Welcome to the Canadian VTE Audit Day:

Thank you for participating in the *Safer Healthcare Now!* Canadian VTE audit day. By participating in this Audit Day, you are helping to improve the delivery of safe and effective care for patients at your institution and across the nation.

The purpose of the day is to:

a. Create awareness around VTE prophylaxis  
b. Obtain an estimate of National VTE prophylaxis  
c. Promote the new Data Collection Tool and other tools available to support VTE

The Canadian VTE Audit is simple and quick to complete (we estimate 60 minutes).

Results of Individual hospitals/organizations will not be shared publicly unless that organization has provided explicit consent to do so. Without express written consent all data submitted to the "Canadian VTE Day" will be presented in aggregate form only.

This work book provides instructions on how to participate and tools to assist you in your data collection.

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**Sheet 1: Instructions for Identifying the Audit Sample**

It is suggested that you plan your approach for identifying your audit sample well in advance of the audit day. This will be helpful for your own planning but also to give us adequate time to assist you in the preparation of the data collection forms that will be developed for your site (see page 7 for a sample data collection form).

The VTE Audit is intended to include patients from *Internal Medicine* and *General Surgery*. In your hospital, the audit can be conducted in either surgical or medical patients but, ideally, should include patients from both. Patients on therapeutic anticoagulation are excluded from this audit.

It is suggested that at least 20 patients from each group be included in the audit.

**FOUR possible options for determining your audit sample:**
1) Include all eligible medical and general surgical patients (eligibility criteria outlined below)
2) Include a sample of eligible medical and general surgical patients (e.g. 20 patients from each group or 30 medical and 20 general surgical patients). If a sample is to be taken, consider using consecutive patients or a random sample (to reduce selection bias)
3) Include all eligible medical OR all eligible general surgical patients
4) Include a sample of eligible medical OR a sample of eligible general surgical patients (e.g. 30 medical patients) (see tip on sample selection in bullet #2 above)

**Eligible patients** for the audit are:
1) Patients in hospital on April 10 AND with an actual or expected length of stay of more than 2 calendar days (but have not been in hospital for more than 30 calendar days); OR
2) Patients admitted between April 10 and April 18 with an actual or expected length of stay of at least 2 calendar days; AND
3) Patients **NOT** taking therapeutic doses of anticoagulants.

**Additional eligibility criteria:**
In general, for patients admitted to *Internal Medicine*, consider medical patients admitted with:
- CHF, severe respiratory disease, or confined to bed with active cancer, previous VTE, sepsis, acute neurologic disease, inflammatory bowel disease.

For *general surgical* patients, consider the following eligibility criteria:
1) **Low risk** - non-major surgery and fully mobile and no additional VTE risk factors-these patients should **NOT** be included in the audit.
2) All other general surgical patients are eligible if they meet the general criteria for eligibility described above.

Data for this audit should generally be obtained from direct chart audit.

For patients that are included in the audit, go to the patient care unit to review the chart, determine eligibility and complete the VTE data collection form (see Sheet 2 for more detailed instruction and Sheet 3 and 4 for methods of data collection).
Sheet 2: Steps for conducting the audit

The Canadian VTE Audit guides you to collect data on four questions:

1. Were preprinted orders used on admission or after surgery?
2. Type of thromboprophylaxis used?
3. Is the patient receiving appropriate thromboprophylaxis?
4. If no to question 3, then Reason recommended thromboprophylaxis was not used.

The steps outlined below help guide you in the process of completing the audit to collect the information to answer the questions above.

Steps and tips to completing the audit:

Step 1: Identify the patients to be included in the audit as per sheet 2
Prepare the necessary Data Collection Forms. Refer to sheet 3 and 4 for more detailed instructions on creating and completing the Data Collection Form.

Step 2: Determining Patients to be excluded
Patients to be excluded from the audit will include those receiving anticoagulants at therapeutic doses. They can be identified in one of two ways:

a) If you have an electronic pharmacy system, look for an anticoagulant medication, either prophylactic or therapeutic, for each patient. If a patient is receiving therapeutic anticoagulation, they should be excluded from the audit.

b) If you do not have access to the electronic pharmacy system, look at the most recent Medication Administration Record (MAR) to determine if a patient is on therapeutic anticoagulation. Patients on therapeutic anticoagulation should be excluded from the audit.

Step 3: Compete the VTE audit by conducting chart reviews
All patients that meet the eligibility criteria can be reviewed for the audit. Please go to the patient care unit to conduct a chart review for these patients.

