# IT-4.15: Venous Thromboembolism (VTE) Prophylaxis Bundle

| **Measure Title** | Venous Thromboembolism Prophylaxis Bundle  |
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| **Description** | * VTE- 1: This measure assesses the number of patients who received VTE prophylaxis or have documentation why no venous thromboembolism (VTE) prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission.
* VTE-2: This measure assesses the number of patients who received venous thromboembolism (VTE) prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after the initial admission (or transfer) to the Intensive Care Unit (ICU) or surgery end date for surgeries that start the day of or the day after ICU admission (or transfer).
* VTE-3: This measure assesses the number of patients diagnosed with confirmed venous thromboembolism (VTE) who received an overlap of Parenteral (intravenous [IV] or subcutaneous [subcu]) anticoagulation and warfarin therapy. For patients who received less than five days of overlap therapy, they should be discharged on both medications and have a Reason for Discontinuation of Overlap Therapy. Overlap therapy should be administered for at least five days with an international normalized ratio (INR) greater than or equal to 2 prior to discontinuation of the parenteral anticoagulation therapy, or INR less than 2 but discharged on both medications or have a Reason for Discontinuation of Overlap Therapy.
* VTE-4: This measure assesses the number of patients diagnosed with confirmed venous thromboembolism (VTE) who received intravenous (IV) unfractionated heparin (UFH) therapy dosages AND had their platelet counts monitored using defined parameters such as a nomogram or protocol.
* VTE-5: This measure assesses the number of patients diagnosed with confirmed venous thromboembolism (VTE)that are discharged to home, home care, court/law enforcement or home on hospice care on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions.
* VTE-6: This measure assesses the number of patients diagnosed with confirmed venous thromboembolism (VTE) during hospitalization (not present at admission) who did not receive VTE prophylaxis between hospital admission and the day before the VTE diagnostic testing order date.
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| **NQF Number** | * VTE-1: 0371
* VTE-2: 0372
* VTE-3: 0373
* VTE-4: 0374
* VTE- 5: 0375
* VTE-6: 0376
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| **Measure Steward** | The Joint Commission  |
| **Link to measure citation** | * VTE-1:
	+ <http://www.qualityforum.org/QPS/0371>
	+ <http://www.qualitymeasures.ahrq.gov/popups/printView.aspx?id=35542>
* VTE-2:
	+ <http://www.qualityforum.org/QPS/0372>
	+ <http://www.qualitymeasures.ahrq.gov/popups/printView.aspx?id=35543>
* VTE-3:
	+ <http://www.qualityforum.org/QPS/0373>
	+ <http://www.qualitymeasures.ahrq.gov/popups/printView.aspx?id=35544>
* VTE-4:
	+ <http://www.qualityforum.org/QPS/0374>
	+ <http://www.qualitymeasures.ahrq.gov/popups/printView.aspx?id=35545>
* VTE-5:
	+ <http://www.qualityforum.org/QPS/0375>
	+ <http://www.qualitymeasures.ahrq.gov/popups/printView.aspx?id=35546>
* VTE-6:
	+ <http://www.qualityforum.org/QPS/0376>
	+ <http://www.qualitymeasures.ahrq.gov/popups/printView.aspx?id=35547>
* Specifications Manual: <http://www.jointcommission.org/assets/1/6/NHQM_v4_3a_PDF_10_2_2013.zip>
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| **Measure type** | Stand-Alone (SA) |
| **Measure status** | P4P\*Use of this measure requires reporting on each of the six components of the bundle as described.  |
| **DSRIP-specific modifications to Measure Steward’s specification** | The Measure Steward’s specification has been modified as follows:* Created as a bundle to reflect clinical practice as it relates to VTE prophylaxis
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| **Denominator Description**  | * VTE-1: All patients
* VTE-2: Patients directly admitted or transferred to intensive care unit (ICU)
* VTE-3: Patients with confirmed venous thromboembolism (VTE)who received warfarin.
* VTE-4: Patients with confirmed venous thromboembolism (VTE)receiving intravenous (IV) unfractionated heparin (UFH) therapy.
* VTE-5: Patients with confirmed venous thromboembolism (VTE) discharged on warfarin therapy
* VTE-6: Patients who developed confirmed venous thromboembolism (VTE) during hospitalization. Discharges with an ICD-9-CM Other Diagnosis Codes of VTE as defined in Appendix A, Table 7.03 or 7.04.

