MMUCC Committee – Traffic Records Data Integration Subcommittee Meeting

March 16, 2023

1:30 – 3:00 PM Eastern

Microsoft Teams

I. Participants
   A. Committee Chair: Joanna Reed, NHTSA
   B. Subcommittee members
      1. Greg Gifford — Illinois Department of Transportation, Bureau of Data Collection
      2. Ty Carhart — Florida Department of Health
      3. Patricia Daniel — Georgia Department of Public Health
      4. Russ Martin — Governors Highway Safety Association
      5. Warren Stanley — Washington Department of Transportation
      6. Sladjana Oulad Daoud — California Office of Traffic Safety
      7. Doug Mowbray — Maryland Department of Transportation Motor Vehicle Administration's (MDOT MVA) Highway Safety Office
   C. Federal Liaisons
      1. CDC
         - David Fosbroke
      2. FHWA
         - Sarah Weissman Pascual
      3. FMCSA
         - Jenny Guarino
      4. NHTSA
         - Tom Bragan
         - John Siegler
         - Beau Burdett
         - Joshua DeFisher
         - Eric Chaney
         - Caitlin Webb
         - Michael Parsons
         - Tonja Lindsey
         - Jonae Anderson
         - Sean Puckett
         - Dereece Smither
         - Donna Glassbrenner
      5. NTSB
         - Brittany Rawlinson
   D. VHB
      1. Chelsea Palmateer
      2. Courtney Ruiz

II. Suggestions from other subcommittees
   A. Suggestion from the Law Enforcement Data Collection Subcommittee: Include *refused treatment* and *refused transport* from NEMSIS
      1. NEMSIS element **eDisposition.28 - Patient Evaluation/Care** which has the following attributes
         - 4228003 Patient Evaluated and Refused Care
         - 4228007 Patient Refused Evaluation/Care

2. NEMSIS element **eDisposition.30 - Transport Disposition** which has the following attribute
    - 4230009 Patient Refused Transport
3. Discussion: The subcommittee members agreed that these elements are critical for data analysis. Transported by family and treated and released to law enforcement would also be useful to include.
4. Suggestions: Add these NEMSIS elements
    - **eDisposition.28 - Patient Evaluation/Care**
    - **eDisposition.30 - Transport Disposition**
    - **eDisposition.31 – Reason for Refusal/Release**

B. Suggestion from the IT Database Design and Administration Subcommittee:
1. Consider interfacing the crash report with the vehicle registration system to auto populate the VIN based on a license plate lookup.
2. Discussion: Any suggestion to interface with other records systems is good, and each section should suggest interfacing. It's important for officers to be able to verify and edit data coming from other data systems because it may be incorrect or outdated. It would be helpful to have an example from a State that currently does this.
3. Suggestions:
    - Work with a State that currently does this to build an example of what can be done via interface. One example is Minnesota, who has representation on the IT subcommittee.
    - Add an example: "Consider interfacing the crash report with the State's vehicle registration system to auto populate the VIN, Make, Model, etc. based on a license plate lookup. Use caution to validate the imported vehicle information with the actual vehicle in the crash."

III. Review compiled edits to Chapter 10. These are general comments about the chapter.

A. The original intent of the chapter was to show that some data elements in previous versions of MMUCC may already be collected in other State data systems and don't need to be duplicated on the crash report. States should use the other applicable national standards that already exist. This chapter has evolved to include not only these elements in previous versions of MMUCC, but to also include additional elements that may help with data interface and crash data analysis.

B. Data *interface* and *integration* are different and accomplish different things. Interfacing the crash system with other data systems allows for real time data collection, lessening the workload for officers by auto-populating data fields. Integrating data from other systems with the collected crash data creates a more robust dataset for analysis, and it allows the crash report to contain fewer data elements by integrating data captured in other databases.

C. The first bullet in the intro should be reviewed and edited for clarity. Decision-makers are using data that has already been analyzed, they are not using the crash reports themselves. Switch the first and second bullets.

D. There would be value in including a list of additional benefits to data integration and interfacing, and how the included elements were selected. Something like "A team of subject matter experts developed a list of data elements from other national standards and the NHTSA data integration subcommittee reviewed it."

E. **Suggestions:**

1. Clarify the purpose of the chapter: 1) interface with the crash report and 2) integrate elements from other systems with the collected crash data for more robust data analysis.
2. Review and edit for consistency in terminology.
3. Add Potential Funding Sources section.
    - Include GO Teams, CDIP, SECDC/EDT grant
4. Clearly define *integration* and *interface* and describe how they are different and how the data from each will be used differently.
5. Review and edit the first bullet point to clarify the intro. Swap the first and second bullet points.
6. Remove the word "deficiency" from the intro and replace with "area for growth" or similar.
7. Include a list of additional benefits of data integration and interfacing.
8. Add how the included elements were selected. Something like "A team of subject matter experts developed a list of data elements from other national standards and the NHTSA data integration subcommittee reviewed it."

