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Impact of 'Friction' upon the BMS





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Root causes of human error

(data from MHRA 2011, graph by Questionmark)



- Process/procedure incorrect
- Procedural steps omitted
- Concentration error
- Training misunderstood
- Training missing
- Poor communication/rushing

Mitigation

- Training
- More personnel
- Lab Information System
- Improved Diagnostics
- Review of SOP and associated procedures

**All Useful, but the friction of MASSIVE TRANSFUSION
And RISKS still present.**

HOW DID WE ADDRESS the LATENT RISK?



AMSTC

Army Medical Services Training Centre



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AMSTC

- **Simulation , not ‘just’ training**
- **(Cultural Impact / Language / Humidity!)**
- **Validates deployable medical teams**
- **Infinitely reconfigurable**
- **Responds to ‘real-life’ changes**
- **professional, full time management team**



ONE SHOT reportable event

international observers



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Impact

- Lab equipment installed
- LIMS set -up
- real time scenarios
- ‘FRICTION’ simulated
- Added benefits (Team building and Trust!)
- ‘Only’ two SHOT/SABRE events



Versatility is key



Ebola Crisis 2014-15

South Sudan 2017 onwards



The value of simulation over ‘isolated’ scenario based training

- 2006 - Hogg, Pirie, Ker “*The use of simulated learning to promote safe blood transfusion practice*” Nurse Education in Practice
- 2014 - Morgan, Rioux-Masse, Oancea, Konia, “*Simulation based education for transfusion medicine*”
- 2016 - Campbell, Poost-Farooshm Pavenski, Contreras, Alam et al “*Simulation as a toolkit - Understanding the perils of blood transfusion in a complex healthcare environment*” Advances in Simulation



IMMERSIVE TRAINING AND INTEGRATION OF MULTIDISCIPLINARY TEAMS SEEMS TO REDUCE THE NEGATIVE EFFECTS OF FRICTION

Questions?

