

# Data Management Committee

Statewide Trauma Advisory Council  
Wednesday, September 6, 2023



# Acronyms

- ACS: American College of Surgeons
- NTDS: National Trauma Data Standard

# Agenda

- Introductions
- Approval of minutes
- Trauma registry website
- Data quality review
- 2024 Data Dictionary
- AAAM AIS course update
- Demonstrations in Patient Registry

# Data Management Committee

- **Chair:** Laura Kane, Trauma Program Manager, American Family Children's Hospital
- **Vice Chair:** Kurrie Pelegrin, Trauma Data Analyst Sr., Aurora Summit and Washington Co.

# Data Management Committee

- **Meredith Glueck**, Trauma Registrar, SSM Health St. Mary's Hospital Madison
- **Stephanie Becker**, Trauma Registrar, Froedtert Menomonee Falls and West Bend Hospitals
- **Nathan Emerson**, Supervisor of Trauma Registry, Froedtert Hospital
- **Meghan Zakaouanou**, Clinical Performance Analyst, UnityPoint Health Meriter

# Data Management Committee

- **Trauma Registry Data Manager:** Katie Prather, Wisconsin Department of Health Services
- **State Trauma Coordinator:** Margaret Finco, Wisconsin Department of Health Services

# Approval of Minutes

# Trauma Registry Website



# Trauma Registry Website

- Wisconsin Trauma Registry
  - ◆ Current data dictionary
  - ◆ Patient Registry training videos
  - ◆ <https://www.dhs.wisconsin.gov/trauma/registry.htm>
- Trauma: Wisconsin Admin. Code ch. DHS 118 and Site Review Resources
  - ◆ Site review documents
  - ◆ <https://www.dhs.wisconsin.gov/trauma/dhs-118.htm>

# Data Quality Review



# Data Quality Review

- Reports to Use
  - ◆ Data elements – hospital count
  - ◆ Data elements importing facilities – hospital count
  - ◆ Pre-existing conditions/hospital events – hospital count
- Reports to Use for Troubleshooting
  - ◆ Required data elements report part 1
  - ◆ Required data elements report part 1 importing facilities
  - ◆ Required data elements report part 2

For Discussion Only

# Data Quality Review

## Ethnicity- Hospital Counts

| Patient Ethnicity (TR1.17)                    | Count             | Percent               |
|---|-------------------|-----------------------|
| Facility Name: *ImageTrend/Lakeville Hospital |                   |                       |
|   | 62                | 57.94%                |
| -Select-                                      | 24                | 22.43%                |
| Hispanic or Latino                            | 8                 | 7.48%                 |
| Not Hispanic or Latino                        | 9                 | 8.41%                 |
| Not Known/Not Recorded                        | 4                 | 3.74%                 |
|   | <b>Total: 107</b> | <b>Total: 100.00%</b> |
|   | <b>Total: 107</b> | <b>Total: 100.00%</b> |

## Gender - Hospital Counts

| Patient Gender                                | Count             | Percent               |
|---|-------------------|-----------------------|
| Facility Name: *ImageTrend/Lakeville Hospital |                   |                       |
| Blank   | 60                | 56.07%                |
| -Select-                                      | 20                | 18.69%                |
| Female  | 10                | 9.36%                 |
| Male  | 15                | 14.02%                |
| Non-binary (Intersex or Indeterminate)        | 1                 | 0.93%                 |
| Not Known/Not Recorded                        | 1                 | 0.93%                 |
|   | <b>Total: 107</b> | <b>Total: 100.00%</b> |
|   | <b>Total: 107</b> | <b>Total: 100.00%</b> |

For Discussion Only

# Data Quality Review

## Acute Respiratory Distress Syndrome- Hospital Counts

| Hospital Event - Acute Respiratory Distress Syndrome (ARDS) | Count             | Percent               |
|---|-------------------|-----------------------|
| Facility Name: *ImageTrend/Lakeville Hospital               |                   |                       |
|   | 85                | 79.44%                |
| No  | 18                | 16.82%                |
| Not Known/Not Recorded                                      | 1                 | 0.93%                 |
| Yes   | 3                 | 2.80%                 |
|   | <b>Total: 107</b> | <b>Total: 100.00%</b> |
|   | <b>Total: 107</b> | <b>Total: 100.00%</b> |

## ADD/ADHD- Hospital Counts

| Pre-Existing Condition - Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD) | Count             | Percent               |
|---|-------------------|-----------------------|
| Facility Name: *ImageTrend/Lakeville Hospital   |                   |                       |
|   | 86                | 80.37%                |
| No  | 16                | 14.95%                |
| Yes   | 5                 | 4.67%                 |
|   | <b>Total: 107</b> | <b>Total: 100.00%</b> |
|   | <b>Total: 107</b> | <b>Total: 100.00%</b> |

