

## Award Application

1	<b>Project Title</b>	<b>Liquid Plasma/Emergent Blood Release/ Massive Transfusion 2023</b>
2	Clinical or Operational Area	System Enterprise Hospital Based
3	Healthcare System	Bozeman Health
4	Hospital or Entity Name	Bozeman Health Deaconess Regional Medical Center and Big Sky Medical Center
5	Applicant Name	Rene' Fredette
6	Applicant Title	System Risk Manager
7	E-mail Address	<a href="mailto:rfredette@bozemanhealth.org">rfredette@bozemanhealth.org</a>
8	Telephone	406-414-5554
9	Mailing Address, City, State, Zip Code	915 Highland Blvd. Bozeman, MT 59715
10	<b>Please list the names and titles/roles of the additional members of the project team:</b>	
	<b>Name:</b>	<b>Title/Role:</b>
	<b>Dr. Parks</b>	Trauma Medical Director
	<b>Dr. Lowe</b>	ED Medical Director
	<b>Dr. Nordeen</b>	ED Provider
	<b>Dr. Emerick</b>	Blood Bank Director
	<b>Chris Grimes</b>	ED Manager
	<b>Heather Wicks</b>	Trauma Manager
	<b>Crystal Skinner</b>	Quality Director
11	Name of Senior Risk Management or Corporate Insurance Representative	Rene Fredette
12	Mailing Address, City, State, Zip Code	915 Highland Blvd. Bozeman, MT 59715

**13. The best practice/improvement submitted for consideration is a: (Check all that apply)**

- Clinical Policy
- Performance Improvement Strategy (*Six Sigma, etc.*)
- Communication Strategy (*Briefing before surgical procedure, senior management rounds, etc.*)
- Other (*Please specify*)

Click or tap here to enter text.

**14. Can the project be duplicated to support patient safety/risk mitigation strategies at other organizations?**  Yes

No

**15. Briefly describe the project: (two paragraphs maximum, please attach any supporting documentation)**

In April 2023, Bozeman Health Deaconess Regional Medical Center embarked on a project to update and improve our Massive Transfusion Protocol (MTP) to align with recent evidence-based practices aimed at reducing mortality and morbidity in trauma patients. Our root cause analysis revealed that our existing emergent blood release and MTP procedures were outdated, lacking in

predicting blood product needs, balancing resuscitation efforts, and safely managing blood product storage. To address these issues, we identified several contributing factors, including the need for better community education on Stop The Bleed (STB), the acquisition of liquid plasma, and the purchase of new blood product-specific coolers to minimize waste. We also recognized the importance of enhancing our MTP protocol with more accurate predictive tools and strict job roles for staff.

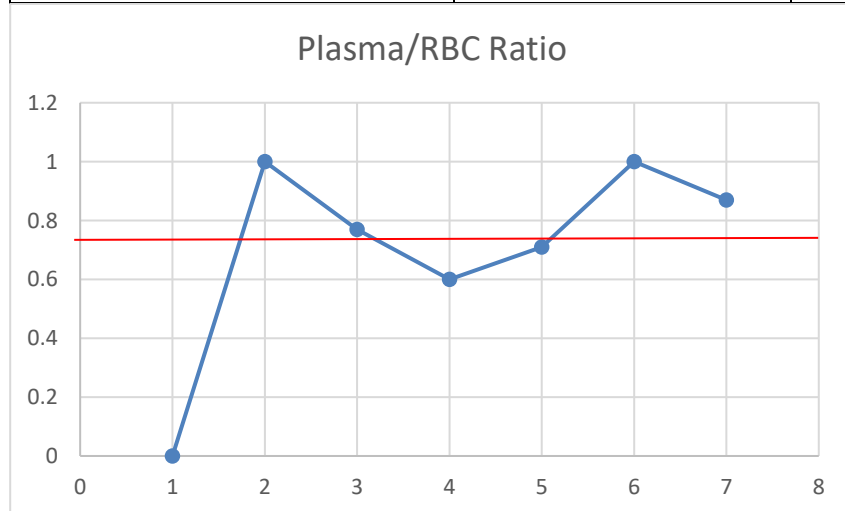
The implementation phase involved a multifaceted approach: we revised the MTP trigger to the shock index, purchased and integrated liquid plasma and dedicated blood coolers, and streamlined activation communication through Epic Electronic Medical Record order sets and HIPPA compliant Pulsara communication application. We developed front-line staff job aids, conducted 27 lectures, 8 skills day trainings, 18 simulations, and continued case reviews with staff coaching. Additionally, our Trauma Injury Prevention Coordinator arranged 21 Stop The Bleed courses, training over 300 participants and distributing 142 STB kits within the community. These changes resulted in a 100% accuracy rate in MTP activation, a 6% reduction in FFP waste, and a 67% increase in balanced resuscitation efforts.

