



National EMS Advisory Council

July 25, 2022

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Dear Mr. Srinivasan,

The National Emergency Medical Services Advisory Council (NEMSAC) would like to offer the following advice specific to the “post-crash care” component of the NRSS in response to the seven specific questions you posed in your letter to our group dated May 31, 2022.

To develop this advice, these questions were shared with the membership of NEMSAC, and responses were reviewed, discussed, collated and summarized by an ad-hoc Subcommittee. The responses are formatted as “bullet points”, but concepts may be expanded as needed.

Responses are as follows:

- 1) **How can NHTSA better support collaboration and partnerships among highway safety offices, EMS offices, and other stakeholders to improve post-crash care?**
 - Fund and support development of regional EMS, 911 and healthcare quality collaboratives to include all stakeholders with the objective of sharing data, quality metric development, quality metric monitoring, and development and deployment of tailored regional quality improvement initiatives.
 - Fund joint multi-disciplinary highway incident management training projects to be sponsored by state highway safety offices, state EMS offices, and other relevant stakeholders.
 - Improve communications between relevant stakeholders through frequent and regular group updates (newsletter, website, social media, etc.).

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- State trauma systems should be included as relevant stakeholders.

2) What post-crash care activities can NHTSA support to improve patient outcomes?

- Fund campaign to educate stakeholders about the newly revised National Trauma Field Triage Guidelines and encourage statewide adoption.
- Fund campaign to educate stakeholders about the newly revised National EMS Model Clinical Guidelines and encourage statewide adoption.
- Encourage state, tribal and territorial governments to provide funding for Stop the Bleed (STB) educational initiatives as well as funding to support the widespread distribution of STB equipment in public spaces to mimic strategies employed for public Automated External Defibrillator (AED) distribution.
- Encourage state, tribal and territorial governments to require Stop the Bleed equipment in all emergency-responder vehicles.
- Support efforts to include Stop the Bleed kits as standard equipment in new vehicles.
- Encourage the adoption of Emergency Medical Dispatch (EMD) more widely so that all calls to 911 receive evidence-based pre-arrival instructions.
- Fund further development and encourage participation in the firefighter/EMS community for training that promotes a safe continuum of medical care during the extrication of the limited-access patient entrapped in vehicular wreckage. This program would teach participants how to safely provide care before, during, and after the disentanglement procedures related to patient extrication.
- Foster the development or improvement of state-wide continuous quality improvement programs (CQIP) for medical care provided by EMS clinicians. CQIPs should improve communication and feedback loops between all relevant stakeholders including but not limited to state highway safety offices, state EMS offices, 911 authorities, hospitals or other definitive care transport destinations.

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- Bolster liaison relationships to improve communication between EMS agencies and hospitals at the local level.

3) What post-crash activities can NHTSA support to reduce disparities in care provided to patients?

- Encourage state, tribal and territorial governments to acknowledge and fund EMS as an essential service, supporting the widespread availability of EMS nationwide.
- Encourage state, tribal and territorial governments to regard EMS practitioners as health care clinicians who provide emergency medical care, interventions, **AND** transportation—not transportation alone.
- Fund efforts to address EMS workforce shortages that currently challenge underserved regions.
- Support and fund injury prevention initiatives in underserved regions and consider ways to include EMS and 911 in their implementation.
- Continue to fund efforts to evaluate and implement road design features that would prevent or limit traffic-related injuries.
- Support reliable capture of precise geolocation data for crashes to improve response and facilitate evaluation of the geospatial incidence and risk factors for motor vehicle crashes in different settings.
- Provide funding for pediatric readiness and disaster response initiatives in EMS to support the improved post-crash care of injured children.

4) What outreach could be conducted to improve on-scene safety and traffic incident training for EMS clinicians?

- Encourage each state to implement statewide “move over” laws and link federal funding to this endeavor.
- Enhance incident notification systems to warn oncoming drivers of approaching roadway hazards including:
 - “Amber Alert” style driver notifications
 - GPS based warning systems
 - Improved roadway traffic alert/incident notification systems
 - Improved/expanded traffic camera monitoring

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- Improved integration of available and future incident notification system technologies with 911 centers throughout the nation.
- Work with Federal Highway Administration to improve access and incentivize participation in Traffic Incident Management (TIM) training for all emergency responders.
- Support development of novel approaches to scene management training, such as virtual reality simulation.
- Develop and widely distribute guidelines for the appropriate use of Highway Emergency Response Units that specialize in blocking traffic (blocker vehicles) at crash scenes.
- Fund education and widespread distribution of existing standards pertaining to appropriate protective gear/attire that should be worn by emergency responders at roadway incidents. Emphasis should be placed on the use of this equipment by all emergency responders at all roadway incidents. Develop funding source for acquisition of appropriate protective gear/attire for emergency responders.
- Fund public service announcement (PSA) campaign to address issue of emergency responder safety at crash scenes.

5) What applied research and data quality improvements can NHTSA support to improve NEMSIS?

- Support linkage of EMS data (NEMSIS) with other related healthcare data sources to provide longitudinal de-identified databases to enhance crash injury epidemiology.
- Support efforts to link EMS databases and other relevant registries such as MVC, traffic safety and law enforcement data, demographic data set, CAD data sets, fatality data to create longitudinal databases for epidemiological study.
- Support local, regional and national data collection efforts related to post-crash care of injured patients at all hospitals, not just trauma centers.
- Encourage recruitment of data managers and provide additional training to support ongoing data management efforts.

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- Support and strengthen the National EMS Quality Alliance (NEMSQA).

6) EMS response times are a potential contributor to post-crash outcomes. How can NHTSA, in collaboration with FICEMS, support improved response times and the delivery of EMS throughout the nation?

- Fund the migration to Next Generation 911 (NG911) which will facilitate the integration of Advanced Automatic Collision Notification (AACN) into local emergency response systems. Automated crash data should be available to 911/dispatch centers and should inform resources required for appropriate response. AACN data should also be made available to emergency responders and thereby made available to first receivers. Efforts should be made for interoperability throughout the continuum of patient care so AACN data can be transferred between all clinical data systems.
- Fund efforts to make NG911 and Emergency Medical Dispatch (EMD) available in every state, territory, and on tribal lands.
- Encourage efforts to improve EMS provider availability and EMS service efficiency by supporting initiatives to decrease time spent by EMS in hospital emergency departments during the patient transfer-of-care process.
- Support further study related to the role of air ambulance services as an adjunct to ground ambulance services, especially in rural regions with documented response time delays.

7) What activities can NHTSA support to improve incident recognition, incident geo-location (including statewide Next Generation 911 compliant GIS mapping), and transition to Next generation 911?

- Fund and coordinate the national transition to Next Generation 911 (NG911).
- Support standardization and interoperability of vehicle-based crash notification systems and NG911.
- Support integration of crowd sourced data and other applications data into the NG911 system for crash notification and geo-location.
- Address cybersecurity concerns related to 911 centers and national emergency communication infrastructure.

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- Continue to support the implementation of NG911 call routing based on the location of the caller device, including usable vertical (z-axis) and the most accurate location data. This will require continuous NG911 GIS mapping that interconnects with surrounding jurisdictions and may be utilized to improve mapping for response and crash analysis.

Following the formal presentation of this material at the NEMSAC meeting in early August, input received during the public comment session will be added and a finalized document will be submitted for your consideration.

We hope that you find these responses helpful as you continue to work toward implementation of the NRSS.

Sincerely,

Mary Ahlers
Chair, National Emergency Medical Services Advisory Council

DRAFT

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