



EMS Focus Webinar FAQ: EMS Week 2025: EMS & Prehospital Blood, a Lifesaving Combo

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The following answers are provided by:

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- **David Long**
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1. *Did you need extra staff to monitor, deliver, and return blood products to and from the hospital? How did you manage those logistics?*

We did not require any additional staffing, we utilized resources already in place.

2. *What is the program cost to start up (including training) Also what is the program cost run rate?*

Great question, 3 year trial program w/ predicted 350 units transfused was \$300,000 startup estimate. Blood cost was \$270,000 of that so about \$30,000 in equipment and then whatever it costs for your blood product. Training was built into our training calendar and did not utilize overtime or additional cost

3. *Is there reimbursement with insurance for transfusion in the field?*

EMS agencies can Bill "ALS 2 charges" if blood is transfused but there is no independent ICD code for EMS to bill. Some hospitals have attempted to bill patients after arrival to hospital and have had intermittent success. Our trauma center did not think this was appropriate so we do not bill patients. Your financial argument is ROI (decreased waste/blood cost for your blood bank, decreased length of stay in ICU, and increased critical care patient volume surviving to ER.

4. *Can you swap out calcium chloride for calcium gluconate?*

Calcium Chloride is generally believed to be dangerous through IO and peripheral lines. In ICU/ER with a central line it is great but for EMS Calcium Gluconate is the choice!

5. *In systems with fewer resources, can freeze dried plasma be used as a bridge to blood?*

Absolutely there are many systems who chose to use alternative blood products like Packed Red Cells, and Plasma. Anything is better than Crystalloids!

6. *Any advice for seeking a blood bank partner, overcoming objections to partner with EMS?*

I would utilize Blood Bankers/Pathologists who have successfully implemented a program. Get with a pathologist/blood bank manager from Uchealth, San Antonio, New Orleans, or Pittsburgh. Let like-trained experts talk to each other.

7. *Is NHTSA or NEMSIS tracking these programs and doing data collection to further support efficacy? Will there be grant programs to help support?*

There are loads of open grants at both regional and state levels that could potentially be used to help fund a trial or program.

8. *Do your trauma centers or local hospitals reimburse EMS agencies that are running a blood program?*

In Colorado Springs, the Level 1 Trauma Center is "giving" blood to EMS who is "transporting" the blood for them. If EMS uses blood then we/EMS bills our grant to pay the hospital back. If we do not use blood we simply return it to hospital after 7 days

9. *How can we encourage more hospitals and blood banks to 'get on board' with prehospital transfusion? Supporting the supply end is critical, as Mr. Long pointed out.*

I believe the future is inevitable and most all EMS nationally will eventually have access to field blood transfusions. ACOS/ACEP and NAEMSP have a very strong position statement stating it is recommended.

10. *Are you familiar with the recent data in Israel, IDF on the drop in CFR, despite a 3 fold increase in >ISS 15?*

https://journals.lww.com/jtrauma/abstract/2019/07001/prehospital_trauma_experience_of_the_israel.25.aspxYes. Cool Data.

11. *Are there any Multi-Vitamin infusion therapies available?*

No not that I am aware of with regards to whole blood EMS care.