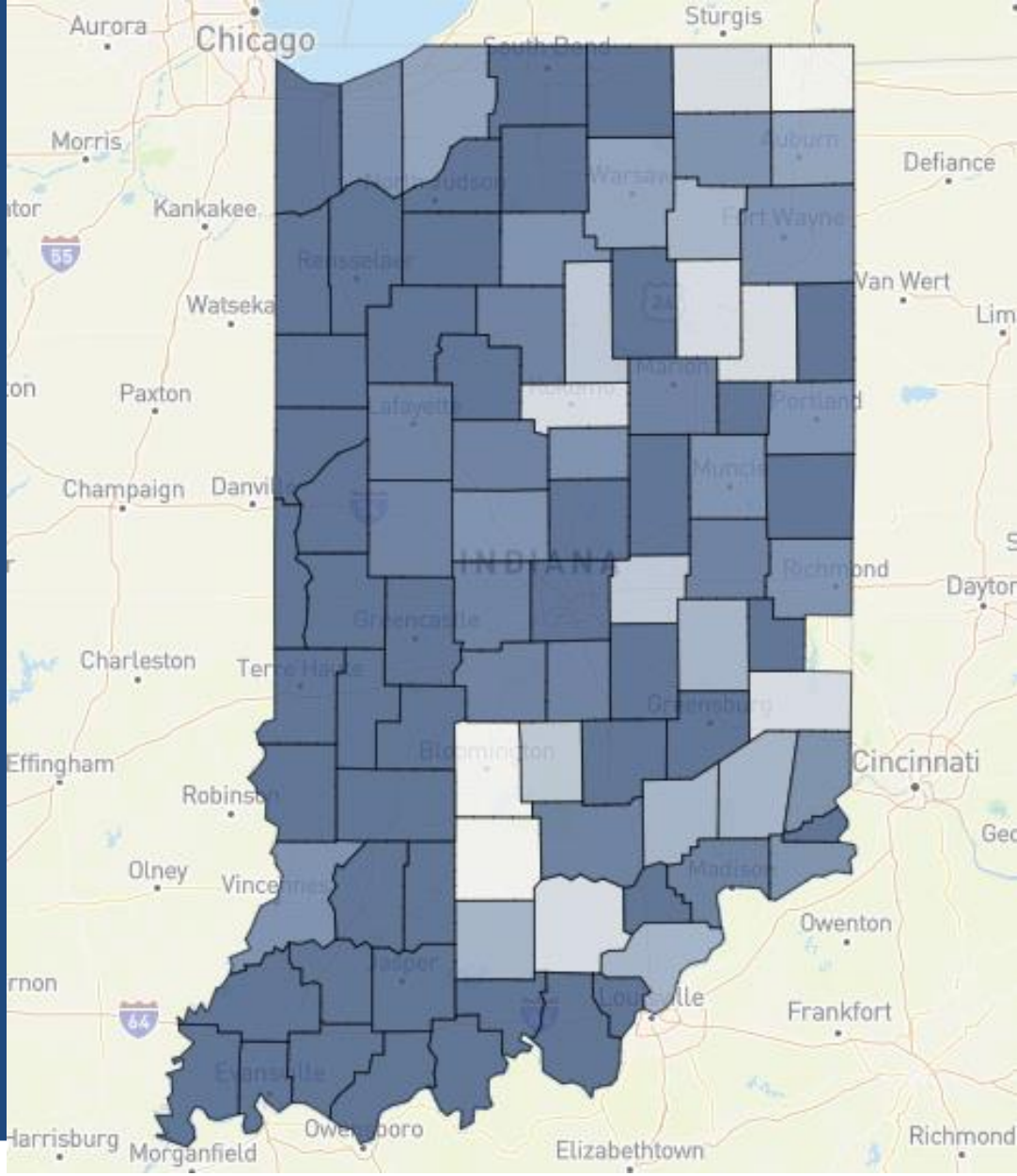
Current State

Response Rate:

85.3%

(638/748)

Current Respondents - by County



IEMSC Emergency Medical Services for Children

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Collaborating Partners

IDHS

ISDH

IEMSA

IFCA

MESH Coalition

IHA

IRHA

IVFA

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.

EMSC 05

HOSPITAL RECOGNITION FOR PEDIATRIC TRAUMA

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***.

EMSC 06
INTERFACILITY TRANSFER GUIDELINES

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 in the state or territory have written interfacility transfer guidelines that cover pediatric patients and that include specific components of transfer.

EMSC 07
INTERFACILITY TRANSFER AGREEMENTS

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.

EMSC 08
PERMANENCE OF EMSC

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

EMSC 09

INTEGRATION OF EMSC PRIORITIES INTO STATUTES OR REGULATIONS

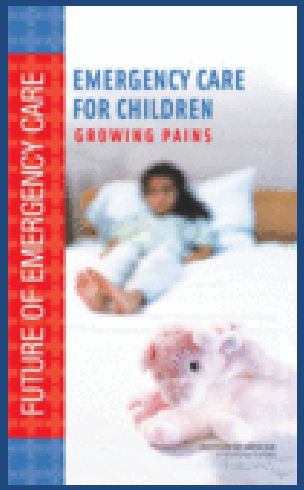
The degree to which the state or territory has established permanence of EMSC in the state or territory EMS system by integrating EMSC priorities into statutes or regulations.

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."

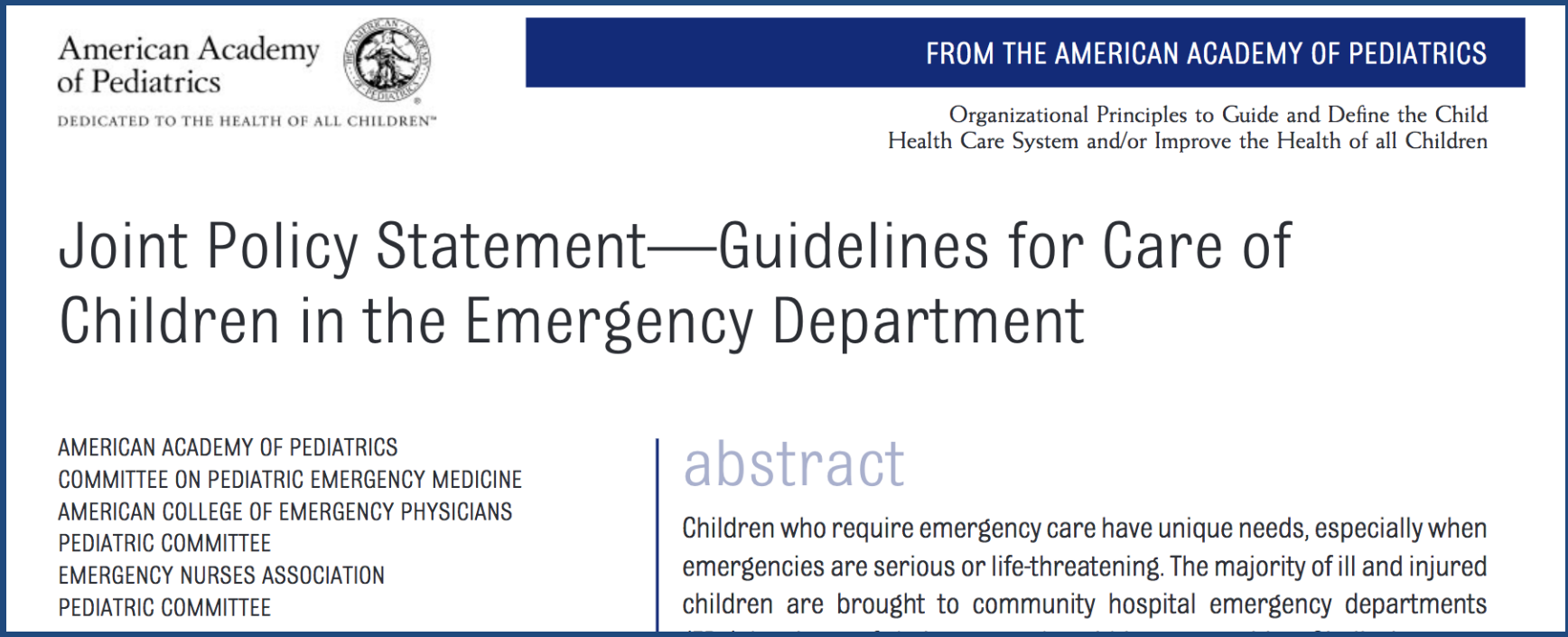


Not Ready for Everyday Means…

- 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!



American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

FROM THE AMERICAN ACADEMY OF PEDIATRICS

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

Joint Policy Statement—Guidelines for Care of Children in the Emergency Department

AMERICAN ACADEMY OF PEDIATRICS
COMMITTEE ON PEDIATRIC EMERGENCY MEDICINE
AMERICAN COLLEGE OF EMERGENCY PHYSICIANS
PEDIATRIC COMMITTEE
EMERGENCY NURSES ASSOCIATION
PEDIATRIC COMMITTEE

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

IEMSC Emergency Medical Services for Children

Indiana – Emergency Medical Services for Children

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)

Number of Hospital Respondents:	106
Number of Hospitals Assessed:	121
Response Rate:	87.6%

STATE SCORE AND COMPARATIVE SCORES:

66	67	69
STATE AVERAGE HOSPITAL SCORE OUT OF 100	**STATE MEDIAN HOSPITAL SCORE OUT OF 100**	**n = 4,143 NATIONAL MEDIAN OF PARTICIPATING HOSPITALS**

