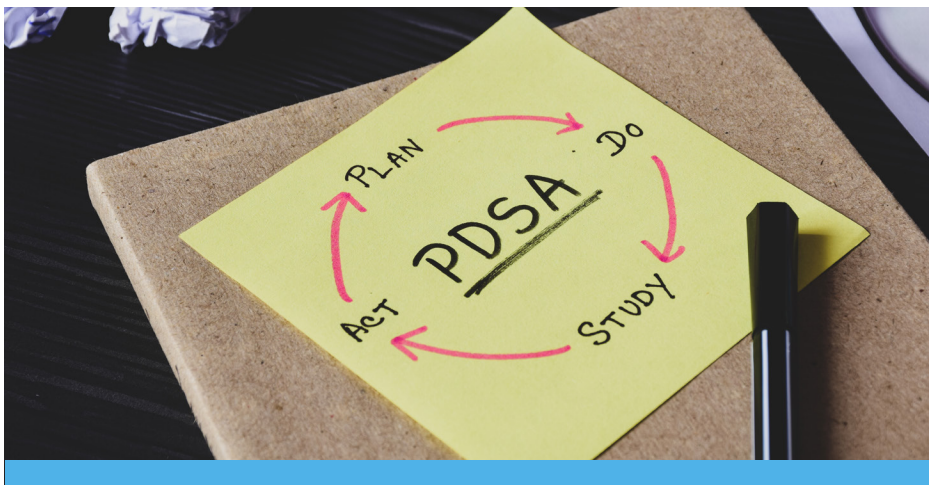


QUALITY ASSURANCE & QUALITY IMPROVEMENT

Quality Assurance (QA) and Quality Improvement (QI) are essential processes for Emergency Service Organizations (ESO) providing Emergency Medical Services (EMS). A QA/QI process helps ensure the safety and effectiveness of medical care provided to a patient. Such a systematic approach is critical in guaranteeing that patients receive the highest standard of care consistently whenever they require it.

An effective QA/QI program encompasses the establishment of comprehensive rules and guidelines for care, the training of staff, and the ongoing evaluation of improvements. This bulletin outlines the importance of QA/QI processes in EMS to ensure high standards of patient care and safety.



director’s office, administration, and logistics personnel. This PDSA cycle is continued in an iterative process until the desired improvement is achieved (McQuillan, RF., et al, 2016).

QA/QI Team

The Team should be comprised of a Team Lead & Medical Director at a minimum. Consider including varied levels of leadership, field-level 911 providers and, if applicable non-emergency ambulance, Paratransit and wheelchair van transport providers.

Quality Assurance (QA)

QA typically measures compliance with established benchmarks, clinical standards, and protocols, while QI typically focuses on improving individual or organizational performance, processes and systems. The standards and measures of QA are fundamental to the QI process.

Quality Improvement (QI)

QA/QI practices vary significantly among EMS agencies throughout the United States. However, a nationwide survey indicates that 71% of the EMS agencies surveyed

have dedicated personnel focused on quality improvement (Redlener, M., et al., 2018).

QA/QI PROCESS

EMS organizations may elect to use the Institute of Healthcare Improvement Model of improvement: The Plan-Do-Study-Act (PDSA) cycle. Effective PDSA cycles should be organized with staff involved in all aspects of the process being improved. For example, a PDSA cycle with an aim to improve cardiac arrest survival should include field paramedics as well as staff from the medical

What should I review?

- 100% of high acuity/high risk events including but not limited to cardiac arrest, STEMI, airway management, stroke, significant trauma, pediatrics, refusal of care, high acuity low frequency skills
- The transport of a patient to the hospital utilizing lights and sirens to determine if the use of lights and sirens was clinically indicated

- New staff: 100% of all patient care reports (PCR) for a specific time based on volume of PCRs generated; suggest a minimum of 30 PCRs
- Experienced staff: All high acuity/high risk events plus a review of 20% of PCRs generated
- Near misses and adverse events in clinical care. The goal for reviewing these events is to identify root causes & implement steps to avoid future occurrences. For example, if a provider gave the wrong medication, the review might reveal that the vials looked similar and were stored next to each other.

How can I improve our processes?

Focused reviews are undertaken to evaluate current practices with a goal of identifying opportunities for improvement.

Common reviews can include but are not limited to:

- Time of arrival to acquisition of 12 lead EKG
- Time of arrival to administration of specific medications
- Time of arrival to medical control notification of Stroke / STEMI
- Serious trauma patient on-scene time (non-entrapped patient)
- High acuity low frequency skills
- Refusal of care documentation

QA/QI programs typically work best in an environment that implements change through a robust, non-punitive education program. Effective QI programs are transparent; both administration and clinical staff understand the goals and methods of any ongoing quality improvement project. The goal is to develop a high-reliability organization that operates in a relatively error-free state over a long period of time (Lincoln, EW., et al., 2024).

Conclusion

The implementation of robust Quality Assurance and Quality Improvement processes is vital for Emergency Service Organizations to enhance patient care and safety. By fostering a culture of continuous improvement and collaboration among all levels of staff, EMS agencies can ensure they not only meet but exceed established clinical standards. The commitment to ongoing evaluation and adaptation of practices will ultimately lead to better patient outcomes and a more effective emergency medical service system.

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