New Jersey Emergency Medical Services Key Performance Indicators Guidelines:

Applicability:

All New Jersey Emergency Medical Services (EMS) Agencies, including but not limited to, licensed, non-licensed, non-affiliated, volunteer, municipal, fire, first aid, first responder, rescue, hospital, corporate and private agencies and/or their agents.

Policy:

All EMS agencies shall develop and maintain a dataset of key performance indicators and develop policies and procedures as necessary to provide for the safest possible environment for EMS personnel, patients and the public.

Background:

The New Jersey Office of Emergency Medical Services (NJOEMS) has recognized that EMS personnel are at approximately 250% higher risk of injury and death than average workers. These rates are similar to, and sometimes greater than, law enforcement and fire personnel.

EMS personnel are confronted on a daily basis with a diverse, difficult, and ambiguous work environment, which demands dedication, regular training and a focus on providing accurate and critical lifesaving emergency medical services. Personnel, along with the EMS agencies that employ them, must recognize the potential for medical errors during the provision of emergency medical services, and appreciate the subsequent learning opportunities that are created when these errors are appropriately analyzed and managed.

Statement:

The term “Key Performance Indicators” (KPIs) refers to a set of data driven metrics which provide the information necessary to discern system strengths and vulnerabilities to allow for the objective assessment of the culture of safety in New Jersey EMS.

The NJOEMS has determined that a focused effort, which includes the establishment of a process to measure KPIs within all EMS agencies, is necessary to reduce and combat the risks to our patients, providers, and the public at large.

Discussion:

The utilization of KPIs provides benefits for patients, EMS personnel, EMS agencies, and the public at large:

Patients: When KPIs are analyzed, individuals and organizations have an opportunity to learn from successes and failures. This promotes improved services and higher standards of patient care which in turn leads to a safer system for patients.
Personnel: EMS agencies, fire agencies, healthcare systems, and regulators learn how to improve the environment of care, reduce and minimize the impact of human error and poor decisions.

EMS Agencies: Successes, errors, and failures are identified and managed effectively by assessing KPIs. EMS agencies should have an objective framework for the constructive review of human errors, poor decisions, and adverse events.

Public at Large: It is expected that by implementing a process of assessing KPIs, the safety of the public will be improved.

Safety Related KPIs:

All EMS agencies shall develop, maintain, and regularly analyze a dataset which includes as a minimum:

**Patient:**

- Number of patient near misses, injuries, and fatalities
  - Transport
    - Lifting and moving device restraints
      - Utilized
        - Properly
        - Improperly
      - Not Utilized
    - Struck by unsecured equipment
    - Stretcher Mount Problem
    - Patient compartment intrusion
    - Patient compartment air bag deployment
  - Drops
    - Stretcher
    - Stair Chair
    - During transfer to/from one device to another
  - Other Injuries
    - Medication administration errors
    - Equipment malfunctions
    - Trips, slips or falls
Provider:

- Number of provider near misses, injuries, and fatalities
  - Vehicle Crash
    - Personal safety restraints
      - Utilized
        - Properly
        - Improperly
      - Not utilized
  - Struck by unsecured equipment
  - Stretcher mount problem
  - Vehicle intrusion
  - Air bag deployment
  - Distracted driver
  - Mechanical failure

- Injuries and incidents related to violence and assault
- Occupationally induced musculoskeletal injuries
- Infectious Disease Exposure
- Sharps injuries
  - Contaminated
  - Non-contaminated

Fitness for Duty:

- ALL provider incidents shall be evaluated in respect to the provider's fitness for duty including:
  - Drug or alcohol impaired by observation
    - Testing when appropriate
  - Lack of rest by provider admission or direct observation
  - A review of hours worked during the previous 24 hours

- Metrics:
  - Drug or alcohol impaired by observation
  - Drug or alcohol impaired by testing
  - Hours of uninterrupted rest in the preceding 24 hours
  - Hours of duty in the preceding 24 hours
Vehicle Operations:

- Number of EWD responses as defined in the "NEW JERSEY EMS VEHICLE OPERATIONS/SAFETY GUIDELINES" Adopted by the New Jersey EMS Council on June 12, 2013:
  - Appropriate
  - Not appropriate

- Number of EWD transports as defined in the "NEW JERSEY EMS VEHICLE OPERATIONS/SAFETY GUIDELINES" Adopted by the New Jersey EMS Council on June 12, 2013:
  - Appropriate
  - Not appropriate

- Provider restraint/seatbelt use as determined by post incident review and other audits

Air-Medical:

- Number of EMS Helicopter flights < 30 minutes ground drive time

Definitions:

- Dataset:
  - a collection of related sets of information that is composed of separate elements but can be manipulated as a unit by a computer

- Near miss:
  - An event or a situation that did not produce patient harm, but only because of intervening factors, such as patient health or timely intervention

- Harm:
  - Any physical or psychological injury or damage to the health of a person, including both temporary and permanent injury

- Medication administration error:
  - The incorrect administration of a medication. May be due to incorrect dosage, drug, patient, time or route of administration, or interaction of incompatible medications

- Equipment malfunction
  - Failure of equipment to perform to standard. The failure may be due to defects, maintenance related, failure to replace or improper use
• Fit for duty
  • A provider who presents for assignment who is physically and mentally capable of safety performing the essential functions of his/her job with or without reasonable accommodation

• Roadway
  • Over 50 MPH
  • Below 50 MPH
  • Parking lot
  • Unimproved roads

• Provider
  • Any member of EMS team who responds to a given incident

• Infectious Disease Exposure
  • Incidents where Universal Precautions have not been followed or utilized in an improper manner or otherwise appear to be inadequate for the exposure encountered.

References:

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H. Mickey McCabe, Chair