The Big Secret

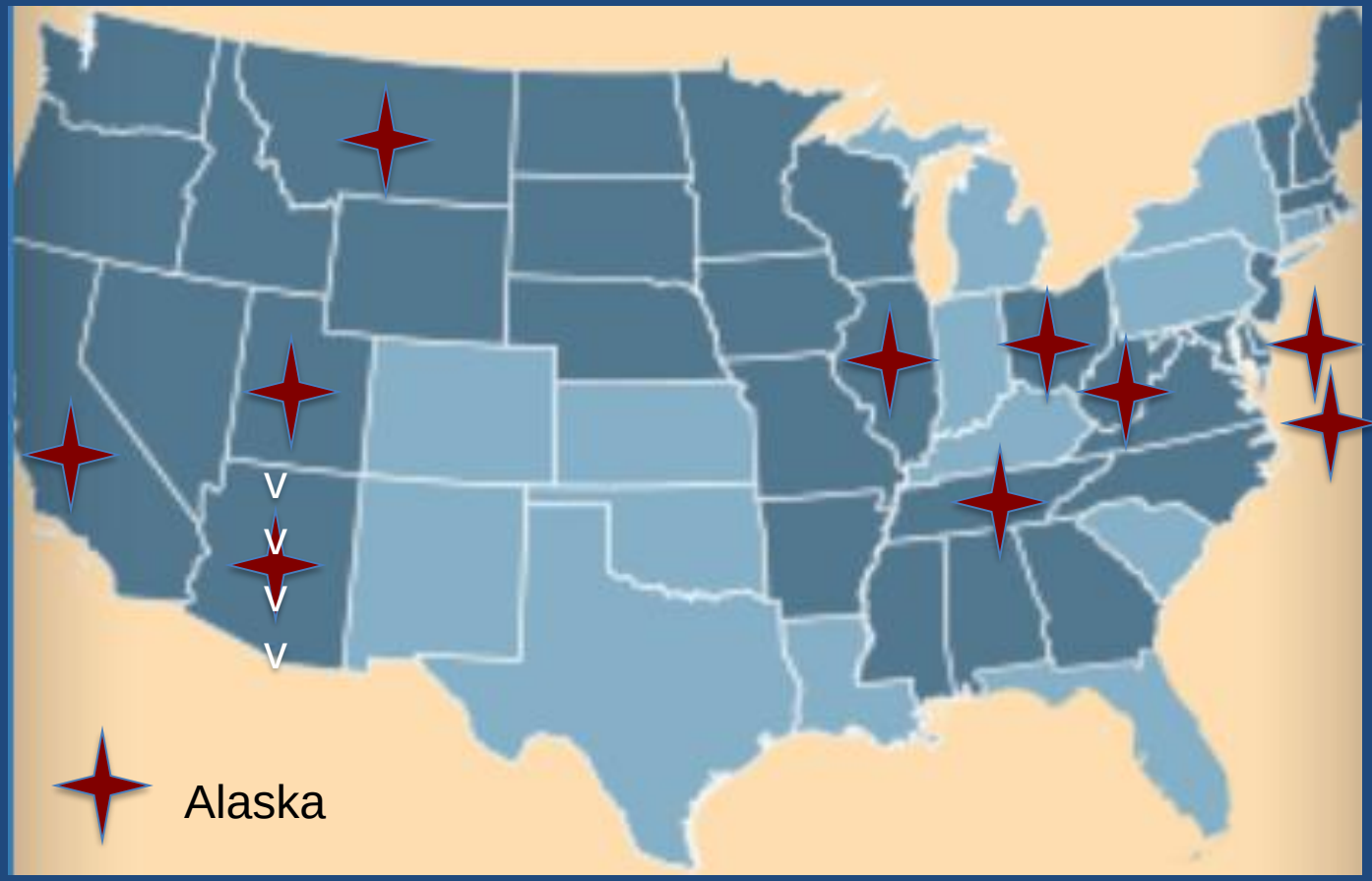
Pediatric Readiness & Facility Recognition

Indiana – Emergency Medical Services for Children

FRC Nationally

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

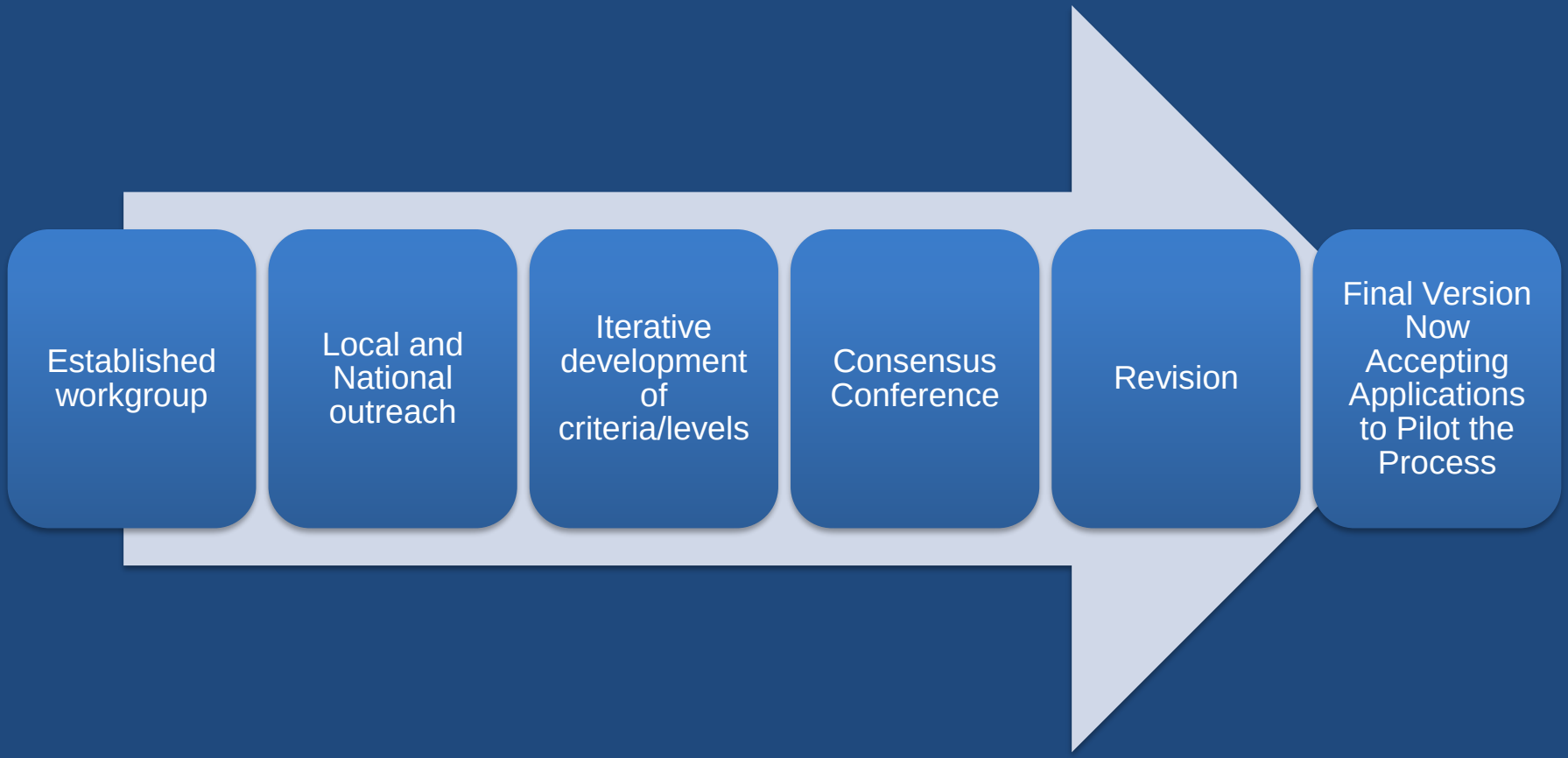
Facility Recognition



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



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

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

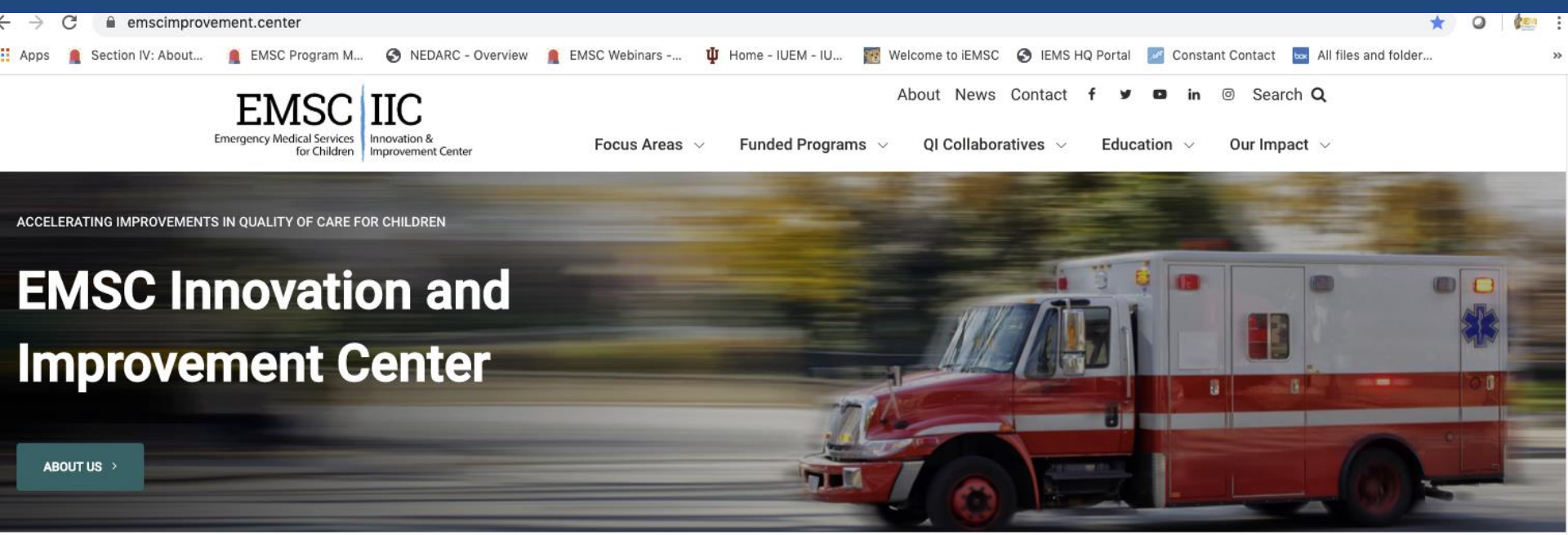
- 2.7 Transportation
  - Safe inter-facility transport of stable, unstable, potentially unstable pediatric patients and prioritization methods.

