

# NATIONAL QUALITY FORUM

## Measure Evaluation 4.1 December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the [evaluation criteria](#) are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

**TAP/Workgroup** (if utilized): Complete all **yellow highlighted** areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: If there is no TAP or workgroup, the SC also evaluates the subcriteria (**yellow highlighted areas**).

**Steering Committee:** Complete all **pink** highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

C = Completely (unquestionably demonstrated to meet the criterion)

P = Partially (demonstrated to partially meet the criterion)

M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)

N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)

NA = Not applicable (only an option for a few subcriteria as indicated)

(for NQF staff use) NQF Review #: 0217	NQF Project: Surgery Endorsement Maintenance 2010
<b>MEASURE DESCRIPTIVE INFORMATION</b>	
<b>De.1 Measure Title:</b> <a href="#">Surgery Patients with Recommended Venous Thromboembolism (VTE) Prophylaxis Ordered</a>	
<b>De.2 Brief description of measure:</b> <a href="#">Percentage of surgery patients with recommended Venous Thromboembolism (VTE) Prophylaxis ordered during admission</a>	
<b>1.1-2 Type of Measure:</b> <a href="#">Process</a>	
<b>De.3 If included in a composite or paired with another measure, please identify composite or paired measure</b> <a href="#">Paired with #218</a>	
<b>De.4 National Priority Partners Priority Area:</b> <a href="#">Safety</a>	
<b>De.5 IOM Quality Domain:</b> <a href="#">Safety</a>	
<b>De.6 Consumer Care Need:</b> <a href="#">Staying healthy</a>	

CONDITIONS FOR CONSIDERATION BY NQF	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	<b>NQF Staff</b>
<b>A.</b> The measure is in the public domain or an intellectual property ( <a href="#">measure steward agreement</a> ) is signed. <i>Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</i> <b>A.1</b> Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? <a href="#">Yes</a> <b>A.2</b> Indicate if Proprietary Measure (as defined in measure steward agreement): <b>A.3</b> Measure Steward Agreement: <a href="#">Government entity and in the public domain - no agreement necessary</a> <b>A.4</b> Measure Steward Agreement attached:	<b>A</b> <b>Y</b> <input checked="" type="radio"/> <b>N</b> <input checked="" type="radio"/>
<b>B.</b> The measure owner/steward verifies there is an identified responsible entity and process to maintain and	<b>B</b>

update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least every 3 years. <a href="#">Yes, information provided in contact section</a>	Y NO
C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. ► <b>Actual/Planned Use:</b> <a href="#">Payment Program, Regulatory and Accreditation Programs</a>	C Y NO
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1 Testing: <a href="#">Yes, fully developed and tested</a> D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? <a href="#">Yes</a>	D Y NO
(for NQF staff use) Have all conditions for consideration been met? Staff Notes to Steward (if submission returned):	Met Y NO
Staff Notes to Reviewers (issues or questions regarding any criteria):	
Staff Reviewer Name(s):	

**Comment [KP]:** 1a. The measure focus addresses:  
 • a specific national health goal/priority identified by NQF's National Priorities Partners; OR  
 • healthcare (e.g., affects large numbers, leading cause of morbidity/mortality, high resource use (current and/or future), severity of illness, and patient/societal consequences of poor quality).

