November 2, 2026

The Honorable Jonathan Morrison
Department of Transportation
Office of Emergency Medical Services
National Highway Traffic Safety Administration
1200 New Jersey Avenue SE, Washington, DC 20590

Re: Docket No. NHTSA-2026-2113

Dear Administrator Morrison,

On behalf of the National Association of Emergency Medical Technicians (NAEMT), thank you for the opportunity to provide feedback on your questions regarding the nationwide advancement and implementation of prehospital blood transfusion, specifically on strategies, barriers, and solutions to advance prehospital blood transfusion capabilities across State, local, tribal, and territorial emergency medical services (EMS) and 911 systems.

Over 110, 000 members strong, the National Association of Emergency Medical Technicians (NAEMT) is the only national association representing the professional interests of paramedics, advanced emergency medical technicians, emergency medical technicians, emergency medical responders and other professionals providing prehospital and out-of-hospital emergent, urgent or preventive medical care. NAEMT members work in all sectors of EMS, including government service agencies, fire departments, hospital-based ambulance services, private companies, industrial and special operations settings, and in the military. They also work in hospitals, clinics, and other healthcare settings.

NAEMT strongly urges your agency to work with the Administration to modernize the EMS prehospital reimbursement policy to reflect current medical science, save lives, and strengthen America's emergency medical and trauma care systems. The Centers for Medicare and Medicaid Services (CMS) currently does not reimburse EMS agencies for blood products administered by paramedics before arrival at the hospital, creating a financial barrier that limits the adoption of this lifesaving intervention. A unit of prehospital blood can cost EMS agencies as much as $1,800 per unit administered (to include storage and temperature control costs, inventory management and waste). Even the highest currently available CMS EMS reimbursement (ALS 2) does not cover the full cost of care for a seriously ill or

injured person and certainly does not contribute to the cost of prehospital blood administration.

In addition, we are pleased that the Defense Health Agency (DHA)'s TRICARE Prehospital Blood Transfusion (PHBT) Demonstration Project is launching in January 2027. This 5-year pilot is designed to change how EMS is reimbursed for administering blood products in the field specifically targeting severe trauma and hemorrhage. It is expected that the Department of Defense (DOD) will use the data collected during the pilot to examine patient survival outcomes, healthcare costs, and overall logistics to determine if prehospital blood reimbursement should become a permanent benefit.

Severe hemorrhage is the leading cause of preventable trauma death in the United States. In the last ten years, EMS agencies have increasingly begun carrying whole blood or other blood products to give to bleeding patients before they arrive at the hospital. Now, patients who would not have survived their traumatic injuries or internal bleeding are recovering and walking out of the hospital to resume their lives after receiving this life-saving intervention.

National expansion should give equal weight to clinical appropriateness, measurable patient outcomes, fiscal responsibility, and long-term sustainability.

Our central concern is that agencies may launch programs with grants, donations, or startup partnerships, then struggle to sustain them once that support ends. Measuring appropriate transfusion, patient outcomes, and program retention, rather than program counts alone, is the most direct way to show progress toward FICEMS's goal of a 5% reduction in mortality from severe bleeding by 2028. A sustainable reimbursement policy for prehospital blood transfusion is critical.

Question 1: What are the current impediments to possible solutions for achieving the following national goals by the end of calendar year 2028?

1a. Increasing the number of EMS agencies nationwide with active prehospital blood transfusion programs to 2028.

The main impediments are startup and recurring costs, state and local protocol restrictions, limited blood supplier and donor partnerships, cold-chain management, medical oversight, training, and maintaining adequate supply without wastage. The largest obstacle is the gap between establishing a program and sustaining one. Agencies may secure initial funding and equipment, then struggle with blood replacement costs, refrigeration maintenance, monitoring systems, competency verification, and staffing. Regional partnerships among EMS agencies, hospitals,

and blood suppliers offer a sustainable path. Shared inventory, hospital rotation agreements, regional purchasing, and strategically deployed blood-capable resources can expand access while avoiding duplication. States should also review protocols and regulations that prevent otherwise capable agencies from starting programs.

We recommend a standardized sustainability assessment before implementation, showing how an agency will fund staff, supply, and maintain its program after startup funding ends. National measures should track program retention at 12, 24, and 36 months, operational readiness, and the percentage of time blood is actually available.

1b. Providing 911 pre-arrival instructions to 25% of pediatric patients with life-threatening bleeding.

Recognizing severe pediatric hemorrhage during a 911 call is difficult, especially when callers are distressed or cannot describe the patient's condition. Many centers also lack the dispatch education and training personnel needed to build this capability.

Standardized pediatric bleeding-control instructions, dispatcher education, and integration into existing Emergency Medical Dispatch (EMD) protocols would improve early recognition and intervention. Measurement should capture whether bystanders took appropriate action, not only whether instructions were given.