Pediatric Readiness: In Press

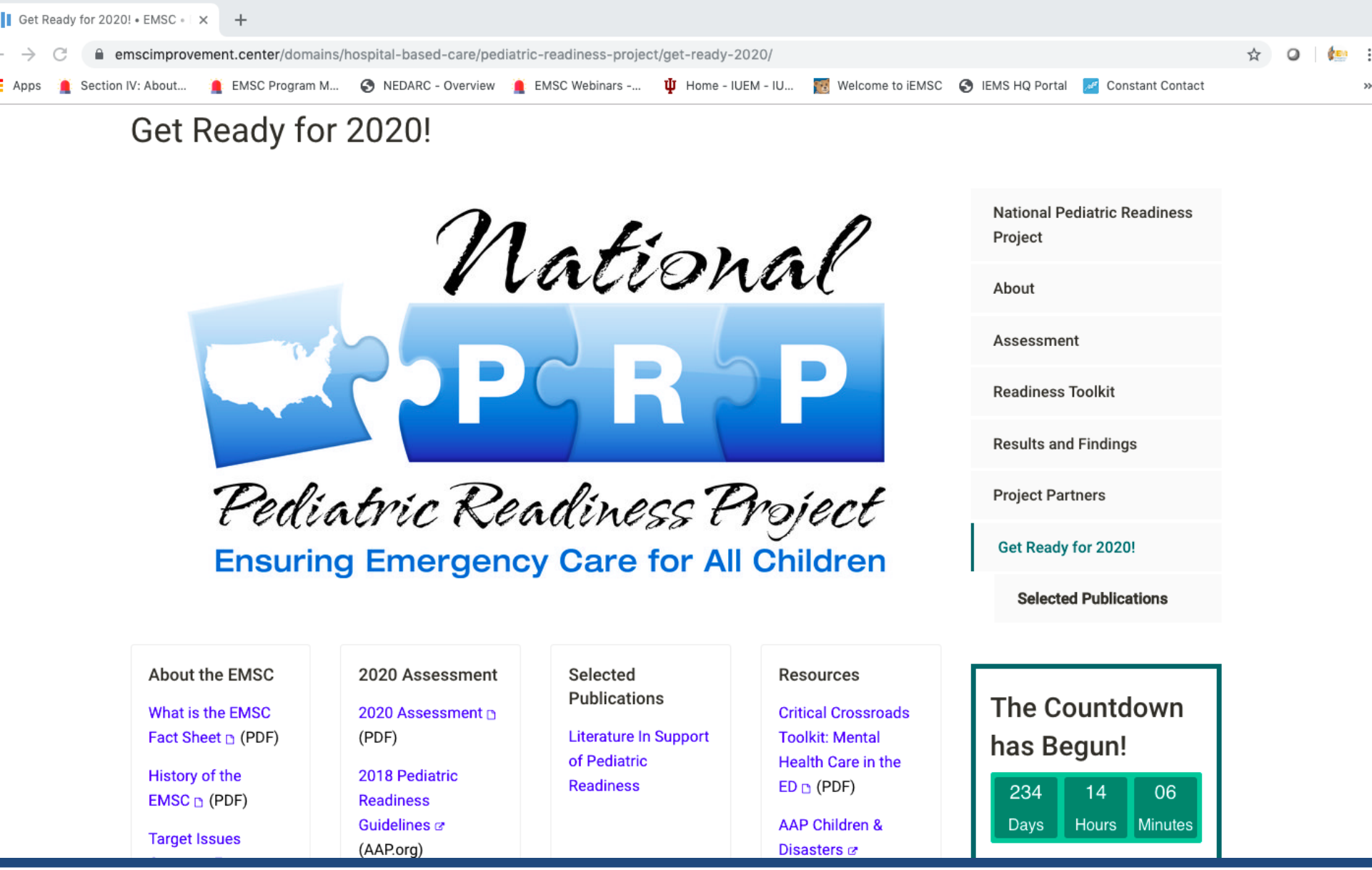
August's issue of *Pediatrics*, contains both a commentary by the EIIC's Dr. Kate Remick and a retrospective cohort study examining the relationship between focusing on hospital-specific pediatric readiness and encounter mortality emergency care for children. The research found that children who presented 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.

Remick KE. The Time Is Now: Uncovering the Value of Pediatric Readiness in Emergency Departments. *Pediatrics*. 2019;144(3):e20191636

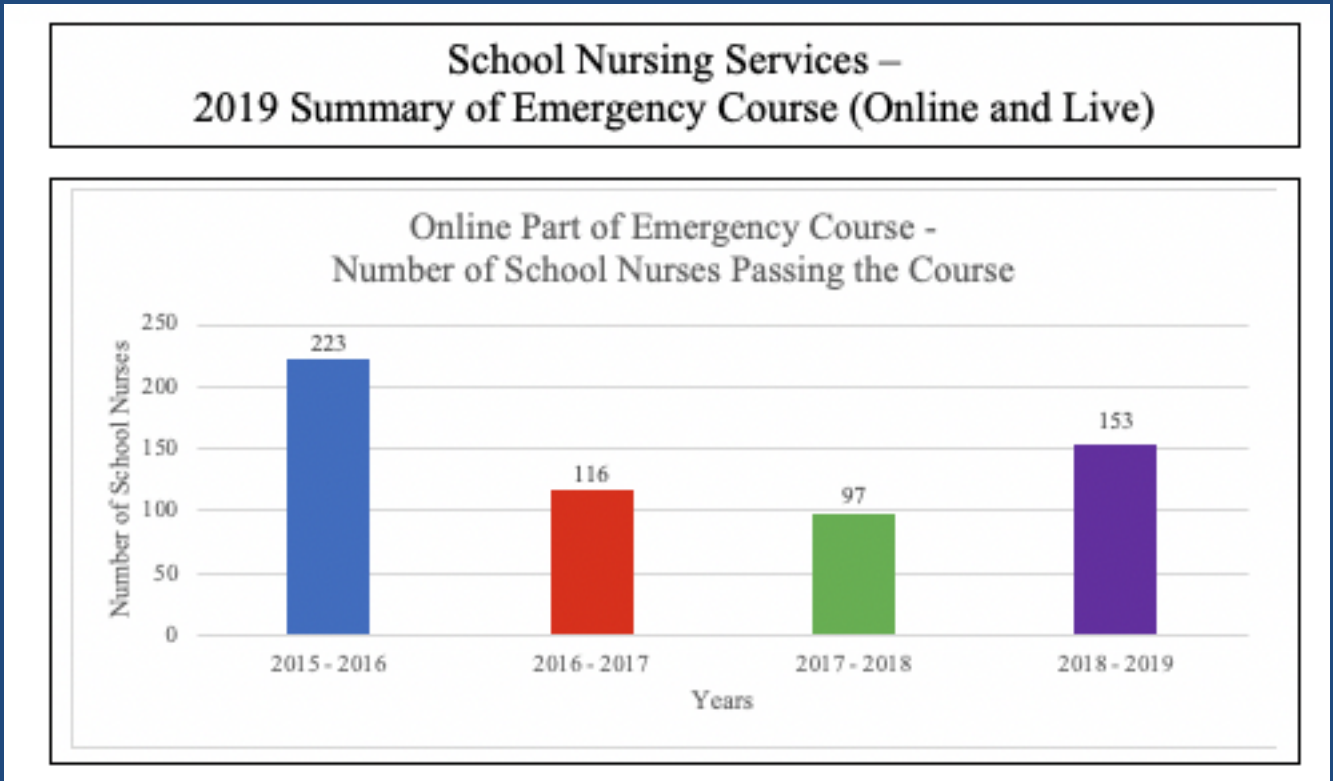
Ames SG, Davis BS, Marin JR, et al. Emergency Department Pediatric Readiness and Mortality in Critically Ill Children. *Pediatrics*. 2019;144(3):e20190568



Indiana – Emergency Medical Services for Children


Get Ready for 2020! • EMSC
emscimprovement.center/domains/hospital-based-care/pediatric-readiness-project/get-ready-2020/
Apps
Section IV: About...
EMSC Program M...
NEDARC - Overview
EMSC Webinars -...
Home - IUEM - IU...
Welcome to iEMSC
IEMS HQ Portal
Constant Contact
Get Ready for 2020!
National
PRP
Pediatric Readiness Project
Ensuring Emergency Care for All Children
National Pediatric Readiness Project
About
Assessment
Readiness Toolkit
Results and Findings
Project Partners
Get Ready for 2020!
Selected Publications
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
The Countdown has Begun!
234 Days
14 Hours
06 Minutes