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
<b>1. IMPORTANCE TO MEASURE AND REPORT</b>	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. <i>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria)</i> <b>(1a. High Impact)</b>	Eval Rating
(for NQF staff use) <a href="#">Specific NPP goal:</a>	
1a.1 Demonstrated High Impact Aspect of Healthcare: <a href="#">Affects large numbers</a> 1a.2  1a.3 Summary of Evidence of High Impact: <a href="#">There are over 30 million surgeries performed in the United States and prevention of perioperative venous thromboembolism is a major aspect of clinical care for the surgical patient. One study of patients discharged from 944 acute care hospitals in America found that postoperative VTE was the second most common medical complication and the third most common cause of excess mortality(1). Randomized clinical trials provide evidence that primary thromboprophylaxis reduces DVT and PE(2). PE is the most common preventable cause of patient death(3). Without prophylaxis, DVT occurs in almost 20% of major surgeries(4). Orthopedic patients experience a higher rate at 40- 60% (5)</a>  1a.4 Citations for Evidence of High Impact: 1. Zhan C, Miller MR. Excess length of stay, charges, and mortality attributable to medical injuries during hospitalization. JAMA 2003; 290: 1868-1874. 2. Geerts WH, Pineo GJ, Heit JA, et al. Prevention of venous thromboembolism: the Seventh ACCP Conference on Antithrombotic and Thrombolytic Therapy. Chest 2004; 126:338S-400S. 3. Shojania KG, Duncan BW, McDonald KM, et al. Making health care safer: a critical analysis of patient safety practices; evidence report/technology assessment No. 43. AHRQ Publication No. 01-E058, Rockville, MD. Agency for Healthcare Research and Quality. Available at: <a href="http://www.ahrq.gov/clinic/ptsafety/">www.ahrq.gov/clinic/ptsafety/</a> . 4. Heit JA, Silverstein MD, Mohr DN, et al. Risk factors for deep vein thrombosis and pulmonary embolism: a population-based case-control study. Arch Intern Med 2000; 160: 809-815. 5. Geerts, WJ, Bergqvist D, Pineo GF, et al. Prevention of venous thromboembolism: American College of Chest Physicians evidence-based clinical practice guidelines (8th	1a C P M NO

edition). Chest 2008; 133: 381-453.

#### 1b. Opportunity for Improvement

**1b.1 Benefits (improvements in quality) envisioned by use of this measure:** Routine administration of VTE prophylaxis reduces adverse patient outcomes while also decreasing costs in the surgical patient. Process measures for VTE prophylaxis will prompt facilities and clinicians to evaluate the systems in place to ensure appropriateness of administration, according to guidelines.

**1b.2 Summary of (data demonstrating performance gap) (variation or overall poor performance) across providers:**

Hospital reported data from the clinical data warehouse for the first quarter in 2010 shows that facilities are providing recommended VTE prophylaxis 94.2% of the time. A national sample of 19,497 Medicare patients undergoing surgery in US hospitals during the first quarter of 2005 received recommended VTE prophylaxis 71.9% of the time.

**1b.3 Citations for data on performance gap:**

From 3539 reporting hospitals nationally, the denominator was 139,743 with the numerator of 131,695.

**1b.4 Summary of Data on disparities by population group:**

No disparities are publicly reported for this measure at this time. Performance on most of the core measures is relatively high. For many of the core measures, there are slight disparities but the absolute differences in performance by race are relatively small. Hispanics had lower rates for surgical care.

**1b.5 Citations for data on Disparities:**

An attachment is provided with disparities information.

1b  
CO  
PO  
MO  
NO

#### 1c. Outcome or Evidence to Support Measure Focus

**1c.1 Relationship to Outcomes (For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population):** Routine administration of VTE prophylaxis reduces adverse patient outcomes while also decreasing costs in the surgical patient. Without prophylaxis, the incidence of VTE is about 10-40% in general surgery patients and between 40 and 60% in orthopedic surgery patients.

**1c.2-3. Type of Evidence:** Evidence-based guideline, Randomized controlled trial, Expert opinion, Systematic synthesis of research, Meta-analysis

**1c.4 Summary of Evidence (as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome):**

ACCP recommends that every hospital develop a formal strategy that addresses the prevention of VTE (Grade 1A). They recommend against the use of aspirin alone as thromboprophylaxis for any patient group (Grade 1A), and recommend that mechanical methods of thromboprophylaxis be used primarily for patients at high bleeding risk (Grade 1A) or possibly as an adjunct to anticoagulant thromboprophylaxis (Grade 2A).

**1c.5 Rating of (strength/quality of evidence) (also provide narrative description of the rating and by whom):**

Grade 1A to Grade 2C

**1c.6 Method for rating evidence:** Strong recommendation, high-quality evidence, Grade 1A; Strong recommendation, moderate-quality evidence, Grade 1B; Strong recommendation, low or very low-quality evidence, Grade 1C; Weak recommendation, high-quality evidence, Grade 2A; Weak recommendation, moderate-quality evidence, Grade 2B; Weak recommendation, low or very low-quality evidence, Grade 2C. \*The guideline developers use the wording recommend for strong (Grade 1) recommendations and suggest for weak (Grade 2) recommendations.

