The presentation will begin shortly.
You may not have sound at the moment, but will have sound once the presentation begins.
Thank you for your patience.
Questions?

Email questions to: indianatrauma@isdh.in.gov

OR

Utilize chatbox underneath the video.
Injury Prevention Advisory Council (IPAC) and Indiana Violent Death Reporting System (INVDRS) Meeting

Friday, January 17, 2020
Trauma and Injury Prevention Mission

To develop, implement and provide oversight of a statewide comprehensive trauma care system that:

• Prevents injuries.
• Saves lives.
• Improves the care and outcomes of trauma patients.

Email questions to: indianatrauma@isdh.in.gov
Trauma and Injury Prevention Vision

Prevent injuries in Indiana.
Round Robin and Introductions

- Name
- Position
- Organization/ Association
- Updates
- Current Projects and Programs
- Upcoming events

@INDTrauma #SafetyIN

Email questions to: indianatrauma@isdh.in.gov
Invite New Members

Please forward my contact information to colleagues interested in violence & injury prevention!

Email questions to: indianatrauma@isdh.in.gov
Resource Guide App

• UPDATED!
• Free download for iOS & Android
  • phone & tablet capabilities
• Available in Apple & Google Play stores

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

Email questions to: indianatrauma@isdh.in.gov
Grant Activities

• Students Teachers and Officers Preventing (STOP) School Violence
  – Continuation of 2018 funded grant

• Dept of Transportation

• Falls Prevention
Upcoming Events

• State Museum Substance Use Disorder Exhibit Opens
  – February 1

• Indiana State Breastfeeding Conference
  – February 26

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

• Our Feb. 5-6 site visit is the final step in our five-year journey to accreditation from the Public Health Accreditation Board.

Email questions to: indianatrauma@isdh.in.gov
ISTCC/ITN Meeting Dates

• Indiana State Trauma Care Committee, Indiana Government Center, 10 am EST
  - February 21\textsuperscript{st}
  - April 17\textsuperscript{th}
  - June 19\textsuperscript{th}
  - August 21\textsuperscript{st}
  - October 16\textsuperscript{th}
  - December 11\textsuperscript{th}

• Indiana Trauma Network, Indiana Government Center, 12:30 pm EST
  - February 21\textsuperscript{st}
  - April 17\textsuperscript{th}
  - June 19\textsuperscript{th}
  - August 21\textsuperscript{st}
  - October 16\textsuperscript{th}
  - December 11\textsuperscript{th}

Email questions to: indianatrauma@isdh.in.gov
IPAC/INVDRS Meeting Dates

• March 20\textsuperscript{th}
• May 15\textsuperscript{th}
• July 17\textsuperscript{th}
• September 18\textsuperscript{th}
• November 20\textsuperscript{th}
Governor Holcomb’s Next Level Agenda

Building One Indiana
Governor Holcomb’s 2020 Next Level Agenda

Economy
Tell Indiana’s story by starting up the new Indiana Destination Development Corporation & attracting more jobs & talent

Infrastructure
Parks
Rehab & renovation

Roads
Build, preserve & enact hands-free device driving law

Rail
West Lake & South Shore

River
Fourth port

Runways
Nonstop international flights

Finish $190M investment in broadband & trails
Deploy $436M for water quality

Workforce & Education
Support Teacher Compensation Commission in making teacher pay more competitive

Public Health
Raise smoking, vaping age to 21 & enhance enforcement

Eliminate unnecessary requirements in 2021
Change career-related teacher professional growth points from required to optional

Hold schools harmless for 2018-19 ILEARN scores
Redesign prison education credits to better prepare offenders for re-entry

Public Health
Make health care costs more transparent for consumers

No surprise billing
Add more recovery housing & expand pilot program for jail inmates

Require school relationship with a mental health provider
Increase mental health professionals & services

More community paramedicine programs
Provide more accommodations for pregnant workers

Good Government
Use $300M in reserves to pay for capital projects that will save more than $125M in borrowing costs