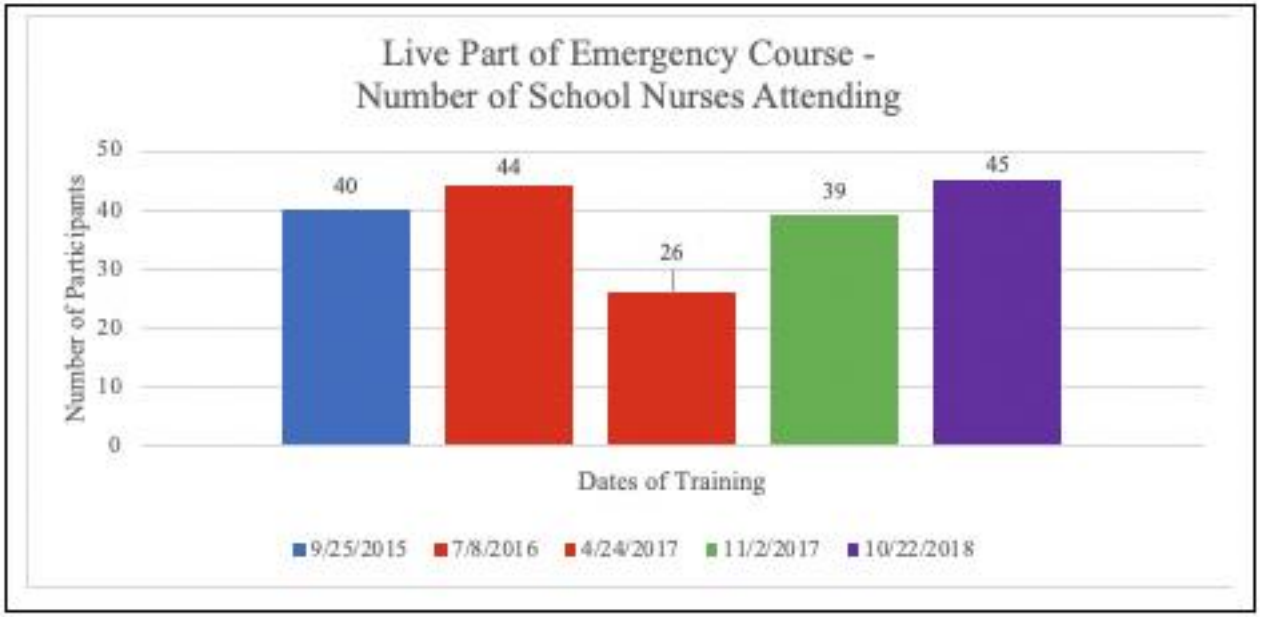
School Nurse Emergency Course



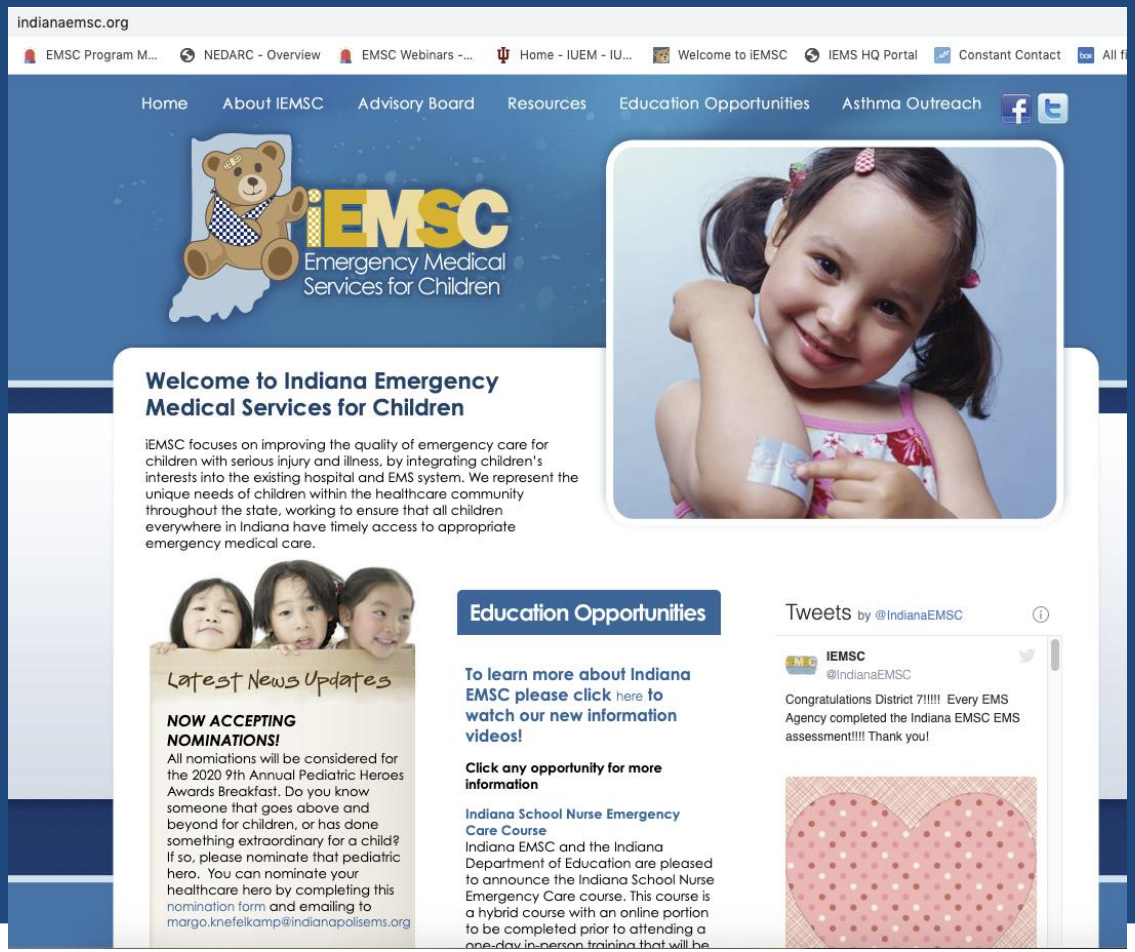
School Nurse Emergency Course

Total Number Trained

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



9th Annual Pediatric Heroes Awards Breakfast



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Resources

- **EMSC Newsletter/PECC Community**
- **Indianaemsc.org**
- **www.pediatricreadiness.org**
- https://emscimprovement.center/domains/planning/training-scenarios/
- https://www.ena.org/docs/default-source/resource-library/practice-resources/toolkits/interfacility-transport-toolkit-for-the-pediatric-patient.pdf?sfvrsn=c017863d_6

Questions?
Margo.Knefelkamp@indianapolisems.org

Indiana Trauma System
Project Updates

Peter C. Jenkins MD, MSc

SCHOOL OF MEDICINE
INDIANA UNIVERSITY

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

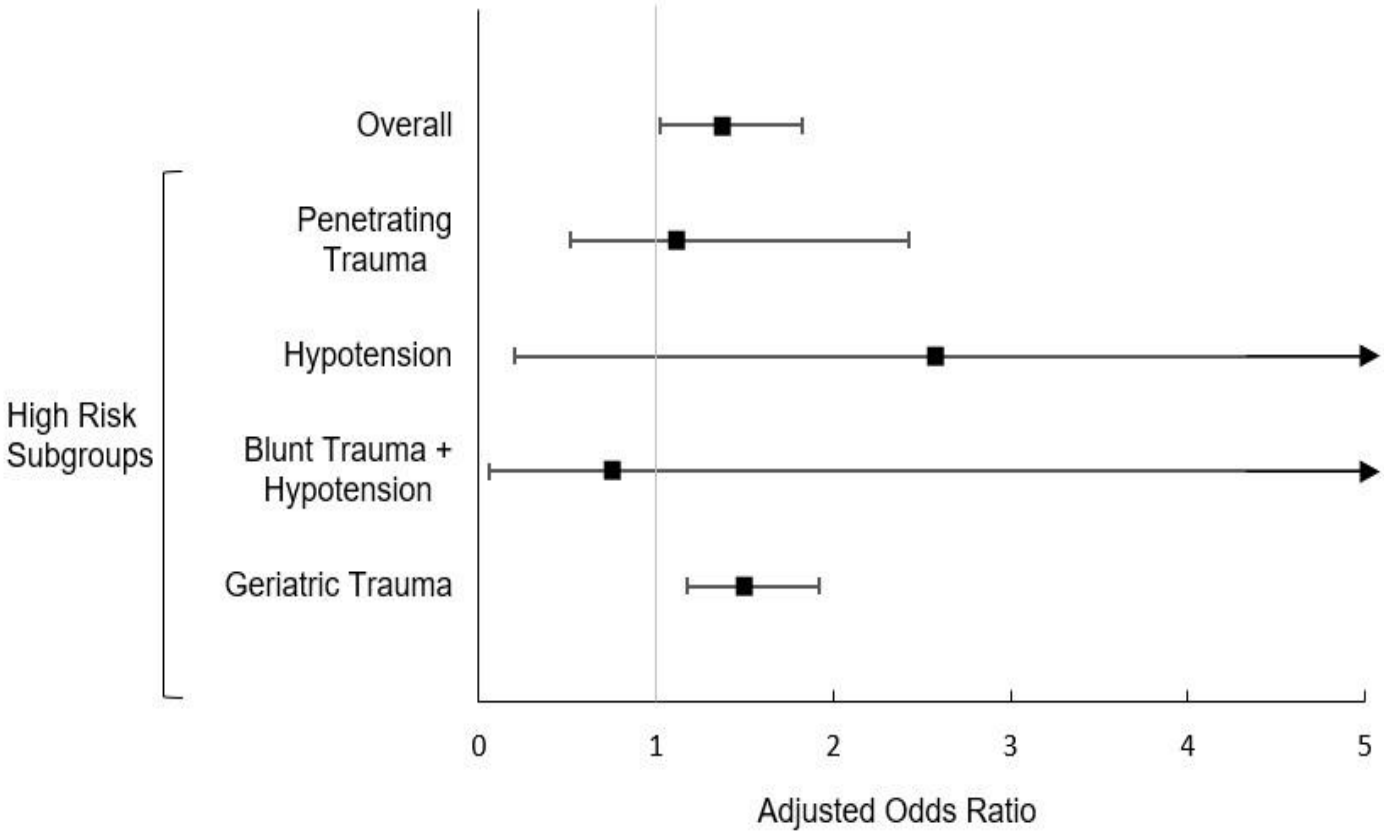
- Indiana trauma registry data (2013-2015)
- Excluded transfer patients
- Propensity matched
- Multivariable logistic regression
- Subgroup analyses:
  - age $\geq$ 65 years
  - penetrating injuries
  - Hypotension
  - blunt injuries with hypotension

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 ≥ 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 ≥ 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)

  Pull Back the Curtain: External Data Validation is an Essential Element of Quality Improvement Benchmark Reporting. Jakubus JL, Di Pasquo SL, Mikhail JN, Cain-Nielsen AH, Jenkins PC, Hemmila MR. J Trauma Acute Care Surg. 2020 Jan 7.
- Hospital performance index
- Meeting schedule
  - 3 meetings annually (TMD & TPM)
  - 1 meeting annually (Registrars)

I-TQIP Structure

Michigan Trauma Quality Improvement Program (MTQIP)
2015 Performance Index
January 1, 2015 to December 31, 2015

