



San Joaquin County

Emergency Medical Services Agency



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2022 CQI Work Plan KPI Outline

DISCUSSION:

The current list of key performance indicators (KPIs) collected by each ALS transport and ALS non-transport EMS provider focuses on measuring the frequency and success of select patient care skills. In response to the input from key personnel from each ALS EMS provider, KPIs will be divided into monthly KPI reports and quarterly KPI reports.

Monthly KPI List	Quarterly KPI List
<ol style="list-style-type: none"> 1. Advanced airway skills (100% of all uses) <ol style="list-style-type: none"> a. OTI success rate b. Use of ETTI c. Identifying Cormack-Lehan grades d. Appropriate use of supraglottic airways e. Use of end title CO2 2. Lucas usage (If equipped) (100% of all uses) <ol style="list-style-type: none"> a. Number of deployments b. Number of deployments reviewed c. Compression ratio d. Complications 3. Vent usage on ROSC patients (If equipped) (100% of all uses) <ol style="list-style-type: none"> a. Number of deployments b. Number of deployments reviewed c. Parameters changed d. Complications 4. Mechanical CPAP usage (100% of all uses) <ol style="list-style-type: none"> a. Number of deployments b. Number of deployments reviewed c. Parameters changed d. Complications 	<ol style="list-style-type: none"> 1. Narcotics usage (80% of all uses) <ol style="list-style-type: none"> a. Correct usage b. Correct dose 2. Documentation (30% of PCRs) <ol style="list-style-type: none"> a. Impression matches PCR treatments b. Drug dose c. PCR reviews statistics 3. Against Medical Advice calls (50% of AMA) <ol style="list-style-type: none"> a. Number of AMAs b. Number of AMAs reviewed 4. Training performed by topic and hour <ol style="list-style-type: none"> a. Cardiac b. Respiratory c. Trauma d. Pediatric e. Pharmacology f. Miscellaneous medical 5. Quarterly skills maintenance 6. Documentation of stroke activation (100% of all alerts) <ol style="list-style-type: none"> a. LKWT 7. 12 lead on ROSC patients (100% of all ROSCs) 8. EKG strips on cardiac arrest (100% of all arrests) 9. STEMI (75% of all STEMI Alerts) <ol style="list-style-type: none"> a. EKG Transmission

Monthly KPI

Monthly KPI's are directed at system evaluation of high risk or new skills.

Advance Airway Skills

Completion of the monthly advanced airway report to include OTI success rate, use of ETTI, identifying Cormack-Lehan grades, appropriate use of supraglottic airways and use of end title CO2.

Lucas Device Usage

With the recent purchase of over 30 Lucas automatic compression devices, SJCEMSA would like to evaluate 100% QA/QI of all uses. Initial device review will consist of number of deployments, if those deployments were evaluated, if they were successful, and if there were any complications.

Ventilator Usage on ROSC Patients

With the recent purchase of over 30 Zoll Z Ventilators, SJCEMSA would like to evaluate 100% QA/QI of all uses. Initial device review will consist of number of deployments, if those deployments were evaluated, if they were successful, and if there were any complications.

Mechanical CPAP Usage

With the recent purchase of over 30 Lucas automatic compression devices, SJCEMSA would like to evaluate 100% QA/QI of all uses. Initial device review will consist of number of deployments, if those deployments were evaluated, if they were successful, and if there were any complications.

Quarterly KPI

Narcotics Usage

The most effective way to determine appropriate use and, if necessary, make system changes is to bring the actual pre hospital narcotics usage rate in San Joaquin County to the forefront of our minds. Additionally, the focus will be on if narcotics are used according to policy concerning the correct patient situation, as well as the correct dose. With that KPI available on a quarterly basis as confirmation of adherence to currently policy, it can be used in conjunction with current medical studies on narcotics usage, to provide a frame work to make an objective assessment of current treatment policy in San Joaquin County.

Documentation

Each ALS department or ambulance service will report on their PCR review process method and the number of PCRs reviewed. These reviews will determine whether the prehospital Primary Impressions and care provided align, whether the correct medication and dose was provided, and whether the documentation matches the PCR documentation rubric used by that ALS prehospital provider.

Against Medical Advice Calls

Against Medical Advice (AMA) calls can be the most challenging and often the riskiest calls that pre hospital staff can be involved in. For this reason, AMA calls require great attention to detail not only in patient care but also in the documentation of that patient care. In 2017, there

were 83,000 EMS ambulance responses to scene calls originating from 911, of which twenty two percent (22%) of those 911 calls either ended as *no medical need* or AMA. With the inherent risk associated with this call type, this needs to be evaluated to determine if 22% is normal and if field personnel are adhering to policies related to AMA and no medical need situations. To accomplish this, ambulance companies and ALS fire departments will not only submit their individual AMA and no medical need rates on a quarterly basis, but also will submit how many were reviewed for accuracy of documentation, if policy was followed, and if the AMA or no medical need was appropriate.

Training Performed by Topic and Hour

In 2022, ambulance companies and ALS fire departments will submit quarterly EMS education and training hours that are categorized into six (6) different KPIs:

1. Cardiac
2. Respiratory
3. Trauma
4. Pediatric
5. Pharmacology
6. Miscellaneous medical

This requirement does not mandate what type of training is conducted at each ALS service provider, since each provider has different EMS training needs. The goal of this KPI set is to assist the SJCEMSA Medical Director in determining whether current training efforts may need modification to stay current with the most recent medicine.

Documentation of Stroke Activation

As our Stroke system of care continues to evolve, the focus of this KPI is if Last Known Well Times (LKWT) have been documented on each Stroke activation.

12 Lead on ROSC Patients

With the importance of 12 lead acquisition on ROSC patients, this will continue to be a KPI for 2022. This KPI will consist of not only documenting 12 leads on 100% of ROSC patients but also attaching them to the PCR.

EKG Strips on Cardiac Arrest

A 2021 random audit of 100 PCRs showed an extremely low number of clear or legible EKG strips and many of them had no EKG strips attached at all. This KPI will focus on EKG strips on 100% of cardiac arrest patients with the primary concern being if the initial rhythm was captured and attached and if subsequent rhythm changes were captured and attached.