Refer to Specifications Manual hyperlink above for detailed tables.  |
| **Denominator Inclusions** | * VTE-1: The Measure Steward does not identify specific denominator inclusions beyond what is described in the numerator description
* VTE-2: The Measure Steward does not identify specific denominator inclusions beyond what is described in the numerator description
* VTE-3:
	+ Patients with confirmed venous thromboembolism (VTE) who received warfarin.
	+ Discharges with an ICD-9-CM Principal or Other Diagnosis Codes of venous thromboembolism (VTE) as defined in Appendix A, Table 7.03 or 7.04
* VTE-4**:**
* Patients with confirmed venous thromboembolism (VTE) receiving intravenous (IV) unfractionated heparin (UFH) therapy
* ICD-9-CM Principal or Other Diagnosis Codes of venous thromboembolism (VTE) as defined in Appendix A, Table 7.03 or 7.04
* VTE-5: Patients with confirmed venous thromboembolism (VTE) discharged on warfarin therapy
	+ Discharges with an ICD-9-CM Principal or Other Diagnosis Codes of venous thromboembolism (VTE) as defined in Appendix A, Table 7.03 or 7.04
	+ Discharged to home, home care or court/law enforcement
	+ Discharged to home for hospice care
* VTE-6:
	+ Patients who developed confirmed venous thromboembolism (VTE) during hospitalization
	+ Discharges with an ICD-9-CM Other Diagnosis Codes of venous thromboembolism (VTE) as defined in Appendix A, Table 7.03 or 7.04

