

Streamlining Care of the Traumatically Injured Geriatric and/or Anticoagulated Patient: Medically and Financially

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Background:

- Review of the trauma registry identified a large number of limited trauma activations
- Large use of resources
- Significant amount related to geriatric or anticoagulated patient falls with concern for head injury
- Less than half of these patients were admitted
- Identified need to streamline care and reduce resource utilization

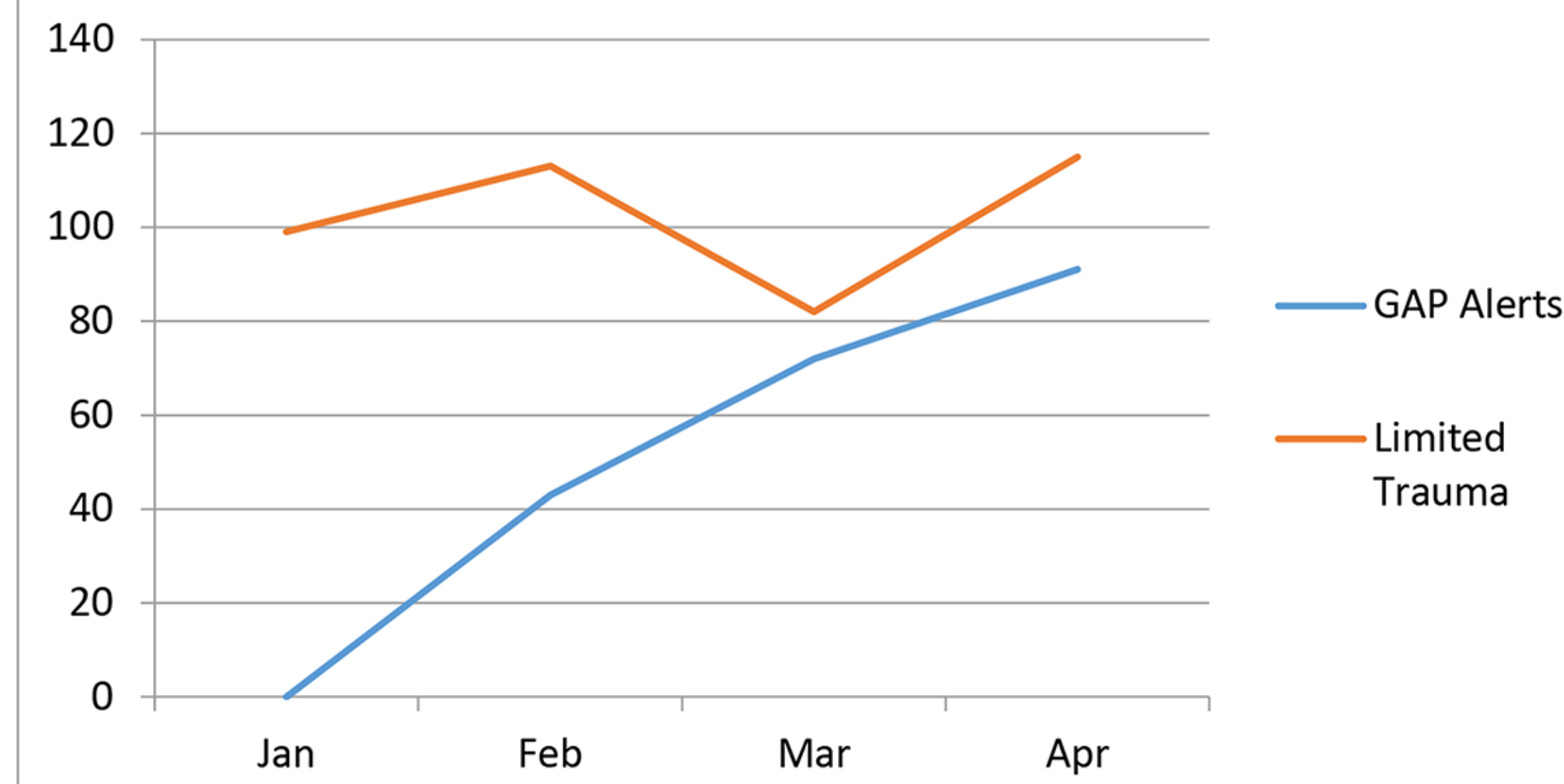
Project Design

A Geriatric or Anticoagulated Patient (GAP) Alert Pathway was created with a 3-month pilot study in a busy Level 1 Trauma Center. Population included patients ≥ 65 years old and/or on anticoagulants and had potential for head injury