Improve & expand 2-1-1 call services to help more Hoosiers

@GovHolcomb
www.in.gov/gov/2020nextlevelagenda.htm
Intentional Injury Data Presentation: Coroner Progress

Morgan Sprecher, INVDRS Epidemiologist

Email questions to: indianatrauma@isdh.in.gov
Drug Overdoses on Death Certificates

The percent (%) of overdose deaths that occurred in Indiana listed as having an undetermined or natural cause of death has fluctuated over the years. More action is needed to reach our 2020 goal of 2%.
Drug Overdoses on Death Certificates

The percent (%) of Indiana resident drug overdose death certificates that listed at least 1 contributing drug again fluctuates year to year, but more action is needed to reach the 2020 goal of 90%
Indiana coroners have begun to surpass the reporting goal for **percent of deaths with circumstances known** at the scene of a **suicide** set by the CDC.
Indiana coroners have surpassed the reporting goal for percent of deaths with circumstances known at the scene of a **homicide** set by the CDC in past years.
Contact Information

Morgan Sprecher, INVDRS Epidemiologist
Trauma and Injury Prevention Division
317.233.9825 (office)
msprecher@isdh.in.gov

Email questions to: Indianatrauma@isd.in.gov
Indiana Coroner Case Management System (ICCMS)

Ryan Cunningham, Data Abstractor Supervisor
State of Indiana

Zach Vanek, Product Sales Executive
ImageTrend

ImageTrend®

Indiana State Department of Health
Why It Was Developed

• Increasing CME/LE reporting completion and timeliness

• Alternative to Coroner ME
  - Easier | more fluid | less input | no duplicate entry

• Innovative/on par with CDC needing to spend funds on something progressive
Why We Chose It

Explore innovative methods of collecting, reporting and sharing data for improved timeliness, improved data quality and greater utilization of data for prevention efforts.
## Case Cataloging

![Image of Coroners Case Management System]

### Coroners Cases

<table>
<thead>
<tr>
<th>Case Number</th>
<th>Death Date</th>
<th>Status</th>
<th>First Name</th>
<th>Last Name</th>
<th>Created By</th>
<th>Created</th>
<th>Updated</th>
<th>Updated By</th>
<th>Visited</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case120131</td>
<td>1/1/2013</td>
<td>In Progress</td>
<td>Ben</td>
<td>Money</td>
<td>ImageTrend Admin</td>
<td>6/1/2018 14:32:04</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case120132</td>
<td>6/20/2015</td>
<td>In Progress</td>
<td>Sammy</td>
<td>Steele</td>
<td>ImageTrend Admin</td>
<td>6/20/2015 13:17:29</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case120133</td>
<td>8/20/2018</td>
<td>In Progress</td>
<td>Colby</td>
<td>Kent</td>
<td>ImageTrend Admin</td>
<td>8/16/2018 10:15:45</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case120134</td>
<td>8/20/2018</td>
<td>In Progress</td>
<td>Will</td>
<td>Ford</td>
<td>ImageTrend Admin</td>
<td>8/16/2018 10:15:45</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case120135</td>
<td>8/20/2018</td>
<td>In Progress</td>
<td>Shane</td>
<td>Brandt</td>
<td>ImageTrend Admin</td>
<td>8/20/2018 10:15:45</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case120136</td>
<td>8/20/2018</td>
<td>In Progress</td>
<td>Harold</td>
<td>Stanley</td>
<td>ImageTrend Admin</td>
<td>8/16/2018 10:15:45</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case120137</td>
<td>8/20/2018</td>
<td>In Progress</td>
<td>Elodie</td>
<td>Christian</td>
<td>ImageTrend Admin</td>
<td>8/16/2018 10:15:45</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case120139</td>
<td>8/20/2018</td>
<td>In Progress</td>
<td>Rex</td>
<td>McSween</td>
<td>Harris Farkas</td>
<td>8/17/2018 10:21:27</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case120142</td>
<td>8/20/2018</td>
<td>In Progress</td>
<td>Sonner</td>
<td>Daniels</td>
<td>ImageTrend Admin</td>
<td>8/17/2018 10:21:27</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dynamic Case Forms

