Indiana State Trauma Care Committee

October 11, 2019

Indiana State
Department of Health

Introductions & approval of meeting minutes

Indiana State
Department of Health

The Opioid Crisis and the Surgeon
Changing the Culture of Pain Mangement

Brandy Padilla-Jones MD
October 11th 2019

Department of Surgery
Indiana University School of Medicine
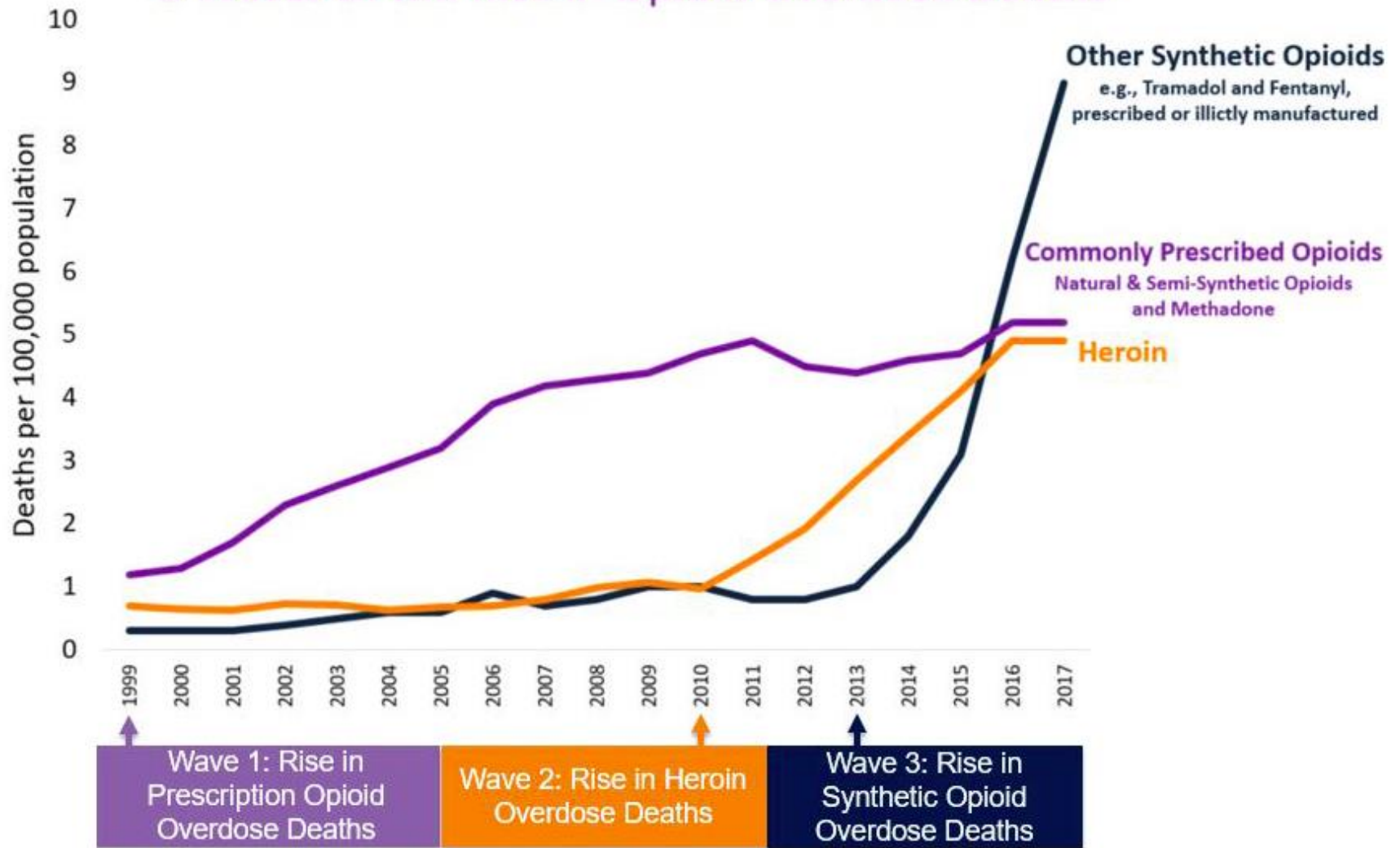
Disclosures

- None

Overview

- History of opioid use and the public health crisis.

- Changing culture in pain management.

- The provider's role in opioid reduction and responsible prescribing practices

- Opioids crisis and IU

History of Opioids: How Did We Get Here?

- Opium
- Morphine
- Heroin
- Oxycontin
- Synthetic drugs

3 Waves of the Rise in Opioid Overdose Deaths

SOURCE: National Vital Statistics System Mortality File.

Opioid Prescribing Rate

2017 Rate per 100 persons

- < 64.1
- 64.1 - 82.9
- 83.0 - 107.1
- > 107.1

https://www.cdc.gov/drugoverdose/maps/rxstate2017.html

2.5 hours — Someone is hospitalized for an overdose

12% — Of opioid naïve patients report abuse or addiction after first medical exposure
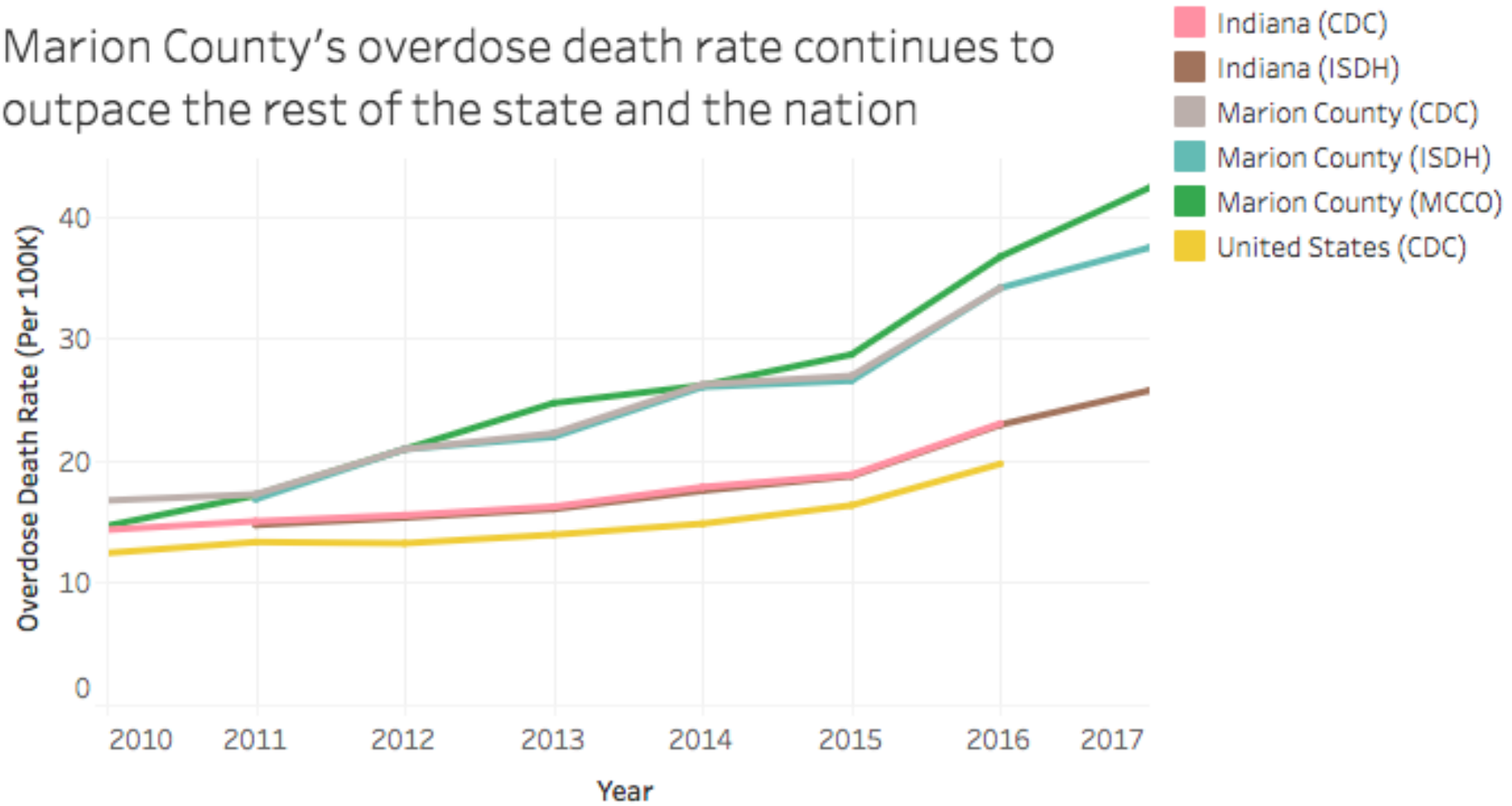
1,700/70,000 — People died from opioid related overdose

$64 Million — Cost of treating opioid dependent infants

$1.4 Billion — Indiana state medical costs and earning losses

https://www.rmff.org/wpcontent/uploads/2018/10/Opioid

Marion County's overdose death rate continues to outpace the rest of the state and the nation

Legend:
- Indiana (CDC)
- Indiana (ISDH)
- Marion County (CDC)
- Marion County (ISDH)
- Marion County (MCCO)
- United States (CDC)

Y-axis: Overdose Death Rate (Per 100K)
X-axis: Year (2010–2017)

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IU HEALTH

https://www.rmff.org/wpcontent/uploads/2018/10/Opioid

Indiana Drug Overdose Deaths

Figure 1. Drug overdose death rates* compared to motor vehicle-related death rates, Indiana residents, 1999-2015

*Age-adjusted death rates using the U.S. population as the standard
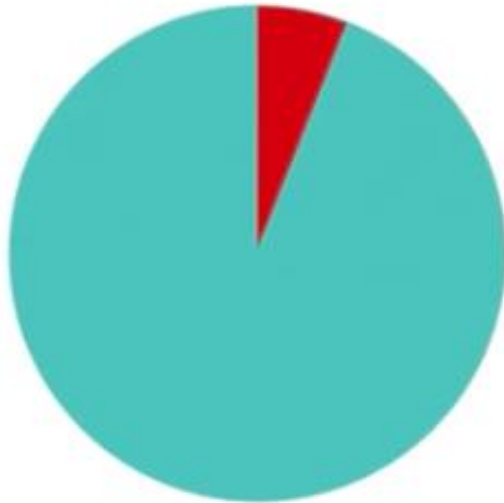
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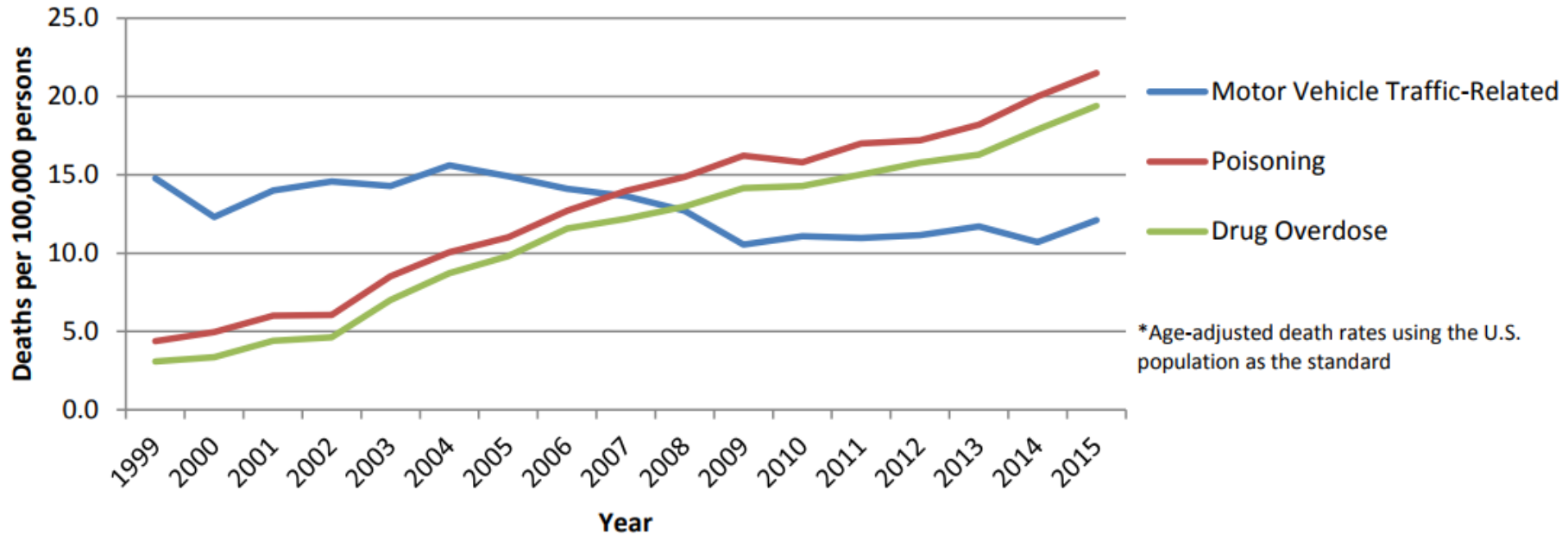
Public Health Crisis
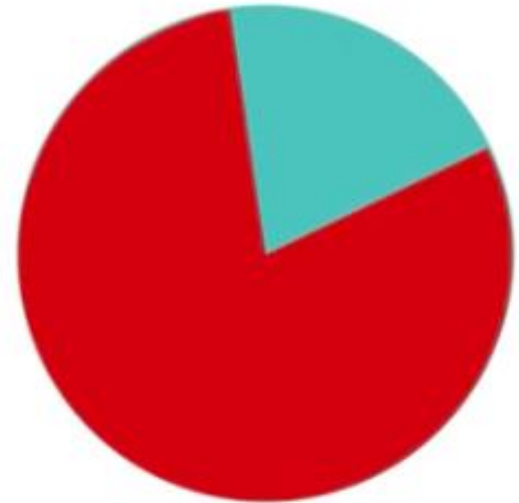
Public Health Crisis

4 %

US share of
world population

80 %

US share of
opioid consumption

Changing the Culture: Combating the Opioid Epidemic

- Government regulation and monitoring
- Reduction
- Mitigating Diversion
- Treatment

Pain Hurts!

