

Implementation of Trauma Tertiary Survey Reduces Missed Injuries

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PROBLEM STATEMENT

Gold standard of trauma care is a three-part evaluation of patients involving a primary, secondary, and tertiary survey to fully assess trauma patients

- **Incidence:**
 - Large, urban trauma center does not currently include Trauma Tertiary Survey (TTS) as standard of care
- **Significance:**
 - Missed non-life-threatening injuries can lead to complications and raise healthcare costs (van Aert, et al., 2020)
- **Evidence-Based Practice:**
 - Implementation of a standardized TTS reduced the number of missed injuries (Wilbers, et al., 2022)

PURPOSE

The purpose of this quality improvement initiative is to implement a standardized TTS to reduce the number of missed injuries.

Structure Goal

- Building a TTS within the Electronic Health Record based on a previously published and validated tool

Process Goal

- Documentation of adherence to TTS completion

Outcome Goal

- Reduction in the number of missed injuries

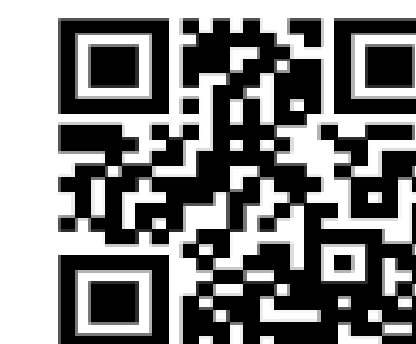
METHODS

- **Setting and Population:**
 - Large urban Primary Adult Resource Center for Trauma
- **Intervention:**
 - Creation of a TTS based on published and validated tools integrated into Electronic Health Record
- **Implementation:**
 - Residents received structured training on TTS with continuous feedback to support adherence throughout the 15-week implementation period
- **Measures:**
 - Weekly chart audits tracked completion of TTS and number of missed injuries

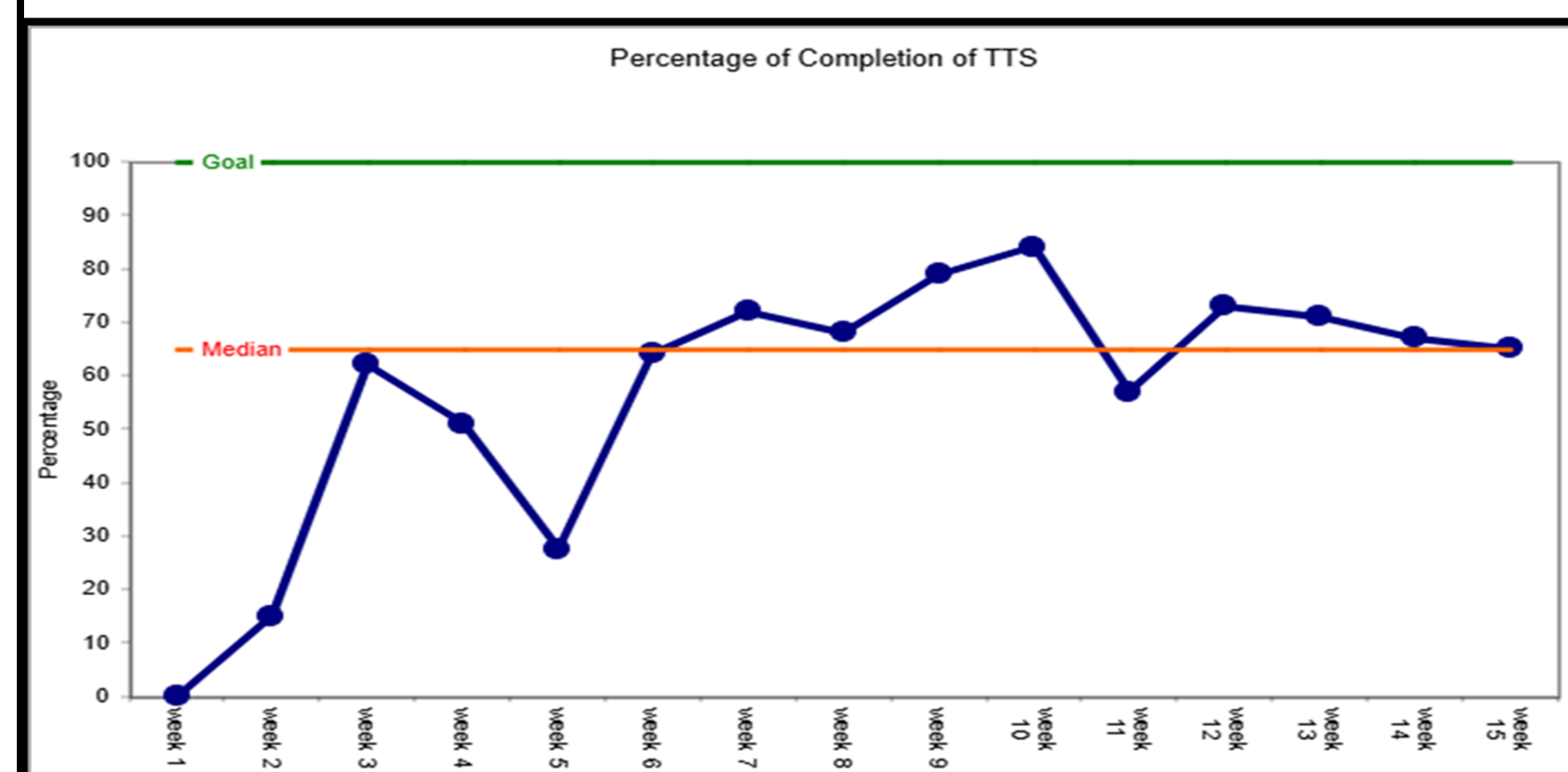
RESULTS

- 100% of the eligible providers attended TTS education
- Documentation of TTS improved dramatically, still not at 100%
- Aligns with current literature regarding standardizing TTS improves completion rates
- Identified 25 new complaints on TTS over 15 weeks, 16% (4/25) determined to be actual injuries
- 76% (19/25) of which required additional imaging
- 8% (2/25) required surgical intervention
- 8% (2/25) were injuries that did *not* require surgical intervention
- 76% (19/25) were orthopedic injuries

Please scan to view TTS



FIGURES



DISCUSSION

Analysis:

- Adherence to completion of the TTS increased from 0 to 65%
- Implementation of staff education, distribution of candy with reminder stickers, and party incentives led to an increase in adherence over the course of the project implementation
- Reduction of missed injuries and types of injuries identified congruent with literature

Limitations:

- Frequent rotation of residents requiring constant re-education
- Residents not hospital staff, therefore, less invested in process improvement

CONCLUSIONS

Implications for Practice:

- TTS has demonstrated to reduce the incidence of missed injuries in trauma patients
- Reduction in missed injuries can reduce length of stay, decrease mortality, and reduce overall hospital costs

Sustainability:

- Continuing education to new staff, residents, and Advanced Practice Providers on the importance of the TTS will help with the sustainability of this initiative

Next Steps:

- Integrate TTS into daily progress notes

REFERENCES



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