Measure	Weight	Measure Description			Points Earned	
#1	10	**Data Submission**				PARTICIPATION (60%)
		On time and complete 3 of 3 times			10	
		On time and complete 2 of 3 times			5	
		On time and complete 1 of 3 times			0	
#2	20	**Meeting Participation-Surgeon**				
		Participated in 3 of 3 meetings			20	
		Participated in 2 of 3 meetings			10	
		Participated in 1 of 3 meetings			5	
		Participated in 0 of 3 meetings			0	
#3	20	**Meeting Participation-Trauma Program Manager or Registrar**				
		Participated in 3 of 3 meetings			20	
		Participated in 2 of 3 meetings			10	
		Participated in 1 of 3 meetings			5	
		Participated in 0 of 3 meetings			0	
#4	10	**Surgeon Lead Presents MTQIP Reports at Hospital Board, Administrative and or Trauma QI Meetings (signed attestation required at year end)**				
		Presented at 3 meetings			10	
		Presented at 2 meetings			8	
		Presented at 1 meeting			5	
		Presented at 0 meetings or attestation not submitted			0	
#5	10	**Data Accuracy**	**First Validation Visit Error Rate**	**Two or > Validation Visits Error Rate**		PERFORMANCE (40%)
		5 Star Validation	0-4.5%	0-4.5%	10	
		4 Star Validation	4.6-5.5%	4.6-5.5%	8	
		3 Star Validation	5.6-8.0%	5.6-7.0%	5	
		2 Star Validation	8.1-9.0%	7.1-8.0%	3	
		1 Star Validation	>9.0%	>8.0%	0	
#6	10	**Site Specific Quality Initiative Using MTQIP Data (Feb 2015-Feb 2016)**				
		Developed and implemented with evidence of improvement			10	
		Developed and implemented with no evidence of improvement			5	
		Not developed or implemented			0	
#7	10	**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)**				
		Tier 1: ≤ 1.5			10	
		Tier 2: 1.6-2.0			10	
		Tier 3: 2.1-2.5			5	
		Tier 4: >2.5			0	
#8	10	**Admitted Patients (Trauma Service-Cohort 2) With Initiation Of Venous Thromboembolism (VTE) Prophylaxis <48 Hours After Arrival (18 Months Data)**				
		>50%			10	
		≥40%			5	
		<40%			0	
				Total (Max Points) =	100	

I-TQIP Structure (MTQIP 2015)

Site Specific Quality Initiative Using MTQIP Data (Feb 2015-Feb 2016)	
Developed and implemented with evidence of improvement	10
Developed and implemented with no evidence of improvement	5
Not developed or implemented	0
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)	
Tier 1: ≤ 1.5	10
Tier 2: 1.6-2.0	10
Tier 3: 2.1-2.5	5
Tier 4: >2.5	0
Admitted Patients (Trauma Service-Cohort 2) With Initiation Of Venous Thromboembolism (VTE) Prophylaxis <48 Hours After Arrival (18 Months Data)	
>50%	10
≥40%	5
<40%	0

I-TQIP Structure (MTQIP 2019)

Serious Complication Rate-Trauma Service Admits (3 yr: 7/1/16-6/30/19)	
Z-score: < -1 (major improvement)	10
Z-score: -1 to 1 or serious complications low-outlier (average or better rate)	7
Z-score: > 1 (rates of serious complications increased)	5
Mortality Rate-Trauma Service Admits (3 yr: 7/1/16-6/30/19)	
Z-score: < -1 (major improvement)	10
Z-score: -1 to 1 or mortality low-outlier (average or better rate)	7
Z-score: > 1 (rates of mortality increased)	5
Open Fracture-Antibiotic Timeliness from ED Arrival (12 mo: 7/1/18-6/30/19)	
≥ 90% patients (Antibiotic type, date, time recorded, and administered ≤ 120 min)	10
≥ 80% patients (Antibiotic type, date, time recorded, and administered ≤ 120 min)	7
≥ 70% patients (Antibiotic type, date, time recorded, and administered ≤ 120 min)	5
< 70% patients (Antibiotic type, date, time recorded, and administered ≤ 120 min)	0
First Head CT Scan Performed in Traumatic Brain Injury (TBI) Patients On Anticoagulation (12 mo: 7/1/18-6/30/19)	
≥ 90% patients (Head CT scan in ED with date and time recorded)	10
≥ 80% patients (Head CT scan in ED with date and time recorded)	7
≥ 70% patients (Head CT scan in ED with date and time recorded)	5
< 70% patients (Head CT scan in ED with date and time recorded)	0

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

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

- Total trauma volume # - Mortality #	*Establish trust*
- Timeliness of data submission - Validity score - ED-LOS >24 hrs (identify outliers) - H-LOS >60 days (identify outliers) - Missing initial GCS with ISS >15 - Missing initial SBP/HR	*Assess data quality*

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 2. Activity timeline for grant period								
Activity	**Year 1**		**Year 2**		**Year 3**		**Year 4**	
Project startup (IRB approval and staff training)	→							
Aim 1. Patient interviews		→						
Aim 1. Hospital staff interviews		→						
Aim 1. Stakeholder panel sessions			→					
Aim 2. Key informant interviews		→						
Aim 2. Provider surveys			→					
Aim 3. On-site data validation				→				
Aim 3. Generate hospital performance reports				→	→			
Aim 3. E-TQIP conference/Post-implementation assessment						→	→	
R01 application preparation and submission							→	→
Completion of Training Aims 1-3	→	→	→	→	→	→	→	→