The Surgeon's Role
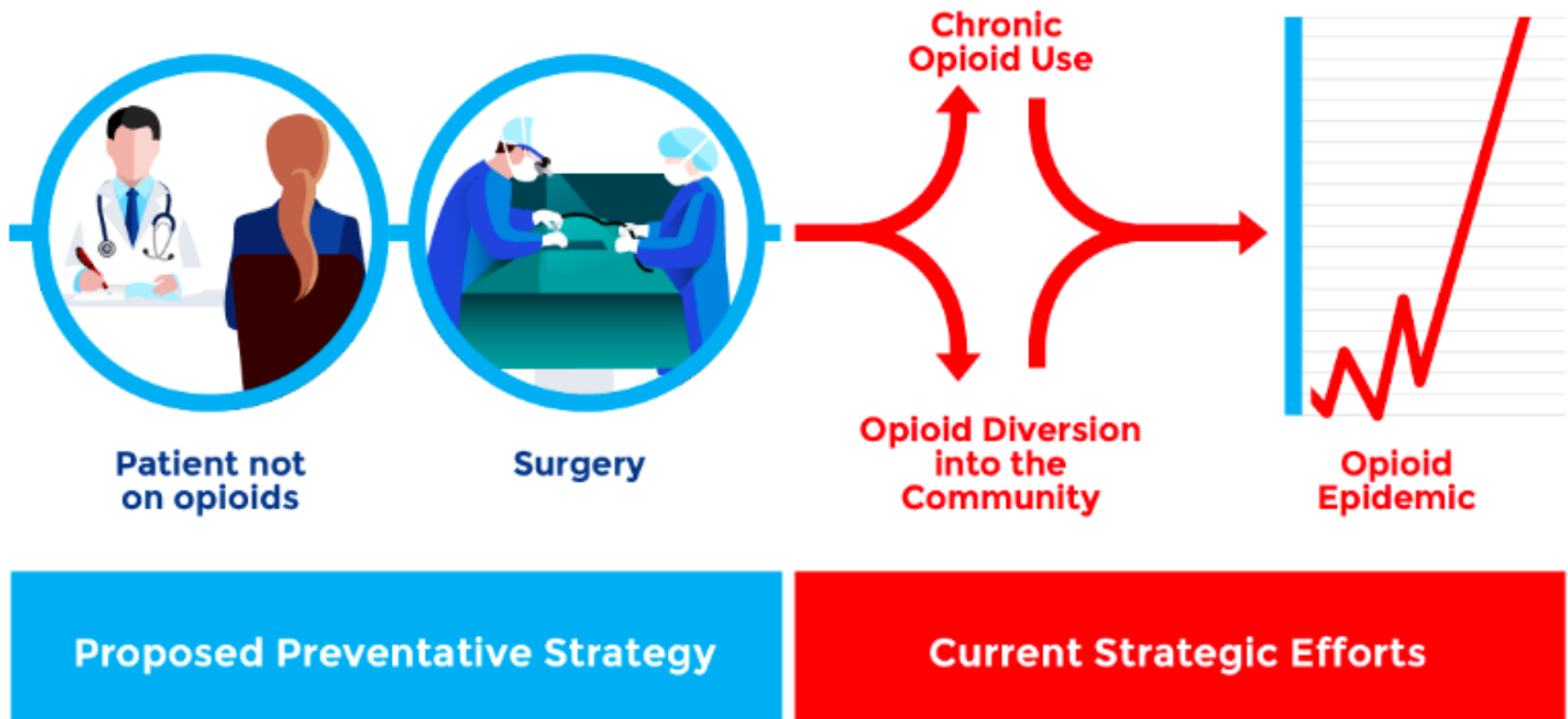
The Provider's Role

- Raise awareness
- Educate, educate, educate
- Patient counseling

Patient Counseling

- Setting expectations and norms:
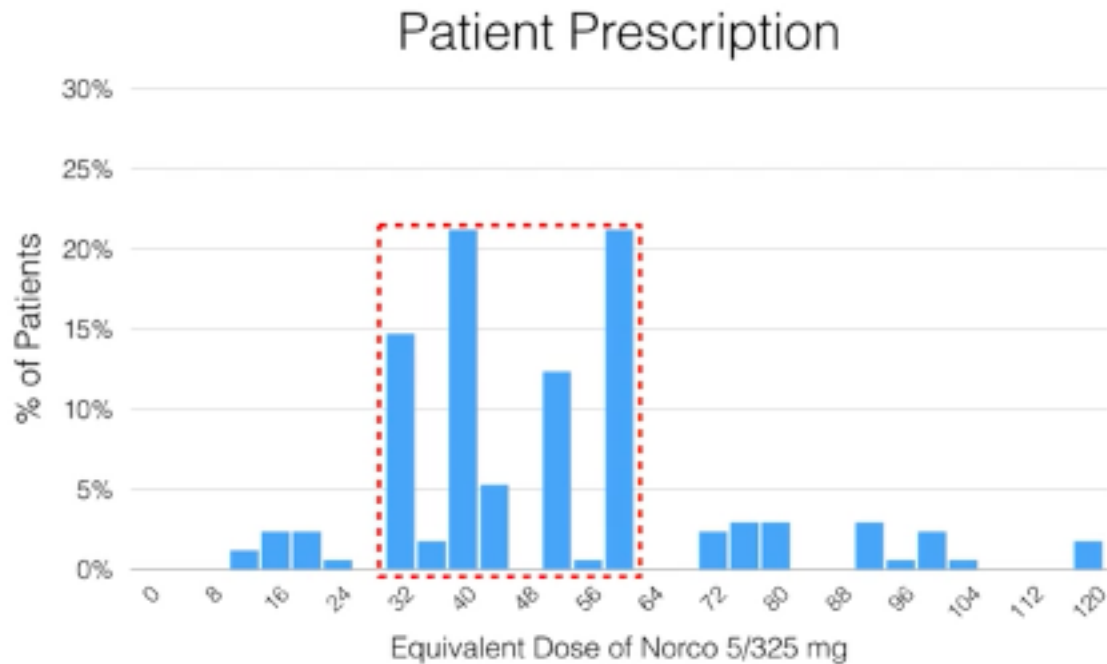
  Can you eat, ambulate, breath, sleep?

- Non-opioid use

- Appropriate use

- Adverse Effects

Preventing Chronic Opioid Use and Abuse Before it Starts
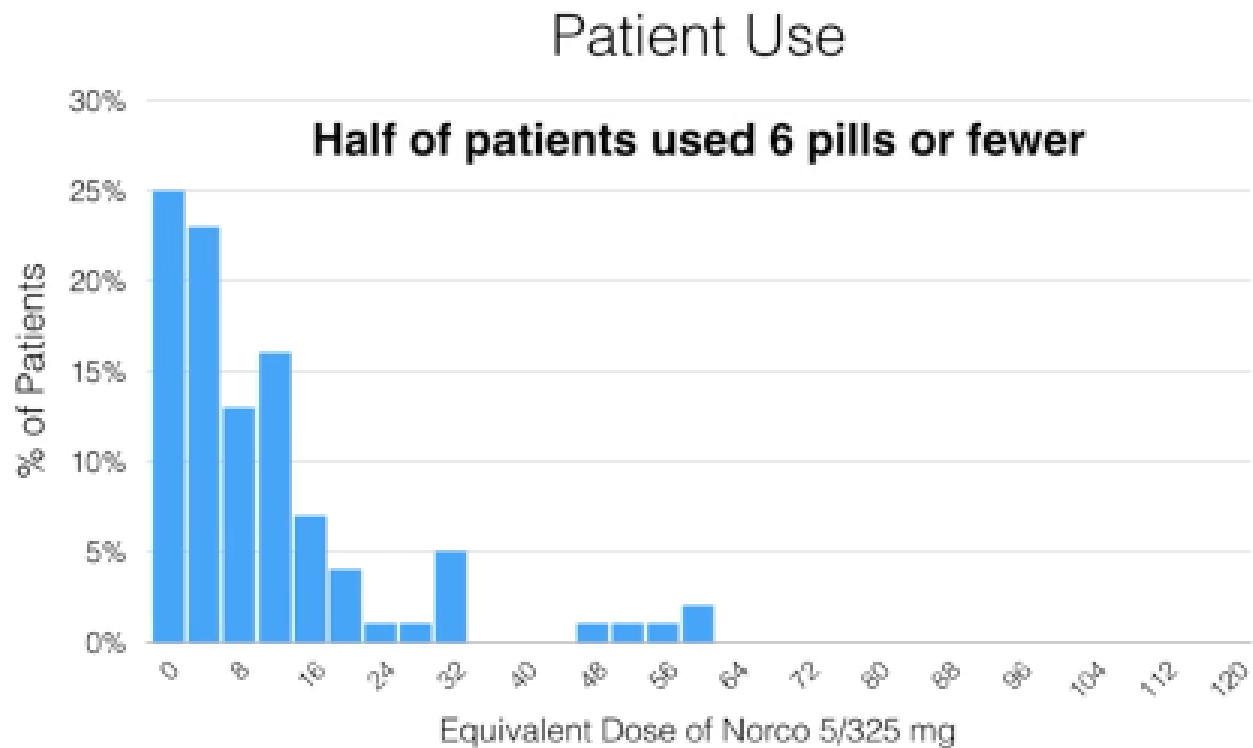
http://michigan-open.org/

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Over Prescribing

Over Prescribing

IU Health Prescribing

IUH Physicians: Scatter Plot
Dispense Quantity Unit: Tablet

260

Prescription Count

0

Dispense Quantity

28K
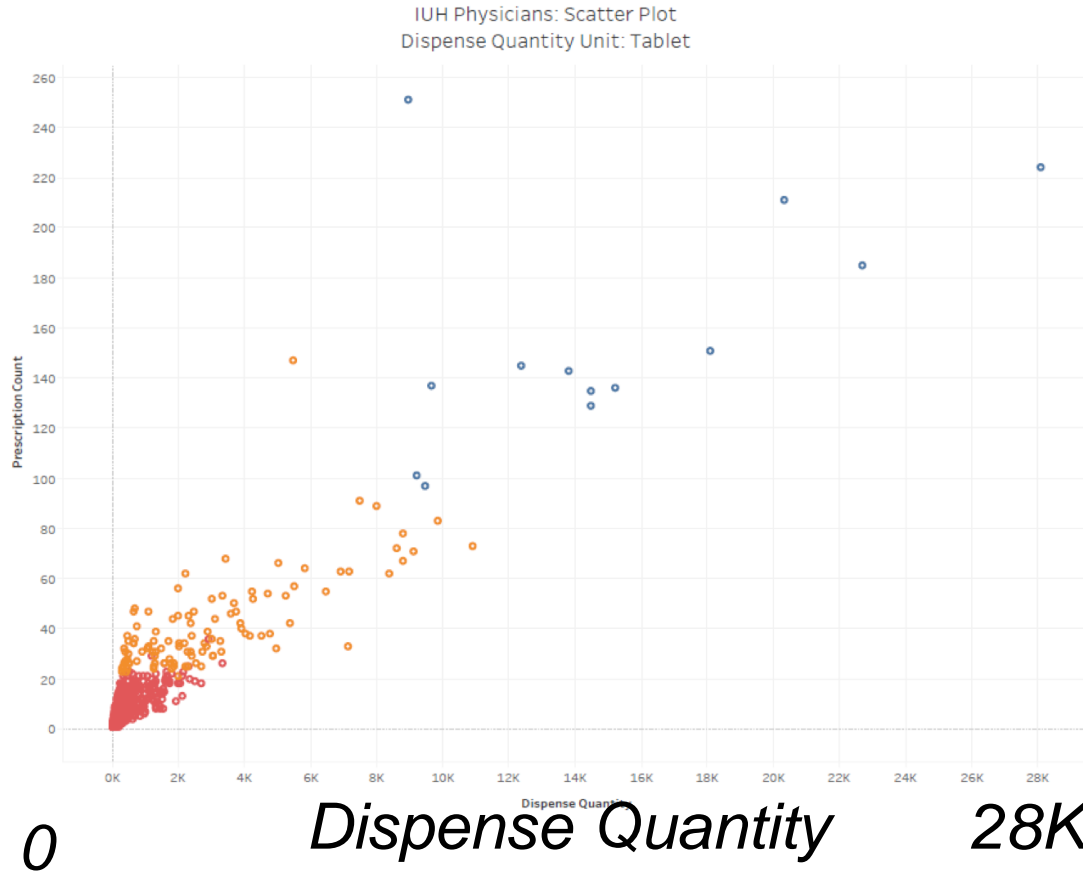
How much is enough?

Oral Opioid	Units	Conversion Factor	Total Daily Amount	MME
Codeine	mg	0.15		0
Tramadol	mg	0.1		0
Hydrocodone	mg	1		0
Oxycodone	mg	1.5		0
Methadone	mg	4, 8, 10, 12		0
Morphine	mg	1		0
Hydromorphone	mg	4		0
Transdermal Opioid				
Fentanyl	mcg/hr	2.4		0
Intravenous Opioid				
Morphine	mg	3		0
Hydromorphone	mg	15		0
Fentanyl	mcg	0.2		0
			Total MME	**0**

How much medication is it ok to administer to a healthy 20-year-old opioid naïve patient with pelvic and femur fractures complaining of 8/10 pain?

2mg IV dilaudid?
20mg oxycodone?
10mg IV morphine?
150mcg IV fentanyl?

