

***More than a ratio: A review on
Trauma Transfusion Protocol in
Queen Mary Hospital***

HA Convention 2013

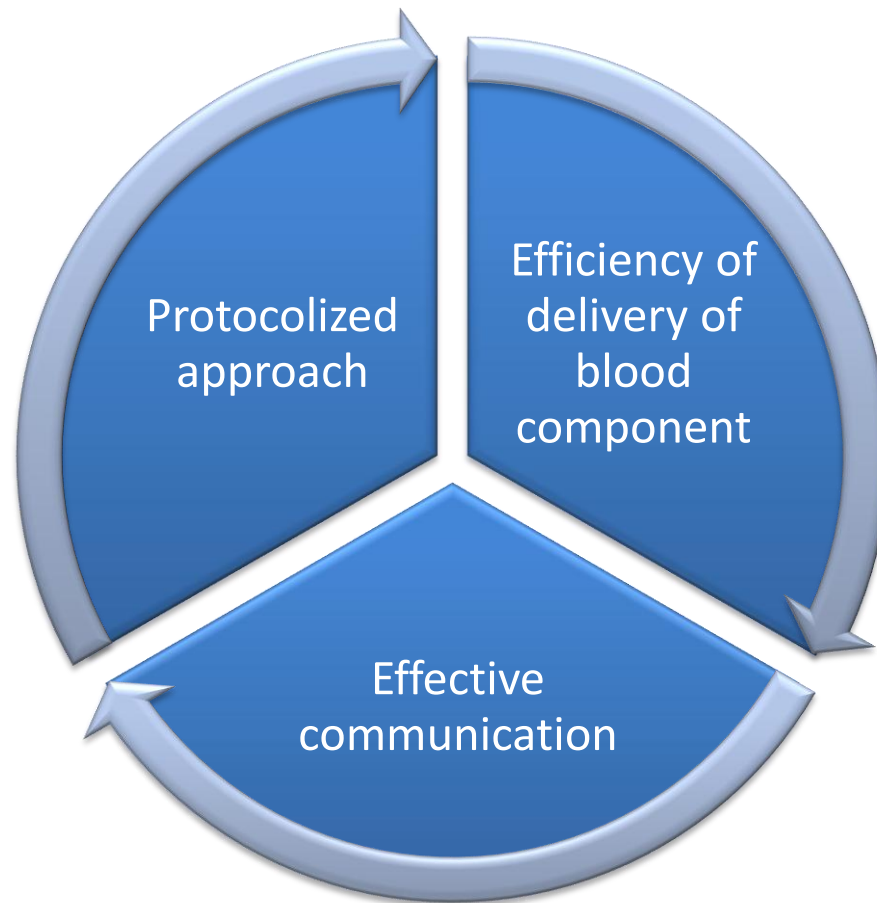
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Evidence & Local Practice

- *Reduced mortality* of trauma patients by using a protocolized approach, targeting at *standardized ratio* of transfused red cells, platelets & plasma, i.e., 1:1:1, with *early* transfusion of plasma and platelets & correction of trauma-associated coagulopathy (evidence mostly from studies done in battlefields)
- *Five local trauma centers* have standardized protocol for activation of the trauma transfusion protocol using a *clinical scoring system*

QMH Trauma Transfusion Protocol: More than a ratio



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- No enforcement in 1:1: 1 package
- Provide alternative activation pathway, i.e., by **clinical decision**

