

Political and Policy Module

State Level Strategy and Engagement

How to save lives at the State and National Level Discussion

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Bringing Lessons Learned from the Battlefield Home to the USA

1. Improvements in the care of combat casualties happen

Excess Mortality Defined as “Would the injured patient have survived if injured on the front steps of a Level 1 Trauma Center?”

- 2.
3. Every war in American history has brought much needed improvements to survival after wounding in the USA from any cause.
4. In the most recent conflicts from 2001 to 2021 the excess mortality rate has been 2%.

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5. In Rural America we estimate the same metric would be 36%!

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- 1. Improvements in the care of combat casualties happen quickly on the battlefield by necessity.**
- 2. Those lessons learned by military medics need to be brought home as quickly as possible to save lives in our own country.**
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- 4. In the most recent conflicts from 2001 to 2021 the excess mortality rate has been 2%.**
- 5. In Rural America we estimate the same metric would be 36%!**
- 6. Today we will be discussing one of those improvements- the use of fresh whole blood for resuscitation after trauma in the pre-hospital world, it is already accepted in the Level 1 Trauma Center world.**
- 7. We have been slow to implement this innovation at the state and national level for the pre-hospital world.**
- 8. That lack of urgency has cost many lives in our country.**
- 9. This conference is a call for action at the state and national level to bring this innovation to the country as a whole.**

Bringing Lessons Learned from the Battlefield Home to the USA

Major innovations brought home from the battlefield:

- 1. Civil war- use of anesthesia in the care of the wounded.**
- 2. WWI- wide spread acceptance of hospitals.**
- 3. WWII-**
 - 1. Specialty care in medicine;**
 - 2. repair of damaged blood vessels;**
 - 3. major hospital systems going to war;**
 - 4. combat medic.**
- 4. Korea-**
 - 1. rotary wing rapid transportation;**
 - 2. surgical care far forward.**

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7. War on Terror-

1. use of whole blood for resuscitation;
2. Golden Hour;
3. Trauma Czar;
4. resuscitative surgery across time, space, and location;
5. tourniquets;
6. standardized protocols for care;
7. grand rounds across the world;
8. good communication;
9. importance of ventilator care;
10. importance of shunts for vascular injuries.

Bringing Lessons Learned from the Battlefield Home to the USA

To date we have brought some of those lessons learned home to the USA:

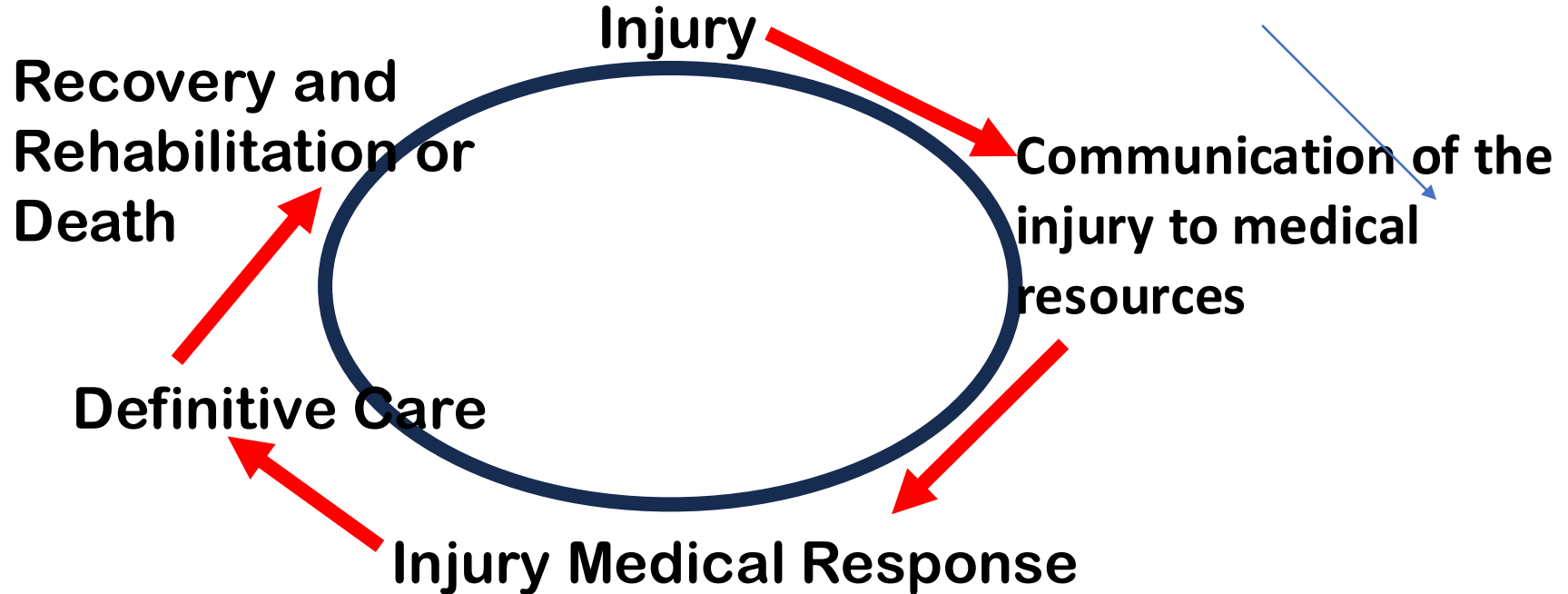
- 1. Stop the Bleed has saved thousands of lives.**
- 2. Trauma protocols have been implemented widely using whole blood for resuscitation after injury.**
- 3. Resuscitation protocols have changed.**
- 4. Emphasis on the Trauma Surgeon.**
- 5. Rotary wing transportation has flourished.**
- 6. BUT we have not implemented a state or national policy and funding to use whole blood in our response vehicles for pre-hospital care.**