Oral Opioid	Units	Conversion Factor	Total Daily Amount		MME
Codeine	mg	0.15			0
Tramadol	mg	0.1			0
Hydrocodone	mg	1			0
Oxycodone	mg	1.5			0
Oxymorphone	mg	3			0
Methadone	mg	4, 8, 10, 12			0
Morphine	mg	1			0
Hydromorphone	mg	4			0
Propoxyphene	mg	0.23			0
Tapentadol	mg	0.4			0
Transdermal Opioid					
Fentanyl	mcg/hr	2.4			0
Intravenous Opioid					
Morphine	mg	3			0
Hydromorphone	mg	15	2		30
Fentanyl	mcg	0.2			0
Remifentanil	mcg	0.2			
Sufentanil	mcg	2			0
				Total MME	**30**

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Oral Opioid	Units	Conversion Factor		Total Daily Amount		MME
Codeine	mg	0.15				0
Tramadol	mg	0.1				0
Hydrocodone	mg	1				0
Oxycodone	mg	1.5		20		30
Oxymorphone	mg	3				0
Methadone	mg	4, 8, 10, 12				0
Morphine	mg	1				0
Hydromorphone	mg	4				0
Propoxyphene	mg	0.23				0
Tapentadol	mg	0.4				0
Transdermal Opioid						
Fentanyl	mcg/hr	2.4				0
Intravenous Opioid						
Morphine	mg	3				0
Hydromorphone	mg	15				0
Fentanyl	mcg	0.2				0
Remifentanil	mcg	0.2				0
Sufentanil	mcg	2				0
					Total MME	**30**

Oral Opioid	Units	Conversion Factor		Total Daily Amount		MME
Codeine	mg	0.15				0
Tramadol	mg	0.1				0
Hydrocodone	mg	1				0
Oxycodone	mg	1.5				0
Oxymorphone	mg	3				0
Methadone	mg	4, 8, 10, 12				0
Morphine	mg	1				0
Hydromorphone	mg	4				0
Propoxyphene	mg	0.23				0
Tapentadol	mg	0.4				0
Transdermal Opioid						
Fentanyl	mcg/hr	2.4				0
Intravenous Opioid						
Morphine	mg	3		10		30
Hydromorphone	mg	15				0
Fentanyl	mcg	0.2				0
Remifentanil	mcg	0.2				
Sufentanil	mcg	2				0
					Total MME	**30**

Oral Opioid	Units	Conversion Factor		Total Daily Amount		MME
Codeine	mg	0.15				0
Tramadol	mg	0.1				0
Hydrocodone	mg	1				0
Oxycodone	mg	1.5				0
Oxymorphone	mg	3				0
Methadone	mg	4, 8, 10, 12				0
Morphine	mg	1				0
Hydromorphone	mg	4				0
Propoxyphene	mg	0.23				0
Tapentadol	mg	0.4				0
Transdermal Opioid						
Fentanyl	mcg/hr	2.4				0
Intravenous Opioid						
Morphine	mg	3				0
Hydromorphone	mg	15				0
Fentanyl	mcg	0.2		150		30
Remifentanil	mcg	0.2				
Sufentanil	mcg	2				0

Total MME **30**

Prescribing Recommendations
UPDATED 2019

Procedure	Oxycodone* 5mg tablets
Laparoscopic Cholecystectomy	10
Open Cholecystectomy	15
Appendectomy – Lap or Open	10
Hernia Repair – Major or Minor	10
Colectomy – Lap or Open	15
Ileostomy/Colostomy Creation, Re-siting, or Closure	15
Open Small Bowel Resection or Enterolysis	20
Thyroidectomy	5
Sleeve Gastrectomy	10
Prostatectomy	10
Laparoscopic Anti-reflux (Nissen)	10
Laparoscopic Donor Nephrectomy	10
Cardiac Surgery via Median Sternotomy	15

Procedure	Oxycodone* 5mg tablets
Hysterectomy – Vaginal, Lap/Robotic, or Abdominal	15
Cesarean Section	15
Breast Biopsy or Lumpectomy	5
Lumpectomy + Sentinel Lymph Node Biopsy	5
Sentinel Lymph Node Biopsy Only	5
Wide Local Excision ± Sentinel Lymph Node Biopsy	20
Simple Mastectomy ± Sentinel Lymph Node Biopsy	20
Modified Radical Mastectomy or Axillary Lymph Node Dissection	30
Carotid Endarterectomy	10
Total Hip Arthroplasty	30
Total Knee Arthroplasty	50
Dental	0

*The recommendations remain the same if prescribing hydrocodone 5mg

OPEN
OPIOID PRESCRIBING ENGAGEMENT NETWORK

http://michigan-open.org/

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Opioid Reduced Pain Treatment Multi-Modal Analgesia

Acetaminophen

NSAIDS

Gabapentinoid

Lidocaine patch

Oral Opioids

Non-selective cyclooxygenase inhibitors

Several Contraindications
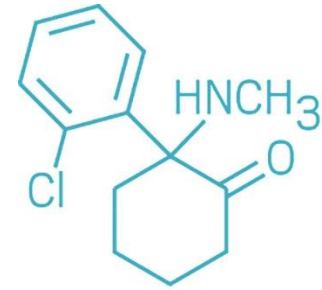
No increased incidence of bleeding

Other Non-Traditional Opioid Adjuncts

- Muscle relaxants

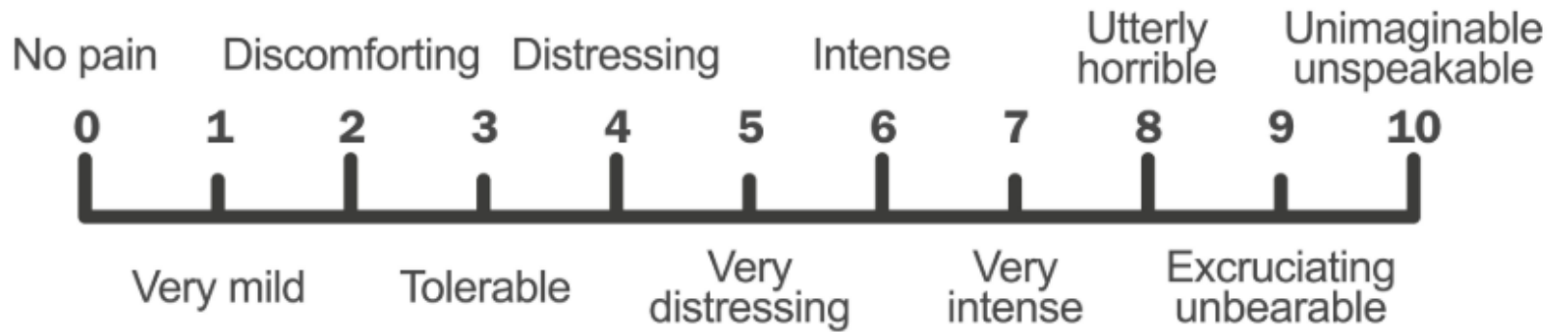- Clonidine/Dexmetatomidine

- Cannabinoids

Ketamine

- Blocks NMDA receptors

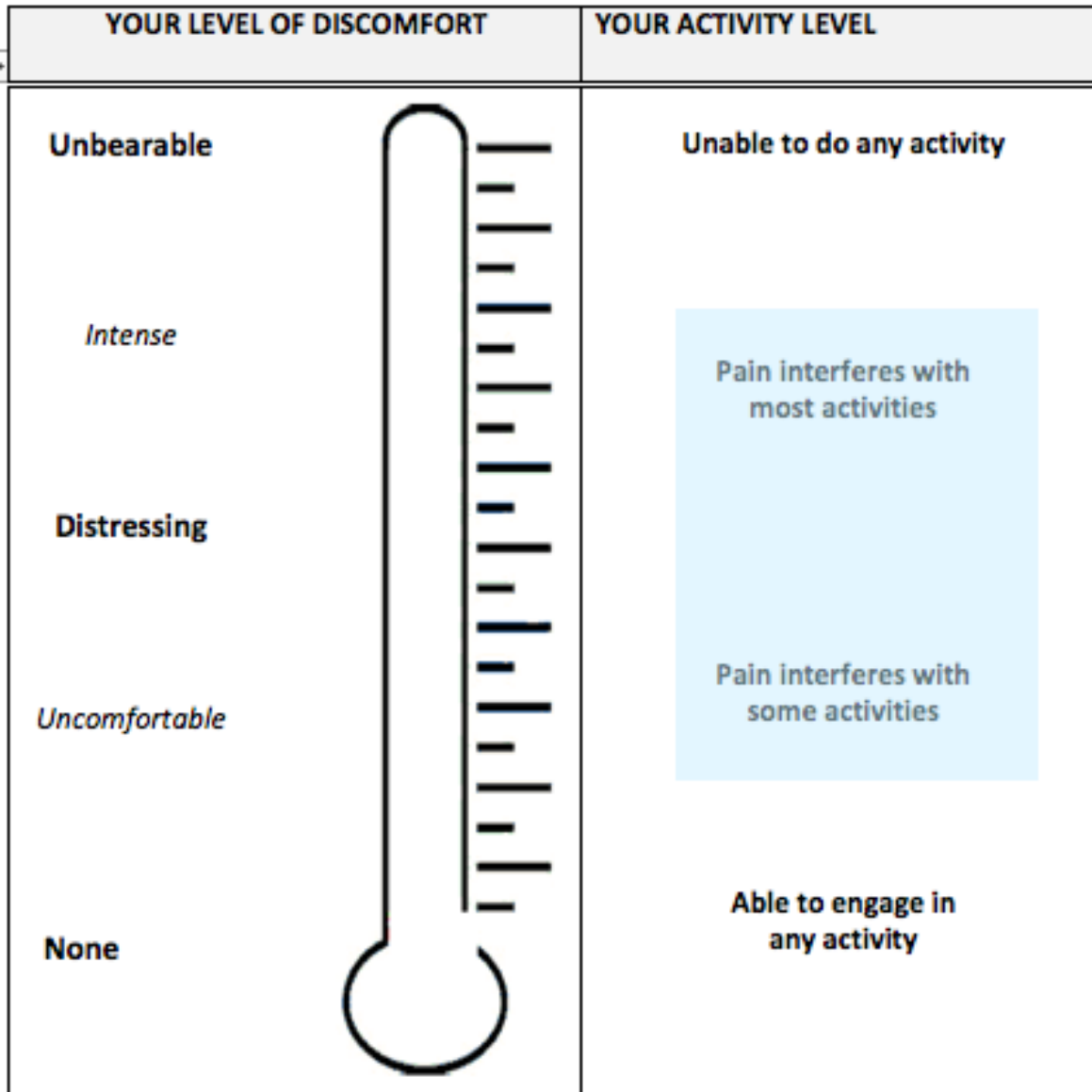- No psychomimetic effects at low doses

- Antidepressant metabolites

Continuous Assessment

- Escalation

- De-escalation

- Continuation of adequate regimen

No pain | Discomforting | Distressing | Intense | Utterly horrible | Unimaginable unspeakable

0 1 2 3 4 5 6 7 8 9 10

Very mild | Tolerable | Very distressing | Very intense | Excruciating unbearable

YOUR LEVEL OF DISCOMFORT	YOUR ACTIVITY LEVEL
Unbearable	**Unable to do any activity**
Intense	Pain interferes with most activities
Distressing	
Uncomfortable	Pain interferes with some activities
None	**Able to engage in any activity**

		Examples	
0	No Pain	No pain	0
1	Unpleasant Sensation - An occasional uncomfortable feeling. Almost no limit to function	Mild skin irritation	1
2	Minimal - Pain frequently brought to one's attention but acceptable. Able to engage in pleasures of life with some interference. Causes to avoid rigorous activities.	Small bruise	2
3	Mild - Tolerable, but unsettling and on one's mind. Interferes with pleasures of life. Stops some productive activities.	Scraped knee, Jammed finger	3
4	Mild to Moderate - Only short intervals of comfortable function; sometimes interrupts Activities of Daily Living, such as bathing and clothing and regularly prevents involvement in many tasks outside of the home. Decrease in job performance.	Major bruise, Ankle sprain	4
5	Moderate - Pain constantly on one's mind; decrease in concentration, job performance and noticeably decreased enjoyment of life. Frequent missed work / time off. Cannot perform normal tasks without an increase in pain.	Moderate toothache, Headache for days	5
6	Moderate to Severe - Significant limitations of Activities of Daily Living; productive activity/work is nearly impossible. Hard to do anything, but think of pain and ER visit.	Day after major surgery pain	6
7	Severe - Difficulty doing more than basic chores; pain prevents productive activity. Frequent crying; pain is impossible to tolerate for long period of time without going to the ER.	Stabbed with a knife, Broken leg	7
8	Debilitating - Causes uncontrollable moaning and distress and completely impairs productive activity. Cannot be still, can't maintain a reasonable conversation. It is impossible to "put on a good face." Emergency medical attention is required.	Natural childbirth, Small kidney stone	8
9	Agonizing - Individual cannot function; uncontrolled screaming and tearfulness. Emergency medical attention is required and hospitalization is recommended.	Arm burning in a fire, Large kidney stone	9
10	Worst Imaginable - Paralyzing; person is in and out of consciousness and near death as a result of the pain. Emergency medical attention and hospitalization are required.	Being torn apart while still alive	10

© 2016 Indiana Polyclinic

Methodist ACS Multimodal Pain Protocol Project

Unless contraindication exists:

- **Acetaminophen**
- **Naproxen**
- **Gabapentin**
- **Lidocaine patch**
- Tramadol
- Oxycodone
- IV opioids reserved for hyperacute settings

Methodist ACS Multimodal Pain Protocol Project: ISDH Grant Funding

Clinical nurse educators

- Patient education
- Formal educational sessions for providers and learners
- Monitoring protocol adherence
- Data collection

Other Research and Projects

- **Acute care surgery pain protocol Methodist Hospital: pre-post**
- **Survey based studies: attitudes and perceptions**
- **Multi-Institutional prospective MMP**
- **EAST Practice Management Guidelines**
- Lidocaine infusion for multiple rib fractures
- Ketamine infusion for severe pain
- Application of functional pain scales
- Spinal and regional anesthesia

In Summary

- The pendulum of medical opioid use has been swinging for centuries.

- Pharmaceutical advancements and unmonitored prescribing practices have lead to an opioid epidemic.

- It is our responsibility to contribute positively to change.

References

1. Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2017. Available at http://wonder.cdc.gov.

2. Scholl L, Seth P, Kariisa M, Wilson N, Baldwin G. Drug and Opioid-Involved Overdose Deaths – United States, 2013-2017. WR Morb Mortal Wkly Rep. ePub: 21 December 2018.