Protocolized approach

Efficiency of delivery of blood component

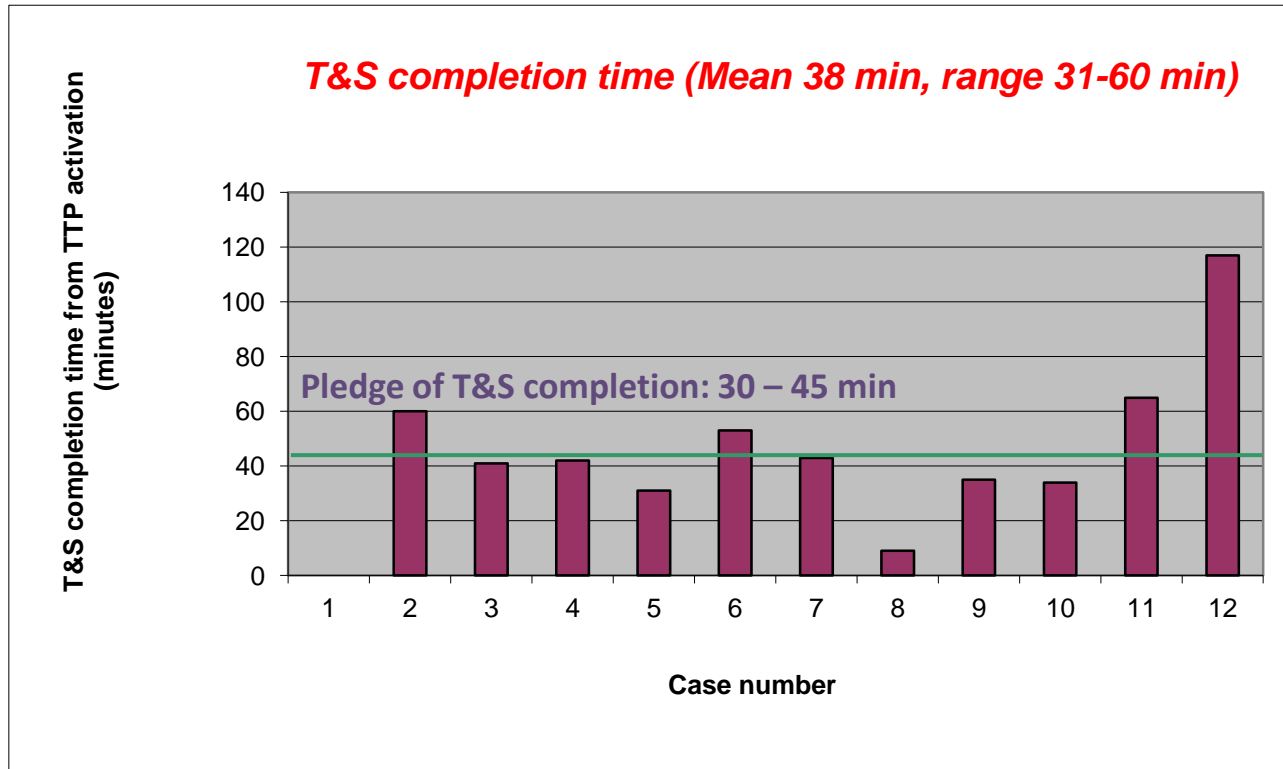
Effective communication

1. Portering system
 - Designated porter **(They are really fast!)**
 - Lift-holding by security
2. Special blood bank service pledges **(We are committed!)**



Central Porter Center designated phoneline: **6666**
Documenting the handover
Porter keep updated of the patient's transfer status

Activation-to-Type & Screen Completion time



Case 1 & 8: T&S sample arrived before activation

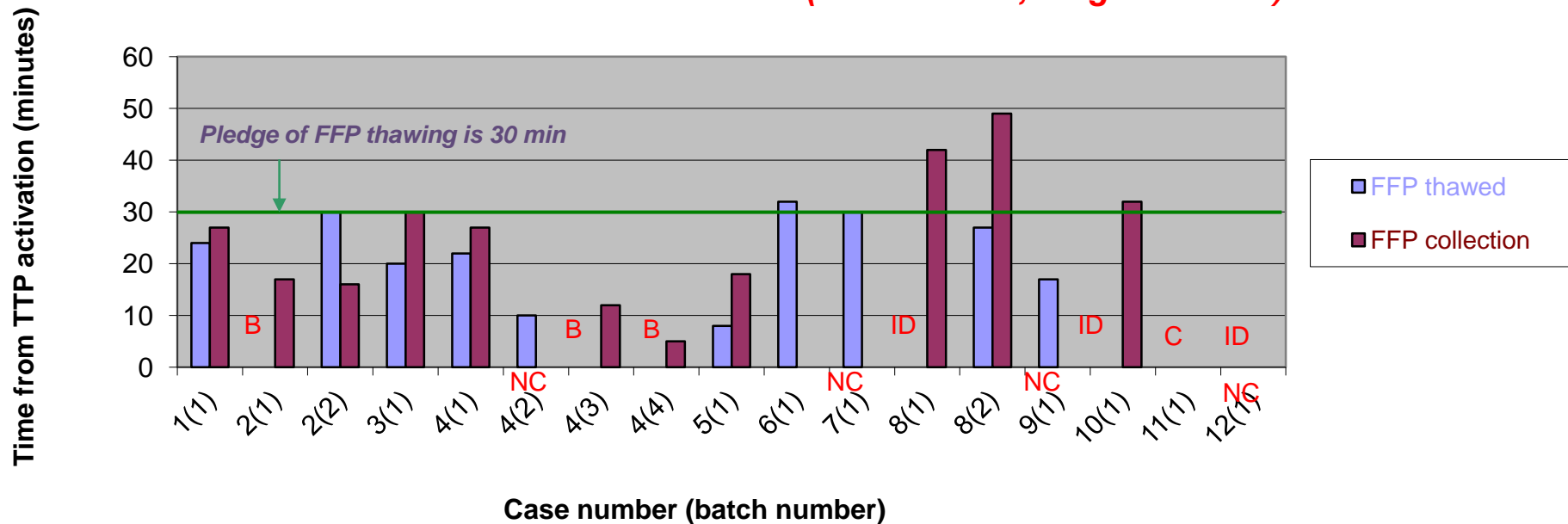
Case 11: Failed resuscitation at A&E

Case 12: Step down 2 minutes after activation

(All four cases were excluded for time study)

Activation-to-FFP Thawing Completion Time & Activation-to-FFP Issue Time

Activation-to-FFP thawing completion time (mean 22 min, range 10-32 min)
Activation-to-FFP issue time (mean 25 min, range 5-49 min)



B = thawed component already available

C = cancel request

NC = not collected

ID = improper documentation

Evaluation & Improvement

1. **75% met T&S TAT pledge; 90% met FFP-thawing pledge** in current study. Continuous monitoring by **Performance Indicators** (critical time factors, percentage meeting BB pledges)
2. Allow validation of clinical scoring system with further refinement if necessary
3. Long-term study on patient survival requires large sample size with the need of multi-center collaboration

Transfusion involves multidisciplinary effort

- *Acknowledgement*
 - TRAUMA TEAM
 - NURSING TEAM
 - PORTERING TEAM
 - BLOOD BANK TEAM
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