Tips when reviewing the chart and completing the data collection form
1. Look at the Doctors Orders to see if an order for mechanical or anticoagulant prophylaxis was written.
   - If there is an order, make note of whether this order was written using an order set. With this information answer column 1 on the “data collection form” by selecting Yes or No based on whether preprinted order sheets were used.
   - If there is no order then select NO as your answer for column 1
2. Identify the type of thromboprophylaxis used (Column # 2) by filling in the appropriately numbered bubble between 1-11 that corresponds with the type of thromboprophylaxis from the list on the VTE audit data collection form.
   - If no order was written respond by filling in bubble # 12 “no order”
3. Determine if the patient is receiving appropriate thromboprophylaxis (Column #3). (see tips for assessing appropriateness of VTE thromboprophylaxis below)
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- If appropriate thromboprophylaxis was ordered answer Yes to column 3. Prophylaxis is considered **appropriate when:**
  - Prophylaxis is started within 24 hours (1 calendar day) of admission or after surgery
  - The order is according to Evidence-based anticoagulant prophylaxis (or mechanical if anticoagulant is contraindicated) as per the SHN Getting Started Kit
- If appropriate thromboprophylaxis was **not** provided answer No to column 3
- If no order was written answer No to column 3

4. If you answered No to column 3, identify reasons the recommended thromboprophylaxis was not used (column 4) by filling the corresponding bubble. The possible reasons thromboprophylaxis are listed in the box on the upper right corner of the VTE data collection form. If you answered Yes to column 3 please leave column 4 blank.

**Tip for assessing appropriateness of VTE thromboprophylaxis**

**Does the patient have an indication for VTE prophylaxis?**

- All patients included in the audit will have an indication

**Does the patient have a contraindication to anticoagulant thromboprophylaxis?**

- If there is a contraindication to anticoagulant thromboprophylaxis (e.g. patient is actively bleeding or at high risk of bleeding) **AND** there is an order for mechanical prophylaxis (bilateral compression stockings, bilateral sequential devices), then the appropriate responses would be:
  - column 2 “type of thromboprophylaxis”: (1) mechanical only
  - column 3 “receiving appropriate thromboprophylaxis”: Yes

**For all patients that are included and do not have a contraindication to an anticoagulant, was the order for anticoagulant written within an appropriate time frame?**

- Initiation: was the anticoagulant ordered within the first 24 hours of admission

**Was the order appropriate?**

- Drug and dose: was the appropriate dose ordered for the appropriate anticoagulant?

**For medical patients this can include:**

<table>
<thead>
<tr>
<th>Low Molecular Weight Heparin (LMWH)</th>
<th>Dalteparin 5000 units subcutaneously once daily</th>
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<tbody>
<tr>
<td></td>
<td>enoxaparin 40 mg subcutaneously once daily</td>
</tr>
<tr>
<td></td>
<td>tinzaparin 4500 units subcutaneously once daily</td>
</tr>
<tr>
<td>Low Dose Unfractionated Heparin (LDUH)</td>
<td>5000 units subcutaneously bid or tid</td>
</tr>
</tbody>
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Fondaparinux 2.5 mg subcutaneously once daily

For surgical patients, this would include:

<table>
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<tr>
<th>Usual Risk</th>
<th>High Risk</th>
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</table>
| • LMWH (dalteparin 5000 units subcutaneously once daily; enoxaparin 40 mg subcutaneously once daily; tinzaparin 4500 units subcutaneously once daily)  
• LDUH 5000 units subcutaneously bid  
• Fondaparinux 2.5 mg subcutaneously once daily | • LMWH 5000-units subcutaneously once daily; enoxaparin 40 mg subcutaneously once daily; tinzaparin 4500 units subcutaneously once daily)  
• LDUH 5000 units subcutaneously tid  
• Fondaparinux 2.5 mg subcutaneously once daily |

* For dosing considerations in special populations, please refer to the VTE GSK [http://www.saferhealthcarenow.ca/EN/Interventions/vte/Pages/default.aspx](http://www.saferhealthcarenow.ca/EN/Interventions/vte/Pages/default.aspx)

If appropriate thromboprophylaxis was not provided answer No to column # 3 and choose from the possible reasons why from the options offered in answer to Question #4. The possible reasons thromboprophylaxis are listed in the box on the upper right corner of the VTE data collection form.

Step 4: Fax the completed VTE Audit Data Collection Form

Once the appropriate information has been completed for all the patients to be included in the audit, please send the completed VTE Data Collection Form by faxing it to number located on the bottom left corner of the form.