Refer to Specifications Manual hyperlink above for detailed tables.  |
| **Denominator Exclusions** | * VTE-1:
	+ Patients less than 18 years of age
	+ Patients who have a length of stay (LOS) less than two days and greater than 120 days
	+ Patients with Comfort Measures Only (as defined in the Data Dictionary) documented on day of or day after hospital arrival
	+ Patients enrolled in clinical trials
	+ Patients who are direct admits to intensive care unit (ICU), or transferred to ICU the day of or the day after hospital admission with ICU LOS greater than or equal to one day
	+ Patients with International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Principal Diagnosis Code of Mental Disorders or Stroke (as defined in the appendices of the original measure documentation)
	+ Patients with ICD-9-CM Principal or Other Diagnosis Codes of Obstetrics or venous thromboembolism (VTE) (as defined in the appendices of the original measure documentation)
	+ Patients with ICD-9-CM Principal Procedure Code of Surgical Care Improvement Project (SCIP) VTE selected surgeries (as defined in the appendices of the original measure documentation)
* VTE-2:
	+ Patients less than 18 years of age
	+ Patients who have a hospital length of stay (LOS) less than two days and greater than 120 days
	+ Patients with Comfort Measures Only documented on day of or day after hospital arrival
	+ Patients enrolled in clinical trials
	+ Patients with intensive care unit (ICU) LOS less than one day without venous thromboembolism prophylaxis administered and documentation for no venous thromboembolism prophylaxis
	+ Patients with ICD-9-CM Principal or Other Diagnosis Code of Obstetrics or venous thromboembolism as defined in Appendix A, Table 7.02, 7.03, or 7.04
	+ Patients with ICD-9-CM Principal Procedure Code of Surgical Care Improvement Project (SCIP) venous thromboembolism selected surgeries as defined in Appendix A, Tables 5.17, 5.19, 5.20, 5.21, 5.22, 5.23, 5.24 that start the day of or the day after ICU admission or transfer
* VTE-3:
	+ Patients less than 18 years of age
	+ Patients who have a length of stay greater than 120 days
	+ Patients with Comfort Measures Only documented
	+ Patients enrolled in clinical trials
	+ Patients discharged to a health care facility for hospice care
	+ Patients discharged to home for hospice care
	+ Patients who expired
	+ Patients who left against medical advice
	+ Patients discharged to another hospital
	+ Patients without warfarin therapy during hospitalization
	+ Patients without venous thromboembolism (VTE) confirmed by diagnostic testing
* VTE-4:
	+ Patients less than 18 years of age
	+ Patients who have a length of stay greater than 120 days
	+ Patients with Comfort Measures Only documented
	+ Patients enrolled in clinical trials
	+ Patients discharged to a health care facility for hospice care
	+ Patients discharged to home for hospice care
	+ Patients who expired
	+ Patients who left against medical advice
	+ Patients discharged to another hospital
	+ Patients without unfractionated heparin (UFH) Therapy Administration
	+ Patients without venous thromboembolism (VTE) confirmed by diagnostic testing
* VTE-5:
	+ Patients less than 18 years of age
	+ Patients who have a length of stay greater than 120 days
	+ Patients enrolled in clinical trials
	+ Patients without Warfarin Prescribed at Discharge
	+ Patients without venous thromboembolism (VTE)confirmed by diagnostic testing
* VTE-6:
	+ Patients less than 18 years of age
	+ Patients who have a length of stay greater than 120 days
	+ Patients with Comfort Measures Only documented
	+ Patients enrolled in clinical trials
	+ Patients with ICD-9-CM Principal Diagnosis Code of VTE as defined in Appendix A, Table 7.03 or 7.04
	+ Patients with venous thromboembolism (VTE) Present at Admission
	+ Patients with reasons for not administering mechanical and pharmacologic prophylaxis
	+ Patients without venous thromboembolism (VTE) confirmed by diagnostic testing

Refer to Specifications Manual hyperlink above for detailed tables and the Data Dictionary. |
| **Denominator Size** | Providers must report a minimum of 30 cases per measure during a 12-month measurement period (15 cases for a 6-month measurement period)* For a measurement period (either 6 or 12 months) where the denominator size is less than or equal to 75, providers must report on all cases. No sampling is allowed.
* For a measurement period (either 6 or 12 months) where the denominator size is less than or equal to 380 but greater than 75, providers must report on all cases (preferred, particularly for providers using an electronic health record) or a random sample of not less than 76 cases.
* For a measurement period (either 6 or 12-months) where the denominator size is greater than 380, providers must report on all cases (preferred, particularly for providers using an electronic health record) or a random sample of cases that is not less than 20% of all cases; however, providers may cap the total sample size at 300 cases.
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| **Numerator Description**  | * VTE-1: Patients who received venous thromboembolism prophylaxis or have documentation why no venous thromboembolism prophylaxis was given:
	+ the day of or the day after hospital admission
	+ the day of or the day after surgery end date for surgeries that start the day of or the day after hospital admission
* VTE-2: Patients who received venous thromboembolism prophylaxis, or have documentation why no VTE prophylaxis was given:
	+ the day of or the day after intensive care unit (ICU) admission (or transfer)
	+ the day of or the day after surgery end date for surgeries that start the day of or the day after ICU admission (or transfer)
* VTE-3: Patients who received overlap therapy
* VTE-4: Patients who have their intravenous (IV) unfractionated heparin (UFH) therapy dosages AND platelet counts monitored according to defined parameters such as a nomogram or protocol.
* VTE-5: Patients with documentation that they or their caregivers were given written discharge instructions or other educational material about warfarin that addressed all of the following:
1. compliance issues
2. dietary advice
3. follow-up monitoring
4. potential for adverse drug reactions and interactions
* VTE-6: Patients who received no venous thromboembolism (VTE) prophylaxis prior to the VTE diagnostic test order date.
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| **Numerator Inclusions** | * VTE-1: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
* VTE-2: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
* VTE-3: Patients who received warfarin and parenteral anticoagulation:
	+ Five or more days, with an international normalized ratio (INR) greater than or equal to 2 prior to discontinuation of parenteral therapy OR
	+ Five or more days, with an INR less than 2 and discharged on overlap therapy OR
	+ Less than five days and discharged on overlap therapy OR
	+ With documentation of reason for discontinuation of parenteral therapy OR
	+ With documentation of a reason for no overlap therapy
* VTE-4: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
* VTE-5: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
* VTE-6: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
 |
| **Numerator Exclusions** | * VTE-1: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
* VTE-2: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
* VTE-3: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
* VTE-4: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
* VTE-5: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
* VTE-6: The Measure Steward does not identify specific numerator exclusions beyond what is described in the numerator description.
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| **Setting** | Inpatient  |
| **Data Source** | Administrative/Clinical data sources |
| **Denominator Sub-set Definition (Optional)**  | Providers have the option to further narrow the denominator population for this measure across one or more of the following domains. If providers wish to use this option, they must indicate their preference to HHSC through the measure selection process.**Payer:** Providers may define the denominator population such that it is limited to one of the following options: 1. Medicaid
2. Uninsured/Indigent
3. Both: Medicaid and Uninsured/Indigent

