



## 3<sup>rd</sup> Annual Quality & Patient Safety Conference Improving the Healthcare Journey for Patients & Staff



### TITLE

## Preventing hospital-acquired venous thromboembolism events in Beaumont Hospital

### SUBMITTED BY

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### ABSTRACT

#### INTRODUCTION

Hospital acquired venous thromboembolic events (HA-VTEs) in acutely unwell patients are a leading cause of preventable morbidity and account for a significant proportion of in-hospital mortality. There are approximately 5,000 cases of VTE in Ireland each year. Recent international data suggests that over 50 percent of all VTE events are hospital acquired. It is widely acknowledged that unfractionated and low molecular weight heparin are effective in the prevention of VTEs. However, use of these medications remains suboptimal. The Beaumont Hospital Thrombosis Committee was set up in 2021 with a primary focus to reduce the rate of HA-VTE.

#### METHODOLOGY

Retrospective audit of completion rate of VTE risk-assessment within 24 hours of hospital admission.

#### AIM

To produce a monthly report of two quantitative assessments in Beaumont hospital; Rate of completion of VTE-RA and rate of prescription of VTE prophylaxis, with the intention to increase compliance rates.

#### CHANGE IMPLEMENTED

The Beaumont Hospital Thrombosis committee have provided targeted education to admitting doctors in Beaumont Hospital about VTE-RA, bleeding risk assessment and appropriate thromboprophylaxis, in addition to introducing a new VTE-RA tool in drug kardexes.

#### MEASUREMENT

We audited the rate of completion of a VTE-RA proforma pre and post educational intervention, in addition to the rate of prescription of VTE-thromboprophylaxis in a random sample of patients every month.

#### RESULTS

##### Pre-Intervention June 2021

- 56 patient admissions audited with rate of completion of VTE-RA 3.6% (n=2).
- Appropriate thromboprophylaxis was prescribed in 84% (n=47).
- 16% of patients (n=9) had no VTE prophylaxis prescribed or RA documented.

##### Post-Intervention (NCHD Education and VTE-RA tool) October 2021

- 52 patient admissions audited, with improved rate of admission VTE-RA 7.7% (n=4).
- Appropriate thromboprophylaxis was prescribed in 83% (n=43). 15.4% (n=8) had no VTE prophylaxis prescribed or RA documented.

#### VALUE

Beaumont Hospital HA-VTE rate of 3.03 cases per 1000 inpatient discharges prior to intervention was higher than the average and median rates of HA-VTE for all Model 4 hospitals in Ireland. We have demonstrated an increased compliance with VTE-RA on admission post intervention, and will reaudit rates of HA-VTE this year.

#### SUSTAINMENT

A multifaceted VTE prophylaxis quality improvement intervention that combines regular education, distribution of a decision support tool and regular audit and feedback is ongoing at our institution. The audit cycle will be repeated on a monthly basis in conjunction with this intervention.