

BC Hospitalist VTE Prevention Collaborative

Project Title: BC Hospitalist VTE Prevention Collaborative

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Introduction: Venous Thromboembolism (VTE) is a significant cause of preventable morbidity and mortality in Canadian hospitals. The gap between current practice and optimal practice in the prevention of hospital acquired VTE is well documented for patients in the general medical population. Studies have shown that this population receives appropriate prophylaxis approximately 20 to 40% of the time.

Methodology: The BC VTE prevention collaborative consisted of 11 hospitalist programs dispersed geographically across the province. Two province wide workshops were coordinated to build awareness of the issue and to build consensus for the collaborative approach. Regular conference calls and a mentored implementation model supported implementation at the various hospital sites. Pre-printed order sets (PPO) were developed unique to each site, however each including a consistent VTE risk stratification tool and prevention protocol. A random prospective audit methodology tracked the percent of appropriate prophylaxis on a monthly basis at each site.

Results: To date six sites have achieved greater than 90 percent compliance with appropriate VTE prophylaxis on a sustained basis. The combined province wide rate of VTE prophylaxis is greater than 90%, however five sites have not yet achieved this target on a sustained basis.

Conclusions: This project was successful in improving appropriate VTE prophylaxis for patients across the province of BC. During the implementation process many sites experienced significant administrative barriers. Most prominent were delays in the development and approval process for Pre-Printed Order sets at several sites. The collective nature of the project allowed us to address these issues at a Health Authority level and should streamline the process for future endeavors.

This collaborative project demonstrates that the mentored implementation model can be used to support wide spread change across multiple sites. It has also resulted in the development of infrastructure, skills and relationships that will allow the Hospitalist community to work collaboratively on future province wide QI projects.

BC Hospitalist VTE Collaborative Audit Form

Hospital: _____ Auditor: _____
 Date of Audit : _____/_____/_____
DD MM YY
 Patient MR# : _____
 Nursing Unit : _____
 Current Responsible MD: _____
 Admitting MD: Hospitalist Other

Complete risk assessment tool for each patient's current status:

<input type="checkbox"/> Low Risk (Must be independently ambulatory outside of room 3 times daily) Observation patients, expected LOS less than 48 hrs: Minor/Ambulatory surgery or Age less than 50 and NO other risk factors , or already on therapeutic anticoagulation	<input type="checkbox"/> Early ambulation, education
<input type="checkbox"/> Moderate to High Risk Most medical or surgical patients CHF, pneumonia, active inflammation, advanced age, dehydration, varicose veins, less than fully and independently ambulatory, and other risk factors. All patients not in the Low or Highest Risk Categories <input type="checkbox"/> Add Serial Compression Device for Highest Risk Patients Elective hip or knee arthroplasty, Multiple Trauma, Abdominal or Pelvic surgery for cancer, Acute spinal cord injury)	CHOOSE ONE pharmacologic option: <input type="checkbox"/> LMH (DALTEPARIN 5000 units OR ENOXAPARIN 40MG OR SC q24h) until discharge <input type="checkbox"/> HEPARIN 5000 units q8h until discharge *OR* If weight less than 40 kg (except patients with active cancer or previous thromboembolic event): <input type="checkbox"/> LMWH (DALTEPARIN 2500 units SC OR ENOXAPARIN 30 mg q24h) until discharge <input type="checkbox"/> HEPARIN 5000 units subcutaneous q12h until discharge
<input type="checkbox"/> Contraindication to Pharmacologic Prophylaxis <input type="checkbox"/> Active bleeding of clinical significance <input type="checkbox"/> High risk of serious bleeding into a critical site (intracranial, intraspinal, pericardial, intraocular, retroperitoneal, intra-articular) <input type="checkbox"/> Known major bleeding disorder or a coagulopathy <input type="checkbox"/> Platelet count less than 50 X 10 ⁹ /L <input type="checkbox"/> History of Heparin Induced Thrombocytopenia <input type="checkbox"/> Already on Therapeutic Anticoagulation <input type="checkbox"/> Other(specify)_____	<input type="checkbox"/> Mechanical prophylaxis with sequential compression device. Interrupt for skin care, assessments, toileting and ambulation only *OR* <input type="checkbox"/> Contraindicated (peripheral vascular disease or wounds) Reassess daily to start pharmacologic prophylaxis when contraindication resolves

Pre-printed Admission Order Set Used Y N
 Pharmacologic Prophylaxis Currently Ordered Y N
 Mechanical Prophylaxis Ordered Y N
 Mechanical Prophylaxis in Use at Time of Audit Y N

Current Prophylaxis is Appropriate (as per risk assessment tool) Y N

Key Metrics

Key Metric	Value
Analysis Period	December 2009 to August 2011
Hospitals incorporated in Analysis	11
Hospitals Excluded from Analysis *	2
Audit's Submitted	4,992
Audits Excluded **	149
Audits Analysed (N=)	4,843
Average Audits Per Month	231
Average Audits Per Hospital Per Month	21

Notes:

* Hospitals excluded are those which have not submitted any audit results in the analysis period

** Excluded Audits are those with no value entered for Prophylaxis Appropriate field.

Combined Results & Linear Trend