- Utilizes “smart” functionality
- Automatically lookup external resources/agencies
- Makes data entry easy and more efficient

**In Action**

Automatically calculates age based on an entered birthdate

Selecting a gender will change the form, such as displaying additional fields specific for women (ex. pregnancy)
Agencies Involved

Reported To Coroner:
- No
- Yes

Reported By:

Agency Type:

Agency Name:

Agency Name Other:

Agency Unit Number:

Contact Person Title:

Contact Person Name:

Contact Person Email:

Contact Person Phone Number:

Contact Person Fax Number:

Case Reference:

External Agency Search

Order By:
- Name
- Ascending

Agency Type

Name

Law Enforcement Ag

Adams County SD
City: Decatur
County: Adams

Advance PD
City: Advance
County: Boone

Akron PD
City: Akron
County: Fulton

Albany PD
City: Albany
County: Delaware

Albion PD
City: Albion
County: Noble
Case Validation

Ensure all required data is entered before the case is closed — any field can be required
Report Writer

• Schedule reports to auto-generate and send
• Report on all data collected
• Easily print:
  - Autopsy Print Report
  - Coroner Print Report
  - Custom reports
NVDRS Module

Coroner Record

VDRS Record
Very Customizable

• Users with appropriate security permissions have direct access to the:
  – Dataset Manager
  – Form Manager
  – Print Report Manager
• Add visibility rules - improve workflow
• Add validation rules - ensure data quality
Messaging
ROI

01 System has been in place for 1-1/2 years

02 50% increase in reporting timeliness

03 Went from 51 counties reporting prior to ICCMS to all 92
Thank you. Questions?

**Ryan Cunningham**, Data Abstractor Supervisor
317-234-9659
RyCunningham@isdh.in.gov

**Zach Vanek**, product sales executive
ImageTrend
952.469.6207
Zvanek@imagetrend.com

**IMAGE**TREND®

[Image of Indiana State Department of Health]
Indiana SADD
Teen Traffic Safety
9 people are killed everyday in the United States due to Distracted Driving.
Drivers under the age of 20 have the highest proportion of distraction-related fatal crashes.
The leading cause of death among American teens is car crashes.
“Peer-to-peer education is a viable component of a broader teen traffic safety strategy.”
An engaging and evidence-based campaign designed to help teens tackle the issue of reckless and distracted driving.
A student-led, peer-to-peer, national awareness campaign with a mission to End Distracted Driving, Prevent Tragic Crashes and Save Lives.
Rule the Road
WHEN THE PERSON IN FRONT OF YOU IS ON THEIR PHONE DRIVING
Mark R. Kaser
Indiana State SADD Coordinator
www.indianasadd.org
Unintentional Injury Data Presentation: A Look at TBIs in 2018

Andzelika Rzucidlo, Injury Prevention Epidemiologist
Trauma and Injury Prevention Division

Email questions to: Indiana trauma@isd.in.gov
Traumatic Brain Injuries (TBIs) impact on injury in Indiana

• A TBI is sudden damage to the brain caused by a blow or jolt to the head from blunt or penetrating trauma\(^1\)
  - Depending on severity, the person may require treatment for years

• TBIs contribute to:
  - 4.3% of all emergency department (ED) visits with injuries
  - 13.1% of all hospitalizations with injuries
  - 23.9% of fatalities with injury as an underlying cause of death

ED Visits

- 24,502 patients were diagnosed with a TBI during an ED visit (53.4% were male)
  - 370.2 TBI-related ED visits per 100,000 people