**1c.7 Summary of Controversy/Contradictory Evidence:** A guideline on the prevention of symptomatic PE

1c  
CO  
PO  
MO  
NO

**Comment [KP]:** 1b. Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall poor performance, in the quality of care across providers and/or population groups (disparities in care).

**Comment [k]:** 1 Examples of data on opportunity for improvement include, but are not limited to: prior studies, epidemiologic data, measure data from pilot testing or implementation. If data are not available, the measure focus is systematically assessed (e.g., expert panel rating) and judged to be a quality problem.

**Comment [k]:** 1c. The measure focus is:

- an outcome (e.g., morbidity, mortality, function, health-related quality of life) that is relevant to, or associated with, a national health goal/priority, the condition, population, and/or care being addressed;

OR

- if an intermediate outcome, process, structure, etc., there is evidence that supports the specific measure focus as follows:

**Comment [k]:** 4 Clinical care processes typically include multiple steps: assess → identify problem/potential problem → choose/plan intervention (with patient input) → provide intervention → evaluate impact on health status. If the measure focus is one step in such a multi-step process, the step with the greatest effect on the desired outcome should be selected as the focus of measurement. For example, although assessment of immunization status and recommending

**Comment [k]:** 3 The strength of the body of evidence for the specific measure focus should be systematically assessed and rated (e.g., USPSTF grading system <http://www.ahrq.gov/clinic/uspstf07/methods/benefit.htm>). If the USPSTF grading system was not used, the grading system is explained including how it relates to the USPSTF grades or why it does not. However, evidence is not limited to quantitative studies and the best type of evidence depends upon the question

developed by the American Academy of Orthopedic Surgeons recommended monophylaxis with aspirin for patients undergoing total hip or knee arthroplasty. That recommendation does not agree with the ACCP guidelines on VTE prevention.

- 1c.8 Citations for Evidence (other than guidelines):**
1. Mismetti P, Laporte S, Darmon JY, et al. Meta-analysis of low molecular weight heparin in the prevention of venous thromboembolism in general surgery. *Br J Surg.* 2001;88:913-930.
  2. Freedman KB, Brookenthal KR, Fitzgerald RH, Jr, et al. A meta-analysis of thromboembolic prophylaxis following elective total hip arthroplasty. *J Bone Joint Surg.* 2000;82-A:929-938.
  3. Handoll HH, Farrar MJ, McBurnie J, et al. Heparin, low-molecular-weight heparin and physical methods for preventing deep vein thrombosis and pulmonary embolism following surgery for hip fractures. *Cochrane Database Syst Rev.* 2002(4):CD000305.
  4. Zurawska U, Parasuraman S, Goldhaber SZ. Prevention of pulmonary embolism in general surgery patients. *Circulation.* 2007;115:e302-e307.
  5. Agnelli G, Bergqvist D, Cohen AT, et al. Randomized clinical trial of postoperative fondaparinux versus perioperative dalteparin for prevention of venous thromboembolism in high-risk abdominal surgery. *Br J Surg.* 2005;92:1212-1220.
  6. McKenna GS, Karthikesalingam A, Walsh SR, et al. Prevention of venous thromboembolism: improving practice in surgical patients. *Int J Surg.* 2009;7:50-53.
  7. Iorio A, Agnelli G. Low-molecular-weight and unfractionated heparin for prevention of venous thromboembolism in neurosurgery: a meta-analysis. *Arch Intern Med.* 2000;160:2327-2332. PMID: 10927730.
  8. Goldhaber SZ, Dunn K, MacDougall RC. New onset of venous thromboembolism among hospitalized patients at Brigham and Women's Hospital is caused more often by prophylaxis failure than by withholding treatment. *Chest.* 2000;118:1680-1684. PMID: 11115458.
  9. O'Donnell M, Weitz JI. Thromboprophylaxis in surgical patients. *Can J Surg.* 2003; 46(2): 129-135. PMID: 12691354.
  10. Janku GV, Paiement GD, Green HD. Prevention of venous thromboembolism in orthopaedics in the United States. *Clin Ortho & Related Research.* 1996;313-321. PMID: 8998892.
  11. Koch A, Bouges S, Ziegler S, et al. Low molecular weight heparin and unfractionated heparin in thrombosis prophylaxis after major surgical intervention: update of previous meta-analyses. *Br J Surg.* 1997;84:750-759. PMID: 9189079.
  12. Palmer AJ, Schramm W, Kirchhof B, et al. Low molecular weight heparin and unfractionated heparin for prevention of thrombo-embolism in general surgery: a meta-analysis of randomised clinical trials. *Haemostasis.* 1997;27:65-74. PMID: 9212354.
  13. Bratzler DW, Raskob GE, Murray CK, et al. Underuse of venous thromboembolism prophylaxis for general surgery patients: physician practices in the community hospital setting. *Arch Intern Med.* 1998;158:1909-1912. PMID: 9759687.
  14. Vanek VW. Meta-analysis of effectiveness of intermittent pneumatic compression devices with a comparison of thigh-high to knee-high sleeves. *American Surgeon.* 1998;64:1050-1058. PMID: 9798767.
  15. Heit JA, Silverstein MD, Mohr DN, Petterson TM, O'Fallon WM, Melton LJ, III. Risk factors for deep vein thrombosis and pulmonary embolism: a population-based case-control study. *Arch Intern Med* 2000;160:809-815.