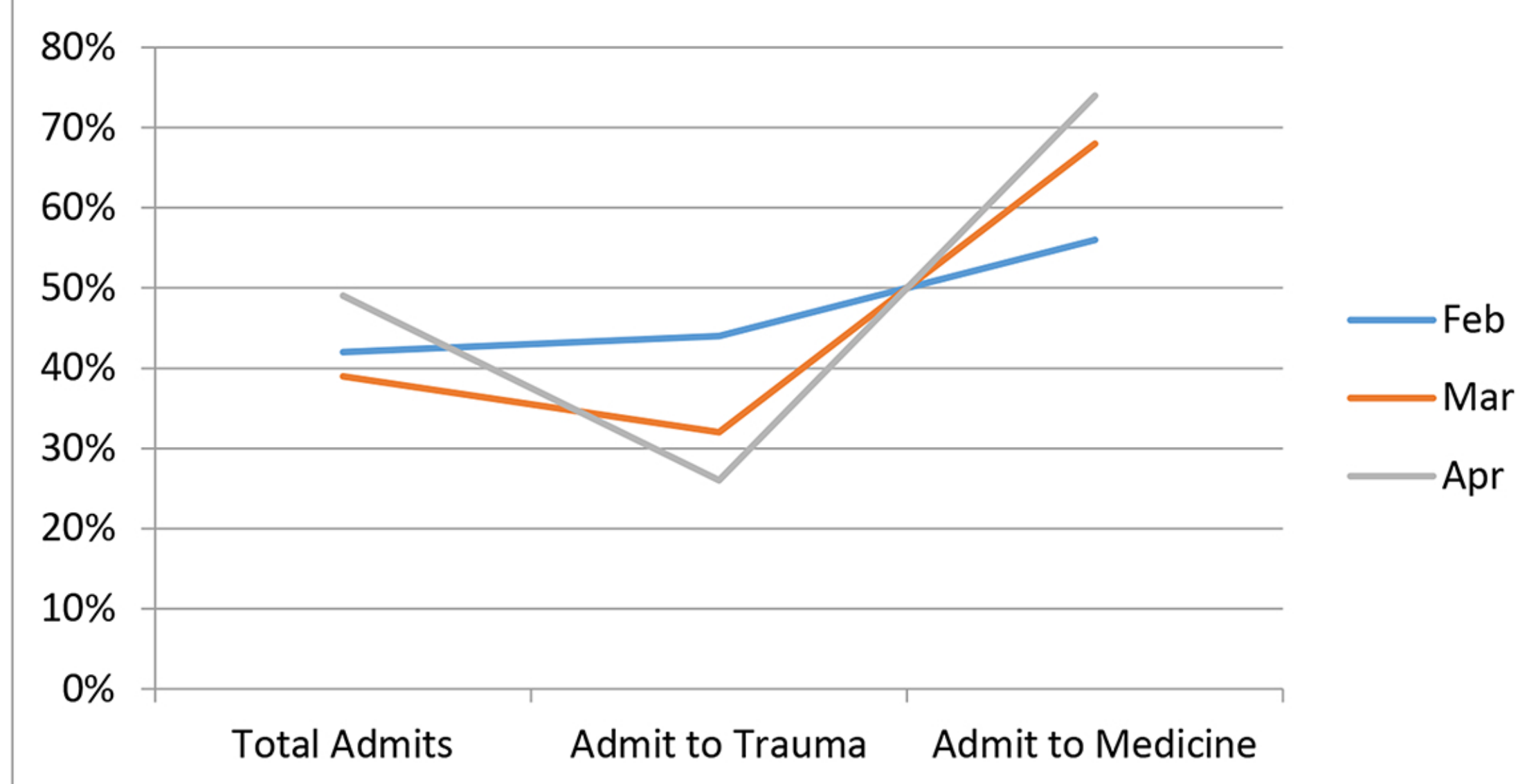
Procedures:

- Literature review conducted
- Population: Patients who are on anticoagulants and/or are ≥ 65 years old with suspicion of head trauma
- GAP alert consists of a modified team: ED MD, RN, EMT with the goal of expediting care and time to CT
- Recommended testing and GAP alert pathway developed based on literature
- Three-month data review included: use of resources and financial impact of utilization, maintaining expedition of obtaining CT scans; and protocol compliance

Alerts by Comparison



GAP Alert Admissions



	Number of Decreased Activations	Savings Per Decreased Activation	Total Savings
Patient Cost	84	\$5,602.18	\$470,583.12

	Number of GAP Alerts	Total Nursing Hours Saved	Cost Savings
Nursing Cost	206	3,360	\$107,520

