South Carolina Bureau of EMS Data Overview

DHEC Data Symposium 2016

South Carolina Department of Health and Environmental Control

Healthy People. Healthy Communities.

SC DHEC Bureau of EMS

- 18 Personnel
- Three Divisions (EMS, Trauma, Data)
- 4 Dedicated to data, process improvement, and registries (Trauma and Stroke)

SC EMS SYSTEM

256 Agencies

- Ambulances- 1868
- Rotor Craft- 38
- Fixed Wing- 9
- MCI Buses 7

- Total: 1922 Transport Capable

- More than 210 licensed First Responder Fire Dept vehicles

Why do we think we have good data? Regulation 61-7, that's why!

- Requires submission of all ePCRs
- 24 – 72 Hours
- Each licensed agency MUST have a data manager

- Each agency must meet data quality score requirements of 1 1/2 x the state average score or less.

Section 1301. Patient Care Reports.

A. Each licensed provider must create and submit an electronic patient care report (ePCR) for each patient contact regardless of patient transport decision.

B. The primary care attendant is responsible for documenting all patient contact, care, and transport decision within the ePCR. All required documentation must be completed within twenty-four (24) hours of the conclusion of call.

C. Each licensed provider must submit its ePCRs into PreMIS within seventy-two (72) hours of the conclusion of call.

D. When transporting to an emergency room (ER), patient ePCR shall be submitted to the ER within thirty (30) minutes of the completion of the call. In lieu of that, a paper pre-run information sheet may be substituted until the ePCR is sent. ePCR information shall be sent no later than twenty-four (24) hours from completion of the call.

If you want to know …

How many female patients over 55 with a chief complaint of chest pain received oxygen, aspirin, NTG, and a 12 lead EKG within 10 mins of Paramedic contact…we can tell you. By state, county, agency, zip code, or even by specific paramedic if its your agency…

If you want to know if male paramedics or female paramedics performed the actions more quickly, we can tell you that as well…

Requesting Data ---

- Is easy !
- Contact the Data Division Director
- Will provide a form for formal request
- Will provide guidance on what can and cant be released
- Will provide you an approximate turn around time for your data in the format you request