3. Kolodny et al. 2015. The prescription opioid and heroin crisis: A public health approach to an epidemic of addiction. Annual Review of Public Health, 36, 559-74

4. Rudd RA, Aleshire N, Zibbell JE, Gladden RM. Increases in Drug and Opioid Overdose Deaths – United States, 2000-2014. MMWR 2016, 64(50); 1378-82.

5. http://michigan-open.org/

6. Low-dose ketamine for pain control in patients with multiple rib fractures Hai-Jun Hou, MD, Fu-Shan Xue, MD, Liu-Jia-Zi Shao, MD, Lei Wan, MD

7. Pol Arch Intern Med. 2017 Nov 30;127(11):785-789. doi: 10.20452/pamw.4123. Epub 2017 Oct 25.**Medical cannabis for the treatment of chronic pain and other disorders: misconceptions and facts.**Hill KP, Palastro MD.

8. The *Functional Pain Scale:* Reliability, Validity, and Responsiveness in an Elderly Population IF.M.GlothIIIMD, CMD[a]A.A.ScheveMS, RN-C[b]C.V.StoberBS[c]SelinaChow[d]JaneProsserBS[e]

9. Use of **Intravenous Lidocaine** for the Treatment of **Acute Pain** in the Emergency Department Wiafe J, Sin B, Kramer A, Yakobi R.Ann Pharmacother. 2017 Oct;51(10):923.

10. Continuous **Lidocaine** Infusion as Adjunctive Analgesia in Intensive Care Unit Patients.Mo Y, Thomas MC, Antigua AD, Ebied AM, Karras GE Jr.J Clin Pharmacol. 2017 Jul;57(7):830-836.

* Pill disposal sites: https://www.in.gov/bitterpill/2549.htm

Questions?

Updates

Katie Hokanson, *Director of Trauma and Injury Prevention*

Indiana State
Department of Health

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

Labor of Love Summit 2019

Wednesday, December 11, 2019

JW Marriott | 10 S. West Street, Indianapolis, IN 46204

#INlaboroflove

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

Division grant activities

- Overdose Data 2 Action (OD2A)Comprehensive Opioid Abuse Site-based Program (COAP)
  - Awarded & funded for 3 years!
    - Largest grant the division has ever applied for.
      - **$7.1 million per year for 3 years**
  - Hosted a webinar October 2 to share the specifics of the grant: https://www.in.gov/isdh/27756.htm

  - Funding opportunity for local communities!!!
    - **$1.2 million dollars**

About Project ECHO

- ECHO = Extension for Community Healthcare Outcomes

- Mission: "...democratize medical knowledge and get best practice care to underserved people all over the world."

- Project ECHO® is a lifelong learning and guided practice model that revolutionizes medical education and exponentially increases workforce capacity to provide best practice specialty care and reduce health disparities through its hub-and-spoke knowledge sharing networks

People need access to specialty care for complex conditions

Not enough specialists to treat everyone, especially in rural communities

ECHO® trains primary care clinicians to provide specialty care services

Patients get the right care, in the right place, at the right time.

IN CAREs ECHO Goal & Areas of Focus

- **Goal: Reduce drug overdose deaths**

- Key IN CAREs ECHO focus areas:

  1. Collect and monitor data on OD death
  2. Provide rapid access to low-barrier OUD treatment
  3. Promote widespread availability of naloxone
  4. Promote ready access to recovery supports

IN CAREs ECHO Hub and Spoke teams

- Connect a group of faculty experts, the "Hub" who have experience in reducing overdose (OD) deaths with community based teams - "Spokes"- comprised of leaders from various sectors of the community.

- The Spoke team will be committed to working together to implement strategies and coordinate efforts to reduce opioid misuse and reduce morbidity and mortality associated with opioid use disorder (OUD)

Community 1

Community 2

Community 3

IN CAREs ECHO Faculty Hub

Community 4

Community 5

IN CAREs ECHO Sessions

1. Beginning in December, 2019 or January, 2020

2. Once a month – 90 minutes – 9 or 10 months

3. Each session will include:

   – a didactic presentation
   – a case presentation and discussion
4. Didactic topics will include:

   – Tackling the stigma of addiction;
   – Increasing access to naloxone;
   – Using data to better understanding OD deaths; and more.

Division staffing updates

- Lauren Harding
  - Drug Overdose Prevention Epidemiologist

- Division interns:
  - Maria
  - Jacqueline
  - Madeline
  - Crystal

Indiana State
Department of Health

ESKENAZI HEALTH

Frostbite
Richard M. Fairbanks Burn Center at Eskenazi Health
Indianapolis, IN

Regional Updates

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

Indiana State
Department of Health

Regional updates

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

Indiana State
Department of Health

Email questions to: **indianatrauma@isdh.in.gov**
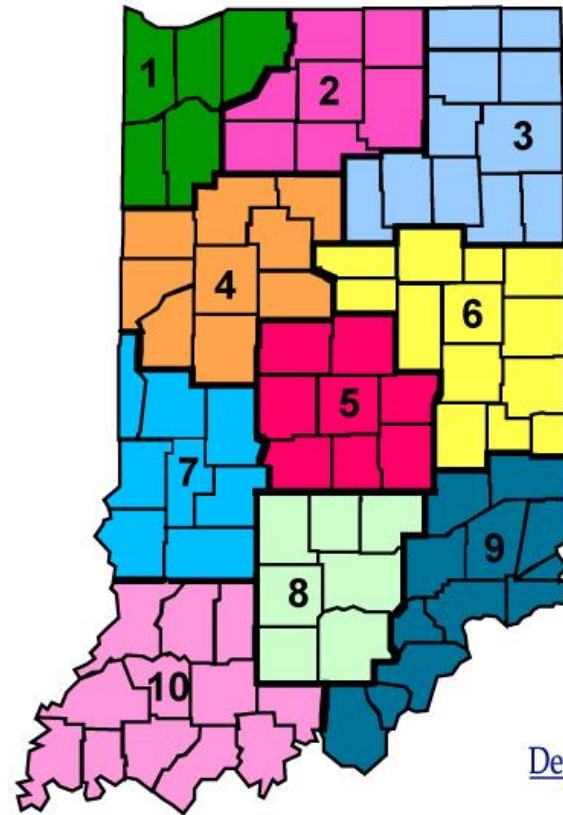
OB NAVIGATOR PROGRAM

Indiana State Trauma Care Committee

October 11, 2019

AGENDA

- Why OB Navigator? A Review of the Data
- What is OB Navigator? An overview of the project
- How can I help? Steps you can take
- Questions and discussion

- Contact us at any time!
  - OBNav@isdh.IN.gov
  - https://www.in.gov/isdh/28233.htm

WHY OB NAVIGATOR?

A review of the data

INFANT MORTALITY IN THE MIDWEST, 2017

Infant mortality rate:
Number of deaths per 1,000 live births

Bar chart showing infant mortality rates: Minnesota 4.8, Iowa 5.3, Illinois 6.1, Missouri 6.2, Wisconsin 6.4, Michigan 6.8, Ohio 7.2, Indiana 7.3
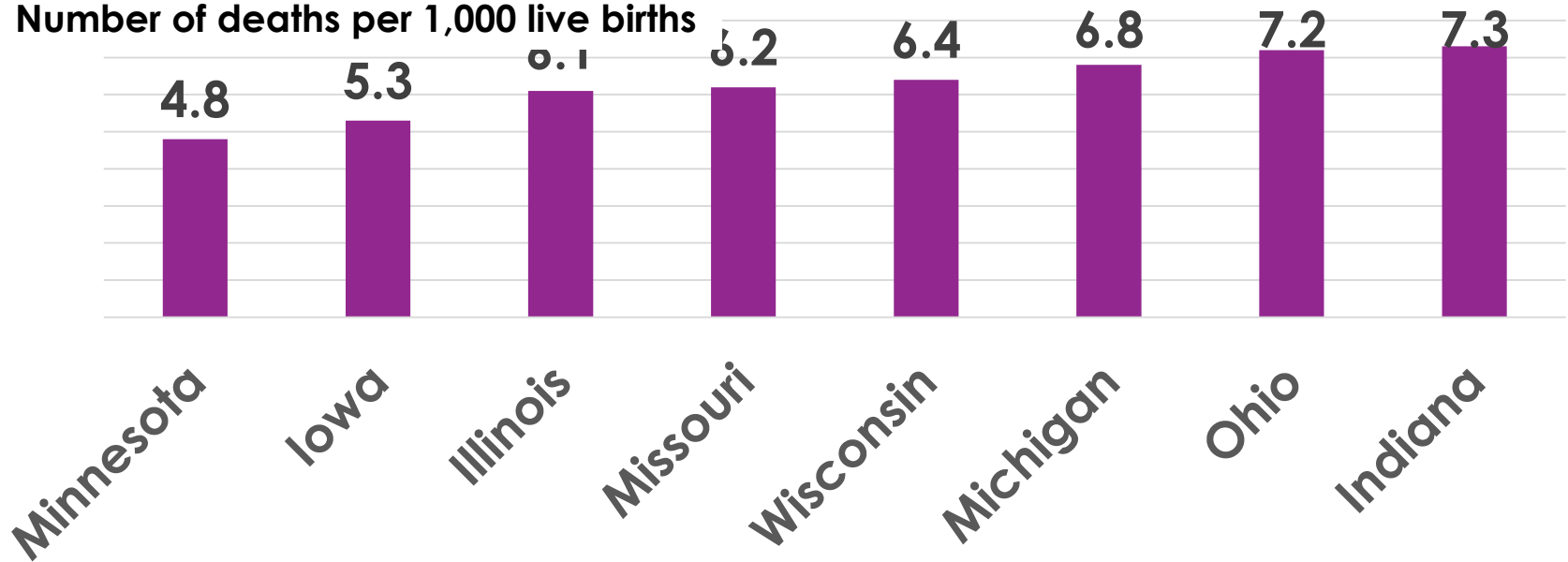
PERSISTENT DISPARITIES

Infant Mortality Rates
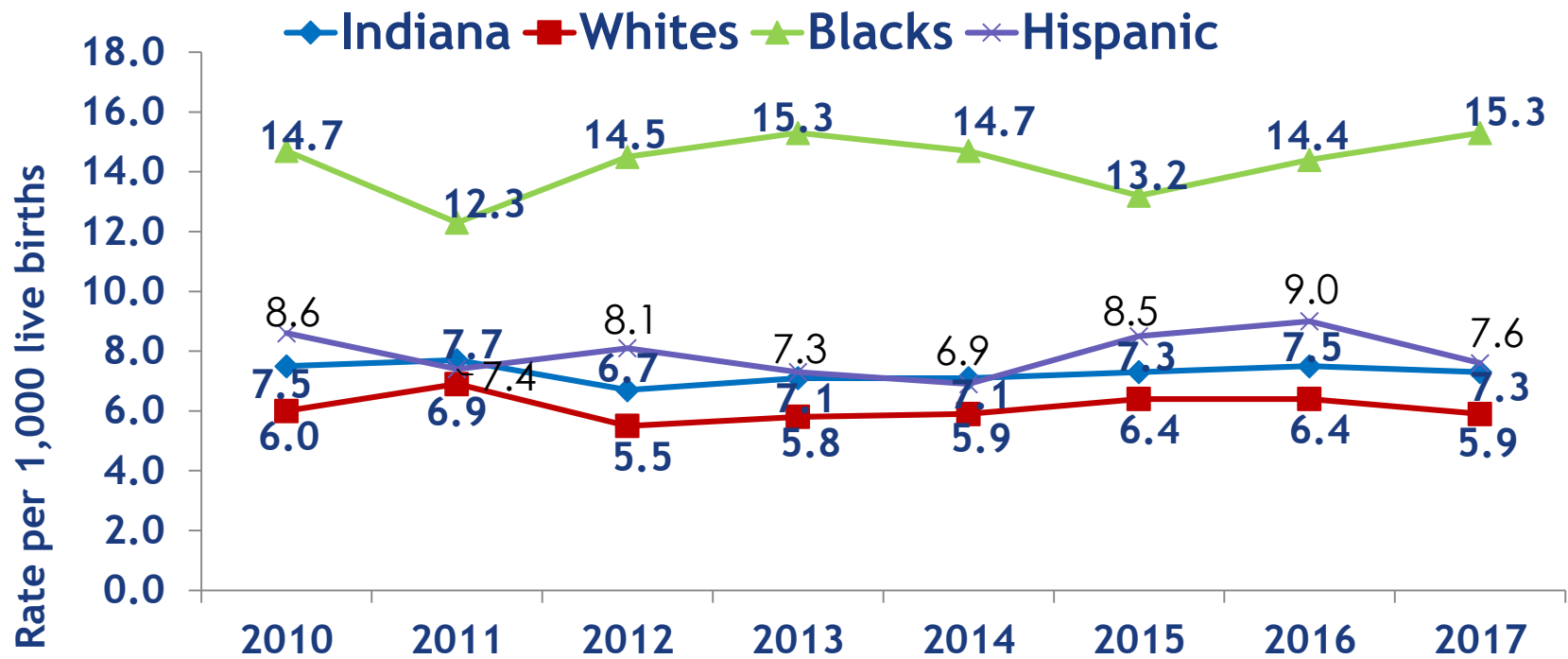
Zip Code	County	Births	Deaths	Infant Mortality Rate (IMR)	White IMR	Black IMR
46404	**Lake**	**1,093**	**22**	**20.1**	******	**21.2**
46312	**Lake**	**2,350**	**37**	**15.7**	**11.2***	**23.4**
46324	**Lake**	**1,409**	**22**	**15.6**	**15.0***	**24.1***
46806	Allen	2,333	36	15.4	13.1*	**22.2**
46218	Marion	2,490	36	14.5	**	**18.7**
46619	St. Joseph	1,631	23	14.1	5.7*	19.8*
46226	Marion	3,483	44	12.6	6.5*	**14.8**
46203	Marion	3,093	39	12.6	10.2	16.4*
46205	Marion	2,417	30	12.4	8.9*	**15.3**
47130	Clark	2,966	36	12.1	12.3	15.6*
46628	St. Joseph	2,059	24	11.7	4.2*	**20.8**
46229	Marion	1,976	23	11.6	6.3*	13.8*
46235	Marion	3,191	37	11.6	6.3*	**13.0**

Highest-risk ZIP Codes, 2013-2017

*Numerator less than 20, the rate is unstable.
**Rate has been suppressed
due to five or fewer outcomes.