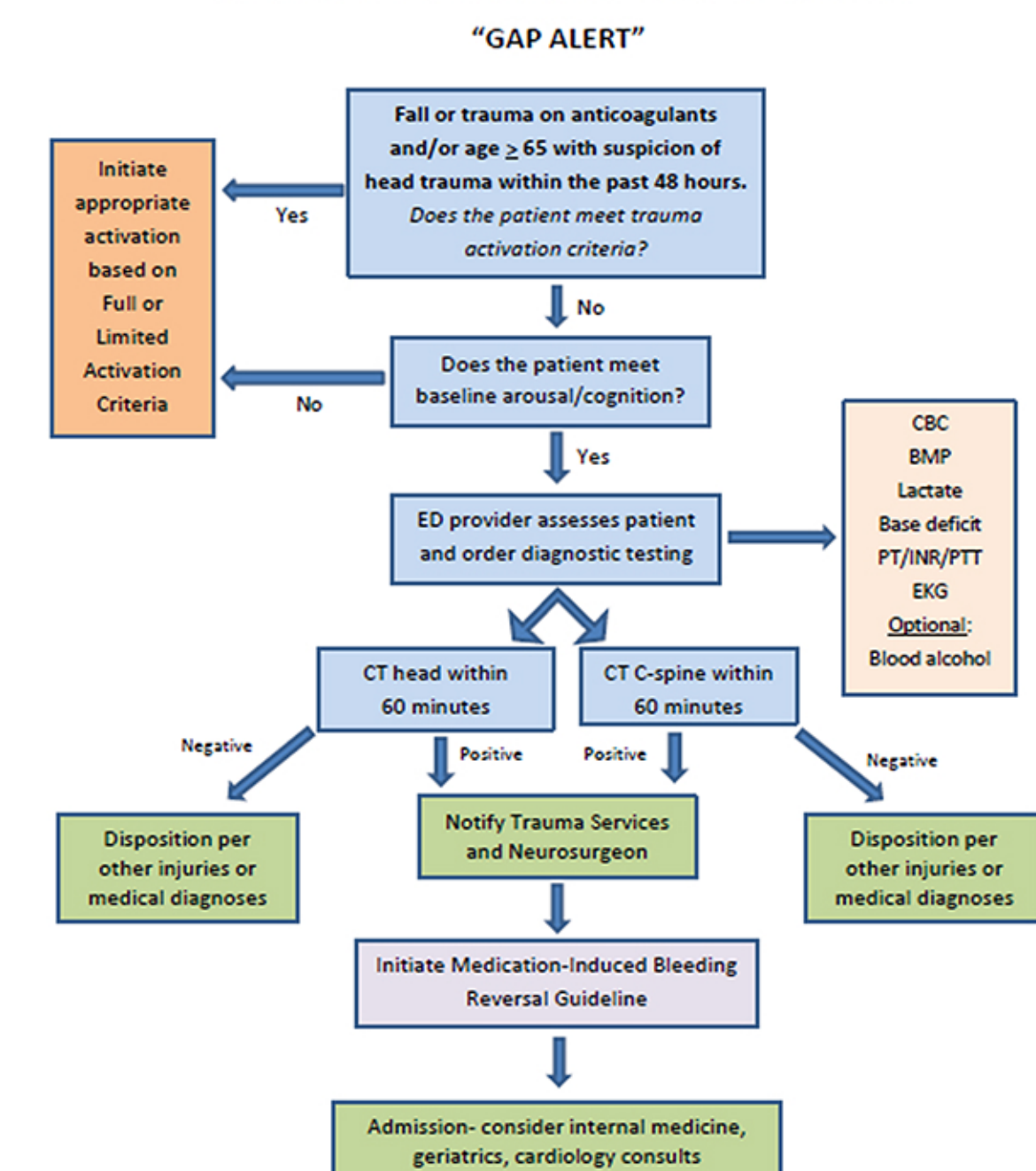
Results of Pilot Study:

- Overall compliance of GAP Alert Pathway was 90%
- Of the 206 patients in the sample, 84 would have previously been a trauma activation
- A total of 3,360 nursing hours were saved by reallocating resources
- Time to CT start was 49 minutes exceeding the goal of 60 minutes
- Approximately 40% of GAP alerts were admitted

Discussion

- Financial benefit was demonstrated with an overall cost savings was potentially \$578,103.12
- More prudent use of resources saved patients and the facility financially
- Care was standardized while maintaining standard goal of rapid identification of injuries
- Expected to see a larger decrease in number of trauma activations; however, Level 1 Trauma designation and verification were attained during the study period
- Alterations to the pathway post pilot study were based on findings and barrier mitigation
- Further data monitoring and analysis are needed and continue to assess the validity and clinical relevance of GAP alerts

GERIATRIC OR ANTICOAGULATED PATIENT TBI ALERT



References:
 • Last recommended by TQIP Geriatric Trauma Management Guidelines.
 • Rittenhouse, K., Rogers, A., Clark, E., Harris, M., Adams, W., Rupp, A., Rogers, F. (2015) The ACT Alert: Preliminary Results of a Novel Protocol to Assess Geriatric Head Trauma Patients on Anticoagulation. The American Surgeon, 81 (1), 400-413.