1c. Providing 911 pre-arrival instructions to 25% of all patients with life-threatening bleeding.

The same dispatch education and staffing barriers apply. Additional challenges include inconsistent hemorrhage recognition, variation in dispatch protocols, language barriers, and inconsistent documentation.

Nationally standardized bleeding-control instructions, dispatcher training, and consistent computer-aided dispatch (CAD) documentation would help. Existing public bleeding-control education initiatives could also be better integrated into the 911 process.

1d. Administering a prehospital blood transfusion to 28% of pediatric patients with life-threatening bleeding.

The funding and protocol barriers in 1a apply here, and many agencies have no pediatric transfusion protocol at all. Pediatric transfusion also involves low patient

volumes, weight-based considerations, and limited opportunities for clinicians to maintain competency.

We encourage NHTSA and FICEMS to focus on appropriate transfusion of clinically eligible pediatric patients rather than a fixed utilization percentage. Pediatric-specific protocols, regional pediatric expertise, simulation-based training, and ongoing quality review would support safer, more sustainable implementation.

1e. Administering a prehospital blood transfusion to 16% of all patients with life-threatening bleeding.

Protocol and funding restrictions limit access. We are also concerned about using a national transfusion percentage as a measure of success, since a higher rate does not necessarily mean better outcomes.

Clinical presentation, hemorrhage severity, transport intervals, access to definitive care, and established criteria should determine whether blood is given. We recommend measuring the percentage of clinically eligible patients who receive appropriate transfusions, along with time to treatment, adverse events, and outcomes. Benchmarks should account for differences among urban, suburban, rural, and frontier systems.

1f. Capturing outcomes data in NEMSIS for 10% of all children transfused prehospitally.

The central barrier is the lack of free information exchange between receiving hospitals and EMS agencies, which makes it hard to link outcomes to the original patient care record. This matters most in pediatrics, where case volumes are low. Standardized pediatric data elements, automated hospital-to-EMS information exchange, and regional trauma registry partnerships would improve collection. Robust quality management around every transfusion is also essential. The goal should be meaningful clinical outcomes, not just a record that blood was given.

1g. Capturing outcomes data in NEMSIS for 10% of all patients transfused prehospitally.

The same barriers apply. EMS can document administration, but knowing whether the intervention helped requires hospital data. We support standardized national data elements and better interoperability among EMS patient care reports, hospital records, and trauma registries.

Automated exchange should be prioritized to avoid new manual reporting requirements, and outcome capture should expand beyond 10% over time.

1h. Participation from at least 51 states and territories in the National EMS Licensure Compact.

The Compact improves workforce mobility and can support staffing across jurisdictional lines. However, interstate licensure alone does not resolve differences in scope of practice, medical direction, or transfusion competency.

Continued support for Compact participation, paired with more consistent education and competency expectations, would reduce these barriers. States should also review whether their EMS regulations support authorized prehospital transfusion programs.

1i. Establishing 10,000 prehospital pediatric emergency care coordinators (PECCs) across the nation.

Barriers include limited awareness of the PECC role and a lack of dedicated state and federal funding for these positions. Smaller agencies may struggle to assign personnel to the role.

Regional or shared PECC arrangements offer a sustainable option, particularly in rural areas. Standardized education, defined responsibilities, and integration into existing quality improvement programs would help these positions produce measurable improvements in pediatric care.

Question 2: What role can technology such as Advanced Automatic Crash Notification (AACN) play in improving timely delivery of prehospital blood transfusion to patients injured in crashes?

AACN can speed initial EMS notification and deployment by identifying serious crashes earlier. Integrated with CAD, it could flag incidents where a blood-capable resource may be needed, reducing delays in getting blood to patients with significant hemorrhage.

Crash severity alone should not determine the need for transfusion. We recommend using AACN as a decision-support tool, with ongoing evaluation of dispatch accuracy, resource use, time to intervention, and patient outcomes.

Question 3 (Emergency Medical Dispatch): What is the potential role of structured 911 call-taking protocols, including Emergency Medical Dispatch

(EMD), in optimizing call processing, dispatch accuracy, and early bystander intervention for patients with life-threatening bleeding?

Structured protocols support early recognition of life-threatening hemorrhage and help identify miscoded calls, so the right resources go to the right patients. They also create an opportunity for bystander intervention before EMS arrives. Standardized instructions for direct pressure, tourniquet application when appropriate, and other bleeding-control measures should be built into dispatch education and protocols. Evaluation should assess whether callers successfully performed the intervention, since measuring only the delivery of instructions may not reflect their effectiveness.

Protocols should also support early identification of patients who may benefit from specialized resources, such as a blood-capable unit, without unnecessarily increasing high-priority responses.