EMS Data System

Health Data Symposium 2016

South Carolina Department of Environmental Services

Bureau of Emergency Medical Services

EMSPIC Applications

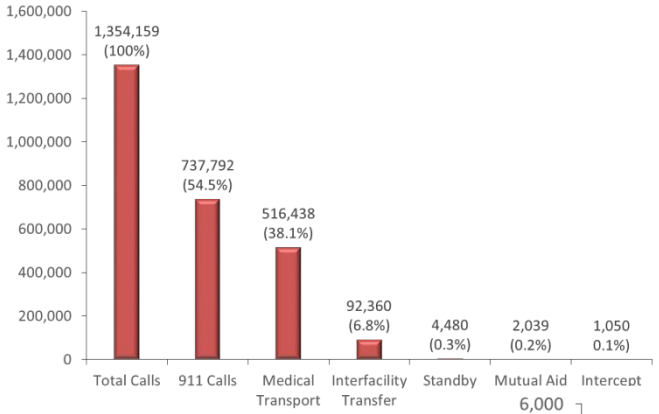
PREmis
patient care reports

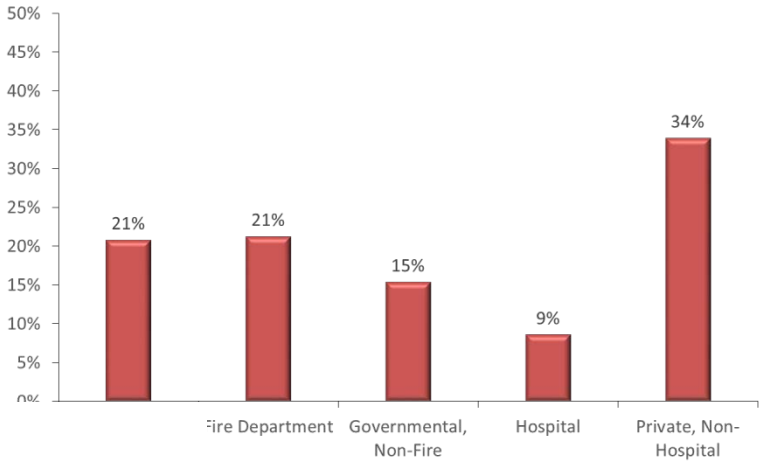
SMARTT
resource + disaster management

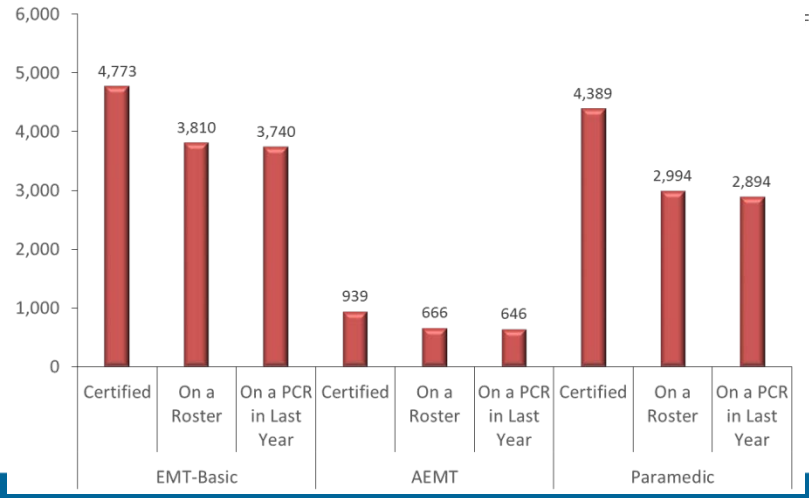
CiS
agency + professional credentialing

EMS STATS
Self Tracking and Assessment of Targeted Statistics