Causes of Infant Mortality by Race
Indiana 2017

White
N = 391

Black
N = 165

**Assaults /
Injuries
4.1**

**Assaults /
Injuries
4.2**

**All Other
15.3%**

**Perinatal
Risks 45.3%**

**SUIDs
14.6%**

**Congenital
Malforma…%**

**All
Oth…%**

**Perinatal
Risks 52.1%**

**SUIDs
24.8%**

**Congenital
Malforma…%**
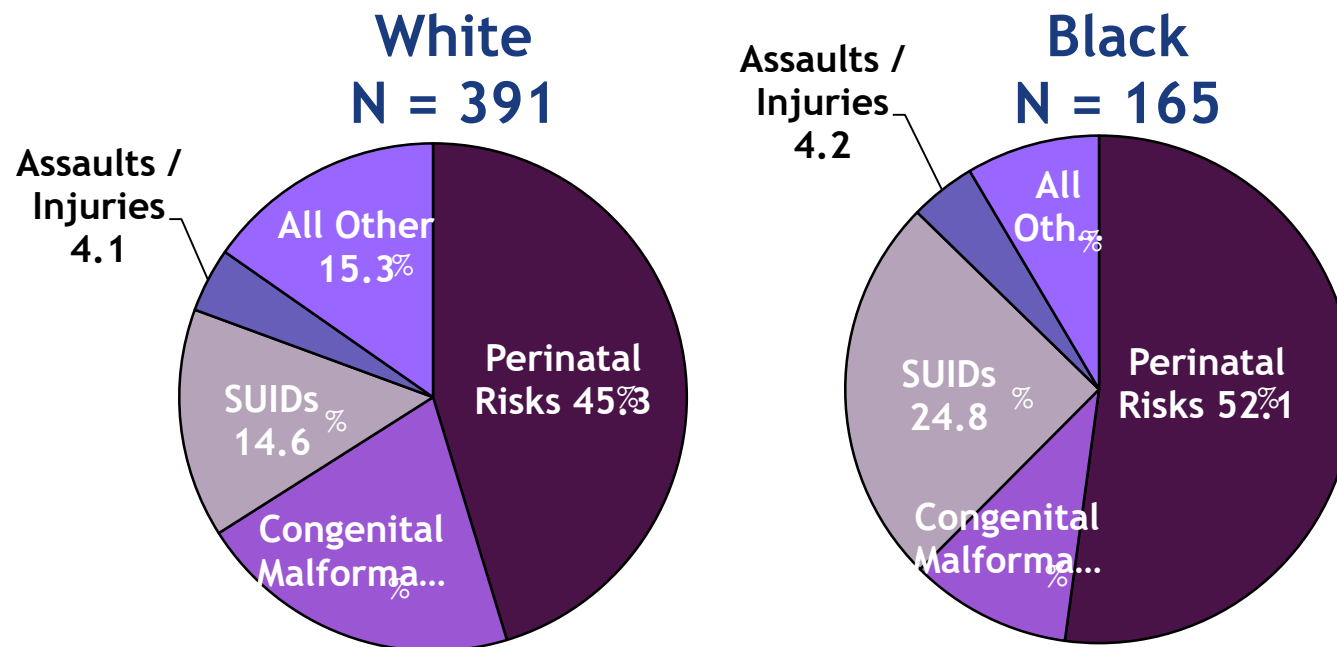
Source: Indiana State Department of Health, Maternal & Child Health Epidemiology Division [November 1, 2018]
Indiana Original Source: Indiana State Department of Health, PHPC, ERC, Data Analysis Team

THE CHALLENGE

To be Best in the Midwest…

INDIANA

…by 2024

THE CHALLENGE

To save 200 babies a year by 2024

WHAT IS OB NAVIGATOR?

An overview of the program

HOUSE ENROLLED ACT 1007

"The state department shall establish a **perinatal navigator program** for the purposes of engaging pregnant women in **early prenatal care** and providing referrals to pregnant women for **wraparound services and home visiting programs in the local community**."

- Signed into law by Governor Holcomb on May 8, 2019

DEFINITION

For the purposes of this project, an OB navigator is a home visitor who provides personalized guidance and support to a woman during her pregnancy and at least the first six to 12 months after her baby is born.

The Vision and the Plan

- The vision is for every pregnant woman in Indiana to be supported by a navigator.

- In 2020, we will start working with women who live in high-risk areas and who are insured by Medicaid.

- The Lake County rollout is scheduled for April.

Perinatal High Risk Areas
2013-2017

- high priority zip codes
- high priority counties

areas assessed using stable infant mortality rates, percentages of women smoking during pregnancy, percentages of preterm and low birthweight births, and SUIDs rates

Source: Indiana State Department of Health
Maternal and Child Health Division
Updated: January 2019

PROCESS FLOWCHART

Identify Pregnant Woman → Transfer Data → Screen Woman → Refer Woman → Home Visiting Services

Direct/Self Referral → Screen Woman
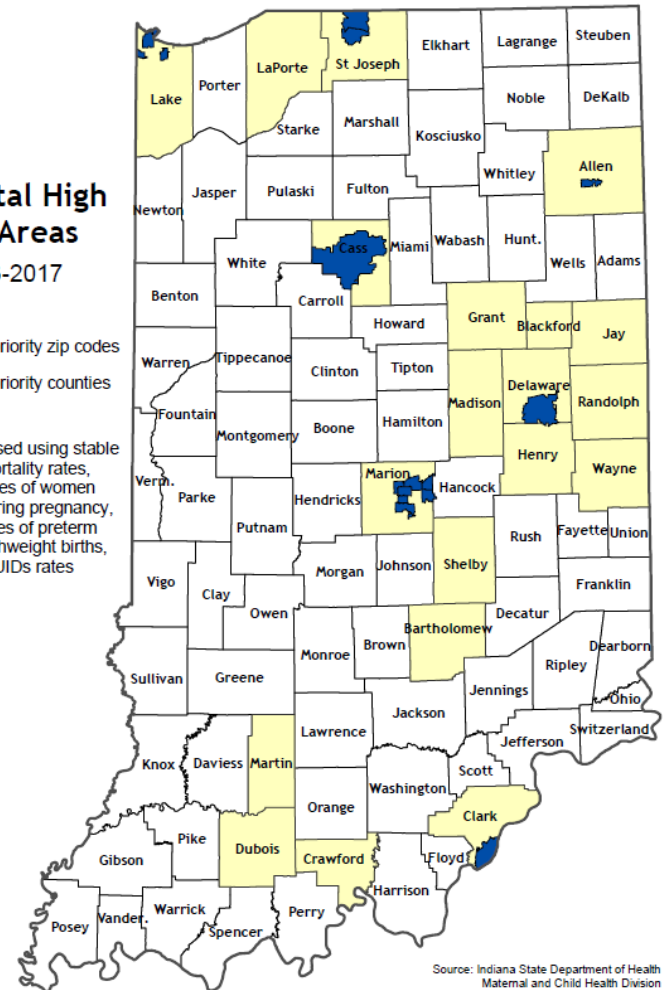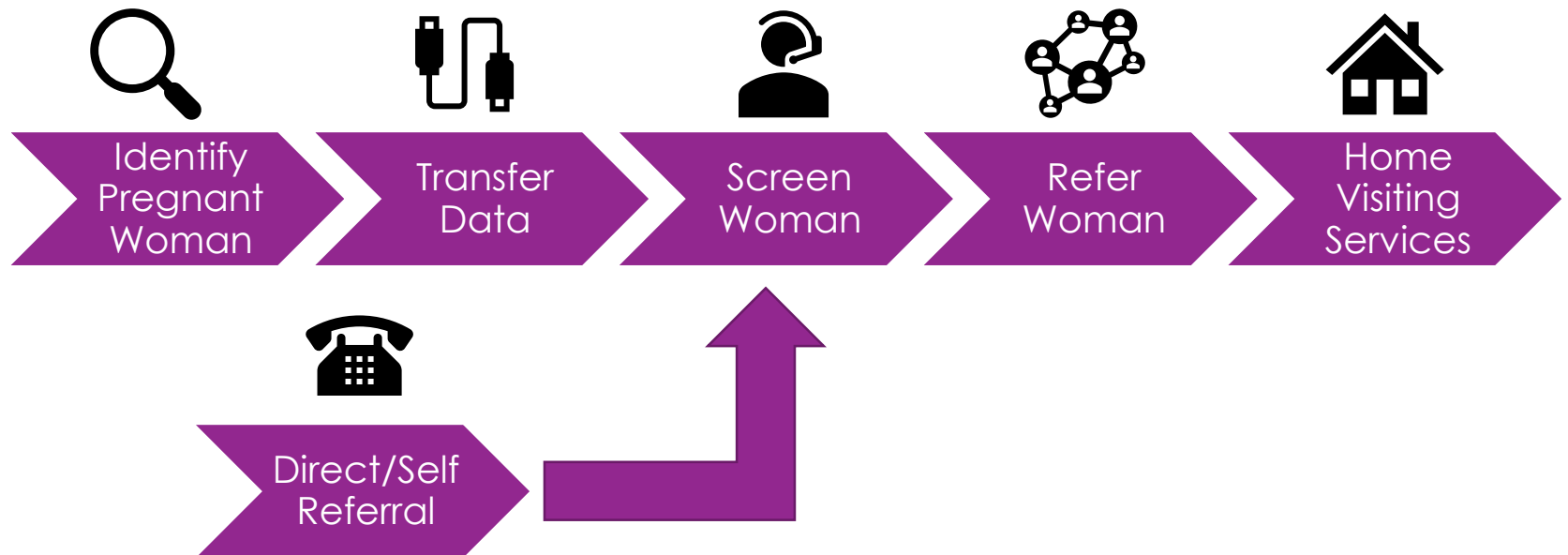
HOME VISITING SERVICES
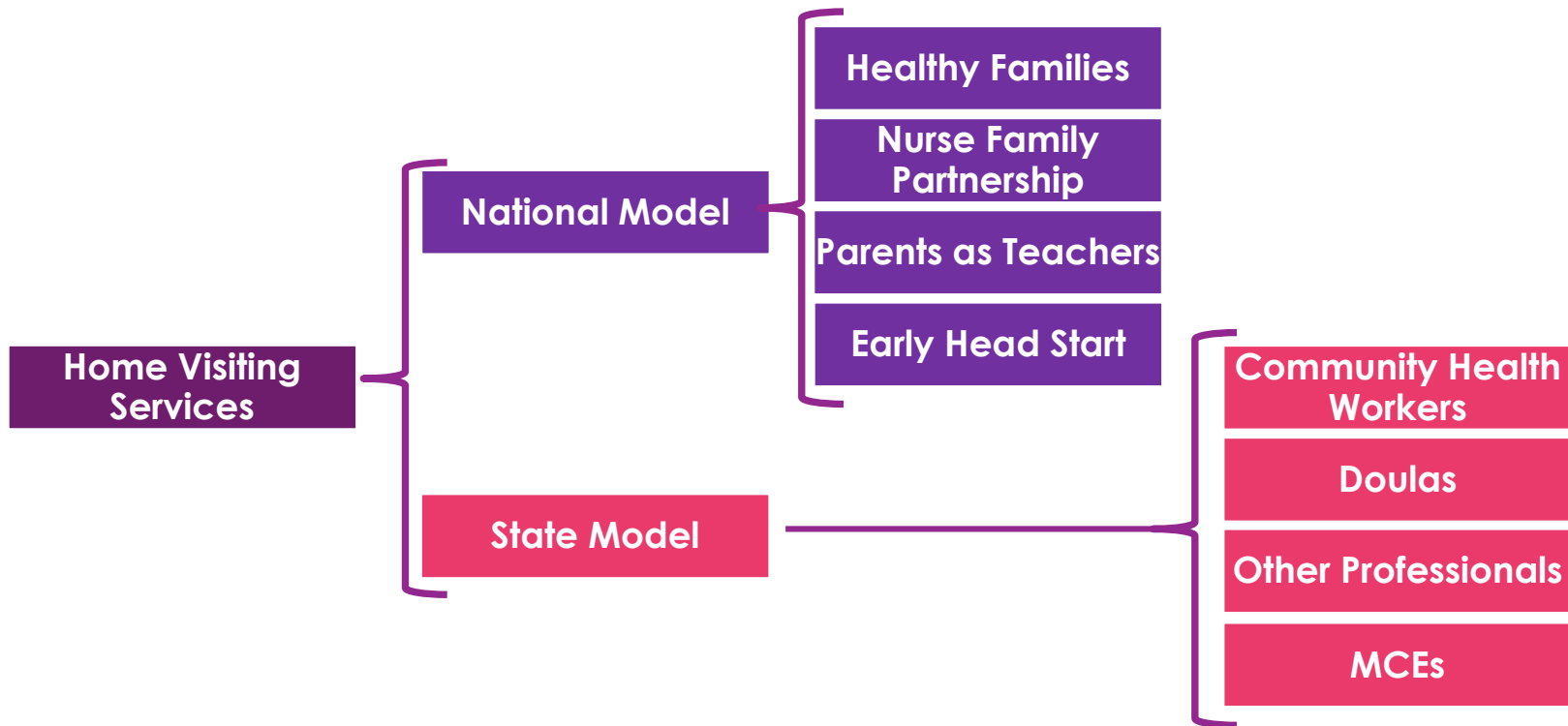
HOW CAN I HELP?

