

Assessment of a Best Practice Alert in Managing Patients on Anticoagulation

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INTRODUCTION

- Estimated 900,000 patients in the United States and nearly 1 million patients worldwide have Venous Thromboembolism (VTE).^{1,2}
- Untreated VTE can lead to long-term morbidity and mortality with an increased risk of stroke, heart failure, and death.^{1,2}
- Estimated total annual cost ranges from \$2 to \$10 billion per 300,000 to 600,000 patients.¹
- Best Practice Alerts (BPAs) are clinical support tools accessible through EHR to alert the clinicians about a particular element of a patient's care, such as improper dosing, platelet counts, high serum creatinine, infections, blood transfusions, or overuse of testing.^{3,4,5}
- The use of BPAs has been effective in both studies for understanding and managing diseases and the need for therapy adjustment and improved response in patients requiring intervention.⁶
- BPAs can help support clinicians in identifying poor anticoagulant management and improve preventive measures.
- Kucher et al. shown that BPAs could reduce the incidence of symptomatic and asymptomatic deep vein thrombosis among hospitalized patients, and it has increasing effects.^{7,8,9}
- This poster includes data at Grady from July 2019 to August 2019 with a total of 100 patients.

OBJECTIVES

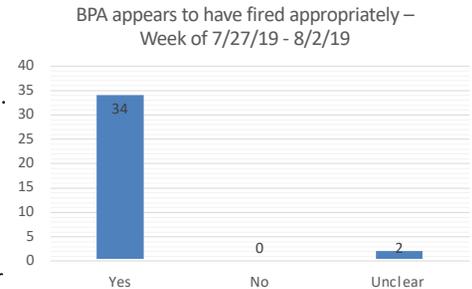
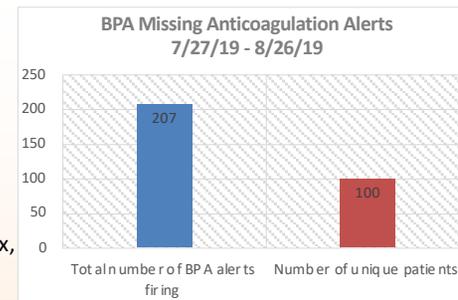
- Objective 1: Determine the accuracy of the firing of BPAs related to VTE prophylaxis.
- Objective 2: Assess the frequency of provider implementation of accurately fired VTE prophylaxis BPA.

METHODS

- Single-center, retrospective, chart review study assessed eligible adult patients who were prescribed anticoagulants for VTE prophylaxis.
- Eligible adult patients were 18 years old and older and were at increased risk for venous thromboembolism.
- A VTE prophylaxis report was processed through EPIC® at Grady Memorial Hospital between July 27, 2019 – August 26, 2019.
- Electronic orders were searched for VTE prophylaxis and mechanical prophylactic measures, including sequential compression devices.
- Patient notes were screened for past/present medical history, accidents, providers, surgeries/procedures, length of stay, or social history.
- Screened for the presence of prophylactic pharmacologic measures, including UFH/Lovenox, aspirin, DOACs, or Warfarin of active and discontinued medications.

RESULTS

- 100 patients identified and 207 BPAs.
- The number of BPAs was fired per unique patient weekly and by floor unit.
- The firing of the BPAs related to VTE prophylaxis was 94.5% accuracy for 36 patients.
- Providers could not prescribe each unique patient with anticoagulation therapy due to having PCI, dementia, or timing when the BPA fired.



CONCLUSION

- BPAs were accurately fired and assessed.
- The assessment showed that VTE prophylaxis was not needed due to a specific event that the patient may have had.
- This specific BPA improved the appropriate management of anticoagulation for VTE prophylaxis in patients.
- Limitations:
 - Fewer studies on the role of BPAs in patient care and the management of anticoagulants for VTE prophylaxis in patients.
 - Providers ignored alerts.
 - BPAs fired after patients left the hospital.
 - BPAs would fire when patients was receiving proper prophylaxis.

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