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

Indiana State Department of Health

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**

Trauma Registry

Ramzi Nimry, *Trauma and Injury Prevention Program Director*

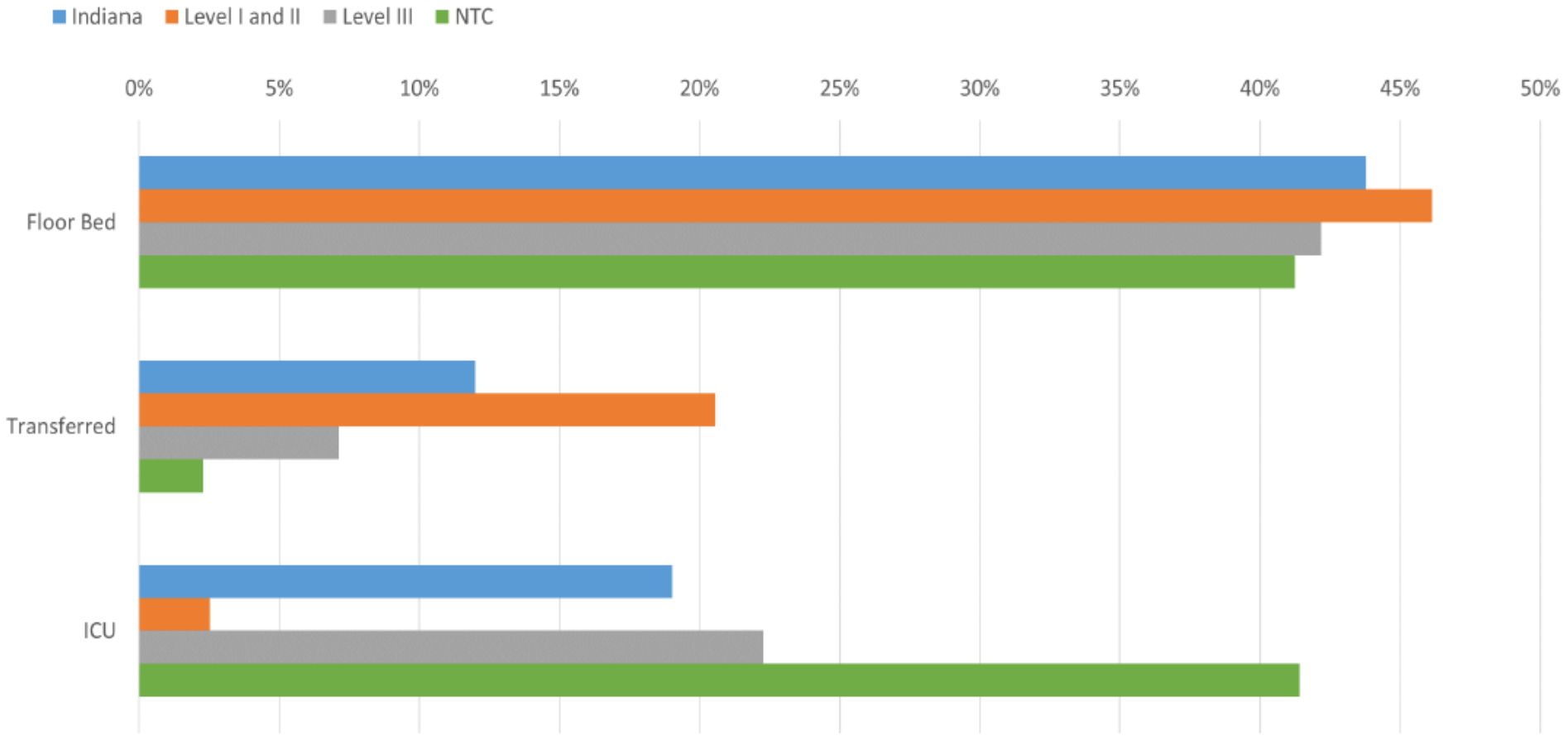
Indiana State Department of Health

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

Quarter 3 2019

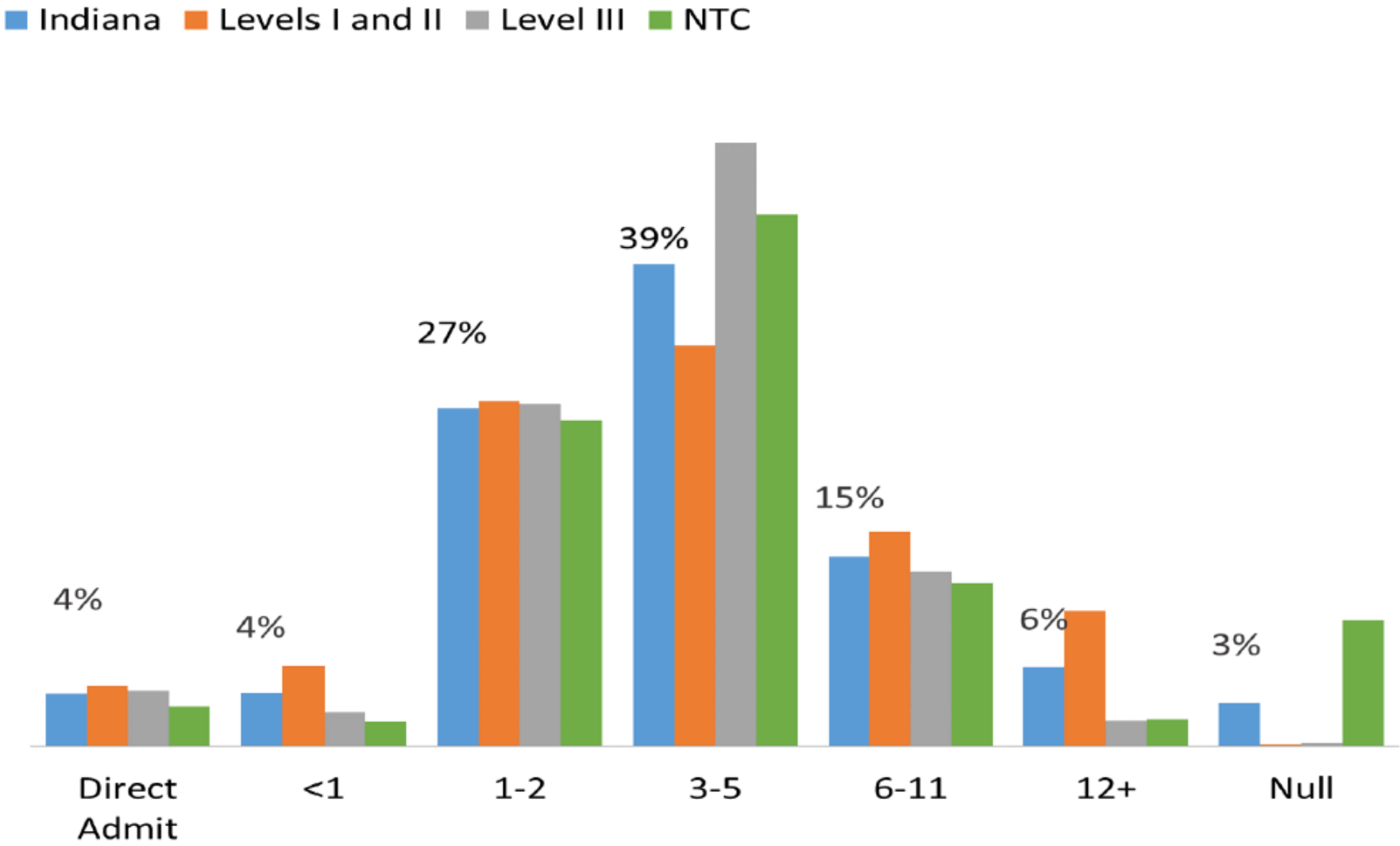
- 108 hospitals reported (ties Q3 2018)
  - 10 Level I and II trauma centers
  - 13 Level III trauma centers
  - 85 non-trauma centers
- 11,442 incidents

The majority of patients in the ED go to a **floor bed or ICU** at non-trauma centers.

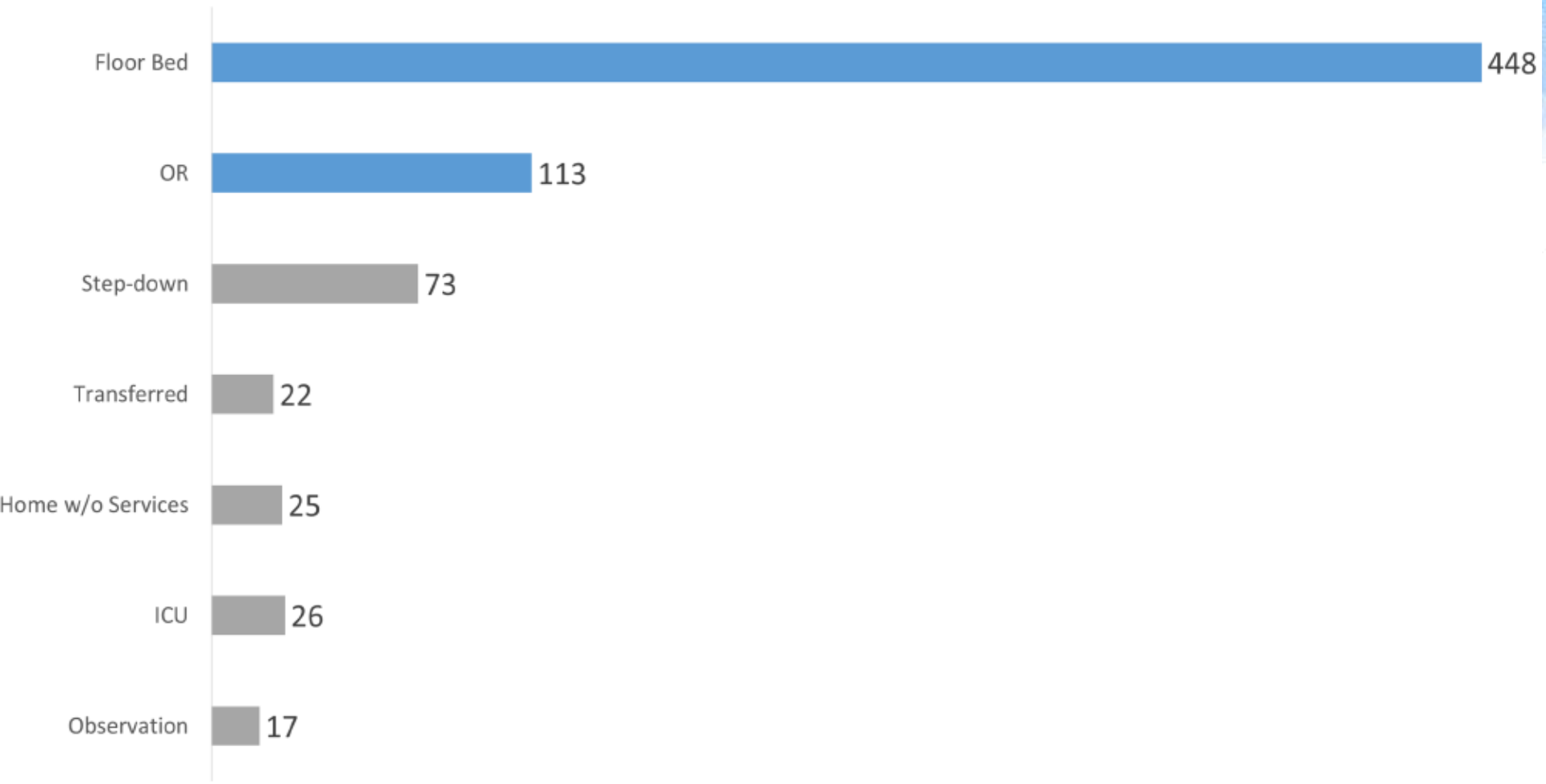


Statewide categories <10% include: OR, home w/o services, observation, step-down, expired, and NK/NR/NA.

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**.



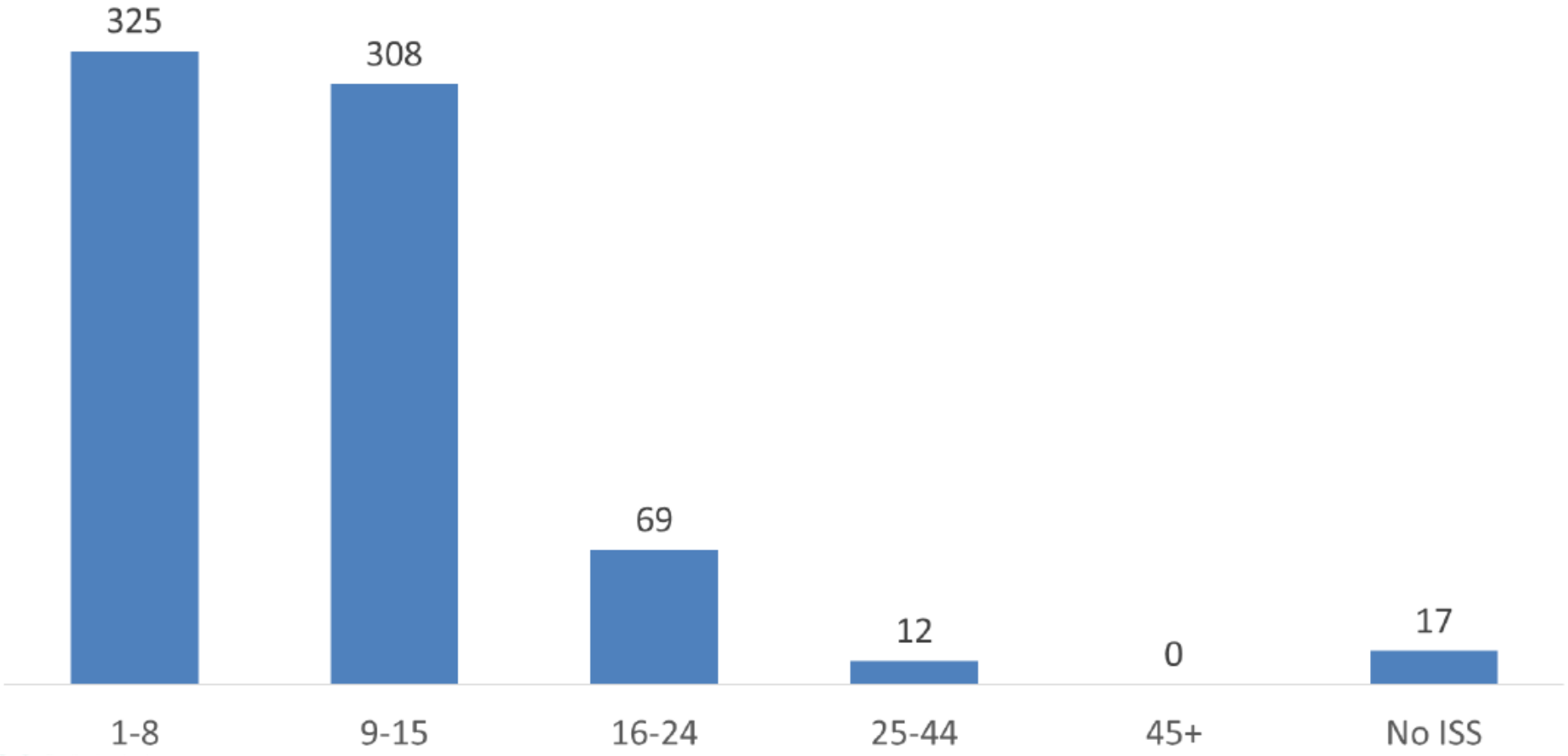
*This data includes both trauma and non-trauma centers

