Paramedic Attitude Toward Patient Hand-off to Level 1 Trauma

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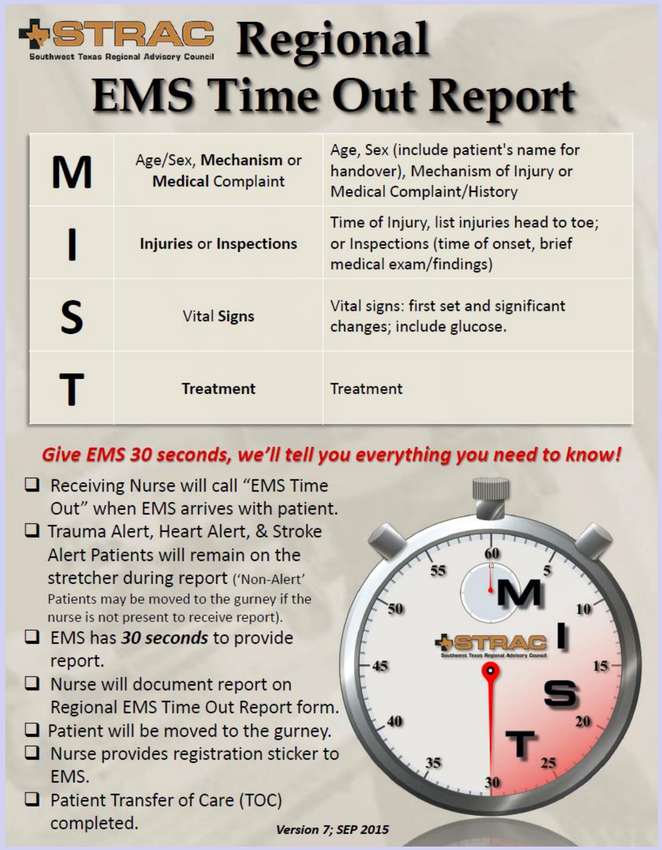
Introduction

- Patient hand off from Emergency Medical Services (EMS) to Emergency Department providers is not consistent across emergency healthcare systems.
- Deficient communication during this handoff period may result in serious medical errors.
- The San Antonio Fire Department (SAFD), in collaboration with the Southwest Texas Regional Advisory Council (STRAC) has incorporated a standardized patient handoff procedure known as MIST.
- MIST: Mechanism of Injury / Medical Illness, Injuries / Inspections, Signs (vital signs, assessment findings), Time and Treatment.

Introduction

The goal of this work is to describe paramedic perception of the patient hand-off process prior to deployment of a standardized handoff format.



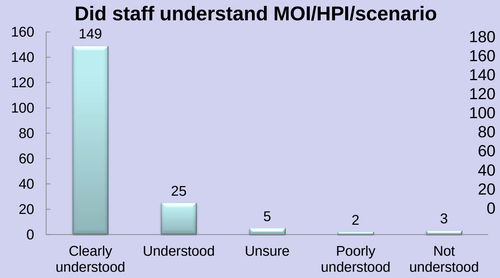
Materials and Methods

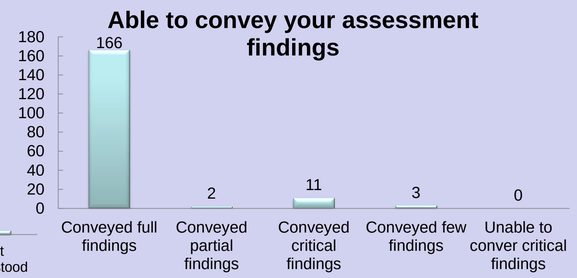
- This study was performed in a large urban EMS system with over 140,000 calls/year, and transports major trauma patients to one of two level one trauma centers.
- The study was conducted over an 11 week period from 11/11/2015 – 1/26/2016.
- A five question survey was integrated into the EMS electronic medical record.
- In order to maximize response, the protocol included a "closed call rule" that required the treating medic to respond to the survey after every major trauma transport in order to close out the record.
- Responses were correlated with destination receiving facility, mechanism of injury, and major trauma indicators.
- Descriptive statistics were used. For comparing the two level one hospitals, aggregate responses were dichotomized and means were compared using two tailed t-test.
- This project received IRB determination as part of a comprehensive quality improvement project supported by the UTHSCSA/SAFD Office of the Medical Director, and Remote Trauma Outcomes Research Network (RemTORN).

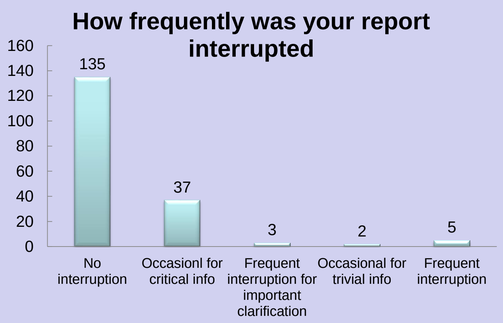
Results

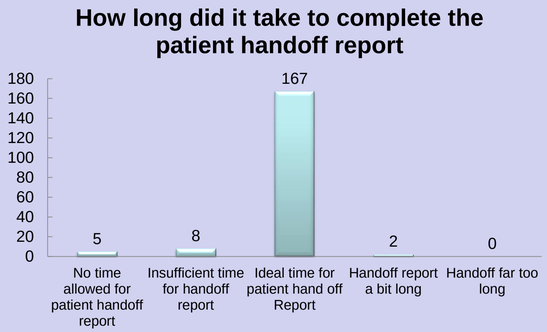
Table 1. Mechanism of injury for trauma cases where the survey was administered

Mechanism of Injury	n
Assault	11
Burn	5
Fall	23
Shooting/Stabbing	46
Head Injury	3
MVC	70
Other	21









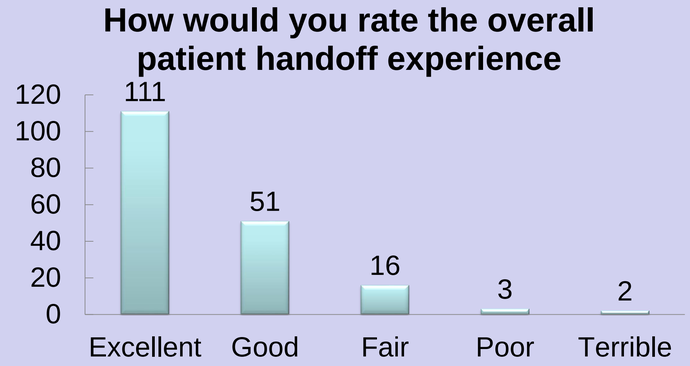


Table 2. Difference in survey response between the two level-1 trauma hospitals in the San Antonio area

	Mean	SD	95% CI
University (n=558)	1.4	0.9	1.32 to 1.57
SAMMC (n=327)	1.2	0.6	1.16 to 1.34

The two-tailed P value equals 0.016
Confidence interval:
The mean of UH minus SAMMC equals 0.19

Conclusion

Overall paramedics from one large urban EMS system viewed current patient handoff procedure quite favorably. Further research will be required to identify any changes in attitude after full deployment of a formal patient hand off protocol.