Steps you can take

HELP US IDENTIFY WOMEN

- Through the Medicaid program:
    - Notification of Pregnancy
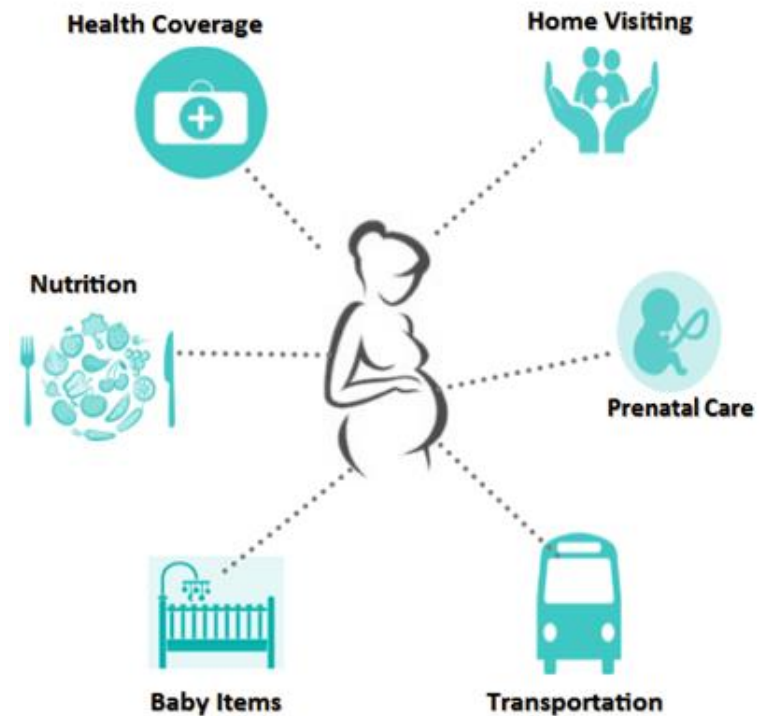   - Presumptive eligibility
- Direct and Self-referral

REFER WOMEN TO MOMS HELPLINE

The MCH MOMS Helpline is a contact center that connects pregnant women throughout the State of Indiana to available resources in their communities.

MOMS Helpline is available today:

1-844-MCH-MOMS

(844-624-6667)

Health Coverage

Home Visiting

Nutrition

Prenatal Care

Baby Items

Transportation

HELP US IDENTIFY WOMEN...

- Through the Medicaid program:
  - Notification of Pregnancy
  - Presumptive eligibility
- Through direct and self-referral to MOMS Helpline

...AND HELP US SAVE 200 BABIES PER YEAR!

QUESTIONS?
THOUGHTS?

Contact us at any time!
OBNav@isdh.IN.gov

https://www.in.gov/isdh/28233.htm

Trauma system planning subcommittee update

Dr. Scott Thomas, *Trauma Medical Director*

Memorial Hospital of South Bend

Dr. Matt Vassy, *Trauma Medical Director*

Deaconess Hospital

Indiana State
Department of Health

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

Trauma system planning subcommittee – agenda

- Trauma center highlights PowerPoint presentation template review.

- Trauma center reporting form template review.

- Trauma center reporting out at ISTCC meeting.

- Additional Discussion.

Indiana State Department of Health

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

Trauma center highlights PowerPoint presentation
template review

- Goals:
  - Showcase the work of trauma centers in Indiana.
  - Highlight educational opportunities.
  - Increased communication and discussion among trauma centers.
  - Looking towards the future of trauma care in Indiana.

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

Trauma Center highlights

Example Presentation

Trauma center name, location, map

Example Presentation

Educational offerings

- Annual educational offerings
- Ongoing education

Example Presentation

Patient volume

- Total number of patients per year
- Total number of trauma patients transferred
  - Reasons for transfers
  - Number of transfers in
  - Number of patients diverted

Example Presentation

Trauma personnel.

Example Presentation

Injury prevention effort

Example Presentation

Achievements

Example Presentation

Case study

Example Presentation

Plans for the next year

Example Presentation

American College of Surgeons – Committee on Trauma

Dr. Scott Thomas, *Trauma Medical Director*

Memorial Hospital of South Bend

Indiana State
Department of Health

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

Performance Improvement Subcommittee Update from September

Jill Castor, *Director, Trauma & Acute Care Surgery*

IU Health Methodist Hospital

Indiana State
Department of Health

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

2019 Goals Refresher

- Decrease ED LOS at non-trauma centers

- Increase trauma registry quiz participation

- Collect hospital level variables on an annual basis

- Continued EMS run sheet collection

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Number of Reporting Hospitals are Increasing

Q2 2018	102
Q3 2018	108
Q4 2018	102
Q1 2019	104
Q2 2019	107

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Department of Health

Decrease ED LOS at Non-Trauma Centers

- Official collection started Q1 2019
- Q1 2019 results:

Transfer Delay - Main Categories

Category	Value
Communication Issue	5
Delay Issue	24
EMS Issue	50
Family, Legal Guardian, or Patient Issue	4
Other	10
Receiving Facility Issue	24
Referring Facility Issue	29
Referring Physician Decision Making	29
Transportation Issue	4
Weather or Nature Factors Issue	3
Null	724
Missing	2281
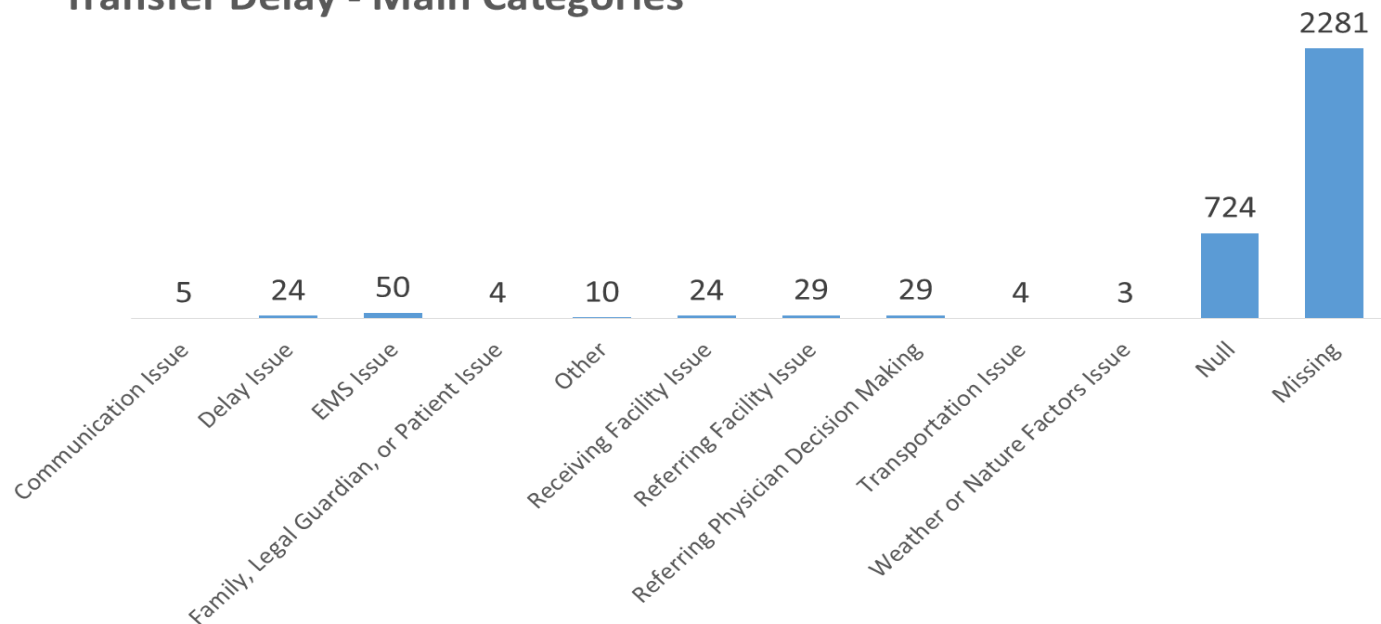
Increase Trauma Registry Quiz Participation

- August 2018 to August 2019
  - Results
    - 35 (out of 50) individuals have taken the quiz at least five times
  - Continued promotion of quiz participation
    - If you have registrars/other staff interested in taking quizzes for CEUs, please contact Trinh Dinh at tdinh@isdh.in.gov

Collecting Hospital Level Variables

- Variables being collected
  - Teaching status (Community, Non-Teaching (no residents), University)
  - Profit (For-Profit, Non-Profit
  - # of beds
  - # of ICU bed
  - # of trauma, orthopedic and neuro – surgeons

- First survey sent out January 2019, with next survey being sent out January 2020.

EMS Run Form/Sheet Collection

- Please send Murray Lawry (mlawry@isdh.in.gov) an email with the list of providers not leaving run sheets.

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

PI Subcommittee Schedule

- Next meeting Tuesday, November 19th at 10a

- 2020 meeting dates at ISDH (Larkin Conference Room)

January 14	July 14
March 17	September 14
May 12	November 14

Trauma Registry

Katie Hokanson, *Director*

Indiana State
Department of Health

Quarter 2 2019

- 107 hospitals reported
  - 10 Level I and II trauma centers
  - 13 Level III trauma centers
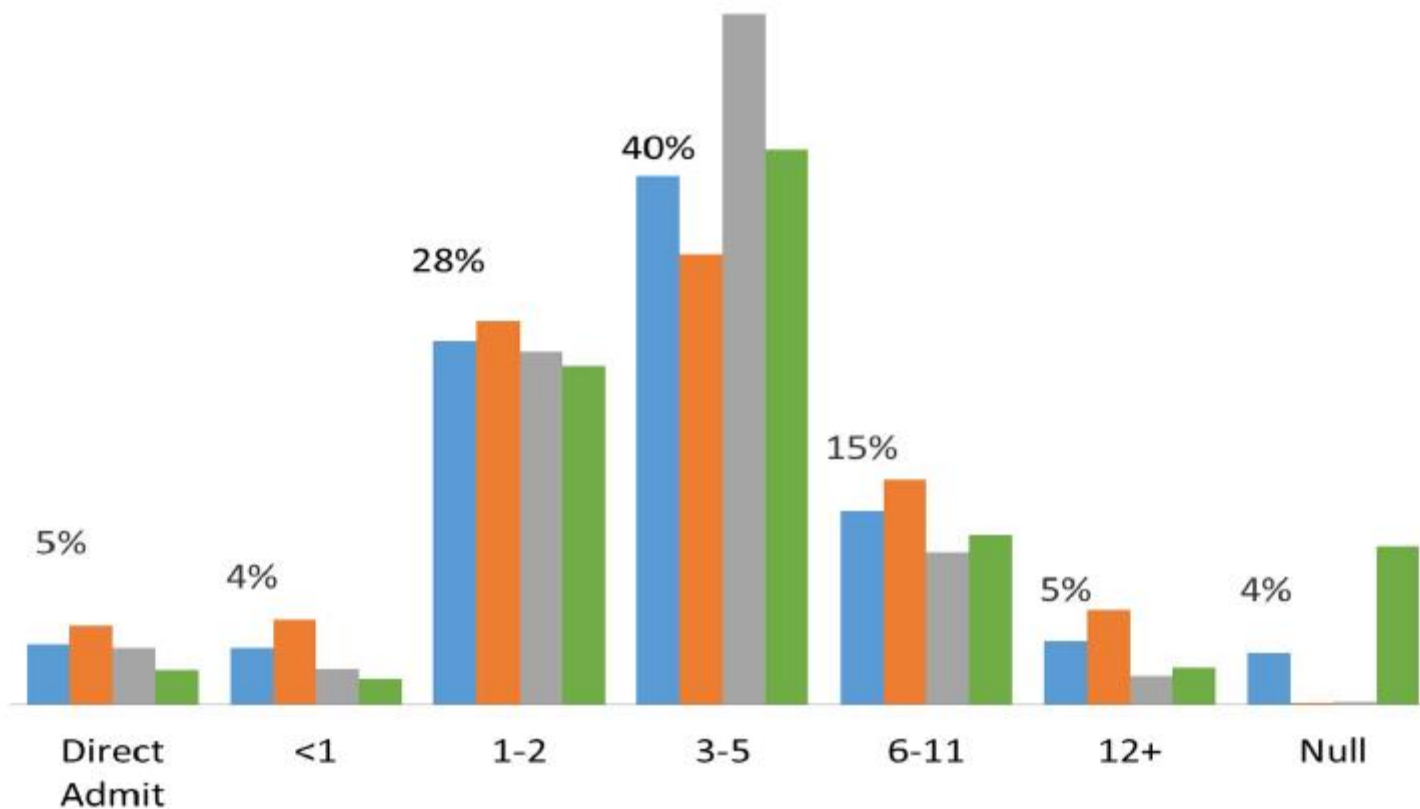 - 84 non-trauma centers
- 10,496 incidents

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The majority of patients in the ED go to a **floor bed** at trauma centers.
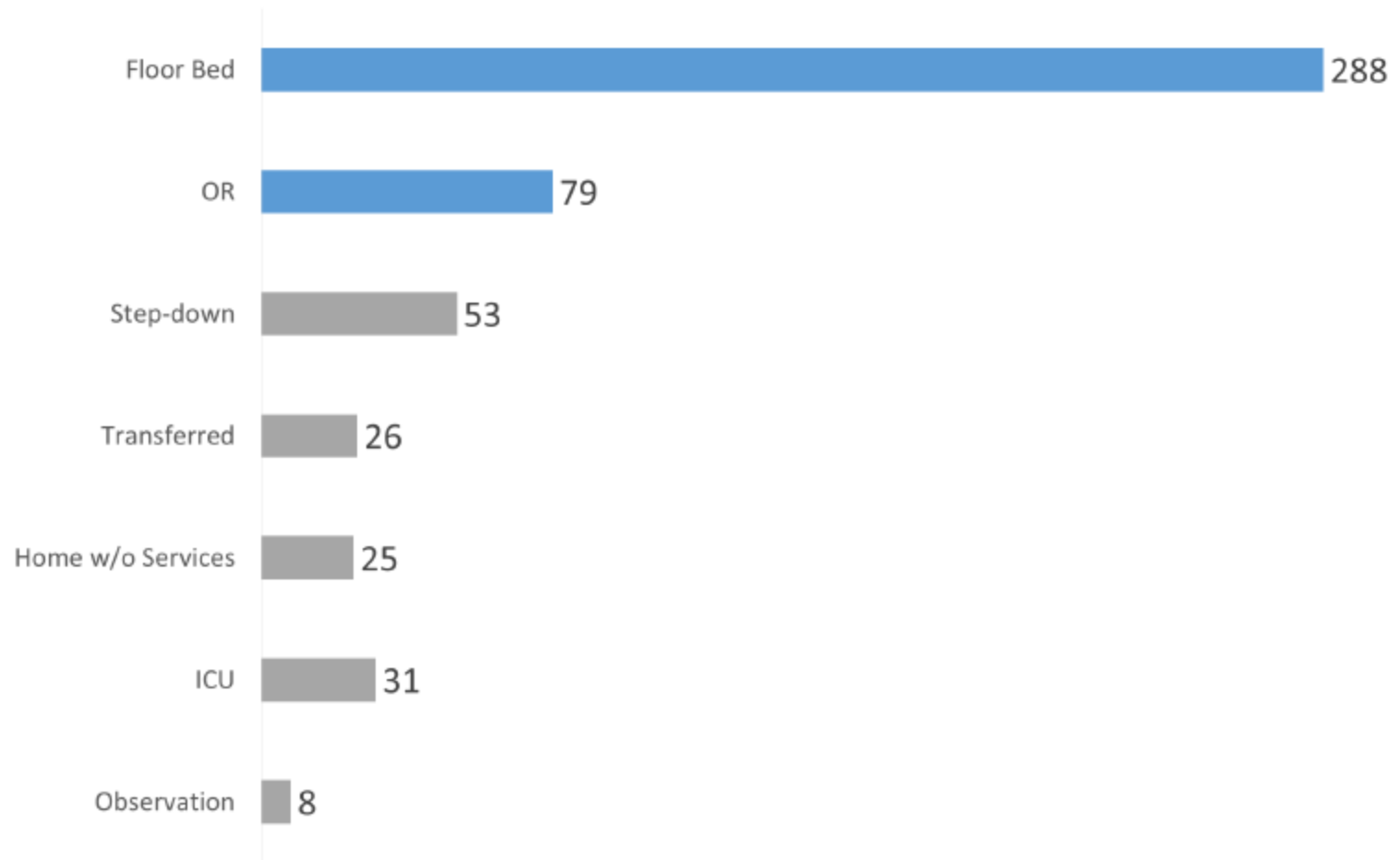
■ Indiana   ■ Level I and II   ■ Level III   ■ NTC