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

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

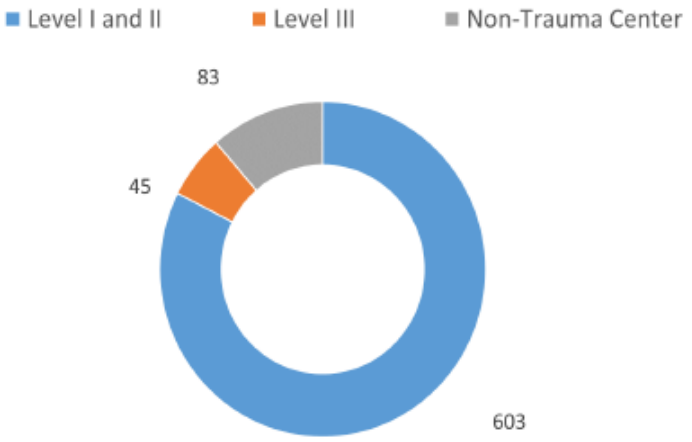
ED LOS > 12 Hours, N=731

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

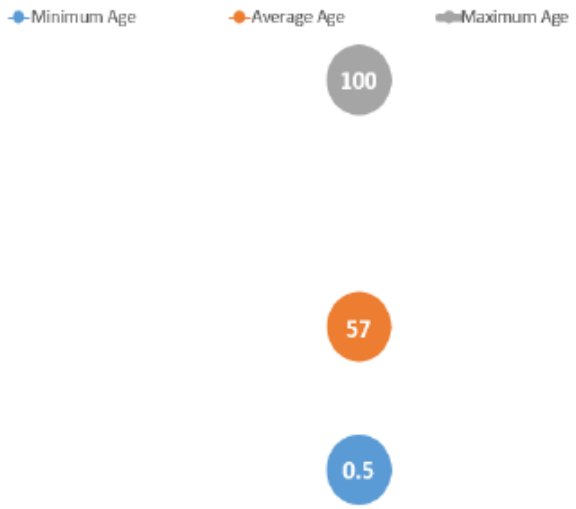


ED LOS > 12 Hours, N=731

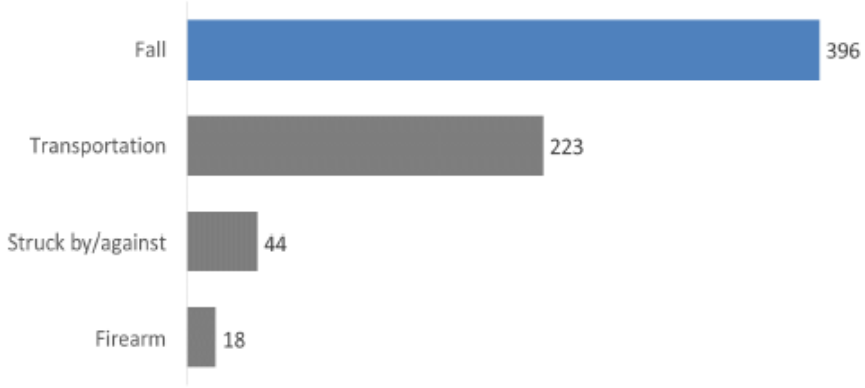
The majority of patients were at a level I or II trauma center.



The average patient age was 57 years.

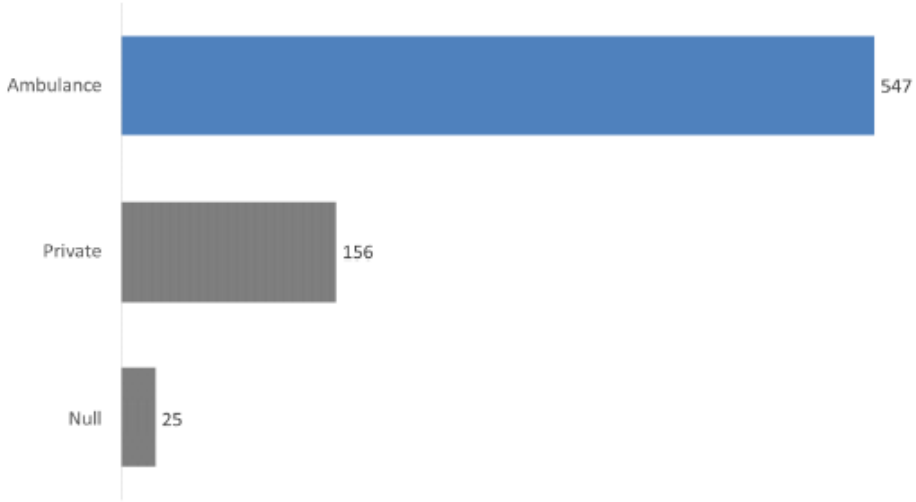


Falls were the most common cause of injury.

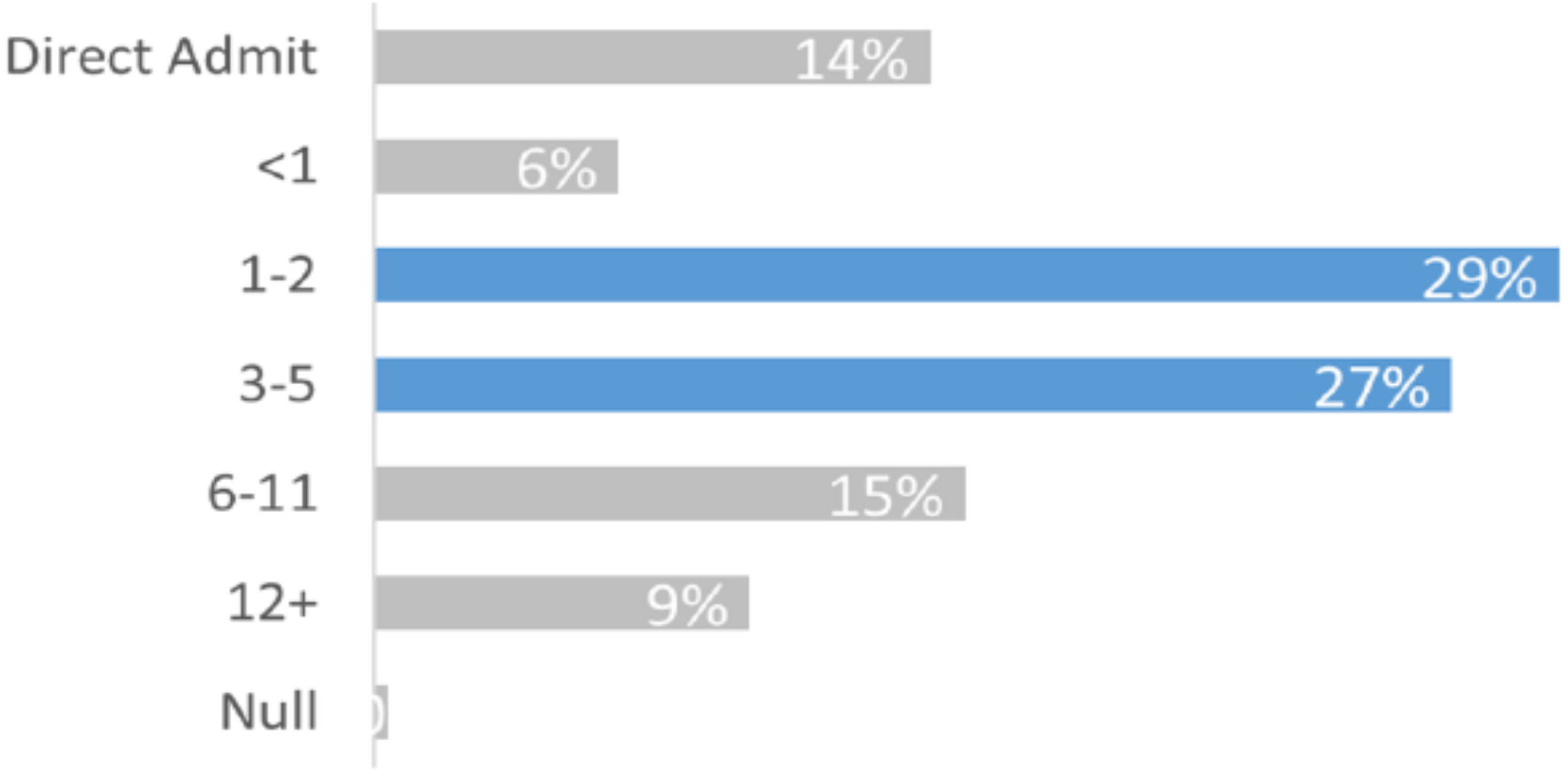


Counts <10 include: Cut/pierce, fire/burn, firearm, machinery, natural, overexertion, suffocation, other specified, and other.