For Discussion Only

# Data Quality Review



## Required Data Elements Report Part 2

| ED Admission Date (TR18.55) | Patient Medical Record Number (TR1.2) | Incident Number (TR5.12)   | Hospital Event - Acute Kidney Injury (AKI) | Hospital Event - Acute Respiratory Distress Syndrome (ARDS) | Hospital Event - Alcohol Withdrawal Syndrome | Hospital Event - Cardiac Arrest with CPR | Hospital Event - Catheter-Associated Urinary Tract Infection (CAUTI) | Hospital Event - Central Line-Associated Bloodstream Infection (CLABSI) | Hospital Event - Deep Surgical Site Infection | Hospital Event - Deep Vein Thrombosis (DVT) | Hospital Event - Delirium | Hospital Event - Myocardial Infarction | Hospital Event - Organ/Space Surgical Site Infection | Hospital Event - Osteomyelitis | Hospital Event - Pressure Ulcer | Hospital Event - Pulmonary Embolism (PE) | Hospital Event - Severe Sepsis | Hospital Event - Stroke/CVA | Hospital Event - Superficial Incisional Surgical Site Infection | Hospital Event - Unplanned Admission To ICU | Hospital Event - Unplanned Intubation |
|-----------------------------|---------------------------------------|----------------------------|--|---|--|--|--|---|---|---|---------------------------|--|--|--------------------------------|---------------------------------|--|--------------------------------|-----------------------------|---|---|---------------------------------------|
| 11/17/2022                  | testing                               | ImageTrend -221117-Demo073 | No   | No  | No   | No                                       | No   | No  | No  | No  | No                        | No                                     | No   | No                             | No                              | No                                       | No                             | No                          | No  | No  | No                                    |
| 11/17/2022                  |                                       | ImageTrend -221117-Demo071 |  |   |  |  |  |   |   |   |                           |  |  |                                |                                 |  |                                |                             |   |   |                                       |
| 11/17/2022                  |                                       | ImageTrend -221117-Demo072 | Yes  | Yes   | Yes  | Yes                                      | Yes  | Yes   | Yes   | Yes   | Yes                       | Yes                                    | Yes  | Yes                            | Yes                             | Yes                                      | Yes                            | Yes                         | Yes   | Yes   | Yes                                   |
| 12/01/2022                  |                                       | ImageTrend -221201-Demo074 |  |   |  |  |  |   |   |   |                           |  |  |                                |                                 |  |                                |                             |   |   |                                       |
| 12/03/2022                  | 11011000010                           | ImageTrend -221206-Demo075 | No   | No  | No   | No                                       | No   | No  | No  | No  | No                        | No                                     | No   | No                             | No                              | No                                       | No                             | No                          | No  | No  | No                                    |
| 12/07/2022                  | F1245                                 | ImageTrend -221207-Demo076 | Yes  | Not Known/Not Recorded                                      | Not Known/Not Recorded                       | No                                       | Yes  | No  | Not Known/Not Recorded                        | No  | Yes                       | Yes                                    | Not Known/Not Recorded                               | Not Known/Not Recorded         | No                              | Yes                                      | No                             | Not Known/Not Recorded      | Not Known/Not Recorded  | No  | Yes                                   |

For Discussion Only

# Data Quality Review

- Common Missing Data and Issues
  - ◆ Pre-Existing Conditions
  - ◆ Transfer Delay
  - ◆ Gender Identity
    - How are these elements being collected?
    - Barriers to collecting information?
    - Possible solutions?

# 2024 Data Dictionary





# 2024 Data Dictionary

- ACS NTDS Data Dictionary
  - ◆ No retired elements
  - ◆ No new elements
  - ◆ No major current element changes
  - ◆ No inclusion criteria changes

# 2024 Data Dictionary: Wisconsin Changes

- ◆ Required for State Direct Entry Submissions
  - TR25.33 Hospital admission date
  - TR25.47 Hospital admission time

# 2024 Data Dictionary: Wisconsin Changes

- ◆ Required for all (currently required for direct entry)
  - TR33.1 Referring facility
  - TR8.8 Mode of arrival
  - TR17.25 ED discharge date
  - TR17.26 ED discharge time
  - TR25.34 Hospital discharge date
  - TR25.48 Hospital discharge time

# 2024 Data Dictionary: Wisconsin Changes

- ◆ New optional data element
  - TR29.10 Safety equipment devices
  - Linked to TR29.24 Protective Devices
  - Appears when “Other” is selected
  - Free text field

# 2024 Data Dictionary: Wisconsin Changes

**Protective Devices:**

| Available  |    | Selected |
|--|----|----------|
| Child Car Restraint (booster seat or child car seat) |    | Other    |
| Three Point Restraint                                |    |          |
| Lap Belt   | >> |          |
| Shoulder Belt  | >  |          |
| Personal Flotation Device                            | <  |          |
| Eye Protection                                       | << |          |
| Helmet (e.g., bicycle, skiing, motorcycle)           |    |          |
| Protective Clothing (e.g., padded leather pants)     |    |          |
| Protective Non-Clothing Gear (e.g., shin guard)      |    |          |

