

Safety Culture in EMS

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Defining a Just Culture

A [Just Culture](#) is one that supports transparent and honest error reporting with the goal of fostering an environment focused on learning from errors to support quality improvement. All employees under a Just Culture are held responsible for their choices, and the system focuses on the management of those behavioral choices. As opposed to focusing on how to rid the system of errors, a system under a Just Culture focuses on why errors occurred and how they can be prevented in the future. Notably, this isn't a blameless environment, but rather one that focuses on what is to blame at the system level instead of focusing on the individual.^{1,2,3} Intrinsic to this culture is trust by individuals that they will receive fair treatment from their organization if they report an error, regardless of their position within that organization.²

The definition of a Just Culture focuses on three responsibilities for behavioral choices that are closely aligned with emergency medical services (EMS) care principles: the duty to act, the duty to follow a procedural rule, and the duty to avoid causing unjustifiable risk.³ However, culture in EMS systems has been traditionally focused on errors and mistakes as the fault of the individual with punitive consequences.⁴ While not universal, the incorporation of a Just Culture into the framework of an organization has increasingly become the standard across many settings of care, notably in hospital settings, but has generally lagged behind in EMS systems.^{5,6,7} To date, there is extensive variation across EMS systems in the degree to which a Just Culture is embraced as an organizational principle, and for many EMS systems, a great deal of focus is still placed on identifying and addressing the individual at fault.

Part of this variation stems from the fact that the organization and financing of EMS systems vary significantly by community. For example, EMS could be operated out of a hospital or fire station, it could be run by a private company, it could be operated by the local public health department, or a mixture in one local community. Similarly, funding for EMS could come from local taxes, or it could be reimbursed via public or private insurance.⁸ With this situation comes variation in available resources, which can dictate prioritization of operational performance goals that may or may not align with the principles of a Just

Culture.³ Additionally, this type of organization of EMS systems makes it more of a challenge for any kind of national directive to be identified or implemented, emphasizing the role of leadership within each EMS system in dictating the priorities of the individual organization. Just Culture has not advanced as far in EMS as in other clinical settings, and is not yet the norm nationally in EMS.^{5,7}

Data Collection and Error Reporting

The reporting of safety events is a critical component of a Just Culture. Through data collection and reporting, organizations are able to identify when, and what types of, events are occurring. It is only through consistent reporting that organizations can determine where there are opportunities for systems changes to prevent future events. Additionally, consistent data collection in a standardized format allows for comparison across organizations and determination of what average performance and event rates look like in given harm areas.⁹

While many EMS systems are increasing data collection capabilities and ability to analyze where and how incidents of patient harm are occurring, in alignment with Just Culture principles, there is, unfortunately, a lack of uniform data collection across EMS systems.³ This is due both to variability in how EMS systems have embraced a Just Culture and also variability in the data systems and computer languages used to collect data. This makes it difficult to integrate EMS care reports with patient medical records.³ Not only does this impede tracking how the field is performing as a whole, it also makes comparisons between EMS systems challenges and limits systems' ability to know whether they are performing at or exceeding average harm rates for a given area, or if they need to increase focus on improvement in particular areas. Additionally, from a research perspective, a lack of uniform data collection makes research into quality improvement and effective quality improvement strategies challenging.³

Despite these logistical and measurement challenges, efforts are being made to capture adverse events in EMS on a national scale. This is typically done through a handful of [patient safety organizations](#) who have voluntary reporting systems, such as the EMS Voluntary Event Notification Tool (E.V.E.N.T.)¹⁰ and ESO's data analytics and performance monitoring electronic health record software.¹¹ Other efforts include direct observations, tracking and analysis of patient complaint data, mortality and morbidity review, and patient care document review. These approaches are most effective at detecting adverse events when a high-risk procedure has occurred. However, these events are a small minority of the cases that EMS manages, and are therefore unlikely to provide a complete picture of the safety of EMS care.¹²

Conclusion

Increasing the transition of EMS to a Just Culture is not something that can happen overnight. Including the concepts of Just Culture in EMS education can develop the foundation for the future EMS workforce and leadership,^{3,6} but in the interim, collection and analysis of data on adverse events needs to be enhanced

on a national scale. In 2016, the National Association of Emergency Medical Technicians released a [position statement](#) recommending that all EMS agencies promote the evaluation of data necessary for continuous improvement of patient care. In support of that statement, a single, unified data entry system that includes standard language and reporting requirements would create a useful tool for the assessment of system performance³ and support a national systems shift towards embracing the principles of a Just Culture.

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