

## NQF ENDORSED VOLUNTARY CONSENSUS STANDARDS FOR HOSPITAL CARE

### Measure Information Form

**Measure Set:** Stroke (STK)

**Set Measure ID #:** STK-1

**Performance Measure Name:** Venous Thromboembolism (VTE) Prophylaxis

**Description:** Ischemic and hemorrhagic stroke patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission.

**Rationale:** Stroke patients are at increased risk of developing venous thromboembolism (VTE). One study noted proximal deep vein thrombosis in more than a third of patients with moderately severe stroke. Reported rates of occurrence vary depending on the type of screening used. Prevention of VTE, through the use of prophylactic therapies, in at risk patients is a noted recommendation in numerous clinical practice guidelines. For acutely ill stroke patients who are confined to bed, thromboprophylaxis with low-molecular-weight heparin (LMWH), low-dose unfractionated heparin (LDUH), or fondaparinux is recommended if there are no contraindications. Aspirin alone is not recommended as an agent to prevent VTE.

**Type of Measure:** Process

**Improvement Noted As:** An increase in rate

**Numerator Statement:** Ischemic or hemorrhagic stroke patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given on the day of or the day after hospital admission.

**Included Populations:** Not applicable

**Excluded Populations:** None

**Data Elements:**

- *Reason for No VTE Prophylaxis – Hospital Admission*
- *Reason for Oral Factor Xa Inhibitor*
- *VTE Prophylaxis*
- *VTE Prophylaxis Date*

**Denominator Statement:** Ischemic or hemorrhagic stroke patients

**Included Populations:**

Discharges with an *ICD-9-CM Principal Diagnosis Code* for ischemic or hemorrhagic stroke as defined in Appendix A, Table 8.1 or Table 8.2.

**Excluded Populations:**

- Patients less than 18 years of age
- Patients who have a Length of Stay less than 2 days
- Patients who have a Length of Stay greater than 120 days
- Patients with *Comfort Measures Only* documented on day of or day after hospital arrival
- Patients enrolled in clinical trials
- Patients admitted for *Elective Carotid Intervention*

**Data Elements:**

- *Admission Date*
- *Birthdate*
- *Clinical Trial*
- *Comfort Measures Only*
- *Discharge Date*
- *Elective Carotid Intervention*
- *ICD-9-CM Principal Diagnosis Code*

**Risk Adjustment:** No

**Data Collection Approach:** Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunities for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-9-CM diagnosis and procedure codes, which require retrospective data entry.