Customizable Annual State Report







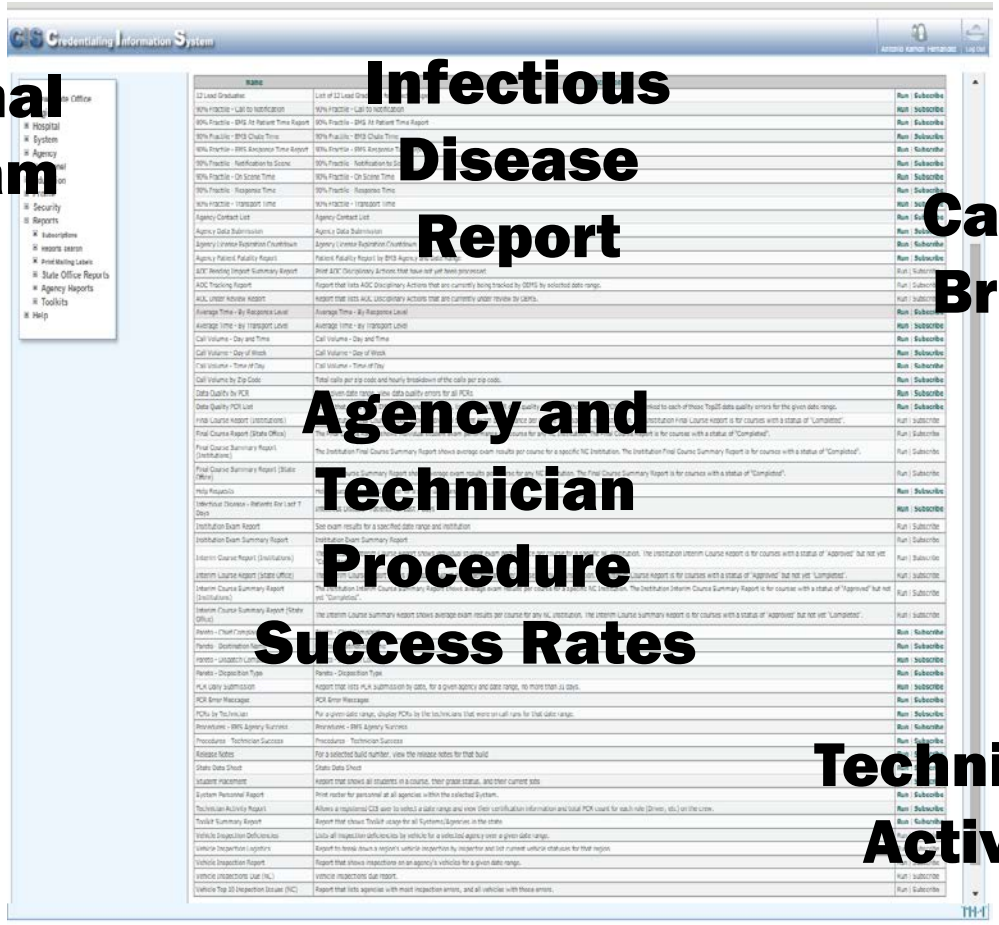
EMSpic

On-Demand Reports

EMS Educational Institution Exam Summary

Fractile Times

Patient Fatality Report



Infectious Disease Report

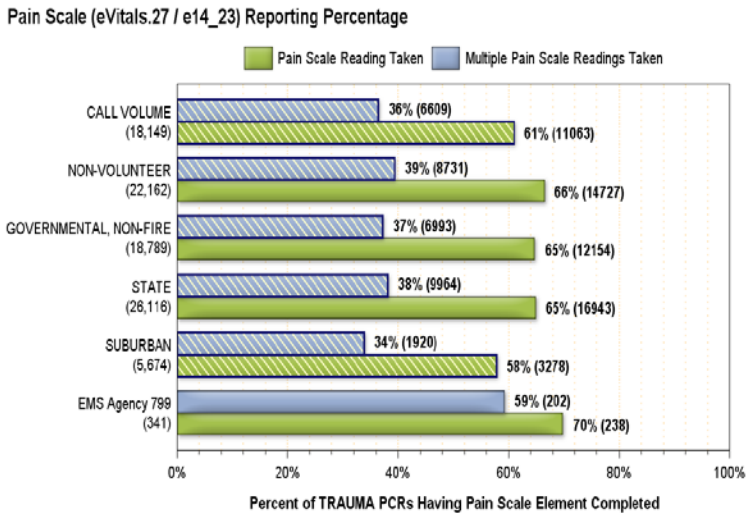
Agency and Technician Procedure Success Rates

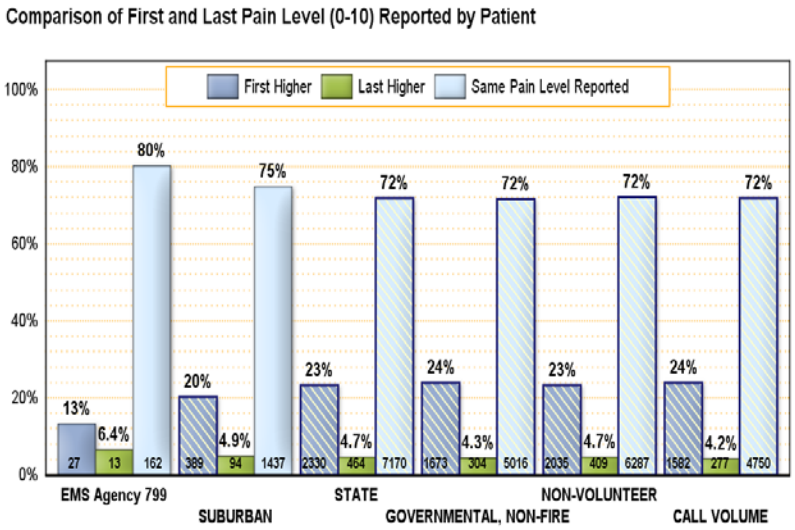
Call Volume Breakdown

Technician Activity

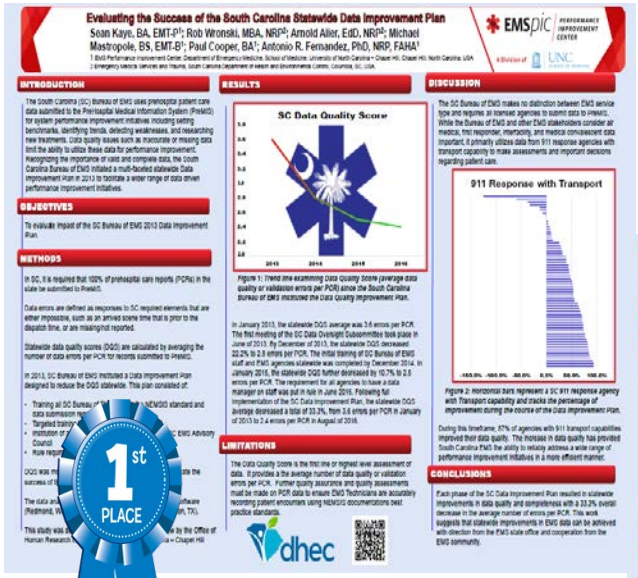
Performance Measure Assessments and Comparisons