<table>
<thead>
<tr>
<th>Age</th>
<th>TBI-related ED visits per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1</td>
<td>366.6</td>
</tr>
<tr>
<td>1 to 4</td>
<td>221.3</td>
</tr>
<tr>
<td>5 to 14</td>
<td>338.1</td>
</tr>
<tr>
<td>15 to 24</td>
<td>576.4</td>
</tr>
<tr>
<td>25 to 34</td>
<td>440.8</td>
</tr>
<tr>
<td>35 to 44</td>
<td>344.0</td>
</tr>
<tr>
<td>45 to 54</td>
<td>275.4</td>
</tr>
<tr>
<td>55 to 64</td>
<td>232.3</td>
</tr>
<tr>
<td>65 to 74</td>
<td>262.5</td>
</tr>
<tr>
<td>75 to 84</td>
<td>468.2</td>
</tr>
<tr>
<td>85 and over</td>
<td>798.1</td>
</tr>
</tbody>
</table>

TBI-related ED visits are higher than average among Indiana residents ages 15-24, 25-34, 75-84, 85 and over. Age-Specific Rates per 100,000
Hospitalizations

• 6488 patients were hospitalized with a TBI diagnosis (60.2% were male)
  – 89.2 TBI-related hospitalizations per 100,000 people

TBI-related hospitalizations are higher than average among Indiana residents ages 55 and older
Hospitalizations

**All TBI-Related Hospitalizations**
- 56%
- 23%
- 6%
- 7%
- 3%
- 5%

**TBI-Related Hospitalizations for 55 year old and older**
- 76%
- 11%
- 3%
- 6%
- 3%

Categories:
- Unintentional Falls
- Assaults
- MV Traffic
- Suicide Attempts
- Struck By/Against
- All Other Transport-Related
Fatalities

- TBI was listed as a cause of death for 1,313 Indiana residents (72.3% were male)
  - 18.6 TBI-related deaths per 100,000 people

TBI-related fatalities are higher than average among Indiana residents ages 15-24, 35-44, 55 and over

Age-Specific Rate per 100,000 people
Fatalities

All TBI-Related Fatalities
- Unintentional Falls: 41%
- Assaults: 12%
- MV Traffic: 18%
- Suicide: 1%
- Struck By/Against: 1%
- All Other Transport-Related: 1%
- <1%

TBI-Related Fatalities for 85+ year olds
- 92%
- 6%
- 1%
All Special Emphasis Reports available online: https://www.in.gov/isdh/25396.htm

Indiana Reports and Documents

Reports and Documents

*Recent Reports*


2017 Child Injuries Report on Indiana children ages 6-11

2017 Child Injuries Report on Indiana teens ages 12-18

Preventing Injuries in Indiana: Injury Prevention Resource Guide App

The Preventing Injuries in Indiana: Injury Prevention Resource Guide* is available for Android and iOS (Apple) systems. The app features buttons for 10 common sources of injury, such as distracted driving, sexual assault, prescription overdoses and falls among older adults. Each category includes a description of the scope of the problem in Indiana and the United States, discusses how the problem is being addressed and includes links to resources.

Users can search for specific items and download pdf versions of material included in the app, or they can share data from the app through email and social media. The app includes an email address for the health department's Division of Trauma and Injury Prevention, which will be updating and expanding the app in the coming months.


*The Preventing Injuries in Indiana: Injury Prevention Resource Guide was developed by the Indiana State Department of Health and is a comprehensive resource for preventing injuries in Indiana. It is available for both Android and iOS systems and includes information on common sources of injury, such as distracted driving, sexual assault, prescription overdoses, and falls among older adults. The app allows users to search for specific items, download PDF versions of material, and share data from the app through email and social media. An email address for the health department's Division of Trauma and Injury Prevention is included in the app, which will be updating and expanding the app in the coming months.*
Contact information

Andzelika Rzucidlo
*Injury Prevention Epidemiologist*
Trauma and Injury Prevention Division
317.234.7463 (office)
[arzucidlo@isdh.in.gov](mailto:arzucidlo@isdh.in.gov)

Email questions to: [Indiana trauma@isd.in.gov](mailto:Indiana trauma@isd.in.gov)
Drug Overdose Trends

Lauren Harding
Drug Overdose Prevention Epidemiologist
Trauma and Injury Prevention

Indiana State Department of Health
Indiana has consistently had higher opioid prescribing than the U.S. average, but both nationally and statewide there is clear evidence of decreases.

