National Association *of* State EMS Officials

THE COLLECTIVE VOICE OF THE NATION'S EMS SYSTEMS

Guidance Document

Artificial Intelligence Use In EMS

This guidance document was created by the NASEMSO Data Managers Council and approved by the NASEMSO Board of Directors on December 4, 2025.

INTRODUCTION

Artificial Intelligence (AI) is increasingly being explored in emergency medical services (EMS) for its potential to improve documentation, optimize system performance, and support data-driven decision-making. However, AI remains in an early stage of adoption, and its use in EMS—particularly regarding patient care documentation and analysis—must be approached with prudence.

This guidance document outlines the benefits, risks, and critical considerations EMS leaders must evaluate to ensure responsible, secure, and ethical use of AI technologies within their operations.

BENEFITS OF AI IN EMS

- Automated Documentation Assistance: AI-enabled tools can suggest narrative content or auto-fill elements of electronic patient care reports (ePCR), improving efficiency and potentially reducing documentation fatigue.

- Data Pattern Recognition: AI can analyze large data sets to identify system-level trends, patient outcomes, and performance metrics faster than traditional analytics.

- Predictive Modeling: When used responsibly, AI can assist in resource allocation, forecasting call volume, and detecting high-risk patients in real time.

- Clinical Decision Support: Future applications may include AI tools that assist medics during care delivery by highlighting protocol-based recommendations or flagging critical values.

RISKS AND CONFIDENTIALITY CONCERNS

- Data Privacy & HIPAA Compliance: Most AI platforms rely on large datasets to improve performance. Improperly configured AI tools risk sharing or uploading protected health information (PHI) to third-party servers—potentially violating HIPAA and state confidentiality laws.

- Non-Secure Inputs: Using open-access AI platforms (e.g., ChatGPT, Bard) for entering patient information, even if anonymized, may inadvertently allow that information to be used for future model training or exposed via breaches.

- Lack of Audit Trails: AI-assisted documentation might lack transparency or traceability, making it difficult to verify how information was generated—compromising legal and clinical accountability.

- Bias & Inaccuracy: AI models may reflect systemic bias or generate inaccurate suggestions that do not align with established medical protocols or regional practice standards.

CONSIDERATIONS FOR EMS LEADERS

- Vendor and Platform Evaluation
  - Ensure AI tools are developed with healthcare-specific security standards (HIPAA or other relevant standards).
  - Ensure potential vendors are capable of meeting any state-specific security standards.
  - Confirm that protected health information (PHI) or personally identifiable information (PII) will not be used for model training, or stored outside secure, compliant systems. Models should be trained on safe harbor datasets where the data cannot be linked back to a person.
  - Emphasize the importance of seamless integration with ePCR systems to prevent workflow disruptions.

- AI as a Tool
  - AI is there to support, not replace, EMS clinicians (AMA, 2025).
  - AI tools should *enhance* the EMS documentation to help EMS clinicians better capture what they see, hear, and experience in the field, as this information is vital in investigations, clinical handoffs, and historical records.
  - AI assistance in EMS documentation is not intended to stand alone.
  - Any fields populated with generative AI requires human review prior to report submission.

- Clarify Documentation Responsibility
  - EMS clinicians must remain fully accountable for the accuracy of patient care and documentation, regardless of AI assistance.
  - AI errors never absolve EMS clinicians of responsibility, echoing healthcare precedent (Jackson LLP, 2025; TMLT, 2025).

- Develop Internal AI Policies
  - Create agency-level protocols addressing how and when AI tools can be used in documentation, training, and analysis.
  - Recommend awareness-level training for EMS leaders on AI bias to help recognize and mitigate systemic risks (PMC, 2025).
  - Establish clear policies prohibiting EMS clinicians from entering PHI into any public AI tool (e.g., web-based chatbots not designed for healthcare use).
  - Include AI-specific HIPAA and cybersecurity training for all staff.
  - Consider pilot programs with close monitoring before system-wide implementation.

- Governance and Oversight
  - AI adoption should include input from clinical leadership, compliance officers, data managers, and information technology professionals.
  - Align AI rules with broader state and federal frameworks and established healthcare guidance to avoid unique or standalone rules that will likely be outdated before implementation and may suppress innovation.

- Transparency and Auditability
  - AI-assisted tools should maintain logs showing all suggestions made and what was ultimately accepted or edited by the EMS clinician for the purposes of quality improvement.
  - Follow state and federal regulations regarding the disclosure of the use of AI in EMS documentation and research.

CONCLUSION

AI holds great promise for improving EMS systems—but its power demands caution. Agencies must proactively establish safeguards to ensure AI is used ethically, legally, and without compromising patient trust or clinical accountability. By implementing thoughtful oversight and maintaining strict privacy protections, EMS can responsibly harness AI's potential to enhance the quality and efficiency of care.

REFERENCES

American Medical Association (AMA). (2025, June 10). *AI scribes save 15,000 hours—and restore the human side of medicine.* https://www.ama-assn.org/practice-management/digital-health/ai-scribes-save-15000-hours-and-restore-human-side-medicine

Jackson LLP. (2025, June 12). *Can you trust AI to take clinical notes? Legal, ethical, and regulatory implications.* https://jacksonllp.com/ai-clinical-notes-in-therapy-healthcare/

Texas Medical Liability Trust (TMLT). (2025). Using AI medical scribes: Risk management considerations. https://www.tmlt.org/resource/using-ai-medical-scribes-risk-management-considerations

PubMed Central (PMC) (U.S. National Library of Medicine). (2025, May 13). *Ethical and legal considerations in healthcare AI.* https://pmc.ncbi.nlm.nih.gov/articles/PMC12076083/