IV. Vehicle Data System
    A. Committee members submitted these additions under the AAMVA D.20
        1. A.29 Motor Carrier
        2. A.32.22 Registration Plate Type
        3. A.32.25 Registration Status
        4. A.38.7 Commercial Vehicle Type
        5. A.38.8 Gross Vehicle Weight
        6. A.38 Vehicle
        7. A.38.18 Vehicle Commercial Class Code

V. Driver Data System
    A. Committee members submitted these additions under the AAMVA D.20:
        1. A.2.9 Driver License Statuses
        2. A.6 Conviction
        3. A.7 Crash
        4. A.9.6 Driver Medical History Indicator
        5. A.9.10 Driver Sex
        6. A.10 Driver Education and Improvement
        7. A.11.21 Driver License Privilege Type Status
    B. Committee members submitted these additions under PDPS. These should also be included under CDLIS.
        1. DACDAT Crash Date
        2. DACSEV Crash Severity Code
        3. DVCJUR Jurisdiction Code – Convicting
        4. DCVDCV Conviction Date

VI. Roadway Data System
    A. Committee members submitted these additions under MIRE
        1. Median Type (FDE)
        2. Intersection/Junction Geometry (FDE)
        3. Interchange Type (FDE)
    B. Committee members submitted these additions under HPMS
        1. Signal Type
        2. Surface Type

3. Speed Limit
4. Ownership

VII. Citation/Adjudication Data Systems

A. This chapter suggests integrating violation information. MMUCC includes D9. Violation Codes. This is not duplicative because the violations codes entered by officers on the crash report (in D9 Violation Codes) may not make it all the way to the Citation/Adjudication system(s). We want both—we want the information from the officer, and we want to know the court outcome. For example, there could be three violations on the crash report, but the person may only get a conviction for one of the violations —this would be reflected on the driving record.

B. The Traffic Records Advisory (2018) includes several national data exchange systems, applicable guidelines, and standards. This may be useful for this section. Citation/Adjudication data can also be found in the driver records system, which may be easier to integrate with the crash data.

C. Suggestions:

1. Add the following to the example Adjudication System:
   - Court Code (to replace Town Code)
   - Race and Ethnicity (to replace Race)
   - Citation Number (to replace Ticket Number)
   - Citation (or Violation) Date
   - Conviction Date
   - Conviction Offense ACD Code
   - Final Dispositions
   - Contributed to Crash
2. Add the following to the example Citation Database:
   - Jurisdiction Code (to replace Town Code)
   - Race and Ethnicity (to replace Race)
   - Citation Number (to replace Ticket Number)
   - Citation (or Violation) Date
   - Citation Date
   - Contributed to Crash
3. Review the Example Traffic Court Records System section. It may not be common for States to maintain both an adjudication database and a traffic court system. If there is a State that does this, providing them as an example may be helpful.
   - Add Court Code (Court, Municipality, or Jurisdiction Code) as an element.

VIII. Injury Surveillance Data Systems

A. NEMSIS contains a **Universally Unique Identifier (UUID)**. The UUID is crucial for matching injury records. The NEMSIS UUID starts at the scene with emergency response and follows the patient throughout their treatment. The UUID can be used to create QR codes that can be scanned by officers to add to the crash report, but this requires the crash report to have a placeholder for this information. Collecting the UUID is one of the suggestions of this chapter.

B. ICD codes on the EMS report are useful for identifying injuries resulting from a motor vehicle crash. It's also helpful for injury surveillance folks to know the *dispatch reason* because it does not always match what officers/EMS encountered at the scene.

C. There is no national standard for hospital records. There is the Health Information Exchange (HIE), but nationally the data quality is not great.

D. MMUCC element P7. Injury Status shouldn't be completed by EMS data because MMUCC uses the KABCO scale and data coming from the injury systems would have more details. States are required by federal law to base their performance targets on the KABCO injury scale as defined in MMUCC 4. How you define an injury is tied to policy, not the true severity of the injury. If States weren't required to report serious injuries, they could have the officer collect the crash type (fatal, injury, PDO) and not try to classify the severity of the injury. However, integrating the detailed injury data with the crash system would be useful for data analysis. Keeping both the data supplied by the officer and the data integrated from another system is important, and it can be used in training for Law Enforcement officers or to follow the injury outcomes.

E. Suggestions:
    1. Add these NEMSIS elements
        - eDispatch.01 – Dispatch Reason
        - eInjury.05 – Main Area of the Vehicle Impacted by the Collision
        - eInjury.07 – Use of Occupant Safety Equipment
        - eInjury.08 – Airbag Deployment
        - eInjury.26 – ACN Vehicle Seat Location
        - eInjury.27 – Seat Occupied
        - eInjury.28 – ACN Incident Seat Belt Use
        - eInjury.29 – ACN Incident Air Bag Deployed
        - eHistory.17 – Alcohol/Drug Use Indicators
        - eDisposition.21 – Type of Destination
        - eOutcome.09 – Emergency Department Procedures
        - eOutcome.10 – Emergency Department Diagnosis
        - dAgency.02 – EMS Agency Number
        - dAgency.03 – EMS Agency Name
    2. Add an example under NEMSIS: "Consider using **eOutcome.10 Emergency Department Diagnosis** and **eOutcome.13 Hospital Diagnosis** to compare to the KABCO injury level on the crash report."
    3. Add an example under NEMSIS: to use NEMSIS UUID to integrate the crash data with the EMS patient care report. Something like: "Consider using the NEMSIS UUID to link the crash report with the EMS patient care report(s) and other injury surveillance data systems (e.g., trauma registry, hospital records)."
    4. Under National Standard Certificate of Death, add **44. If Transportation Injury, Specify**.
    5. In Alcohol and Drug Toxicology (typical State system, no standard) change "Lab Number" to "Lab***oratory*** Number".
    6. Add a section to ISS for **Hospital Records (typical State system, no standard)**
        - Hospital Name
        - Hospital location
        - Admission Date
        - Type of Admission
    7. Add the following under National Trauma Data Bank:
        - Date of admission
        - Time of admission
        - Location of trauma center

IX. State Challenges

A. Discussion and Suggestion: Add a State Challenges and Opportunities section to the end of the chapter. List the challenges discussed in previous meetings, and also include solutions where possible. Create general language that applies to all data systems, and then list some specific examples for each data system.

X. Close meeting – ended at 2:27 PM Eastern