**1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number):**  
 Every hospital should develop a strategy that addresses the prevention of VTE (Grade 1A). ACCP recommends against the use of aspirin alone as thromboprophylaxis for any patient group (Grade 1A), and recommends that mechanical methods of thromboprophylaxis be used primarily for patients at high bleeding risk (Grade 1A) or possibly as an adjunct to anticoagulant thromboprophylaxis (Grade 2A). For patients undergoing major general surgery, ACCP recommends thromboprophylaxis with a low-molecular-weight heparin (LMWH), low-dose unfractionated heparin (LDUH), or fondaparinux (each Grade 1A). Routine thromboprophylaxis for all patients undergoing major gynecologic surgery or major, open urologic procedures (Grade 1A for both groups), with LMWH, LDUH, fondaparinux, or intermittent pneumatic compression (IPC) is recommended. For patients undergoing elective hip or knee arthroplasty, one of the following three anticoagulant agents is recommended: LMWH, fondaparinux, or a vitamin K antagonist (VKA); international normalized ratio (INR) target, 2.5; range, 2.0 to 3.0 (each Grade 1A). For patients undergoing hip fracture surgery (HFS), the routine use of fondaparinux is recommended (Grade 1A), LMWH (Grade 1B), a VKA (target INR, 2.5; range, 2.0 to 3.0) [Grade 1B], or LDUH (Grade 1B). ACCP recommends