**Data Accuracy:** Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

**Measure Analysis Suggestions:** None

**Sampling:** Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications section.

**Data Reported As:** Aggregate rate generated from count data reported as a proportion

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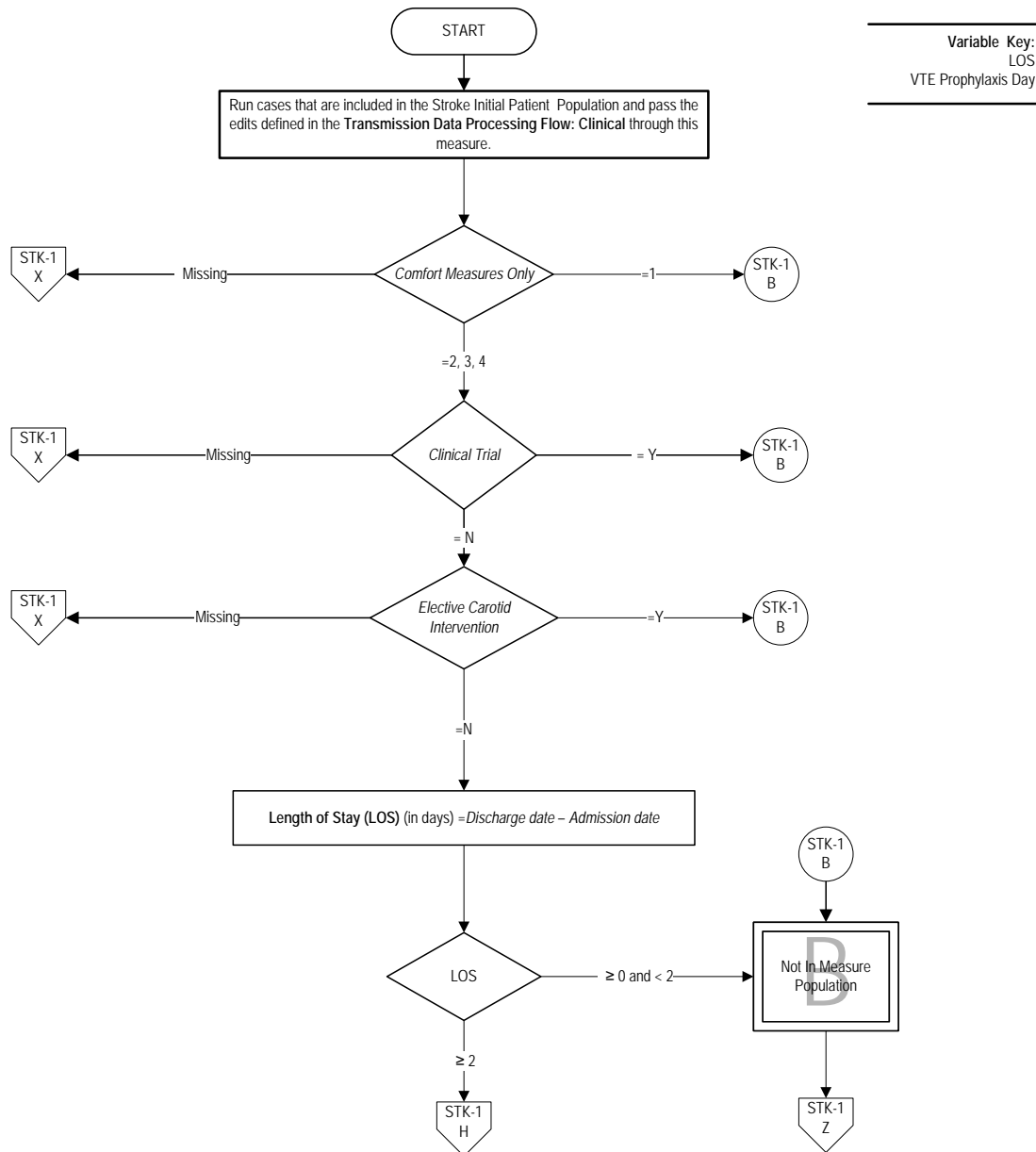
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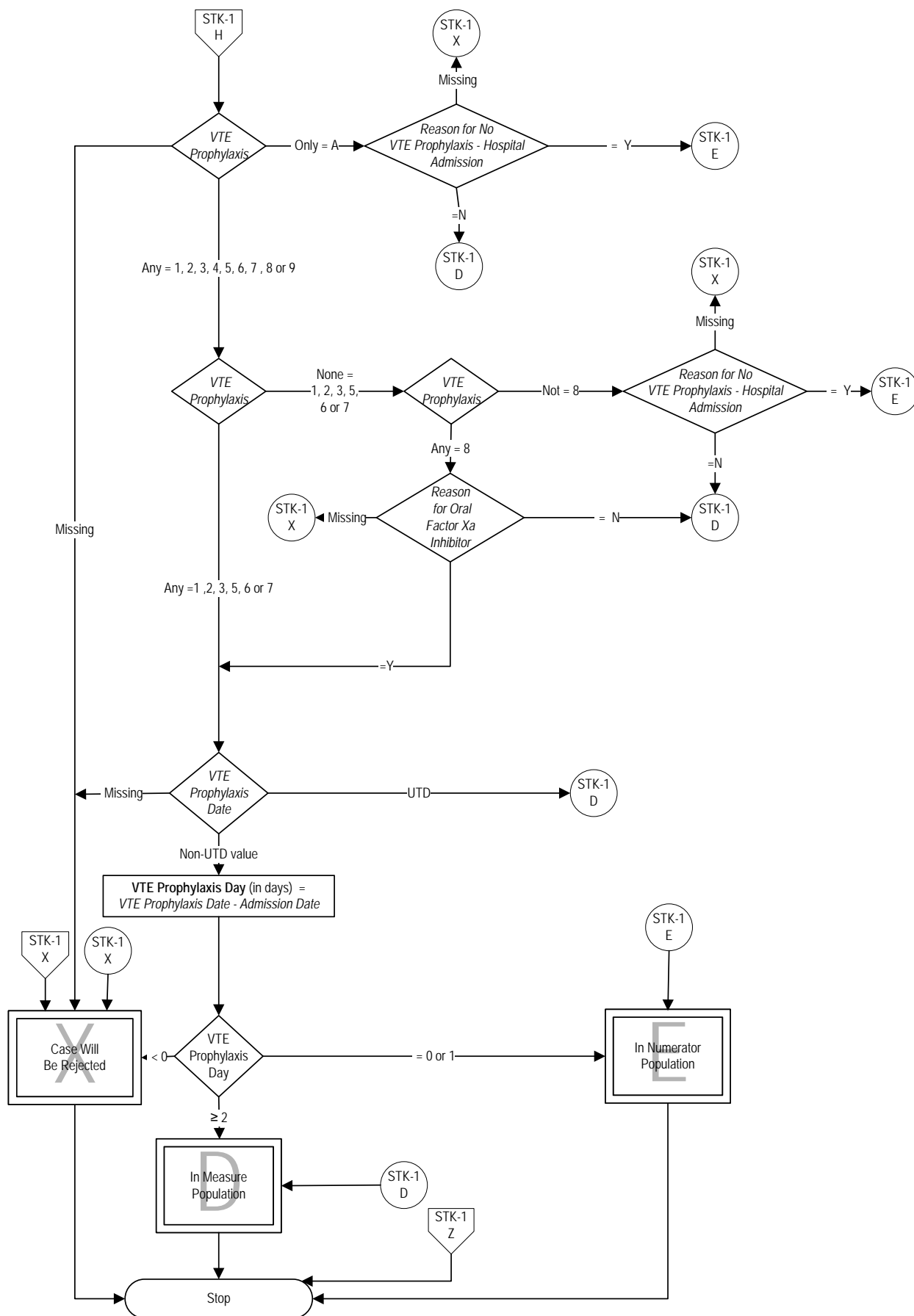
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## STK-1: Venous Thromboembolism Prophylaxis

