



Measure Report Descriptions

Each of the reports is part of a suite of measures defined by the North Dakota Rural EMS Counts project to identify performance measures that matter for EMS in rural settings.

Filters applied to all reports include:

1. Active = Yes
2. Locked = Yes
3. Run Type = 911 Response

There are five groupings that comprise the North Dakota Rural EMS Counts Reports: Cardiac (3), Pain (2), Safety (3), Stroke (4), and Vitals (6).

Cardiac

Cardiac- 12 Lead Performed by EMS for ED-Diagnosed STEMI

Description:

This report looks at how often a 12-lead ECG was performed for patients with an ED ICD10 diagnosis of STEMI/NSTEMI returned through ESO Health Data Exchange.

This report is for EMS Agencies that receive information back from the hospital regarding the patient diagnosis and treatment at the hospital. The EMS ePCR is updated to reflect the ED and/or hospital diagnosis. If the hospital diagnosed the patient with ST elevation myocardial infarction (STEMI) or Non-STEMI, the report will flag the ePCRs that did not have a 12-Lead performed by EMS.

This is a learning opportunity for EMS. Knowing the hospital diagnosis allows EMS Agencies to review their assessment, training, and protocols and improve patient care.

Specific filters to identify ED-Diagnoses STEMI include:

1. Patient Age (in Years) \geq 18
2. Outcome ED Diagnosis = 1) Admitting or 2) Final
3. Outcome Diagnosis ICD-10 Diagnosis Group = STEMI/NSTEMI

Cardiac- 12 Lead Performed for Suspected Cardiac Chest Pain

Description:

This measure calculates how often a 12-lead ECG was performed for patients with an EMS provider impression related to suspected Acute Coronary Syndrome.

Specific filters to identify suspected Acute Coronary Syndrome include:

1. Primary or Secondary Impressions includes one of these values: 1) Chest Pain / Discomfort, 2) Angina pectoris, 3) Angina, unstable, 4) ST elevation (STEMI) myocardial infarction of anterior wall, 5) ST elevation (STEMI) myocardial infarction of inferior wall, 6) ST elevation (STEMI) myocardial infarction of other sites, 7) ST elevation myocardial infarction (STEMI), 8) Myocardial infarction, or 9) Non-ST elevation myocardial infarction (NSTEMI)

Cardiac- Aspirin Administration for Suspected Cardiac Chest Pain

Description:

This report calculates how often aspirin was administered to patients with an EMS provider impression of non-traumatic chest pain. This report is part of a suite of measures defined by the North Dakota Rural EMS Counts project to identify performance measures that matter for EMS in rural settings.

Exceptions:

The following pertinent negatives (reasons procedure not performed) are not included in the measure. These records will be found in the "Exceptions" row in the drill through: Contraindication Noted, Denied By Order, Medication Allergy, and Medication Already Taken.

Note: The following pertinent negatives are not treated as exclusions: Unable to Complete and Refused. These records will be included under "Measure Criteria Not Met".

Specific filters to identify suspected cardiac chest pain include:

1. Patient Age (in Years) \geq 18
2. Primary or Secondary Impression includes one of these values: 1) Chest Pain / Discomfort, 2) Angina pectoris, 3) Angina, unstable, 4) ST elevation (STEMI) myocardial infarction of anterior wall, 5) ST elevation (STEMI) myocardial infarction of inferior wall, 6) ST elevation (STEMI) myocardial infarction of other sites, or 7) ST elevation myocardial infarction (STEMI)

Pain Reports

Pain- Pain Management Intervention Performed for Pain >4

Description:

The report calculates the percentage of patients with a pain score of five or greater from any cause (trauma, cardiac, other), that received some form of pain intervention and the percentage of patients with pain relief.

*For the purposes of reporting the percentage of patients receiving pain intervention, the following interventions are considered: Toradol, Ibuprofen, Tylenol, Fentanyl, Morphine, Nubain, Versed, Versed Drip, Midazolam, Valium, Darvocet, Demerol, Dilaudid, Hydrocodone, Percodan, Stadol, Nitroglycerin, Nitronox, Nitroprusside, Nitrostat, Nitro Infusion, Nitro Paste, Nitro Spray. The following interventions when applied in the presence of a self reported **pain score of greater than 4** are assumed to be used in part to reduce discomfort; splinting, traction splint, cooling, bandaging, burn care and irrigation. That report requires documentation of at least two pain scores.*

Specific filters to identify for this report include:

1. Highest Pain Value Gathered \geq 5. [This value is documented in the vital signs section.]

Pain- Pain Intervention Resulted in Pain Reduction for Pain >4

Description:

This report calculates the percentage of EMS transports originating from a 911 request for patients whose pain score was lowered during the EMS encounter.

Specific filters to identify for this report include:

1. Highest Pain Value Gathered \geq 5. [This value is documented in the vital signs section.]

Safety Reports

Safety- ETCO2 Monitoring with Advanced Airway

Description:

This report calculates how often at least one ETCO2 measurement was recorded when an advanced airway was used.

This report identifies the patient population:

- *Treatments Performed (per Patient): Combitube, EasyTube Airway, iGEL, King Airway, Nasotracheal Intubation, Needle Cricothyroidotomy, Orotracheal Intubation, Pertrach, QuickTrach (Adult), QuickTrach (Child), Rapid Sequence Intubation (RSI), Retrograde Intubation, Sedation Assist Intubation (SAI), Surgical Cricothyroidotomy, Video Laryngoscopy*
- *First Successful Advanced Airway Attempt Number: 1, 2*

Safety- Lights and Sirens Not Used During Response to Scene

Description:

This report calculates the percentage of EMS responses originating from a 911 request in which lights and sirens were not used during response.