Results of Individual hospitals/organizations will not be shared publicly unless that organization has provided explicit consent to do so. Without express written consent all data submitted to the “Great Canadian VTE Day” will be presented in aggregate form only.
Sheet 3: Instructions for collecting the data - Method 1

Method #1: Automatic generation of data collection form

Safer Healthcare Now! has designed a VTE Data Collection Form to support you in the collection of data for your VTE audit. You can access this collection tool in one of two ways.

PLEASE NOTE: We will offer a training session on the new VTE Data Collection Tool via WebEx, in association with the VTE National Call on March 26th. Details for the call can be found at www.saferhealthcarenow.ca.

Register for the VTE audit at www.saferhealthcarenow.ca and complete the necessary registration and contact information.

Prior to registering for the audit, please have the following information available:

- Name and e-mail address of the person registering for your site
- Name and e-mail address of the person collecting the audit data
- Name of province, health region or LHIN, organization, site/facility (and units completing the audit if appropriate) Audit sample: will data be collected by site/facility or by unit, for medical and/or surgical patients?

After your information is submitted, a data collection sheet(s) specific to your organization and audit sample/unit will be e-mailed to you. The data collection form(s) can be printed and photocopied for as many times as needed. Each row on the data collection form represents one patient. Each form can collect data on 10 patients. If you were collecting data on 20 patients you would require 2 sheets.

Once the audit is completed, the data collection forms should be faxed to the fax number on the bottom left corner of the form. Remember to enter the name and phone number of the person completing the form in the area provided in the upper left corner of each form so that we may contact you if there are any data entry errors.

Once faxed, the system will automatically process the data and make it available for reports within Patient Safety Metrics. Please allow 20 minutes for data to be processed by the system before it becomes available for reports.
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Image of the Data Collection Form that will be emailed to you.
Sheet 4: Instructions for collecting the data - Method 2

Method #2: Using Patient Safety Metrics to create the Data Collection Form (DCF)

Below is a guide on submitting VTE data using the Data Collection Form in Patient Safety Metrics (PS Metrics).

The new VTE Data Collection Form is a paper-based tool designed to collect patient level data while reducing the burden of measurement on staff.

PLEASE NOTE: We will offer a training session on the new VTE Data Collection Tool via WebEx, in association with the VTE National Call on March 26th. Details for the call can be found at www.saferhealthcarenow.ca.

A quick guide to submitting VTE data using the Audit/Survey Data Collection Form component of Patient Safety Metrics can be found below.

Requirements for use:
1) Your organization needs be enrolled in PS Metrics
2) You need to be a registered member for your organization
3) For instructions on how to meet the two criteria, above please contact Alex Titeu of the Central Measurement Team at 416-946-3103 or email at metrics@saferhealthcarenow.ca

I. How to create a new Data Collection Form
1) Login to PS Metrics https://shn.med.utoronto.ca/metrics/login.aspx
2) Select the VTE Intervention tab

3) If the VTE Intervention tab is NOT visible:
   1. Select the gold button “Manage Interventions”
   2. Scroll down to “VTE - Venous Thromboembolism Prevention”
   3. Click on the window to the right of the intervention title and Select “Enroll”
   4. Click on gold button “Save and Back” in bottom right corner of screen. The newly selected “VTE - Venous Thromboembolism Prevention” will appear listed under “Intervention with No Data Submitted”
   5. Select “VTE - Venous Thromboembolism Prevention”
4) Click the “Add New Data Collection Form” gold button in bottom left corner of screen
5) Select the **VTE Survey** from the drop-down menu

6) Once on this screen you will have the opportunity to select all applicable sample attributes such as in/out patient, adult/pediatrics, age group, program, service, unit/site, procedure, or patient sample.

7) Please fill-out all the necessary information that best defines your sample population for example for Unit/Site, if you select “other” you will be given a free text field to type your unit name. “6 East”. (see screen shot below)

8) Click the Save button to add the new survey

9) Once the form has been created with your patient sample click the gold button “Get Form”

11. Complete and FAX the printed PDF form
   - *Make sure you fill-in your name and contact phone number.*
   - *Double-check that you filled in the correct date and the form information is correct.*
   - *Fax to the number printed in the bottom left corner of the form*

Once faxed, the system will automatically process the data and make it available for reports within Patient Safety Metrics. Please allow 20 minutes for data to be processed by the system before it becomes available for reports.