**Numerator:** Ischemic or hemorrhagic stroke patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given on the day of or the day after hospital admission.

**Denominator:** Ischemic or hemorrhagic stroke patients





## STK-1: Venous Thromboembolism (VTE) Prophylaxis

**Numerator:** Ischemic or hemorrhagic stroke patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given on the day of or the day after hospital admission.

**Denominator:** Ischemic or hemorrhagic stroke patients.

**Variable Key:** Length of Stay (LOS), VTE Prophylaxis Day

1. Start processing. Run cases that are included in the Stroke (STK) Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.
2. Check Comfort Measures Only
  - a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If Comfort Measures Only equals 1, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
  - c. If Comfort Measures Only equals 2, 3, or 4, continue processing and proceed to Clinical Trial.
3. Check Clinical Trial
  - a. If Clinical Trial is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If Clinical Trial equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
  - c. If Clinical Trial equals No, continue processing and proceed to Elective Carotid Intervention.
4. Check admitted for Elective Carotid Intervention
  - a. If Elective Carotid Intervention is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If Elective Carotid Intervention equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
  - c. If Elective Carotid Intervention equals No, continue processing and proceed to Length of Stay calculation.
5. Calculate the Length of Stay (LOS). Length of Stay, in days, is equal to the Discharge Date minus the Admission Date.
6. Check Length of Stay (LOS)



- a. If the Length of Stay is greater than or equal to zero and less than 2, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.
  - b. If the Length of Stay is greater than or equal to 2, continue processing and proceed to VTE Prophylaxis.
7. Check VTE Prophylaxis
- a. If VTE Prophylaxis is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If VTE Prophylaxis equals A only, continue processing and proceed to Reason for No VTE Prophylaxis-Hospital Admission.
  - c. If VTE Prophylaxis equals 1, 2, 3, 4, 5, 6, 7, 8 or 9, continue processing and proceed to step 9 and recheck VTE Prophylaxis.
8. Check Reason for No VTE Prophylaxis-Hospital Admission
- a. If Reason for No VTE Prophylaxis-Hospital Admission is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If Reason for No VTE Prophylaxis-Hospital Admission equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.
  - c. If Reason for No VTE Prophylaxis-Hospital Admission equals No, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
9. Recheck VTE Prophylaxis
- a. If none of the VTE Prophylaxis equals 1, 2, 3, 5, 6 or 7, continue processing and recheck VTE Prophylaxis.
  - b. If any VTE Prophylaxis equals 1, 2, 3, 5, 6 or 7, continue processing and proceed to step 13 and check VTE Prophylaxis Date.
10. Recheck VTE Prophylaxis
- a. If VTE Prophylaxis is not equal to 8, continue processing and proceed to Reasons for No VTE Prophylaxis-Hospital Admission.
  - b. If any of VTE Prophylaxis equals 8, continue processing and proceed to step 12 and check Reason for Oral Factor Xa Inhibitor.
11. Check Reason for No VTE Prophylaxis-Hospital Admission
- a. If Reason for No VTE Prophylaxis-Hospital Admission is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If Reason for No VTE Prophylaxis-Hospital Admission equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

- c. If Reason for No VTE Prophylaxis-Hospital Admission equals No, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
12. Check Reason for Oral Factor Xa Inhibitor
- a. If Reason for Oral Factor Xa Inhibitor is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If Reason for Oral Factor Xa Inhibitor equals Yes, continue processing and proceed to VTE Prophylaxis Date.
  - c. If Reason for Oral Factor Xa Inhibitor equals No, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
13. Check VTE Prophylaxis Date
- a. If VTE Prophylaxis Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If VTE Prophylaxis Date equals Unable to Determine (UTD), the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
  - c. If the VTE Prophylaxis Date equals a Non-Unable To Determine (non-UTD) Value, continue processing and proceed to VTE Prophylaxis Day calculation.
14. Calculate VTE Prophylaxis Day. The VTE Prophylaxis Day, in days, is equal to the VTE Prophylaxis Date minus the Admission Date.
15. Check VTE Prophylaxis Day
- a. If the VTE Prophylaxis Day is equal to zero or 1, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.
  - b. If the VTE Prophylaxis Day is greater than or equal to 2, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
  - c. If the VTE Prophylaxis Day is less than 0, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.