Supplemental Table A. PreMIS Data Elements Used to Capture Field Triage and TTDP Criteria

|  |  |  |
| --- | --- | --- |
| **2006 Field Triage Criteria** | **North Carolina TTDP** | **PreMIS Variable Source for field** |
|  | | |
| **Physiologic Criterion** |  |  |
| Glasgow Coma Score: <14 | Glasgow Coma Score < 13 | (E14\_15) Glasgow Coma Score – Eye  (E14\_16) Glasgow Coma Score – Verbal  (E14\_17) Glasgow Coma Score – Motor  (E14\_19) Total Glasgow Coma Score  *\*Use either total score OR sum of three composite scores* |
| Systolic Blood Pressure: <90 mmHg | Systolic Blood Pressure: <90 mmHg | (E14\_04) Systolic Blood Pressure |
| Respiratory Rate:  <10 or >29 OR  <20 in infant <1 yr | Respiratory Rate:  <10 or >29 OR  <20 in infant <1 yr | (E14\_11) Respiratory Rate |
|  |  |  |
| **Anatomic Criterion** |  |  |
| Penetrating injury to head, neck, torso, or extremities proximal to elbow and knee | Penetrating injury to head, neck, torso, or extremities proximal to elbow and knee | (E03\_01) Dispatch complaint = STAB/GUNSHOT WOUND  OR  (E10\_01) Injury cause = FIREARM ASSAULT (E965.0), FIREARM INJURY (ACCIDENTAL) (E985.0), FIREARM SELF INFLICTED (E955.0),  STABBING/CUTTING ASSAULT (E966.0)  OR  (E09\_05) Chief Complaint = Stabbing, GSW  OR  Narrative contains 'GUN', 'SHOOTING', 'GUNSHOT'  'SHOOT', 'GSW', 'KNIFE' |
| Flail Chest or Pneumothorax | Flail Chest or Pneumothorax | (E16\_07) Flail Segment L 3555, Flail Segment R 3560 |
| Two or more proximal long-bone fractures | Two or more proximal long-bone fractures | No PreMIS variable or proxy |
| Crushed, degloved, or mangled extremity | Crushed, degloved, or mangled extremity | No PreMIS variable or proxy |
| Amputation proximal to wrist and ankle | Amputation proximal to wrist and ankle | No PreMIS variable or proxy |
| Pelvic fractures | Pelvic fractures | No PreMIS variable or proxy |
| Visibly Open or depressed skull fracture | Visibly Open or depressed skull fracture | No PreMIS variable or proxy |
| Paralysis | Paralysis | No PreMIS variable or proxy |
|  | Critical or Serious Burns | (E10\_03, 2040) Burns = yes  OR  (E10\_01) Injury cause = FIRE AND FLAMES (E89X.0)  OR  (E03\_01) Dispatch complaint = BURNS |
|  |  |  |
| **Mechanism Criterion** |  |  |
| Falls:  Adults >20 ft  Children >10 ft | Falls:  Adults >20 ft  Children >10 ft | (E10\_10) Fall - Height of Fall |
| MVC:  Intrusion >12 inches  occupant side  Intrusion >18 inches  any site  Ejection  Death in same vehicle  Vehicle Telemetry  with high risk injury | MVC:  Intrusion >12 inches occupant side  Intrusion >18 inches any site  Ejection  Death in same vehicle  Vehicle Telemetry with high risk injury | Motor Vehicle Crash  (E10\_04, 2085) Space Intrusion > 12 inches  (E10\_04, 2065) Ejection  (E10\_04, 2060) DOA Same Vehicle  Vehicle telemetry not collected |
| Auto vs. pedestrian/ bicyclist thrown, run over | Auto vs. pedestrian/ bicyclist thrown, run over | (E10\_01) Injury Cause =  BICYCLE ACCIDENT (E826.0)  PEDESTRIAN TRAFFIC ACCIDENT (E814.0) |
| Motorcycle crash >20 mph | Motorcycle crash >20 mph | (E10\_01) Injury Cause =  MOTORCYCLE ACCIDENT (E81X.1) |
|  |  |  |
| **Special Criterion** |  |  |
| Age  Older adults > 55 years  Children | Omitted | Omitted from NC TTDP so not collected |
| Anticoagulation and bleeding disorders | Anticoagulation and bleeding disorders | No PreMIS variable or proxy |
| Burns | See Anatomic Criterion | See Anatomic Criterion |
| Time sensitive extremity injury | Omitted | No PreMIS variable or proxy |
| End stage renal disease requiring dialysis | Omitted | No PreMIS variable or proxy |
| Pregnancy >20 weeks | Pregnancy >20 weeks | (E12\_20) Pregnant = yes  OR  Narrative mentions pregnancy  OR  (E09\_05) Chief Complaint or Provider Primary Impression= 659.90- PREGNANCY / OB DELIVERY |
| EMS provider judgment | Omitted | No PreMIS variable or proxy |