**Gender:** Providers may define the denominator population such that it is limited to one of the following options:1. Male
2. Female

**Ethnicity:** Providers may define the denominator population such that it is limited to one of the following options:1. White/Caucasian
2. Black/African American
3. Latino/Hispanic
4. Asian
5. American Indian/Alaskan Native
6. Native Hawaiian/Other Pacific Islander

**Age:** Providers may define the denominator population such that it is limited to an age range:Lower Bound: \_\_\_\_ (Provider defined)Upper Bound: \_\_\_\_ (Provider defined)**Comorbid Condition:** Providers may define the denominator population such that it is limited to individuals with one or more comorbid conditions:Comorbid condition: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Provider defined)**Setting/Location:** Providers may define the denominator population such that it is limited to individuals receiving services in a specific setting or service delivery location(s).Service Setting/Delivery Location(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Provider defined)   |
| **Demonstration Years** | **DY3****10/01/13 – 09/30/14** | **DY4****10/01/14 – 09/30/15** | **DY5****10/01/15 – 09/30/16** |
| **Measurement Periods***(Note: For P4P measures, DY3 Measurement Period is equivalent to the Baseline Period for purposes of measuring improvement.)* | **Providers must report data for one of the following DY, SFY, or CY time periods:**12 Month Period: 1. 10/01/13 – 09/30/14, or
2. 09/01/13 – 08/31/14, or
3. 01/01/13 – 12/31/13, or
4. 10/01/12 – 09/30/13, or
5. 09/01/12 – 08/31/13

6 Month Period: 1. 04/01/14 – 09/30/14, or
2. 03/01/13 – 08/31/14, or
3. 01/01/13 – 06/30/13, or
4. 07/01/13 – 12/31/13

Other: Providers specify/propose an alternative 6 or 12 month time period to be reviewed and approved by HHSC. | **Providers must report data across a 12-month time period that meets the following parameters:**1. Start date: The start date for the reporting period must occur after the provider’s DY3 Measurement Period.2. End date: The end date for the reporting period must occur on or before 09/30/15. | **Providers must report data across a 12-month time period that meets the following parameters:**1. Start date: The start date for the reporting period must occur after the provider’s DY4 Measurement Period.2. End date: The end date for the reporting period must occur on or before 09/30/16. |
| **Reporting Opportunities to HHSC** | 10/31/2014 | 4/30/201510/31/2015 | 4/30/201610/31/2016 |
| **Pay for Performance Target Methodology** | Not Applicable | Improvement Over Self | Improvement Over Self |