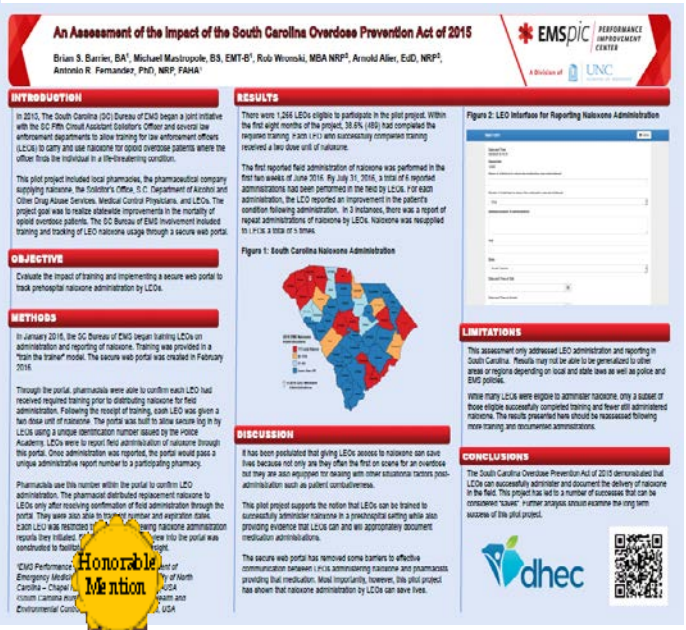
EMS STATS
Self Tracking and Assessment of Targeted Statistics





Research Presentations





2015 SAEM ABSTRACTS

317 **An Assessment of Benzodiazepine Medications and Administration Routes for Seizures in the Prehospital Setting in South Carolina**

Remle P. Crowe[1], Melissa A. Bentley[1], Robert A. Wronski[2], and Antonio R. Fernandez[3]
[1]*National Registry of EMTs, Columbus, OH;* [2]*SC Department of Health and Environmental Control, Columbia, SC;* [3]*Emergency Medical Services Performance Improvement Center, University of North Carolina, Chapel Hill, NC*

Federal Agency Data Requests

- DOJ
- DEA
- FBI

South Carolina Trauma Registry

DHEC Data Symposium 2016

South Carolina Department of Health and Environmental Control

Healthy People. Healthy Communities.

"A trauma registry is a disease-specific data collection composed of a file of uniform data elements that describe the injury event, demographics, prehospital information, diagnosis, care, outcomes, and costs of treatment of injured patients."

(Resources for optimal care of the injured patient, 2014)

Definition of Trauma Patient

A trauma patient is defined as a patient who sustains a traumatic injury and meets the inclusion/exclusion criteria approved by the Trauma Advisory Council and included in this data dictionary.

