

IMPROVE Score

Assessing patient's risk of venous thromboembolism (VTE) and need for prophylaxis

72 to 80%

72 to 80% of medical patients who receive VTE prophylaxis in Lower Mainland hospitals are considered **low risk** for developing VTE.^{1,2,3}

What is happening?

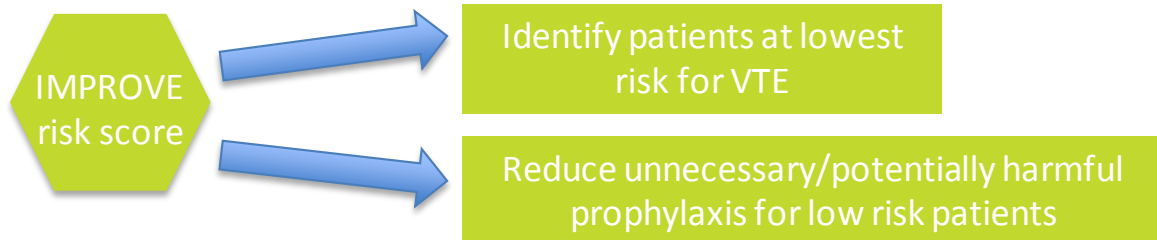
The new **VTE RISK ASSESSMENT AND PROPHYLAXIS ORDERS - MEDICINE (REGIONAL)** will require risk assessment using the IMPROVE criteria prior to ordering VTE prophylaxis.

- The IMPROVE (International Medical Prevention Registry on Venous Thromboembolism) risk score estimates the probability of VTE using statistically weighted variables derived from clinical trials, and can aid in identifying patients at low risk of thrombosis for which prophylaxis is unnecessary.^{4,5}
- IMPROVE score 0 or 1: low risk of VTE.^{4,5}
- IMPROVE score greater than or equal to 2: greater than 1% risk of VTE.^{4,5}

IMPROVE risk assessment model has been externally validated^{6,7}

Why is the change occurring?

- Although VTE prophylaxis is an important preventable cause of mortality and morbidity, unnecessary thromboprophylaxis can lead to higher probability of bleeding and costs.
- Symptomatic VTE occur in only 0.3 to 2% of hospitalized medical patients.^{8,9,10}



How do I use IMPROVE risk assessment?

VTE Risk Factor ^{4,5,7}	Points
Previous VTE	3
Thrombophilia <i>Familial condition leading to an excess risk of thrombosis (e.g. antithrombin III deficiency, protein C and protein S deficiencies, Factor V Leiden, antiphospholipid syndrome, prothrombin G20210A mutation and resistance to activated protein C)</i>	2
Active cancer <i>Active malignancy, treated or untreated within the past 6 months</i>	2
Lower limb paralysis <i>Hemiparesis, hemiplegia, paraplegia or quadriplegia</i>	2
Critical Care stay <i>Critical Care stay for greater than or equal to 24 hours during the same hospital admission</i>	1
Predicted immobilization of 7 days or more <i>Immobilization is defined as being confined to bed or chair during and/or prior to admission</i>	1
Age greater than 60 years	1

Cumulative IMPROVE score:

0 or 1: no prophylaxis^{4,5}

Greater than or equal to 2: give prophylaxis (unless high bleeding risk)^{4,5}

Questions or Concerns?

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