Opioid prescribing rate per 100 persons.
The evolving nature of the opioid epidemic in Indiana has come in three distinct waves.

Age-adjusted drug class overdose death rate 1999-2017

Wave 1: Rise in prescription opioid overdose deaths

Wave 2: Rise in heroin overdose deaths

Wave 3: Rise in synthetic opioid overdose deaths
Decline in 2018

There were a total of 1,626 overdose deaths in 2018.
The number of all drug overdoses and opioid-involved overdoses declined from 2017 to 2018.
The number of drug overdose deaths have increased in Indiana. Opioids are the most frequently involved substance.
The type of opioids involved in overdose deaths rose for all opioid types except methadone but the highest driver of opioid involved deaths was synthetic opioids such as illicitly made fentanyl.

Counts of deaths involving specific opioid types 2014 to 2018
Steady Increase of Psychostimulant Use

- **2016**: 105
- **2017**: 249
- **2018**: 377
All age groups are impacted by the opioid epidemic, but those aged 30-39 had the highest number of opioid involved overdose deaths in 2018.
Males are Experiencing More Fatal Overdoses than Women

36%

64%
Contact Information

Lauren Harding
*Drug Overdose Prevention Epidemiologist*
Trauma and Injury Prevention
LHarding@isdh.IN.gov
317-234-9656
Future of Brain Injury in Indiana:
Needs & Resource Assessment

Jeremy Funk, MPH
Objectives:
1. Project Description & Scope
2. Survey Definitions
3. Aggregate Survey Findings
4. Subgroup Survey Findings:
   a) Clinicians
   b) Patients & Care Givers
5. Conclusions & Limitations
Project Description:

In December 2018, the Indiana State Department of Health (ISDH) approved Indiana’s first Traumatic Brain Injury State Plan.

This document outlines five goals and recommendations to inform or improve statewide TBI care for Hoosiers over the next five years (2019 – 2024).

Latest assessment of Indiana Needs & Resources was conducted back in 2007, therefore members of the TBI Advisor Board sought to re-evaluate the current market perceptions for TBI care.
Project Description:

1. **Identify the strengths and weakness of Indiana’s TBI infrastructure.**
   A. A third party consulting company (Ghost Map Analytics) will conduct a comprehensive needs and resources assessment of TBI-care system.
   
   B. Identify the key agencies and organizations with active TBI grants and prevention interventions.
   
   C. Establish the prevalence, incidence, and supplemental information of TBI within Indiana Residents.
Survey Definitions:

*Individuals were asked to self-identify between the following:*

1. **TBI patient / survivor** — former or current consumers of the TBI healthcare system
2. **Patient Caregivers** — Family members or loved ones of TBI survivors that were active in the recovery process.
3. **Medical Professionals** — Individuals that provided direct patient care (Doctors, Nurses, Psychologist, etc.)
4. **Other** — Auxiliary organizations that support TBI patients (Insurance companies, federal /state government, etc.)

Questions and definitions for the 2007 N&R assessment were used to provide direct comparisons on how TBI care has evolved over time.
Survey Dissemination

Online survey that participants could take using their phone, tablet, or computer. Conditional logic was heavily utilized to cut down on time required to take survey.

Our dissemination plan was to recruit via:
- RHI waiting room promotions
- BIAI social media & Newsletters
- Surveying support group attendants
- ISDH bi-weekly newsletter
Aggregate Results
Preliminary Aggregate Results:

Collection Date: 4/15/2019 to 11/31/2019

Surveys Collected: 280 unique Individuals

Average Time: 4 minutes 7 seconds

Completion: 62%

Survey Link: https://www.surveymonkey.com/r/IndianaTBISurvey
**Preliminary Aggregate Results:**

What was perceived as the largest barrier to TBI care currently?