Hurlburt strengthens Air Force readiness by establishing the first stateside Joint Trauma System Valkyrie training site

“Early whole blood transfusion saves lives,” said Col. Stacey Brundrett, 1st Special Operations Medical Group chief nurse. “Combat casualty research has shown many battlefield deaths are potentially survivable if blood can be delivered sooner.” **In fact, whole blood administered within 36 minutes of injury produces a fourfold increase in 24-hour survival while significantly reducing 30-day mortality.** Valkyrie brings that capability to the point of injury before evacuation or definitive care is available. With local Hurlburt units’ support, participants trained with live donors and recipients while performing blood collection and transfusions to Joint Trauma System standards.

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The cycle of medical care after trauma is clear:



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Every one of these way points can be improved upon!

- 1. The modern cell phone has helped the communication step if it is used.**
- 2. 911 Systems save lives.**

Can we bring Level 1 Trauma care to bear earlier in the cycle?

- 1. Yes, by education and bringing whole blood to the trauma scene as we are doing by protocol in the Level 1 Centers!**
- 2. This single step will lower the estimated 36% excess mortality in rural America!**

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The facts are clear!

- 1. Early whole blood transfusions is saving lives in the hospital and pre-hospital setting across America!**
- 2. Several jurisdictions have implemented such programs successfully.**
- 3. Then what is the problem?**

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The problem is lack of knowledge and political will to save lives!

In our current system of county medical officials, state Commissioners of Health, and National Public Health officials, no one is held responsible for excess deaths in the traumatic setting!

With no one person or office in charge, no one answers for this epidemic of excess death in our country!

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Give me an example!

In 2003 with the war in Iraq, we discovered that several Marines had died of tension pneumothorax, even though proper field care had been administered.

The Military Service SGs looked at this issue and determined that we had not kept up with current patient sizes.

The field medic had used a 2.5 inch needle to decompress the pneumothorax, but the injured patients had had a 3 inch thick chest, so died for lack of proper equipment in the field setting.

The SGs were responsible for organizing, training and equipping the field medics, so a longer needle was then made and distributed to the field medics.

Problem solved!

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So, this issue becomes a real education and political issue and will require a both an education and a political solution to overcome this 36% estimated excess mortality in the rural setting. Cost matters, so how much would such a program cost at the state or national level?

The estimate is low, \$0.25/person in the state or country!

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- The question then becomes clear:

| do we have the ability to educate and the political
(will to overcome this epidemic of excess death in
(rural America?

no
ng!

\ Listen carefully to the presentations today and the answer is
(clear:

{ we must take the responsibility for this issue at the
| county, state and national political level and fix it
| with an education and political answer- educate our
(population and politicians and ask them to demand
| that we fund such a program!

The estimate is low, \$0.25/person in the USA, or \$80-100M total

Panel Discussion