



KEY PERFORMANCE INDICATORS IN EMS

The most important metrics your agency should be measuring.

In today's data-driven world, healthcare providers are tasked with measuring criteria to objectively quantify their performance across the operational, clinical and financial realms. Emergency medical services are no exception.

To ensure your agency is performing at a consistently high level, measurement and reporting of key clinical performance indicators are essential. **But what specific indicators should EMS agencies track?**

Data is a great four-letter word, but operationalizing it or turning it into actionable intelligence is a key activity for any executive today. EMS is a business, like it or not.

– Rob Lawrence, MCM
California COO of Paramedics Plus

Clinical

Analytics of patient encounters is essential to support clinical decisions, says Greg Mears, MD, medical director at ZOLL. “[These metrics] provide a resource and also help make sure that care is standardized for optimal outcomes,” Mears says. “What that translates to is value in EMS,” adds Jamie Chebra, director of EMS at JFK Medical Center, Edison, N.J.

Here are some examples of trends to examine in your patient outcomes:

CHEST PAIN/STEMI CARE

- Time from 911 access to CPR
- Administration of aspirin
- Was a 12-lead ECG completed and transmitted?
- Direct transport to appropriate facility with communication to activate cardiac team/ ECG-to-balloon times (on-scene time less than 10 minutes)

STROKE

- Time of symptom onset to arrival at stroke receiving center
- Was a prehospital stroke alert conducted?
- Was the patient admitted?

RESPIRATORY DISTRESS

- Administration of nitroglycerin (without contraindications)
- Prehospital noninvasive positive pressure ventilation rates

TRAUMA

- Immediate and direct transport time to designated trauma center (on-scene time less than 10 minutes)

HOSPITAL ADMISSIONS

- Was the patient admitted to the hospital?
- What was the patient's length of stay?
- On discharge, was the patient deceased, discharged to home, to a skilled nursing facility, or another medical facility?

INTUBATION

- First-pass success rates on endotracheal intubation
- Capnography waveform measurement with every patient that requires an emergent airway

IV INSERTION

- First attempt success rates

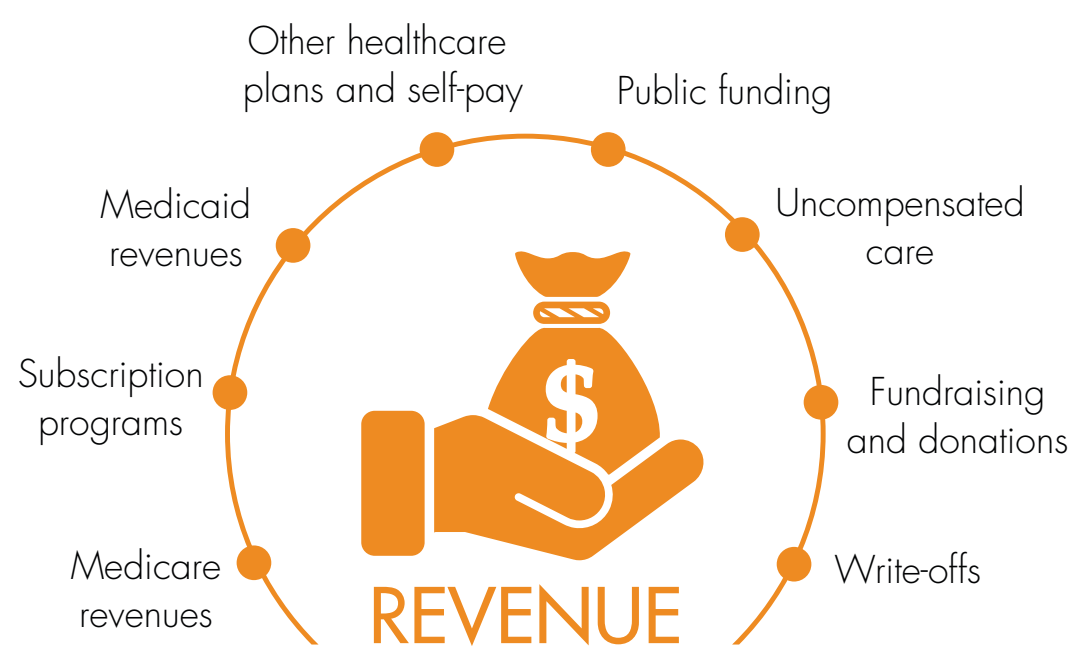
GENERAL CLINICAL

- Does your agency use the regional EMS council clinical protocols?
- Do you calculate a REMS score for each patient?

Financial

Beginning Jan. 1, 2020, CMS will begin requiring EMS agencies to collect and report cost data related to their operations. According to Asbel Montes, vice president of governmental relations and reimbursement for Acadian Ambulance Service in Lafayette, LA, the initial phase will be a survey-based model of a statistical representative sample of EMS providers. A Med-PAC report will be due in 2023. It's imperative that the industry begins to collect accurate data now, as it will be used to direct future reimbursement decisions. Are you collecting the necessary data to prepare?

Here are some key metrics your agency should be tracking now:



Operational

Cost data collection is imperative to get right.

– Asbel Montes, Vice President of Governmental Relations and Reimbursement
Acadian Ambulance Service

The first phase of the CMS cost data collection effort will begin by classifying your system's organizational structure, says Montes, stressing the need to begin tracking accurate data to ensure proper reimbursement decisions from CMS. The home health industry has seen decreases in payments over a 10-year period, in part because of substandard and unstandardized data reporting to the federal government.

Here are some initial areas of data you should be capturing now:



SIZE AND ORGANIZATIONAL STRUCTURE

- Organizational designation (i.e., public, fire, governmental, hospital based, etc.)
- Percentage of volunteer EMS labor
- Volume of ambulance services delivered per year
- Percentage of Medicare emergency and nonemergency services provided per year
- Average duration of transports
- If you have a sole-source contract and the percent of the activity provided under that contract



DEMOGRAPHICS

- Percentage of transports that are urban, rural or supr-rural
- Other services required to do business
- Fees required to your local jurisdiction



DISPATCH AND REPOSE

- Average response time
- Fleet operations
- Out of service time