# Trauma Activation in a Non-Trauma Tertiary Care Center: An Observational Study

Jesse Pittard Caron MD, Fahd Ali MD, Michael Gregg MD, Marcus Darrabie MD, Scott Bloom MD, Joshua Goldberg MD

## Background

•Trauma centers in the U.S. are classified by the American College of Surgeons (ACS) into Levels I–V based on resources and capabilities:
•**Level I:** Comprehensive trauma care, research, and residency training
•**Level II:** Can manage most trauma but lacks research/training requirements
•**Level III:** Initial resuscitation and stabilization, transfers complex cases
•**Level IV & V:** Stabilization and transfer to higher-level centers
•Non-trauma tertiary care centers (NTCCs) are large hospitals with specialized services but lack a formal trauma designation. They often receive trauma cases unexpectedly.
•Trauma activation involves immediate mobilization of surgical and emergency teams, guided by protocols at trauma centers, but often inconsistently applied at NTCCs.
•**Challenges at NTCCs:**
•Lack of standardized trauma team response
•Over-reliance on subjective provider judgment for activation
•Delayed response times and inappropriate activations
•Delayed trauma activation (>30 minutes) may worsen patient outcomes, prolong hospital stays, and waste resources.

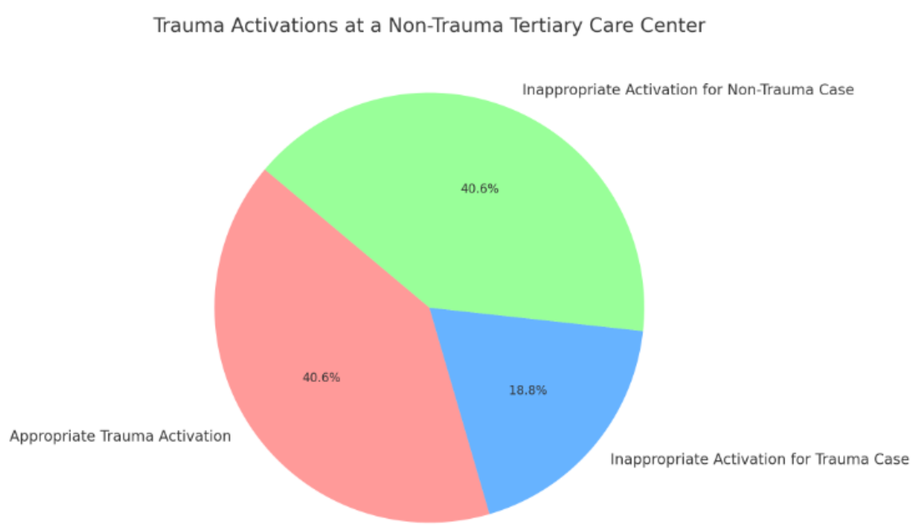
## Objective

- **Primary Objective:** Assess the appropriateness and timeliness of trauma activations at a non-trauma tertiary care center.
- **Secondary Objective:** Identify the percentage of delayed trauma activations and evaluate the need for standardized trauma protocols.

## Methods

- This retrospective study analyzed trauma activation logs at a non-trauma tertiary care center in Orlando, Florida, from April 2024 to February 2025.
- Trauma activation occurs when the general surgery trauma phone rings. A provider assesses the situation and triggers the trauma team if urgent intervention is needed.
- Activations are categorized as "trauma" or "non-trauma," with appropriate activations involving serious injuries requiring immediate care.
- Inappropriate activations include non-traumatic or minor injuries. Delays were defined as responses initiated >30 minutes after patient arrival.

## Results




## Results

•**Total Trauma Activations:** 32
  • 19 (59.4%) trauma-related
  • 13 (40.6%) non-trauma-related
•**Appropriate Trauma Activations:**
  • 13 (40.6%) were deemed appropriate
  • Included serious injuries such as gunshot wounds, motor vehicle collisions, and motorcycle crashes
•**Inappropriate Trauma Activations:**
  • 6 (18.8%) were inappropriate, involving minor trauma (e.g., ground-level falls, superficial gunshot wounds)
•**Non-Trauma Activations:**
  • All 13 non-trauma activations (40.6%) were inappropriate
  • Cases included gynecological complications, non-traumatic pneumothorax, and hernia/diverticulitis consults
•**Delayed Trauma Activations:**
  • 2 (15.4%) of the 13 appropriate trauma activations were delayed (>30 minutes after patient arrival)

## Conclusions and Future Directions

- 59% of trauma activations were inappropriate, including minor trauma cases.
- 15.4% of appropriate activations had delayed responses (>30 minutes), potentially impacting outcomes.
- Standardized trauma activation protocols and provider education could reduce delays and inappropriate activations
- Data will inform the development of multidisciplinary internal trauma protocols at AdventHealth to optimize activation and response times.

**Contact Information: jesse.p.caron.md@adventhealth.com**

Graduate Medical Education

© Poster Template by Genigraphics® 1.800.790.4001 www.genigraphics.com