

Leveraging State of the Art Trauma Video Review for Performance Improvement

Trauma teams strive for continuous quality and process improvement but lack the necessary tools to gain comprehensive visibility into their resuscitations and objectively analyze performance. The Trauma Black Box® empowers teams to reach new heights by providing:



Real-time, high-definition audiovisual review for unobstructed observation of your team's communication and performance.



Data-driven performance optimization insights to enhance trauma resuscitation processes.



Customizable annotation tools to systematically analyze video footage based on your center's key performance indicators.



A centralized trauma video library containing all recorded trauma resuscitations.



A consolidated and accurate trauma response timeline to enable a comprehensive re-creation of events.



Trauma Black Box: Audiovisual-Powered Performance Optimization

The Trauma Black Box delivers unprecedented visibility into trauma team performance by capturing audiovisual, environmental, and patient data during trauma resuscitations.

This invaluable information is housed in a cloud-based video library and provides your trauma team with powerful insights into technical and non-technical skills¹, team collaboration, adverse events², and performance improvement metrics.



Consolidated Trauma Timeline

- Access a robust and accurate timeline that consolidates complex EHR data to highlight important components of the resuscitation timeline.
- Accurately pinpoint critical moments for comprehensive case analysis like time to definitive care, vascular access, hemorrhage control, intubation, etc.³

Data-Driven Performance Improvement⁴

- Leverage powerful insights to collaborate, identify areas for improvement, and implement systemic enhancements.
- Facilitate a continuous feedback loop for optimizing quality, safety, and team skills.



Video Review Capabilities

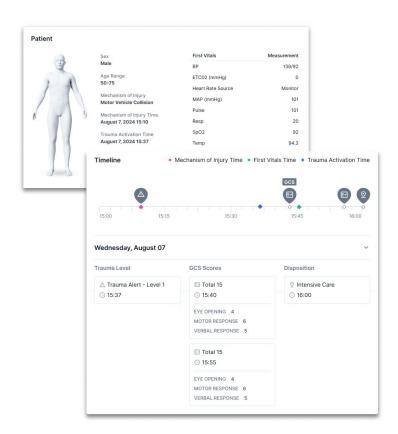
- Gain a multi-angle, unobstructed view of trauma team performance through high definition, optionally de-identified video recordings.
- Capture metrics and benchmarks to identify opportunities for enhanced quality and educational initiatives, and research projects.⁵

Ensuring Privacy and Compliance

- Industry-leading security controls including encryption, access restrictions, optional de-identification, and video deletion protocols.
- Patient footage never becomes part of the medical record.
- Helps organizations measure performance metrics that are important for trauma center verification.

Customizable Annotation Framework

- Tailor video analysis with annotation tools that are individualized to centerspecific needs and metrics.
- Highlight specific events, techniques, or behaviors for quality assurance or research.⁶



- Nagaraj, M. B., Lowe, J. E., Marinica, A. L., et al. (2023). Using Trauma Video Review to Assess EMS Handoff and Trauma Team Non-Technical Skills. *Prehosp Emerg Care*, 27(1), 10-17. https://pubmed.ncbi.nlm.nih.gov/34731071/.
- Nazir, A., Baletic, N., Dumas, R. P., et al. (2024). Reliability of the safety threats and adverse events in Trauma (STAT) taxonomy using trauma video review. Eur J Trauma Emerg Surg, 50(2), 497-504. https://pubmed.ncbi.nlm.nih.gov/37979061/.
- Kuhlenschmidt, K. M., Choi, E., Moonmoon, K., et al. (2022). Provider Perception of Time During Trauma Resuscitation: A Prospective Quantitative Trauma Video Review Analysis. J Surg Res, 274, 207-212. https://pubmed.ncbi.nlm.nih.gov/35190328/.
- Nolan, B., Hicks, C. M., Petrosoniak, A., et al. (2020). Pushing boundaries of video review in trauma: using comprehensive data to improve the safety of trauma care. *Trauma Surg Acute Care Open*, 12:5. https://pubmed.ncbi.nlm.nih.gov/32685694/.
- Maiga, A. M., Vella, M. A., Appelbaum, R. D., et al. (2024). Getting out of the bay faster: Assessing trauma team performance using trauma video review. J Trauma Acute Care Surg, 96(1), 76-84. https://pubmed.ncbi.nlm.nih.gov/37880840/.
- Scrushy, M. G., Nagaraj, M., Buke, K., et al. (2023). Under the Lens: Team Perception of Trauma Video Review. J Trauma Nurse, 30(3), 171-176. https://doi.org/10.1097/jtn.000000000000023



Elevate Your Trauma Program

Harness the Trauma Black Box audiovisual review, annotation, and timeline consolidation capabilities to provide an unvarnished lens into trauma resuscitation.

This pioneering solution empowers trauma teams to systematically analyze and refine every aspect of their performance – transforming care delivery through continuous, data-driven optimization.

Surgical Safety Technologies Inc. (SST) is a mission-driven organization that is transforming care in high-acuity environments through intelligent software solutions. Our comprehensive platform leverages audiovisual review capabilities to elevate patient safety, optimize team performance, and facilitate continuous improvement across the trauma spectrum, and perioperative and simulation environments.

Cutting-edge technologies empower clinicians with data to identify key performance indicators and maximize performance improvement opportunities. Built on research excellence through partnerships with leading trauma centers, our innovative approach integrates with existing systems while future-proofing organizations through an open platform for emerging innovations. Delivering proven value with over 80 peer-reviewed publications, SST drives the future of modern trauma quality improvement.

Visit our website to learn more at: www.surgicalsafety.com

Contact us to set new standards in trauma excellence: info@surgicalsafety.com