Safety- Light and Sirens Not Used During Transport

Description:

This report calculates the percentage of EMS transports originating from a 911 request during which lights and sirens were not used during patient transport.

Specific filters to identify for this report include:

1. Disposition is any of these values: 1) Transported Lights/Siren, 2) Transported Lights/Siren, Downgraded, 3) Transported No Lights/Siren, upgraded, 4) Transported No Lights/Siren

Stroke Reports

Stroke- Blood Glucose Check Performed for Suspected Stroke

Description:

This report evaluates the percentage of adult suspected stroke patients that received a blood glucose evaluation. As a protocol adherence report, the provider gets credit for performing the assessment if a value is recorded or if it is documented that the patient refused the assessment.

NOTE: The Blood Glucose Check must be documented in the Vital Signs section of the ePCR.

Specific filters for this report include:

2. Patient Age (in Years) \geq 18
3. Primary or Secondary Impression includes one of these values: 1) Stroke, 2) Transient Cerebral Ischemic Attack (TIA)
4. Treatments Documented (per Patient) = Stroke Alert
5. Narrative Treatment Protocol = Suspected Stroke

Stroke- Last Known Well or Time of Onset Recorded by EMS for Suspected Stroke

Description:

This report calculates the percentage of records for patients with suspected stroke or TIA who had time of onset or time last known well (LKW) documented in the appropriate discrete data field as part of the stroke assessment.

Specific filters for this report include:

1. Primary or Secondary Impression includes one of these values: 1) Stroke, 2) Transient Cerebral Ischemic Attack (TIA)
2. Treatments Documented (per Patient) = Stroke Alert
3. Narrative Treatment Protocol = Suspected Stroke

Stroke- Stroke Assessment Performed by EMS for ED-Diagnosed Stroke

Description:

This report calculates the percentage of EMS responses originating from a 911 request for patients with an ED ICD10 diagnosis code indicating stroke, who had a stroke assessment performed during the EMS response.

This report is for EMS Agencies that receive information back from the hospital regarding the patient diagnosis and treatment at the hospital. The EMS ePCR is updated to reflect the ED and/or hospital diagnosis. If the hospital diagnosed the patient with a Stroke the report will flag the ePCRs that did not have a stroke assessment performed by EMS.

This is a learning opportunity for EMS. Knowing the hospital diagnosis allows EMS Agencies to review their assessment, training, and protocols and improve patient care.

Stroke- Stroke Assessment Performed by EMS for Suspected Stroke

Description:

This report calculates the percentage of EMS responses originating from a 911 request for patients with suspected stroke who had a stroke assessment performed during the EMS encounter.

Documentation of any part of a stroke screen will count towards “measure criteria met”. Performance improvement teams may wish to dive further into assessment to determine whether or not all elements of the screening instrument were completed.

Specific filters for this report include:

1. Patient Age (in Years) \geq 18
2. Primary or Secondary Impression includes one of these values: 1) Stroke, 2) Transient, or Cerebral Ischemic Attack (TIA)
3. Treatments Documented (per Patient) = Stroke Alert
4. Narrative Treatment Protocol = Suspected Stroke

Vitals Reports

The six Vitals Sign reports are for all patient contacts.

All Vitals Signs must be documented in the Vital Signs sections.

The Vitals Reports exclude the following Disposition values:

- 1) Cancelled (No Patient Contact), 2) Cancelled (Prior to Arrival at Scene), 3) Cancelled on Scene/No Patient Found, 4) Standby - No Service or Support Provided, 5) Patient Dead on Scene - No Resuscitation Attempted (With Transport), 6) Patient Dead on Scene - No Resuscitation Attempted (Without Transport), 7) Patient Dead on Scene - Resuscitation Attempted (With Transport), 8) Patient Dead on Scene - Resuscitation Attempted (Without Transport), 9) Transport Non-Patient, Organs, etc., and 10) Wheelchair Transport.

Vitals- Glasgow Coma Scale Documented

Description:

Assessing and monitoring vital signs is a critical component for ensuring appropriate and timely out-of-hospital care. This report calculates the percentage of all records with at least one Glasgow Coma Scale score gathered and documented in the appropriate discrete data field.

Vitals- Pulse Rate Documented

Description:

Assessing and monitoring vital signs is a critical component for ensuring appropriate and timely out-of-hospital care. This report calculates the percentage of all records with at least one pulse rate gathered and documented in the appropriate discrete data field.

Vitals- Respiratory Rate Documented

Description:

Assessing and monitoring vital signs is a critical component for ensuring appropriate and timely out-of-hospital care. This report calculates the percentage of all records with at least one respiratory rate gathered and documented in the appropriate discrete data field.

Vitals- Set of Vital Signs Documented

Description:

Assessing and monitoring vital signs is a critical component for ensuring appropriate and timely out-of-hospital care. This report calculates the percentage of all records with at least one set of vital signs gathered and documented in the appropriate discrete data fields. For this measure, a set of vital signs consists of: Glasgow Coma Scale score, pulse rate, respiratory rate, systolic blood pressure, and pulse oximetry.

Vital- SpO2 Documented

Description:

Assessing and monitoring vital signs is a critical component for ensuring appropriate and timely out-of-hospital care. This report calculates the percentage of all records with at least one pulse oximetry reading gathered and documented in the appropriate discrete data field.

Vitals- Systolic Blood Pressure Documented

Description:

Assessing and monitoring vital signs is a critical component for ensuring appropriate and timely out-of-hospital care. This report calculates the percentage of all records with at least one systolic blood pressure reading gathered and documented in the appropriate discrete data field.