SC Trauma Data Dictionary, 2016

SC Trauma Registry Inclusion Criteria

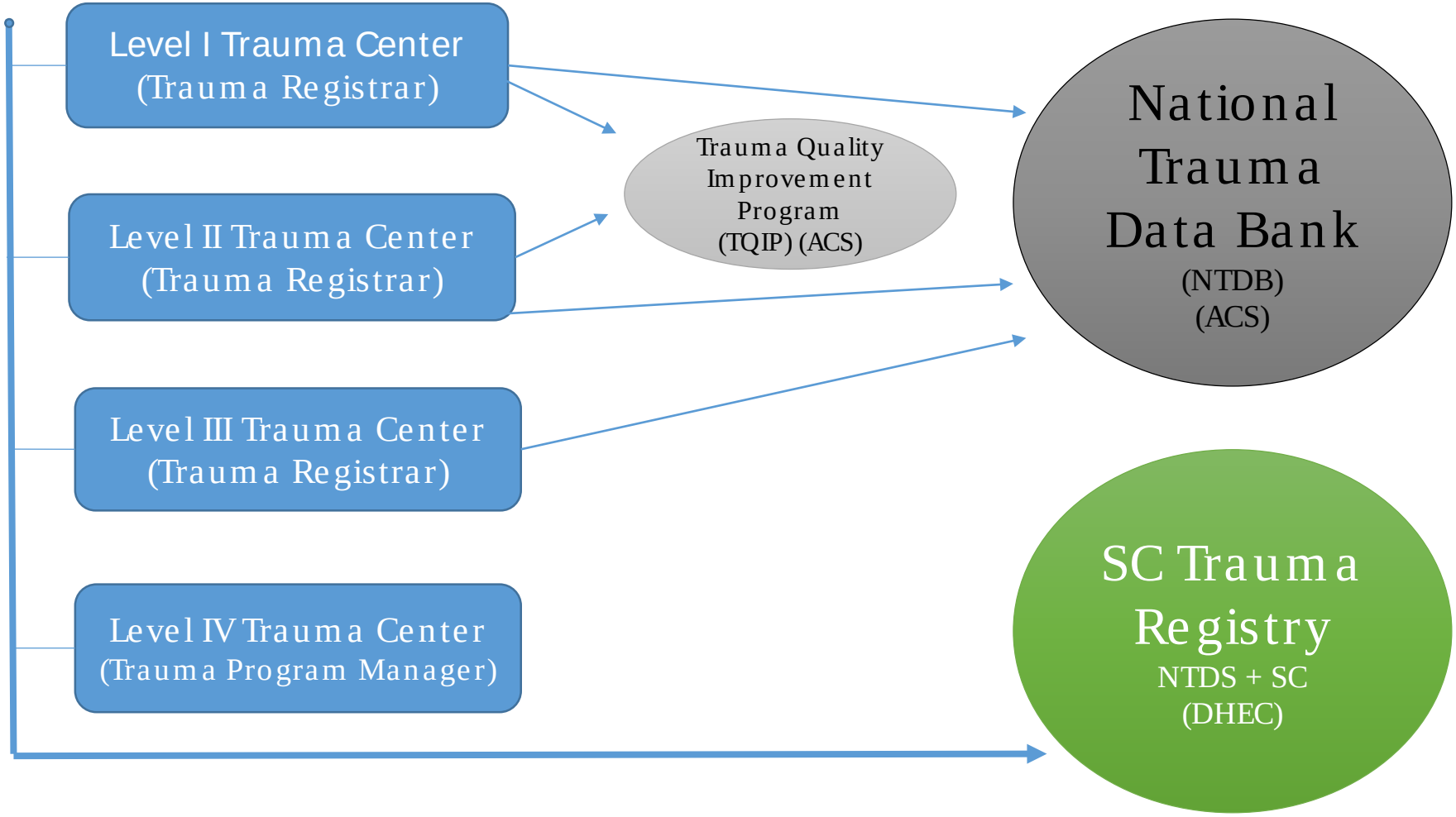
At least one of the following injury diagnostic codes defined in the **International Classification of Diseases, Tenth Revision (ICD-10-CM):**

- ***S00-S99 with 7th character modifiers of A, B, or C ONLY.*** *(Injuries to specific body parts – initial encounter)*
- ***T07*** *(unspecified multiple injuries)*
- ***T14*** *(injury of unspecified body region)*
- ***T20-T28 with 7th character modifier of A ONLY*** *(burns by specific body parts- Initial encounter)*
- ***T30-T32*** *(burn by TBSA percentages)*
- ***T79.A1-T79.A9 with 7th character modifier of A ONLY*** *(Traumatic Compartment Syndrome – initial encounter)*

AND MUST INCLUDE ONE OF THE FOLLOWING IN ADDITION TO (ICD -10-CM S00-S99, T07, T14, T20-T28, T30-T32 and T79.A1-T79.A9):

- Hospital admission OR
- Patient transfer via EMS transport (including air ambulance) from one hospital to another hospital OR
- Death resulting from the traumatic injury (independent of hospital admission or hospital transfer status)

