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

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| --- | --- | --- |
| **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 WOUNDOR(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, GSWORNarrative 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 ftChildren >10 ft | Falls: Adults >20 ftChildren >10 ft | (E10\_10) Fall - Height of Fall  |
| MVC:Intrusion >12 inches  occupant sideIntrusion >18 inches  any siteEjectionDeath in same vehicleVehicle Telemetry  with high risk injury | MVC:Intrusion >12 inches occupant sideIntrusion >18 inches any siteEjectionDeath in same vehicleVehicle 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** |  |  |
| AgeOlder adults > 55 yearsChildren | 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 ORNarrative mentions pregnancyOR(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)

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| --- | --- | --- | --- |
| **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