**Safety Equipment Description:**

# 2024 Data Dictionary: Wisconsin Changes

- ◆ Change from required to optional for direct entry
  - TR33.2 Referring facility arrival date
  - TR33.3 Referring facility arrival time
  - TR33.30 Referring hospital discharge date
  - TR33.31 Referring hospital discharge time

# 2024 Data Dictionary: Wisconsin Changes

- ◆ Change from required to optional for direct entry
  - TR5.33 Extrication
  - TR7.3 Name of EMS service
  - TR15.38 EMS run sheet/status
  - TR17.78.3 New activation level

# 2024 Data Dictionary: Wisconsin Elements

- ◆ No change for direct entry and will stay optional. They can be useful for PRQ
  - TR17.15 Date physician arrived
  - TR17.9 ED physician
  - TR17.13 ED physician service type
  - TR18.98 Admitting MD/staff
  - TR200.2.2.1 Operation number
  - TR200.2.2.3 Date/Time in OR
  - TR200.6 Service type of the physician
  - TR200.11 Procedure performed location

For Discussion Only



# PRQ Reports Associated with Data Element Changes

- Will function without elements made optional
  - ◆ Abnormal scene time for patients arriving by EMS
  - ◆ Open cases over or near 60-day timeliness threshold
  - ◆ Over triage report
  - ◆ Under triage report
  - ◆ Total number of highest-level activations

# PRQ Reports Associated with Data Element Changes

- Will not function without elements made optional
  - ◆ Patients arriving by EMS w/no ePCR

# PRQ Reports Associated with Existing Optional Data Elements

- Percent of time surgeon is present in ED within 30 minutes of highest-level activation
- Percent of time physician/APP/mid level provider is present in ED within 30 minutes of highest-level activation
- Surgeon activation for highest level activation
- Number of trauma patients admitted with ISS > 15 per physician

# PRQ Reports Associated with Existing Optional Data Elements

- Number of trauma patients admitted per year per physician
- Number of trauma craniotomies per year per physician
- Physician and count of procedures

# AAAM AIS Course Update

# Status Update

- Waiting for State Fiscal Year 2023 close out to occur for finalized budget, typically be the end of August
- Proposal will be sent to leadership for approval
- Proper State procurement procedures will then be followed
- Likely Spring 2024 at the earliest

# Demonstrations in Patient Registry

# Demonstrations in Patient Registry

- Updated Inter-Rater Reliability

The screenshot displays a software interface titled "Inter-Rater Reliability Validation". It features a table with columns: "Form Tab", "Form Field", "Form Value", and "Value Accurate?". Below the table are three rows, each corresponding to a form field. Each row includes a "Comments:" text area with a "4000 Characters left" indicator. At the bottom of the interface are "Save" and "Close" buttons.

| Form Tab     | Form Field                        | Form Value | Value Accurate?   |
|--------------|-----------------------------------|------------|---|
| Demographics | Patient's Middle Initial (TR1.10) |            | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| Demographics | Patient's Age (TR1.12)            |            | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| Demographics | Alternate Home Residence (TR1.13) |            | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| Demographics | Age Units (TR1.14)                |            | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| Demographics | Gender (TR1.15)                   |            | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| Demographics | Race (TR1.16)                     |            | <input type="radio"/> Yes <input checked="" type="radio"/> No |



# Demonstrations in Patient Registry

- Layout change
- Users name > Edit > Additional information > Incident tab display > vertical

# Demonstrations in Patient Registry

▼

► Edit Incident » Wisconsin Trauma Comprehensive Form » Demographics » ImageTrend -230707- Demo035|424 Save Save and Continue

**GREEN:** Optional      **BLUE:** State Required      **RED:** NTDB Required

**Record Information**

**Medical Record #**  \*      **Registry #:** ImageTrend -230707- Demo035      **Account #**

**Injury Information**

**Injury Date:**    **Time:**

**Patient Information**

**Patient's Last Name**  \*      **First Name Alias:**

**Patient's First Name**  \*      **Last Name Alias:**

**Patient's Middle Initial**

**Date of Birth**  /  /

**Age:**

**Age Units:**

**Race:**    
Asian   
Native Hawaiian or Other Pacific Islander   
Other Race

**Ethnicity:**

**Sex:**

**Gender:**  \*

**Patient Address Information**

Demographics  
Injury  
Pre-Hospital  
Referring Facility  
ED/TTA  
Initial Assessment  
Ventilator/Blood  
Procedures  
Diagnosis  
Outcome  
NTDB Preexisting/Hosp. Events  
Complications/PI  
Log of Admission

For Discussion Only

# Demonstrations in Patient Registry

- Report Writer
  - ◆ Hospital Events – Hospital Count
  - ◆ Required Data Elements Report Part 2
  - ◆ Door to CT Scan (all diagnoses)

Other Topics or Questions?

Thank You!