Supplemental Table B. Transport to a Level I Trauma Center by Geocoded Distance and Field Triage Criterion (percentages are of the total for that distance)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Distance from Trauma Center (miles)** | **Pre-TTDP** | | **Post-TTDP** | | | **% Difference (95% CI)** |
|  | N | % | | N | % |  |
| *Met Any Field Triage Criterion* | |  | |  |  |  |
| Overall | 2018 | 21.2% | | 2070 | 20.8% | -0.4% (-0.7%, 1.5%) |
| <30 | 715 | 47.6% | | 662 | 43.7% | -3.9% (-7.5%, -0.4%) |
| 30-60 | 141 | 8.6% | | 137 | 7.2% | -1.4% (-3.2%, 0.4%) |
| 61-90 | 54 | 5.8% | | 47 | 4.4% | -1.4% (-3.4%, 0.5%) |
| 91-120 | 18 | 4.1% | | 11 | 2.4% | -1.7% (-4.0%, 0.7%) |
| *Met Physiologic Criterion* | |  | |  |  |  |
| Overall | 1315 | 21.5% | | 1288 | 19.4% | -2.1% (-3.5%, -0.7%) |
| <30 | 460 | 44.7% | | 407 | 39.6% | -5.2% (-9.4%, -0.9%) |
| 30-60 | 94 | 8.0% | | 79 | 5.7% | -2.4% (-4.4%, -0.4%) |
| 61-90 | 35 | 5.7% | | 33 | 4.3% | -1.4% (-3.7%, 1.0%) |
| 91-120 | 12 | 4.0% | | 9 | 2.8% | -1.2% (-4.1%, 1.7%) |
| *Met Anatomic Criterion* | |  | |  |  |  |
| Overall | 290 | 18.0% | | 323 | 20.5% | 2.5% (-3.6%, -1.3%) |
| <30 | 147 | 49.5% | | 155 | 50.7% | 1.2% (-6.8%, 9.1%) |
| 30-60 | 21 | 6.8% | | 25 | 8.3% | 1.4% (-2.8%, 5.6%) |
| 61-90 | 6 | 3.2% | | 7 | 3.7% | 0.6% (-3.2%, 4.3%) |
| 91-120 | 1 | 1.2% | | 0 |  | -1.2% (-3.6%, 1.1%) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Met Mechanism Criterion* | |  |  |  |  |
| Overall | 333 | 27.4% | 378 | 31.6% | 4.2% (0.6%, 7.9%) |
| <30 | 61 | 64.9% | 58 | 61.7% | -3.2% (-17.0%, 10.6%) |
| 30-60 | 23 | 26.1% | 33 | 26.2% | 0.1% (-11.9%, 12.0%) |
| 61-90 | 13 | 19.4% | 7 | 12.1% | -7.3% (-20.0%, 5.3%) |
| 91-120 | 5 | 14.7% | 2 | 6.3% | -8.5% (-23.0%, 6.1%) |
| *Met Special Criterion* |  |  |  |  |  |
| Overall | 80 | 14.5% | 81 | 15.1% | 0.6% (-3.6%, 4.8%) |
| <30 | 47 | 57.3% | 42 | 48.8% | -8.5% (-23.5%, 6.6%) |
| 30-60 | 3 | 3.8% | 0 |  | -3.8% (-7.9%, 0.4%) |
| 61-90 | 0 |  | 0 |  |  |
| 91-120 | 0 |  | 0 |  |  |

Supplemental Table B: Transport to a Level I Trauma Center by Geocoded Distance and Field Triage Criterion (percentages are of the total for that distance) *continue*d