1. Unaware of available services
2. Services not located locally
3. Inability to pay
4. Lack of support or patient advocacy
5. Difficult understand importance
5. Transportation
Preliminary Aggregate Results:

What is the biggest improvement need?

25% - Cognitive Training
21% - Any Medical Service
11% - Behavioral Support Group
11% - Mental Health Counseling
Aggregate Might Be Misleading:

81% patients and 92% of caregivers felt that Relationship / Marital Support was the most overlooked aspect of TBI recovery.

ONLY 2% of Medical Professionals and < 1% of “Others” category sited Relationship / Marital Supports as a “Very Important” need for improvement

All four groups identified the following as “Very Important” areas for improvement:
1. Financial Burden
2. Awareness of available services
3. Behavioral Supports
Practitioner Results
**Noted Medical Professional Findings:**

- Estimated TBI patients with Medicare – 42% (Range 20% - 90%)
- Estimated TBI patients with Medicaid – 34% (Range 0% - 85%)

40% of MPs “Always” ask new patients if they have a history of TBI.
16% of MPs “Rarely” or “Never” ask new patients about TBI history

MPs with TBI specific interventions within their facility:
- 76% - Provide Direct TBI Service
- 97% - Trained staff to care for TBI patients
- 47% - Engage in TBI Prevention activities
- 81% - Provide TBI-specific Education to Patients & Caregivers
- 37% - Provide Vocational services
- 9% - Financial Services or Financial Counseling
# Perceived Patient Barriers to Care - MPs

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation (1)</td>
<td>90.63%</td>
</tr>
<tr>
<td>Lack of insurance (3)</td>
<td>87.50%</td>
</tr>
<tr>
<td>Unaware of services and resources (8)</td>
<td>84.38%</td>
</tr>
<tr>
<td>Inability to pay (2)</td>
<td>78.13%</td>
</tr>
<tr>
<td>Services not located locally (4)</td>
<td>71.88%</td>
</tr>
<tr>
<td>Difficulty understanding process or paperwork (5)</td>
<td>71.88%</td>
</tr>
<tr>
<td>Lack of support/patient advocacy (7)</td>
<td>71.88%</td>
</tr>
<tr>
<td>Difficulty with English language (6)</td>
<td>34.30%</td>
</tr>
<tr>
<td>Other (please specify) (10)</td>
<td>Responses</td>
</tr>
<tr>
<td>No barriers experienced (9)</td>
<td>3.13%</td>
</tr>
</tbody>
</table>
## Single Largest Need for Improvement - MP:

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Training (retraining brain to improve everyday skills) (26)</td>
<td>21.21%</td>
</tr>
<tr>
<td>Any/All Medical Services (20)</td>
<td>15.15%</td>
</tr>
<tr>
<td>Case Management/Resource Facilitation (for example, by a Nurse or Social Worker) (23)</td>
<td>15.15%</td>
</tr>
<tr>
<td>Supported Housing (1)</td>
<td>6.06%</td>
</tr>
<tr>
<td>Transportation (14)</td>
<td>6.06%</td>
</tr>
<tr>
<td>Mental Health Counseling (15)</td>
<td>6.06%</td>
</tr>
</tbody>
</table>
Patients and Caregivers
Noted Findings for Patients:

- **Time since Injury** - 5 years (Std: 1.27, Min: < 1 year, Max: 6 years)
- **Estimate Number of Brain Injuries** – 3.4 (Std: 2.6, Min: 1, Max: 9)
- **Currently employed** – 47%
- **Had Insurance at the time of Injury** – 54%
- **Insurance Company Declined Inpatient Rehab Services** – 42%

