Abstract

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Improving Venous Thromboprophylaxis prescribing in the Acute Medical Unit: A Quality Improvement Project

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Abstract

Background

Venous thromboembolism (VTE) prophylaxis is an important management plan for every patient admitted to the Acute Medical Unit in a hospital. Pulmonary embolism remains as the leading cause of preventable in-hospital death. Bleeding risk and possible contraindication to antithrombotic agents must be assessed before instituting VTE thromboprophylaxis. Based on national and international thromboprophylaxis guidelines, only 40-50% of medical patients received VTE prophylaxis while 60-75% of surgical patients received VTE prophylaxis. The 2018 National Institute of Clinical Excellence (NICE) guidelines recommend prescribing VTE prophylaxis to all admitted patients who need it within 14hours of admission. When the assessment of risk favours the use of thromboprophylaxis, low molecular weight heparin or fondaparinux should be administered.

Method

Collecting preliminary data, intervention, data collection, reviews of data, meetings with medical staff and on-going improvement made. Duration: August 2018 to July 2019, across a year span. 5 patients data are randomly collected every week and Microsoft excel software is used to generate the percentage.

Problem

Venous thromboembolism prophylaxis was very poorly prescribed in the acute medical unit. The preliminary data shows that less than 35% of patients were prescribed dalteparin sodium within 14hours of admission to the acute medical unit in the hospital.

Intervention

Design a VTE flow chart based on the local hospital guideline, regional Scottish guideline and national United Kingdom, NICE Guideline. This is to guide prescribers mainly the junior doctors whether to prescribe dalteparin sodium or not. A period of intervention was assigned for two months. Then, data was collected again and saw a great improvement to more than 80%. We would like to see a consistency in the practice, hence we figured out the causes in the inconsistency of the data. We intervened again by presenting this project to all medical staff, receiving feedbacks from the meeting, and made a few changes accordingly.

Result

The data has improved from less than 35% to more than 60% and plateauing at more than 80%. In order to generate this final VTE flow chart, we have made some changes accordingly after having discussion with our junior and senior doctors including all nursing staff and quality improvement managers several times over the past months. That means all medical team have to be involved in any kind of quality improvement project for the safety of patients ultimately.

Conclusion

This project can be reproduced in the future to ensure a good medical practice amongst the doctors in the hospital. The same method can be easily followed. This is an on-going QI project which will be stopped once a consistency of more than 80% of the data is achieved across a few data points. No ethics approval is required and this was checked with the QI manager before commencement.

Key Message

Timing of commencement of VTE prophylaxis in line with the NICE guidelines is of great importance because this is the kind of medical problem we can prevent provided patients receive appropriate VTE prophylaxis dose within the targeted time frame.