Creating Healthy Work Environments VIRTUAL 2021

Venous Thrombo Embolism Prevention Initiative an Interprofessional Collaborative

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Purpose: Venous thromboembolism (VTE) is a preventable life-threatening hospital acquired complication. From 2017 to 2018, the peri-operative DVT or PE risk adjusted rate was 4.51 per 1000 discharges which was higher than the national average of 3.8 per 1000 discharges. To better understand the reason for our high incidence of VTE rates, we did an internal review of our DVT and PE data and it was found to be secondary to missed or delayed pharmacological prophylaxis, patient refusal due to multiple administrations of VTE prophylaxis and lack of mobility in surgical critical care units. Our aim was to create an inter-professional collaboration to address the root causes that were leading to the high incident rate of DVT and PE.

Methods: Based on literature review, when a pharmacological prophylaxis dose is missed or delayed, the risk of DVT or PE increases up to 180%. In addition, our own internal data showed that 70% of all missed heparin subcutaneous prophylaxis in our hospital were due to patient refusal. As part of improving patient compliance and safety, we started VTE Prophylaxis Campaign. This campaign is led by multi-professional disciplines, including nursing, provider, pharmacy and physical therapist. The campaign started with Change of Culture in practice with administering enoxaparin subcutaneous (SC) in replacement of heparin SC as first agent of choice for VTE prophylaxis in appropriate patient population. Guideline review indicates enoxaparin SC is as efficacious as heparin SC in VTE prevention in hospitalized patients. In addition, enoxaparin gives the advantage of once daily dosing in comparison to heparin subcutaneous three times daily. This decreases nursing and patient disruptions, especially at night. Another advantage of enoxaparin is decreased incidence of heparininduced thrombocytopenia. In addition, we changed how clinicians were entering orders for VTE prophylaxis to specify a time and a frequency for when the nurses needed to administer this medication. In addition, an escalation process was instituted when patients chose to refuse his VTE treatment. The escalation process included nurses providing additional information regarding the importance of VTE prophylaxis as well informing the providers if patient did not take the dose. Other strategies were also

implemented to improve VTE prophylaxis rates included education to nursing and provider through VTE prophylaxis infographic, enoxaparin dosing guide, and availability of enoxaparin syringes on all nursing floors. Real time data was provided to the various process owners for continuous feedback.

This initiative included all medical and surgical patients with the exception of cardiac surgery patients and those patients that enoxaparin was a contraindication.

Results: After the institution of all the interventions in this initiative, there was a significant reduction of the peri-operative DVT or PE to 2.43 per 1000 discharges (Jan-Nov 2019), which is lower than the national rate.

Conclusion: Through inter-professional collaboration with VTE prevention initiative, we were able decrease peri-operative DVT and PE rates by timely order and administration of VTE prophylaxis and increase patient compliance and safety.

Title:

Venous Thrombo Embolism Prevention Initiative an Interprofessional Collaborative

Keywords:

empowerment, interprofessional collaboration and patient safety

Abstract Summary:

Venous thromboembolism (VTE) is a preventable life-threatening hospital acquired complication. Peri-operative DVT or PE risk adjusted rate was 4.51 per 1000 discharges and higher than the national average of 3.8 per 1000 discharges. Our aim via interprofessional collaboration addressed root causes leading to high incident rate of DVT and PE.

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