SC Trauma Data Dictionary, 2016

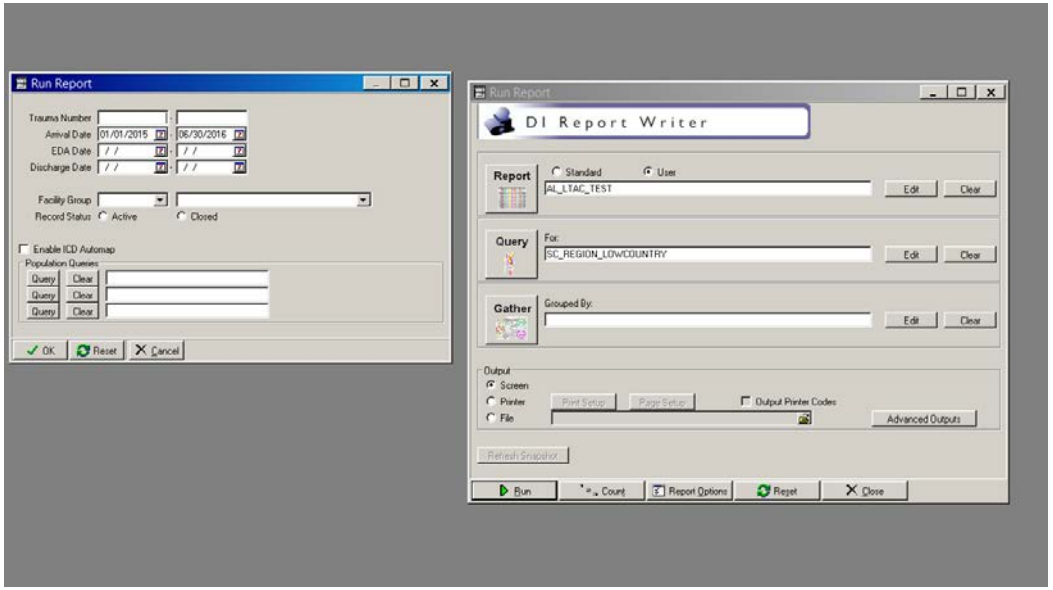

Level I Trauma Center
(Trauma Registrar)
Level II Trauma Center
(Trauma Registrar)
Level III Trauma Center
(Trauma Registrar)
Level IV Trauma Center
(Trauma Program Manager)
Trauma Quality Improvement Program (TQIP) (ACS)
National Trauma Data Bank
(NTDB)
(ACS)
SC Trauma Registry
NTDS + SC
(DHEC)

ISS Summary — Generated 11/21/2016 14:55

ISS Summary
Generated 11/21/2016
Arrival Dates 01/01/2016 - 06/30/2016
Query MOPED_MECHANISM
Number of Records 146

ISS	Count	Percent
All Patients	146	100.00
Valued	146	100.00
01 - 08	44	30.14
09 - 15	60	41.10
16 - 24	26	17.81
25 - 40	13	8.90
41 - 49	3	2.05
50 - 74	0	0.00
75	0	0.00
Not Valued	0	0.00
Blank	0	0.00
Not Applicable	0	0.00
Unknown	0	0.00

2015	2016 (01/01-6/30)
16904 submitted records	7106 submitted records



Data source: SC Trauma Registry, 2016

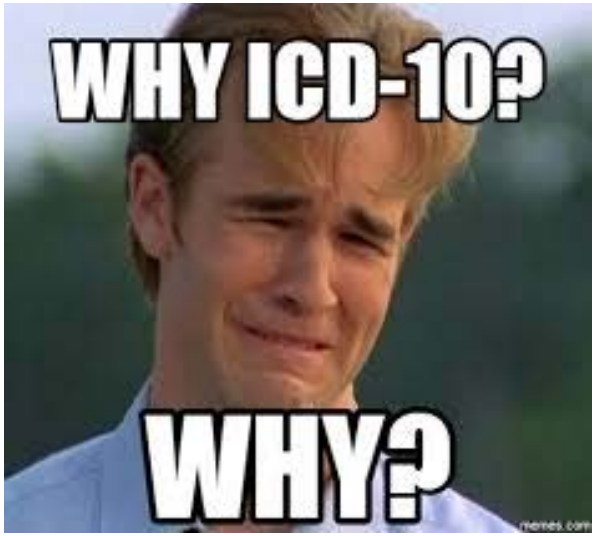
Trauma Data Utilization

- Population-based perspective of injury
- Determine leading mechanisms of injury
- Underserved areas of the state
- Outcomes of injured patients
- Trauma system improvement efforts

Challenges for the SC Trauma Registry

- Data homogeneity
- Challenges with registry vendor
- Timely and complete data submissions
- Trauma registrar education
- Formal state data request process
- State employee turnover
- Multiple registries for trauma system (EMS registry, trauma registry, post-acute care data)
- Lack of resources and references on DHEC website for TCs, trauma program managers, and trauma registrars

How is 2017 looking so far?



- RFP for trauma registry vendor
- SC Trauma Registry Data Dictionary
- Areas to benefit from having Level IV TC
- Focus on registrar education
- Registry data for regional PI initiatives
- Formalizing state trauma data request process
- SC Trauma Registry User's Group

Painting a better picture with the trauma data…

- Rehabilitation and outcome data
- Integrating multiple registries
- Recruiting and submission of non-trauma center data
- TQIP regional collaborative
- Best practices for the South Carolina Trauma System

Who to contact at DHEC?

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References

Resources for optimal care of the injured patient. (2014). Chicago, IL: American College of Surgeons, Committee on Trauma.

South Carolina Trauma Registry Data Dictionary (2016). Columbia, SC: Bureau of Emergency Medical Services, Trauma Division.