



Chairperson
Brenden Hayden

Vice Chairperson
Thomas Arkins

1 November 7, 2024

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3 Richard Patrick

4 FICEMS Chairperson

5 c/o Office of Emergency Medical Services

6 National Highway Traffic Safety Administration

7 U.S. Department of Transportation

8 1200 New Jersey Avenue, Southeast

9 Washington, DC 20590

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12 Dear Mr. Chairperson,

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14 On behalf of the National Emergency Medical Services Advisory Council (NEMSAC), I am
15 writing to encourage FICEMS to evaluate and provide guidance on the appropriate use of
16 Artificial Intelligence (AI) in Emergency Medical Services (EMS). AI has the potential to
17 significantly transform the provision of EMS and is being discussed across the industry as its
18 technology and capabilities are exponentially growing.

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20 Some potential benefits of the predictive analytics of AI to EMS include improved response
21 times and system status management, optimized resource allocation, reduced overutilization,
22 improved inventory management, disease surveillance, enhanced clinical decision-making, cost
23 efficiency, predictive interventions, data-driven policy making, equity in emergency response,
24 enhanced patient care, improved documentation, clinical quality improvement, enhanced billing,
25 and enhanced education and training.

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27 Even with the probable benefits of AI to enhance many facets of EMS, there are some real
28 concerns with the use of AI. Its rapid development and widespread adoption across many sectors
29 has led to unregulated use with some important gaps identified which EMS should consider.
30 These include significant privacy and security concerns, ethical and legal considerations, lack of
31 standardization of data collection and integrity, lack of proper training in the actual use of the
32 technology, poor integration with existing EMS technology, lack of benchmarks and metrics to
33 determine accuracy of received information, and of course financial constraints which may limit
34 widespread adoption and thus reducing interoperability.

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36 President Biden signed [Executive Order 14110](#) on October 30, 2023, titled “Safe, Secure, and
37 Trustworthy Development and Use of Artificial Intelligence”, with Section 8, “Protecting
38 Consumers, Patients, Passengers, and Students,” sub-section (c), directing the US Department of
39 Transportation to “promote the safe and responsible development and use of AI in the
40 transportation sector, in consultation with relevant agencies.” Paragraph (iii) under sub-section
41 (c) required that the Advanced Research Projects Agency - Infrastructure (ARPA-I) “explore the
42 transportation-related opportunities and challenges of AI - including regarding software-defined
43 AI enhancements impacting autonomous mobility ecosystems.” As a result of this Executive
44 Order, ARPA-I put out a [Request for Information](#) on May 3, 2024, soliciting comments and input
45 on the potential applications of AI in transportation, noting that AI could “bring significant
46 potential benefits and risks.” The open comment period closed on July 2, 2024.

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48 The NEMSAC is requesting that FICEMS member, Department of Transportation, NHTSA
49 Office of EMS, work with ARPA-I to evaluate the 108 received comments to determine any
50 potential impact or solutions for EMS. The NHTSA Office of EMS should encourage ARPA-I
51 to research and publish guidance on the safe use of AI specifically as it relates to EMS, given the
52 unique federal requirements on the safety, security, and privacy aspects of healthcare data. Any
53 published guidance can specifically comment on the individual concerns noted throughout this
54 letter to properly inform EMS across the nation on best practices for how to use AI to their
55 advantage and avoid the potentially disastrous pitfalls.

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57 While EMS is regulated by the US Department of Transportation, it exists at the intersection
58 between healthcare, public health, public safety, and emergency management. As such, it is
59 important that when considering the opportunities and challenges of the use of AI in the
60 transportation sector, EMS should be given careful and unique consideration. Given the rapid
61 exponential growth and adoption of AI, NEMSAC appreciates the consideration of FICEMS to
62 provide urgent guidance for best practices for safe use of AI in EMS.

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64 We appreciate your consideration in this urgent matter.

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66 Sincerely,

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70 Brenden Hayden, BS, NRP
71 Chair, National Emergency Medical Services Advisory Council