Question 3 (Data Integration): What mechanisms, technical standards, or policy enhancements are needed to advance data integration and linkage across local, State, and national data systems (e.g., NEMSIS, trauma registries) in support of prehospital blood transfusion surveillance and quality measurement?

The biggest opportunity is connecting prehospital care to hospital outcomes. Documenting that blood was given is straightforward; showing whether it improved outcomes is not.

We recommend the following:

- Memoranda of understanding (MOUs) and Business Associate Agreements (BAAs) among all HIPAA-covered entities involved, so data can be shared lawfully and routinely.
- Stronger health data exchange between prehospital and hospital electronic medical records.
- A standardized national transfusion dataset and consistent documentation within NEMSIS.
- Interoperability among EMS patient care reports, hospital records, and trauma registries.
- Privacy-protective patient matching, automated outcome reporting, and standardized definitions.
- Where possible, existing data systems should be used rather than new reporting platforms, so agencies can evaluate clinical effectiveness without added administrative workload.

Question 4: How might improve military and civilian EMS integration advance prehospital blood transfusion practices, logistics, cold-chain management, and clinical training?

Civilian EMS is already informed by and should continue to learn from the military's extensive experience in hemorrhage management, whole-blood transfusion, blood-product logistics, and operational training. Because the Department of Defense already sits on FICEMS, the committee is well placed to lead this collaboration.

Greater integration could support shared education, simulation, cold-chain practices, and clinical protocol development. Regional partnerships among military medical personnel, civilian EMS agencies, trauma centers, and blood suppliers could share expertise and reduce duplication.

Civilian programs must still account for differences in patient populations, transport intervals, staffing, and access to definitive care when adapting military practices.

Question 5: What improvements and curriculum enhancements are needed within the EMS education and training system to support transfusion medicine, clinical competency, and other innovative prehospital practices?

Transfusion content should be strengthened in initial EMS education and initial credentialing, so clinicians enter practice with a foundation rather than learning it entirely on the job. Agencies that deploy blood through supervisors or other designated units should provide those clinicians with regular ongoing training.

We favor competency-based training over adding mandatory continuing education hours. National curriculum guidance should cover patient selection, transfusion administration, blood-product handling, cold-chain management, recognition and management of adverse reactions, documentation, guidance on blood product resuscitation of reproductive-aged females, and pediatric-specific content. Regional training partnerships and standardized simulation programs would help smaller agencies maintain competency without needing to build extensive programs on their own.

Question 6: Do you have any additional comments regarding the nationwide implementation of prehospital blood transfusion programs?

The long-term success of this initiative depends on how success is defined and how programs are supported after launch.

Program sustainability. The greatest risk to nationwide expansion is programs that launch successfully but cannot sustain operations. Startup grants do not cover the recurring costs of keeping blood available. We encourage a national sustainability framework covering recurring funding, blood supply agreements, product rotation, ongoing competency verification, and measurable performance.
Reimbursement reform. There is no dedicated reimbursement for prehospital transfusion programs. Medicare's ALS2 ambulance payment criteria recognize prehospital blood administration as a qualifying intervention, but there is no separate payment for the blood product or for maintaining the capability. Because CMS is a FICEMS member, we encourage NHTSA and FICEMS to work with CMS, Congress, state Medicaid programs, and other payers on reforms such as:

- Separate reimbursement for blood products and their administration.
- Readiness payments for maintaining blood availability.
- Payment models that recognize blood-capable response units even when they do not transport the patient.
- The planned TRICARE prehospital blood transfusion reimbursement demonstration may inform broader policy. Startup grants can establish programs, but predictable reimbursement will keep them operating.
- Blood-product stewardship. Blood is a limited resource. Programs should have inventory rotation agreements, temperature monitoring standards, and wastage-reduction practices. Expanding the number of agencies carrying blood without addressing supply could create new shortages.
- Regional deployment. Increasing the number of agencies carrying blood is different from increasing the number of patients with timely access to it. Regional deployment strategies may achieve the second goal more efficiently, with less duplication of equipment, inventory, and operating cost.
- Clinical outcomes. We encourage continued research into which patients benefit most, particularly comparing urban systems with short transport times to rural systems with prolonged transport. National measures should include appropriate patient selection, time to transfusion, blood wastage, adverse events, patient outcomes, and program sustainability.

NAEMT believes we should judge nationwide prehospital blood expansion not only by how many programs exist in 2028, but by how many remain operational and clinically effective in 2030 and beyond.

Thank you for the opportunity to respond to these questions. Should you have any questions and/or need additional support, please contact NAEMT’s Director of Government Relations, Kim Champi Krenik at kim.krenik@naemt.org.

Sincerely,



Christopher Way
President, NAEMT