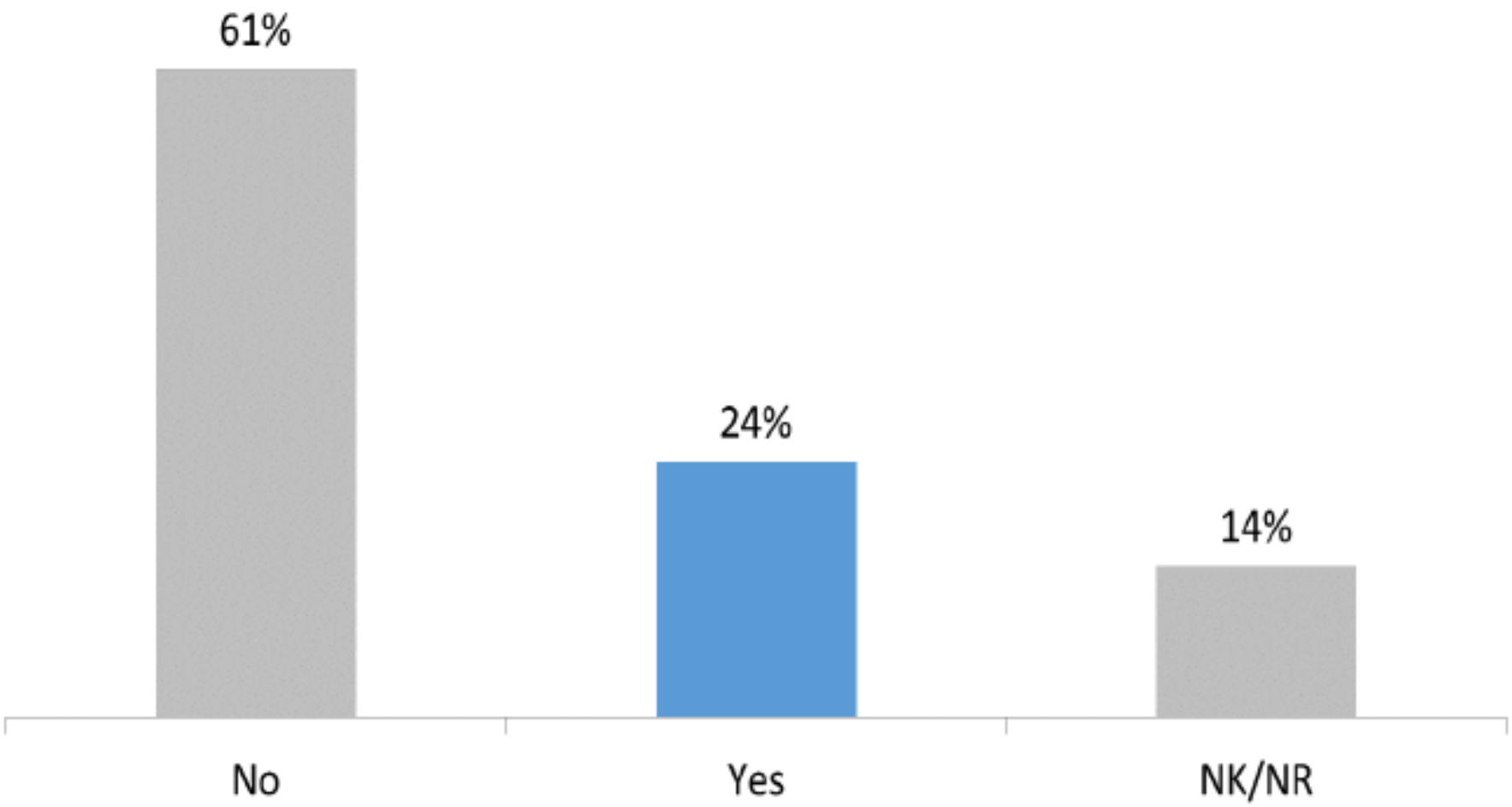
The majority of patients are transported by **ambulance**.



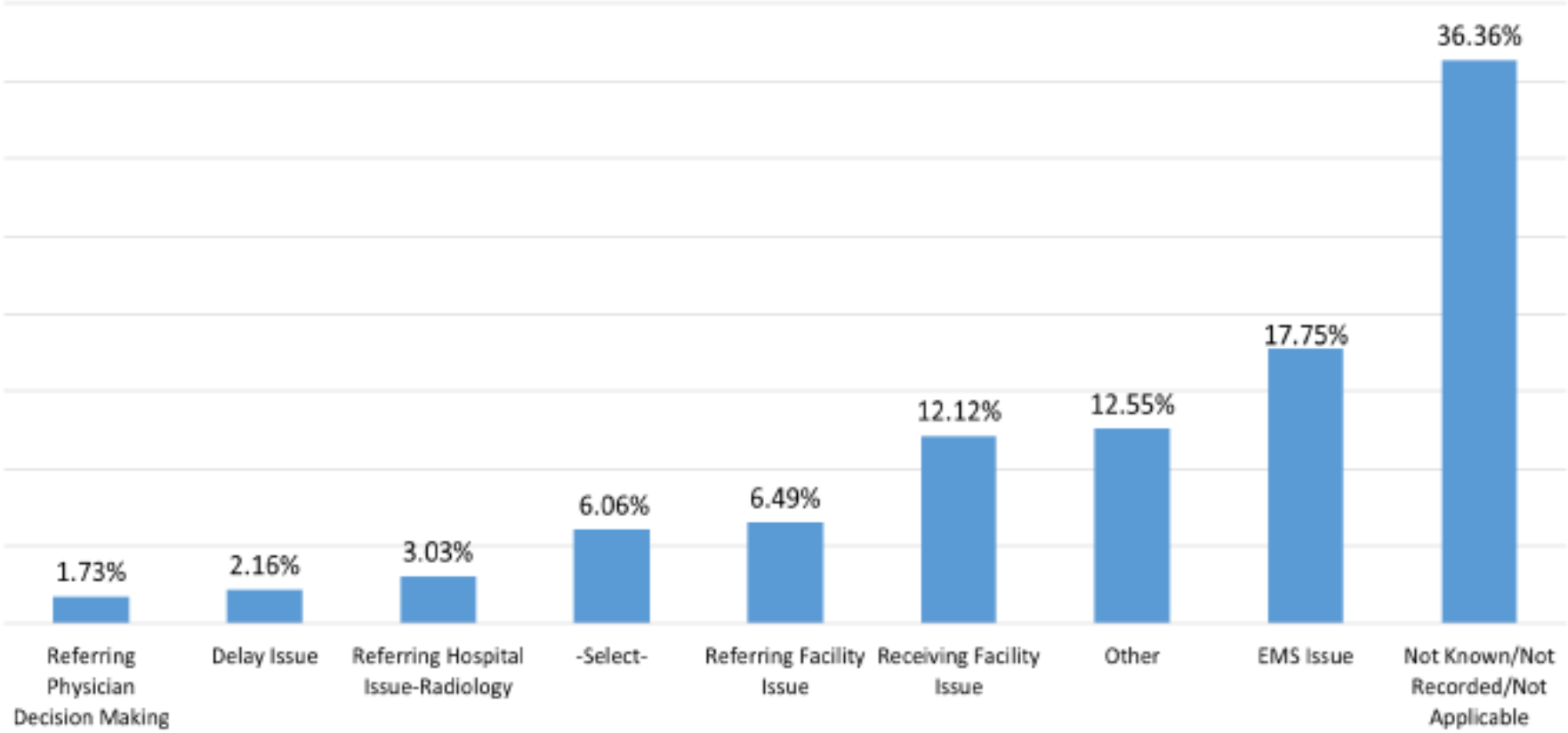
Most transfer patients are in the ED for **1-5 hours** at the final hospital.



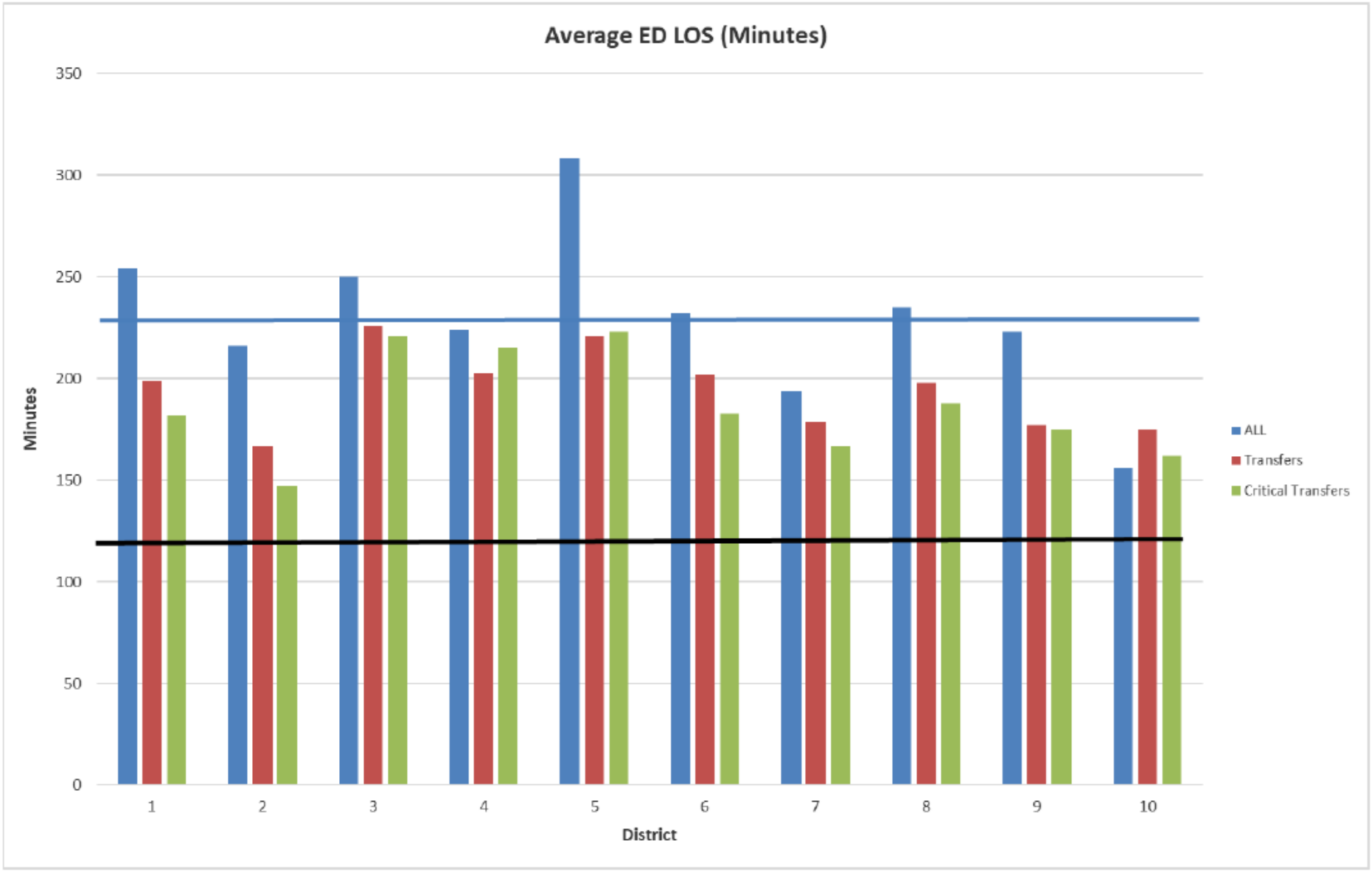
A small portion of transfers had a delay indicated.



Transfer delay reasons



ED LOS by District



Other Business

Indiana State Department of Health

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

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