**16. Describe how this project has reduced the potential for liability and improved patient safety. (one paragraph maximum)**

Bozeman Health Deaconess Regional Medical Center, a Level III trauma center located 150 miles from the nearest Level II center, has significantly enhanced patient safety and reduced liability through the implementation of evidence-based resuscitation practices. By adopting a balanced resuscitation approach with a 1:1:1 ratio of blood products for massive transfusions, we have improved our ability to manage critical trauma cases efficiently, thus reducing the risk of preventable deaths from hemorrhage. This protocol not only minimizes blood product waste and ensures optimal resource allocation but also emphasizes strict adherence to job roles and expert involvement during these time-sensitive procedures. Additionally, our efforts in community education on external hemorrhage control contribute to overall safety improvements and better preparedness.

**17. What metric(s) have been used to measure and/or sustain success? (one paragraph maximum)**

Target	Baseline Jan-August 2023	Results	Eval
Teach 20 STB courses and distribute 50 STB kits in 2023	8 STB courses	21 STB Course, 319 participants, 142 STB kits distributed	Goal met
Increase MTP activation accuracy to > 75% from 9/2023-12/2023	50% MTP accuracy	100% MTP activation accuracy	Goal met
Decrease FFP waste to < 21% from 9/2023- 12/2023	31% FFP waste	25% FFP waste	Will continue to monitor
With patient receiving > 3 units of blood product within 6 hours will receive a plasma/RBC ratio of $\geq 0.75$ (3/4) for all MTP patients from 8/2023-12/2023	0% received balanced resuscitation	67% (4/6) patients received balanced resuscitation	Will continue to monitor.



**18. Are you willing to share this project with other members of AEIX?**  Yes  No

**19. Was this project an original concept created by the project team?**  Yes  No

20. Was this project based on successful practices evaluated from literature or other healthcare providers?  Yes  No

21. Is this project being implemented in your health system for the first time?  Yes  No

22. Do you have plans to publish the project results in a professional publication or networking forum?  Yes  No

23. Is there anything else you'd like to share about this project?

Upon reviewing this project, conducting case reviews and receiving staff feedback, several additional actions have been identified to enhance our current processes and protocols. These include: 1. Exploring evaluation tools such as TEG or ROTEM to guide MTP resuscitation, 2. Ongoing assessment to determine the appropriate timing for transitioning to whole blood stocking, and 3. Considering the relocation of emergent blood to the Emergency Department.

Thank you for completing the application. Please follow these next steps.

- Please save this document in Word format and gather your supporting documentation.
- Forward the application and documentation to your senior risk management leader or corporate insurance representative. *They will need to complete and sign the Evaluation of Awards Application Form on the final page of the application before submitting it to American Excess Insurance by Friday August 16, 2024.*

## Evaluation of Award Application

The evaluation must be completed and signed by the senior risk manager or corporate insurance representative. Please evaluate the Award Application by indicating the best answer to the question.

1. How will this project improve safety and/or reduce liability?

- Little effect on safety and liability (1)
- Some improvement but metrics are not defined and/or it is not clear that measurable effect can be sustained (2)
- Strong effect with clearly defined metrics (3)

2. What is the potential to share this project or practice with other AEIX members?

- Little potential – i.e. *implementation requires major budgetary commitment, topic is highly specialized, and/or metrics are not clearly defined* (1)
- Some potential but process may be hard for another organization to implement, and/or its application may be limited - i.e. *major budgetary commitment, topic is highly specialized, and/or metrics are not clearly defined* (2)
- Strong potential for producing best practices (3)

3. What level of impact will this project or practice have on the severity of risk exposure?

- Little chance of impacting severity of risk but could address other issues (1)
- Some potential to impact risk exposure (2)
- Strong ability to impact severe malpractice exposure caused by significant risk events (3)

4. What level of innovation best describes this project?

- Project/practice is new to this organization and is based primarily on firmly established best practices (1)
- Project/practice was created primarily by applicants with some assistance from an outside vendor and contains well-established best practices with additional innovative features (2)
- Project/practice was created solely by applicants and could be included in established literature or industry best practices (3)

5. **Share your comments or recommendations.**

This project has been thoughtfully researched and implemented to provide improved lifesaving care to patients. In addition to care, the project has shown how to reduce waste of a valuable resource. This project has inspired an upcoming project as identified in #23. I recommend this project to be considered for the Lighthouse Award.

Thank you for providing the opportunity to participate.

<b>Rene' Fredette</b>	<b>System Risk Manager</b>	<b>8/6/2024</b>
<b>E-Signature</b>	<b>Title</b>	<b>Date</b>
<b>406-414-5554</b>	<b>rfredette@bozemanhealth.org</b>	
<b>Phone</b>	<b>Email</b>	

Send the completed application in Word format, supporting documentation, and signed evaluation to [ana\\_taylor@premierinc.com](mailto:ana_taylor@premierinc.com) by **Friday August 16, 2024**.

**Thank you for your submission. In continued pursuit of our mission and vision to partner with forward-thinking healthcare leaders, inspire innovation, and provide the leading pathway for managing risk, we may share your project with other members of American Excess. However, this project will not be shared outside of the American Excess Insurance membership without your prior consent.**