**Injury Mechanism:**
- 44% Motor Vehicle Crash
- 12% Motor Cycle
- 14% Fall
- 7% Assault

**Age at Time of Injury:**

- Under 18: 25.58%
- 18-24: 13.95%
- 25-34: 23.26%
- 35-44: 16.28%
- 45-54: 16.28%
- 55-64: 4.65%
### Persistent TBI Symptoms:

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forgetful or poor memory</td>
<td>79.07%</td>
</tr>
<tr>
<td>Stress/anxiety</td>
<td>74.42%</td>
</tr>
<tr>
<td>Physical fatigue</td>
<td>62.79%</td>
</tr>
<tr>
<td>Sleep disturbances</td>
<td>62.79%</td>
</tr>
<tr>
<td>Headaches or Migraines</td>
<td>58.14%</td>
</tr>
<tr>
<td>Light sensitivity</td>
<td>53.49%</td>
</tr>
<tr>
<td>Increase in emotions or irritability</td>
<td>53.49%</td>
</tr>
<tr>
<td>Losing place when reading</td>
<td>51.16%</td>
</tr>
<tr>
<td>Balance issues, dizziness</td>
<td>51.16%</td>
</tr>
<tr>
<td>Sensory sensitivity (sights, sounds, touch)</td>
<td>48.84%</td>
</tr>
<tr>
<td>Disordered thinking</td>
<td>41.86%</td>
</tr>
<tr>
<td>Difficulty in busy visual environments (mall/supermarket/school)</td>
<td>41.86%</td>
</tr>
<tr>
<td>Eye strain or pain</td>
<td>30.23%</td>
</tr>
<tr>
<td>Words move or run together when reading</td>
<td>30.23%</td>
</tr>
<tr>
<td>Comprehension problems when reading</td>
<td>30.23%</td>
</tr>
</tbody>
</table>
### Why Patients believe they are unemployed:

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in thinking / memory / cognition (8)</td>
<td>21.74%</td>
</tr>
<tr>
<td>Inability to perform previous job (2)</td>
<td>17.39%</td>
</tr>
<tr>
<td>Physical limitation (5)</td>
<td>17.39%</td>
</tr>
<tr>
<td>Inability to find work (1)</td>
<td>13.04%</td>
</tr>
<tr>
<td>Inability to perform any job (3)</td>
<td>13.04%</td>
</tr>
<tr>
<td>Mood regulation (9)</td>
<td>8.70%</td>
</tr>
<tr>
<td>Uninterested in working (7)</td>
<td>4.35%</td>
</tr>
<tr>
<td>Change in interpersonal skills / personality (10)</td>
<td>4.35%</td>
</tr>
</tbody>
</table>
Top Beneficial Services Declined by Insurance:

Patients were asked to identify the most impactful services their insurance didn’t cover:

1. Behavioral Supports
2. Sleep Management
3. Neuropsychology Evaluation
4. Family Counseling
5. Occupational Therapy
6. Mental Health Counseling
7. Educational Reintegration
8. Money Management
9. Pain Management
10. Vocational Services
Next Steps

• Since 2004, the preliminary analysis indicates Indiana has significantly improved in patient satisfaction in providing direct supports.

• These results also suggested that patients and caregivers have shown a dramatic increase demand for social and behavioral services.

• Qualitative analysis of free responses answers about the needs of TBI care.

• All finding will be submitted and published by ISDH in January, 2020.
Conclusions

1. A dichotomy exists between Professionals and Patients in regards to the perceived barriers and “Very important” Needs within TBI care.

2. Patients and Caregivers have shown an increased desire for Behavioral and Social supports.

3. Lack of awareness about services remains largely desired and unchanged since 2004.

Limitation:
Small sample of patients.
Non-adherence to using the electronic format
Completion percentage
Conclusions

Please help us! We an increasing need for more input on this survey. (esp. patients)

The Survey is open until October 31!
Feel free take/share this link to access the survey:
https://www.surveymonkey.com/r/IndianaTBI Survey
Thanks for joining!

Feel free to invite new attendees for the next meeting on March 20th!