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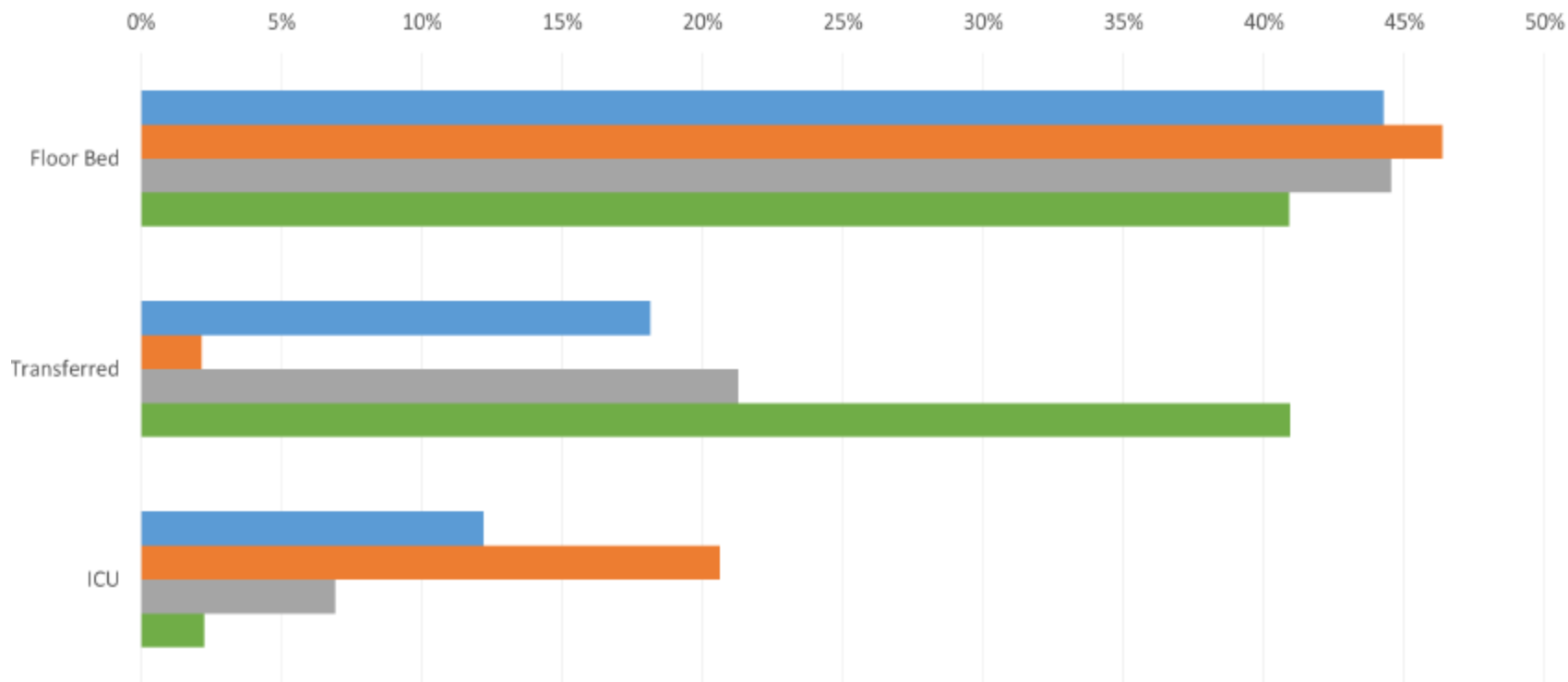
The majority of patients in the ED stay for **1-5 hours**.

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Most patterns in the ED>12 hours go to a **floor bed** or **the OR**.

|	
Floor Bed	288
OR	79
Step-down	53
Transferred	26
Home w/o Services	25
ICU	31
Observation	8

None of these patients died or had a disposition of Null, Home with Services, or Expired.
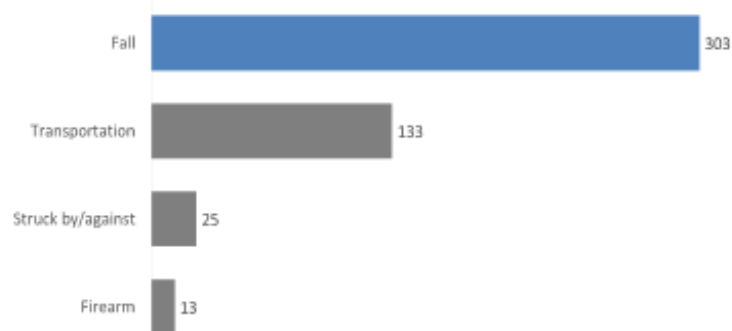Categories with counts <10 include AMA and Other.

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ED LOS > 12 Hours, N=507

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

- Level I and II
- Level III
- Non-Trauma Center

94
42
371
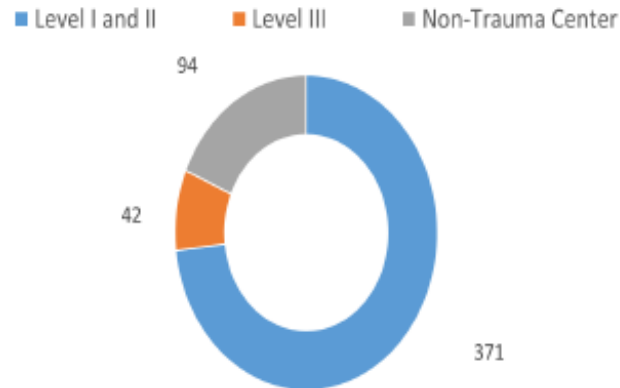
The average patient age was 60 years.

- Minimum Age
- Average Age
- Maximum Age

100
60
0.5
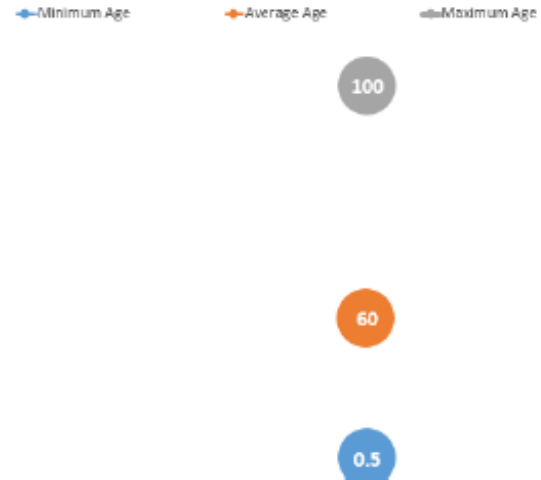
Falls were the most common cause of injury.

|	
Fall	303
Transportation	133
Struck by/against	25
Firearm	13

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

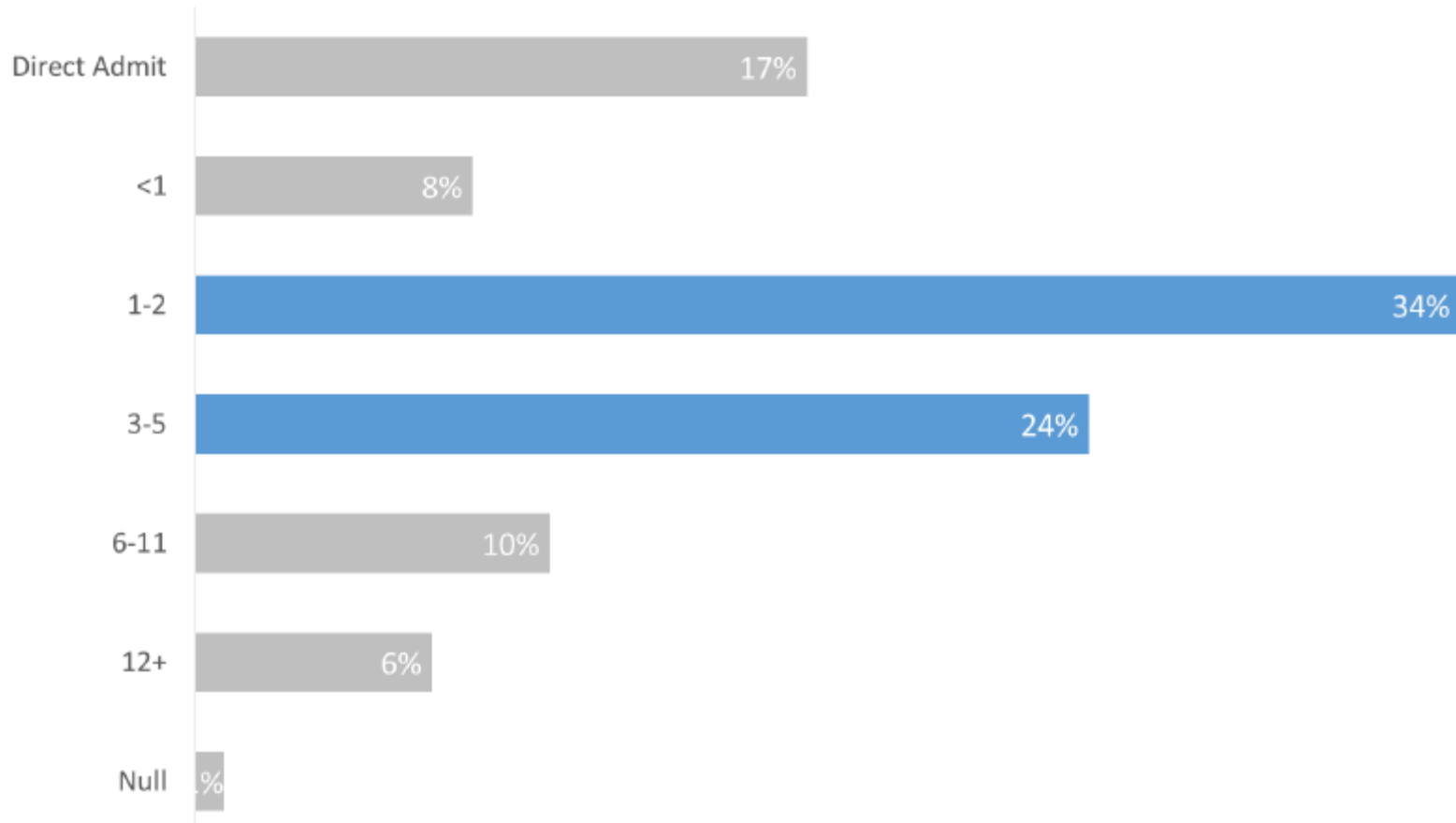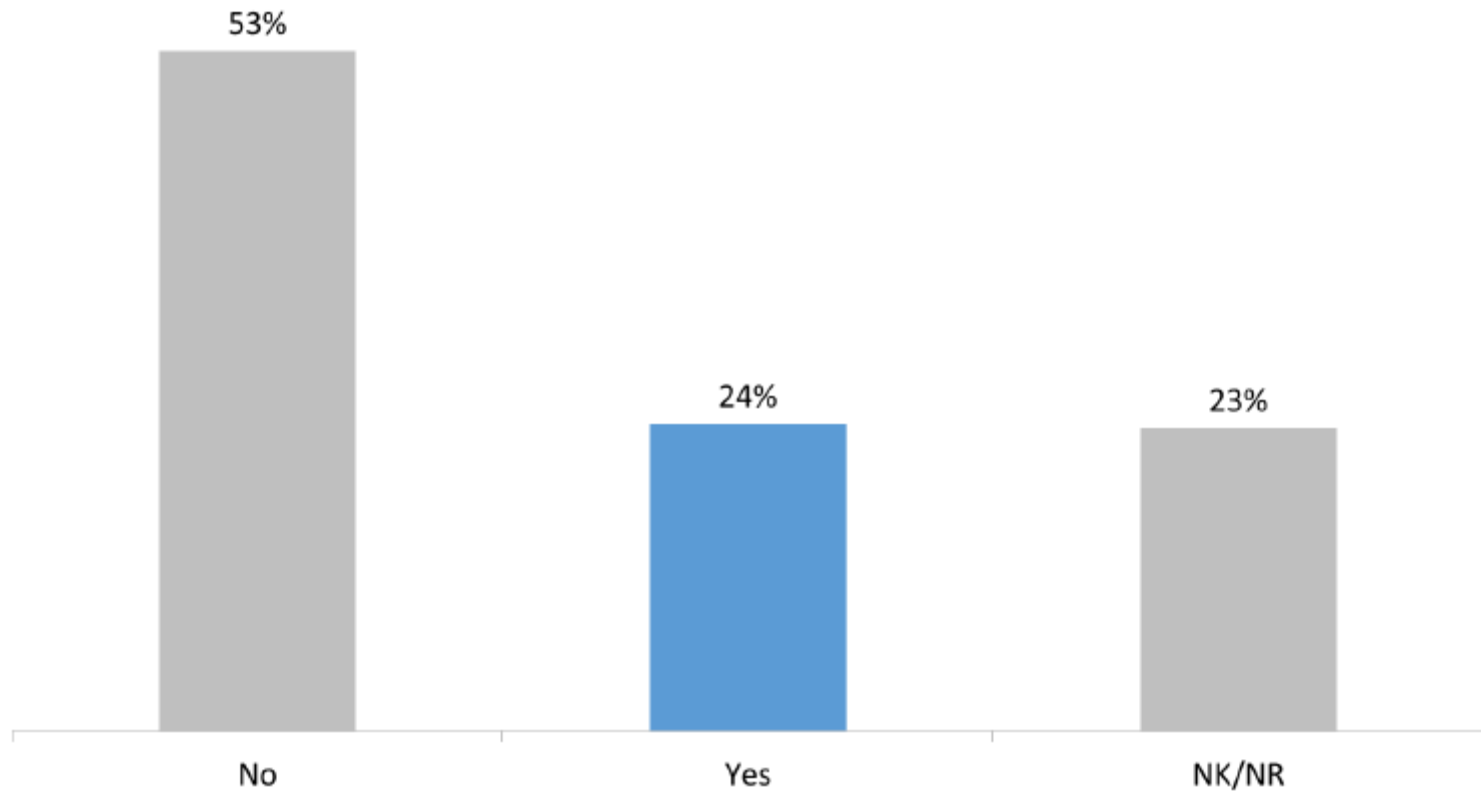The majority of patients are transported by ambulance.

Ambulance	394
Private	103
Null	10

ED LOS > 12 Hours, N=507

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

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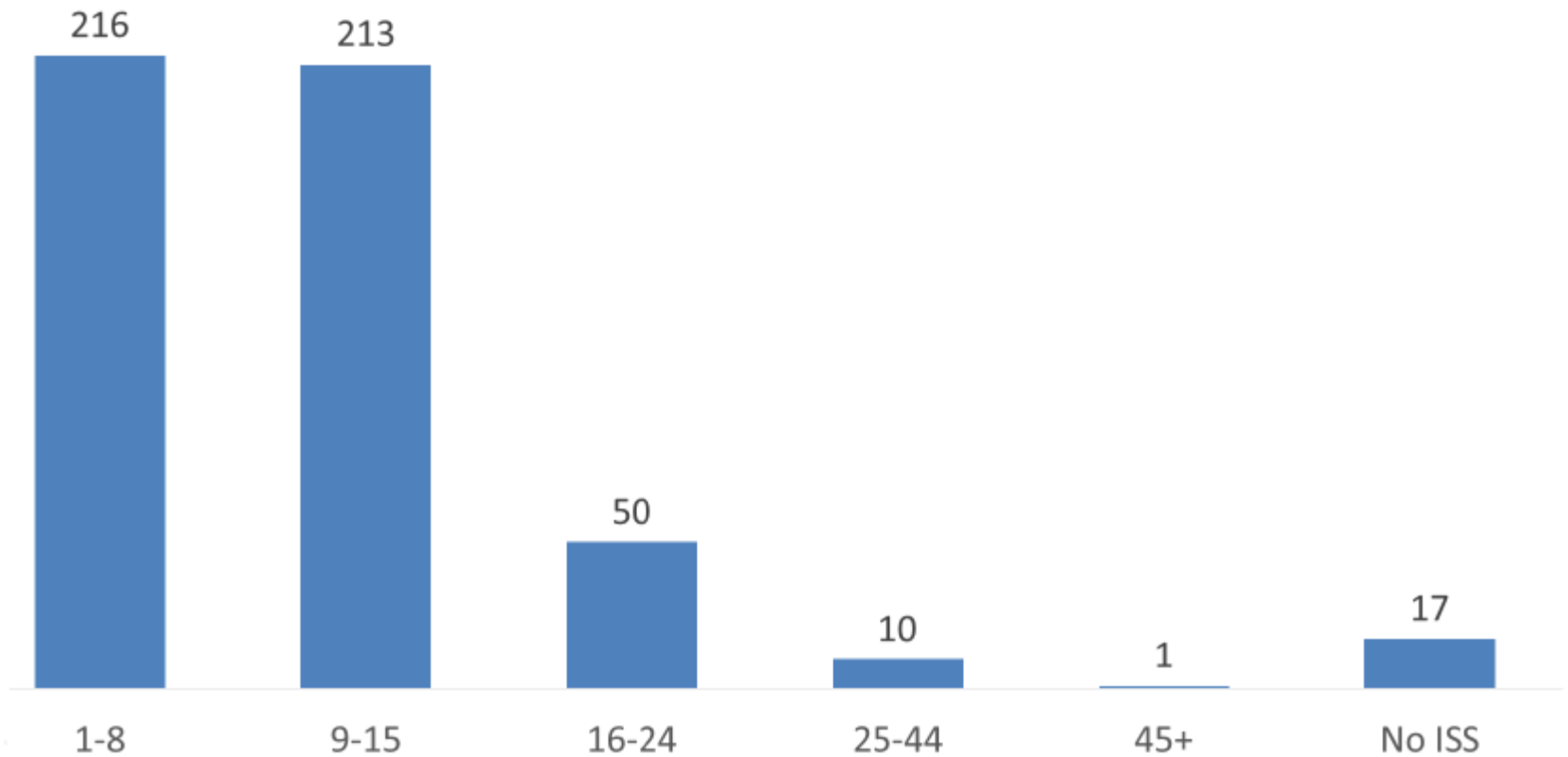
Most transfer patients are in the ED for **1-5 hours** at the final hospital.

Category	Percentage
Direct Admit	17%
<1	8%
1-2	34%
3-5	24%
6-11	10%
12+	6%
Null	1%

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

A small portion of transfers had a **delay indicated**.

Most delay reasons were not completed.

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

ED LOS by District

Average ED LOS (Minutes)
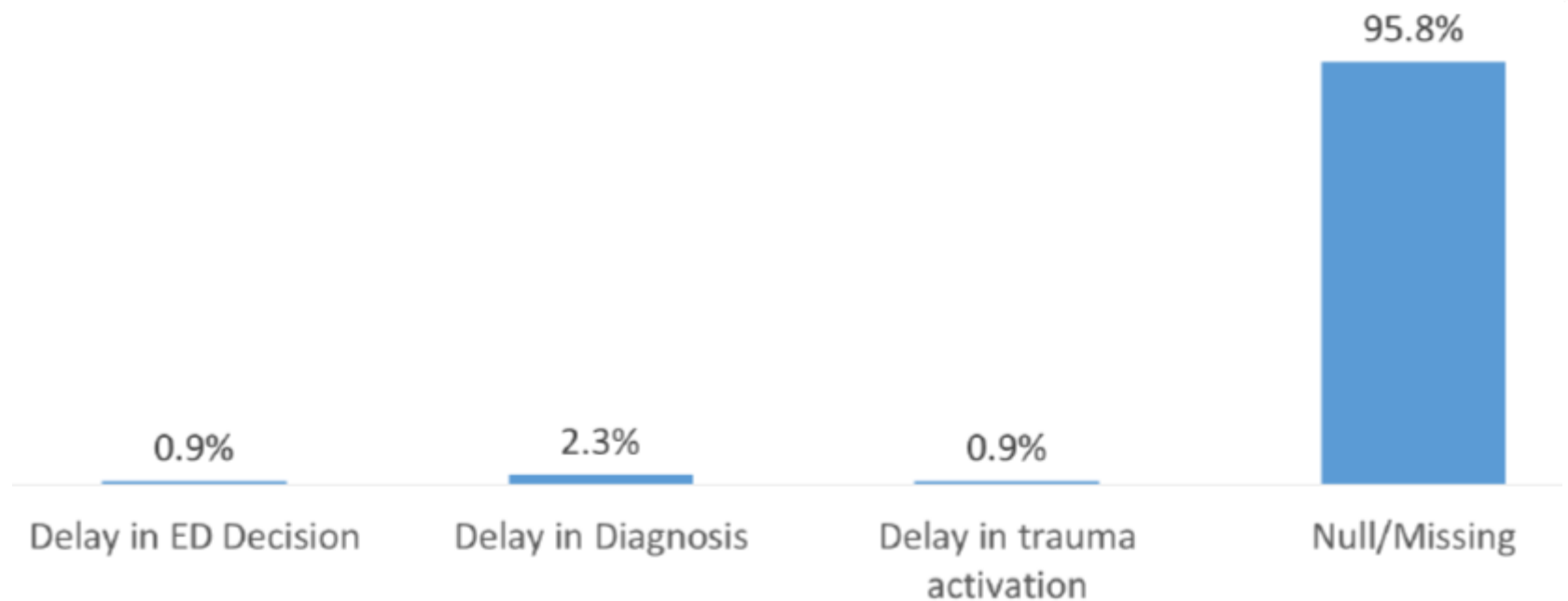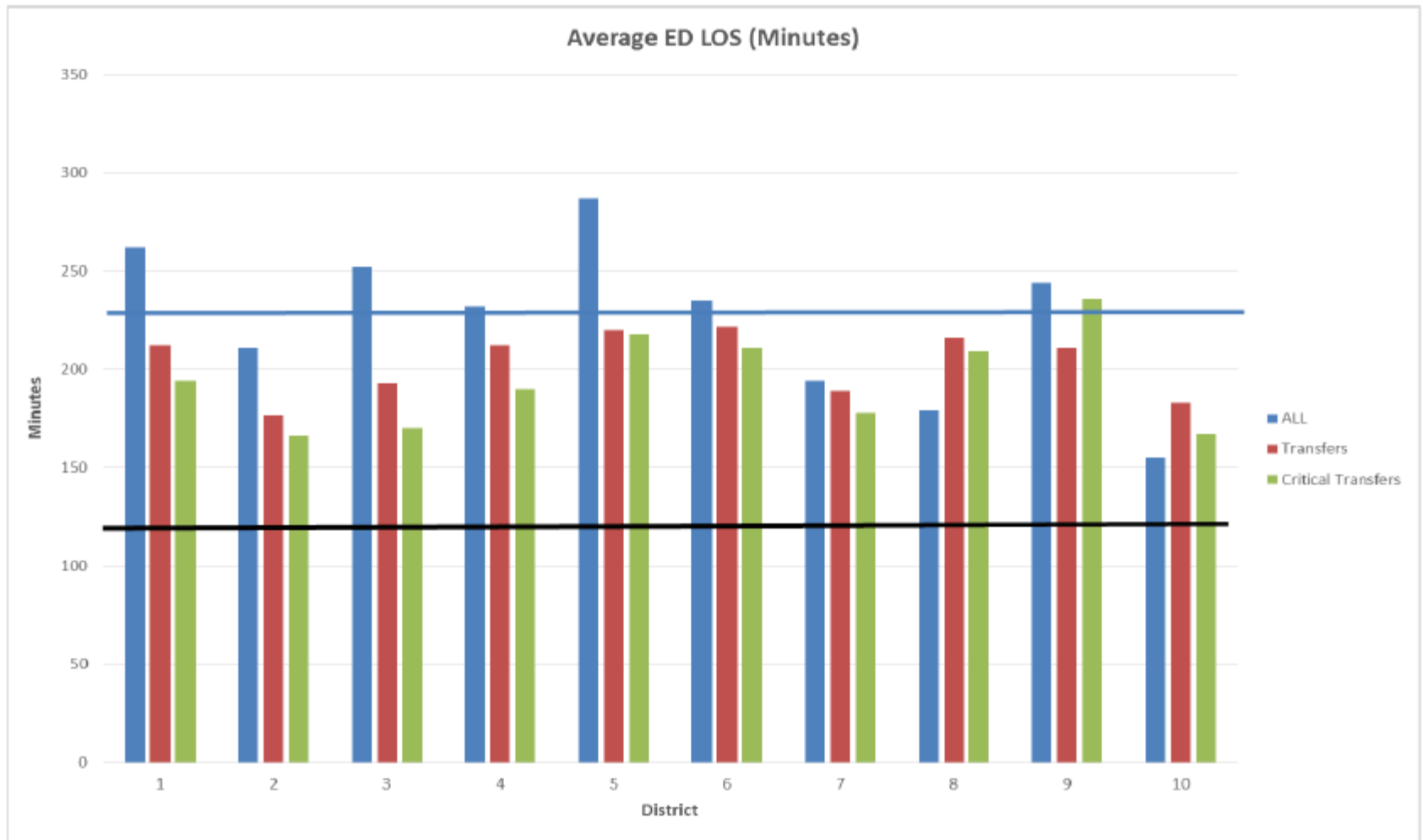
*Black line represents the 120 minute performance improvement filter
**Blue line represents the state average

Transfer Delay Analysis

Katie Hokanson, *Director*

Indiana State
Department of Health

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

Quarter 1 2019 Data

- Statewide incidents, N=9,037
- Non-trauma center incidents, N=3,187
- Delay = Yes, N=366

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Main Categories

- Null, N=185

- EMS Issue, N=50

- Referring Facility Issue, N=29

- Referring Physician Decision Making, N=28

- Receiving Facility Issue, N=24

- Delay Issue, N=24

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Main Categories, continued

- Other Issue, N=10

- Communication Issue, N=5

- Family, Legal Guardian, N=4

- Transportation Issue, N=4

- Weather and Natural Factors, N=3

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Summary

- Thank you
- Finding documentation
- We will continue following responses
- Share at TRAC meetings

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Other Business

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2019 ISTCC & ITN Meetings

- Location: Indiana Government Center – South, Conference Room B.

- Webcast still available.

- Time: 10:00 A.M. EST.

- 2019 Dates:
  - December 13

- 2020 Dates:
  - February 21
  - April 17
  - June 19
  - August 21
  - October 16
  - December 11

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

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