that patients undergoing hip or knee arthroplasty or HFS receive thromboprophylaxis for a minimum of 10 days (Grade 1A); for hip arthroplasty and HFS, we recommend continuing thromboprophylaxis > 10 days and up to 35 days (Grade 1A).	
<p><b>1c.10 Clinical Practice Guideline Citation:</b> Geerts, WJ, Bergqvist D, Pineo GF, et al. Prevention of venous thromboembolism: American College of Chest Physicians evidence-based clinical practice guidelines (8th edition). Chest 2008; 133: 381-453.</p> <p><b>1c.11 National Guideline Clearinghouse or other URL:</b>  <a href="http://www.guideline.gov/summary/summary.aspx?doc_id=12956&amp;nbr=006665&amp;string=vte+AND+prophylaxis">http://www.guideline.gov/summary/summary.aspx?doc_id=12956&amp;nbr=006665&amp;string=vte+AND+prophylaxis</a></p>	
<p><b>1c.12 Rating of strength of recommendation</b> (also provide narrative description of the rating and by whom):            Grade 1 recommendations are strong and indicate that the benefits do or do not outweigh risks, burden, and costs. Grade 2 suggestions imply that individual patient values may lead to different choices.</p> <p><b>1c.13 Method for rating strength of recommendation</b> (If different from <a href="#">USPSTF system</a>, also describe rating and how it relates to USPSTF):            The USPSTF assigns letter grades only. This guideline uses levels of evidence as well as grades of recommendations.</p> <p><b>1c.14 Rationale for using this guideline over others:</b>            This guideline is exhaustive in its coverage of studies supporting the recommendations with over 700 references used.</p>	
<b>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Importance to Measure and Report?</b>	1
<b>Steering Committee: Was the threshold criterion, Importance to Measure and Report, met?</b>	1
<b>Rationale:</b>	Y O N
<b>2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES</b>	
Extent to which the measure, <u>as specified</u> , produces consistent (reliable) and credible (valid) results about the quality of care when implemented. ( <a href="#">evaluation criteria</a> )	Eval Rating
<b>2a. MEASURE SPECIFICATIONS</b>	
<p><b>S.1 Do you have a web page where current detailed measure specifications can be obtained?</b>  <b>S.2 If yes, provide web page URL:</b></p>	2a- specs C P M N
<p><b>2a. Precisely Specified</b></p> <p><b>2a.1 Numerator Statement</b> (Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome):            Surgery patients with recommended VTE prophylaxis ordered during the admission</p> <p><b>2a.2 Numerator Time Window</b> (The time period in which cases are eligible for inclusion in the numerator):            Anytime from hospital arrival to 24 hours after Anesthesia End Time.</p> <p><b>2a.3 Numerator Details</b> (All information required to collect/calculate the numerator, including all codes, logic, and definitions):            Data Elements:            Anesthesia Type            VTE Prophylaxis</p> <p><b>2a.4 Denominator Statement</b> (Brief, text description of the denominator - target population being measured):</p>	

**Comment [k]:** USPSTF grading system <http://www.ahrq.gov/clinic/uspstf/grade.htm>: A - The USPSTF recommends the service. There is high certainty that the net benefit is substantial. B - The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. C - The USPSTF recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small. Offer or provide this service only if other considerations support the offering or providing the service in an individual patient. D - The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. I - The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

**Comment [KP]:** 2a. The measure is well defined and precisely specified so that it can be implemented consistently within and across organizations and allow for comparability. The required data elements are of high quality as defined by NQF's Health Information Technology Expert Panel (HITEP).

**All selected surgery patients****2a.5 Target population gender:** Female, Male**2a.6 Target population age range:** greater than or equal to 18 years of age**2a.7 Denominator Time Window** (*The time period in which cases are eligible for inclusion in the denominator*):

Entire inpatient admission

**2a.8 Denominator Details** (*All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions*):

Data Elements:

Admission Date

Anesthesia End Date

Anesthesia End Time

Anesthesia Start Date

Anesthesia Start Time

Birthdate

Clinical Trial

Discharge Date

ICD-9-CM Principal Diagnosis Code

ICD-9-CM Principal Procedure Code

Laparoscope

Perioperative Death

Preadmission Warfarin

Reason for Not Administering VTE Prophylaxis

**2a.9 Denominator Exclusions** (*Brief text description of exclusions from the target population*): Patients

who are less than 18 years of age. Patients with procedures performed entirely by laparoscope. Patients whose total surgery time is less than or equal to 30 minutes

Patients who stayed less than or equal to 24 hours postoperatively. Burn patients (refer to Specifications Manual, National Healthcare Quality Measures, Appendix A, Table 5.14 for ICD-9-CM codes). Patients who are on warfarin prior to admission. Patients with contraindications to both mechanical and pharmacological prophylaxis. Patients whose ICD-9-CM Principal Procedure occurred prior to the date of admission

**2a.10 Denominator Exclusion Details** (*All information required to collect exclusions to the denominator, including all codes, logic, and definitions*):

Data Elements:

Laparoscope

Perioperative Death

Preadmission Warfarin

Reason for Not Administering VTE Prophylaxis

**2a.11 Stratification Details/Variables** (*All information required to stratify the measure including the stratification variables, all codes, logic, and definitions*):

No stratification except by surgery type and those are:

Intracranial neurosurgery, Appendix a, Table 5.17; General surgery, Appendix A, Table 5.19; Gynecologic Surgery, Appendix A, Table 5.20; Urologic Surgery, Appendix A, Table 5.21; Elective total hip, Appendix A, Table 5.22; Elective total knee, Appendix A, Table 5.23; Hip fracture surgery, Appendix A, Table 5.24

**2a.12-13 Risk Adjustment Type:** No risk adjustment necessary**2a.14 Risk Adjustment Methodology/Variables** (*List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method*):

N/A

**2a.15-17 Detailed risk model available Web page URL or attachment:****2a.18-19 Type of Score:** Rate/proportion

**Comment [k]:** 11 Risk factors that influence outcomes should not be specified as exclusions.  
12 Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.



**2a.20 Interpretation of Score:** Better quality = Higher score**2a.21 Calculation Algorithm** (*Describe the calculation of the measure as a flowchart or series of steps*):

Numerator: Surgery patients with recommended Venous Thromboembolism (VTE) prophylaxis ordered anytime from hospital arrival to 24 hours after Anesthesia End Time.

Denominator: All selected surgery patients.

Variable Key: Patient Age, Length of Stay (LOS), Surgery Length, Surgery Days

1.  
Start processing. Run cases that are included in the Surgical Care Improvement Project (SCIP) Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.

2. Calculate Patient Age. The Patient Age, in years, is equal to the Admission Date minus the Birthdate. Use the month and day portion of admission date and birthdate to yield the most accurate age.

3. Check Patient Age

a. If Patient Age is less than 18 years, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

b. If Patient Age is greater than or equal to 18 years, continue processing and proceed to ICD-9-CM Principal Procedure Code.

4. Check ICD-9-CM Principal Procedure Code

a. If the ICD-9-CM Principal Procedure Code is not on Table 5.17, 5.19, 5.20, 5.21, 5.22, 5.23, or 5.24, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

b. If the ICD-9-CM Principal Procedure Code is on Table 5.17, 5.19, 5.20, 5.21, 5.22, 5.23, or 5.24, continue processing and proceed to ICD-9-CM Principal Diagnosis Code.

5. Check ICD-9-CM Principal Diagnosis Code

a. If the ICD-9-CM Principal Diagnosis Code is on Table 5.14, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

b. If the ICD-9-CM Principal Diagnosis Code is not on Table 5.14, continue processing and proceed to the LOS calculation.

6. Calculate LOS. LOS, in days, is equal to the Discharge Date minus the Admission Date

Specifications Manual for National Hospital Inpatient Quality Measures

Discharges 10-01-10 (4Q10) through 03-31-11 (1Q11) SCIP-VTE-1-12

7. Check LOS

a. If the LOS is less than or equal to 3 days, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Calculation. Stop processing.

b. If the LOS is greater than 3 days, continue processing and proceed to Laparoscope.

8. Check Laparoscope

a. If Laparoscope is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Laparoscope equals 1 or 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c. If Laparoscope equals 2, continue processing and proceed to Clinical Trial.

9. 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 Preadmission Warfarin.

10. Check Preadmission Warfarin

a. If Preadmission Warfarin is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If Preadmission Warfarin 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 Preadmission Warfarin equals No, continue processing and proceed to Anesthesia Start Date.

11. Check Anesthesia Start Date

a. If the Anesthesia Start Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b. If the Anesthesia Start Date equals Unable To Determine, the case will proceed to a Measure Category

Assignment of D and will be in the Measure Population. Stop processing.

c.If Anesthesia Start Date equals a Non Unable To Determine Value, continue processing and proceed to the Surgery Days calculation.

12.Calculate Surgery Days. Surgery Days, in days, is equal to the Anesthesia Start Date minus the Admission Date.

13.Check Surgery Days

a.If the Surgery Days is less than zero, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

b.If the Surgery Days is greater than or equal to zero, continue processing and proceed to Perioperative Death.

14.Check Perioperative Death

a.If Perioperative Death is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b.If Perioperative Death 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 Perioperative Death equals No, continue processing and proceed to Anesthesia Start Time.

15.Check Anesthesia Start Time

a.If the Anesthesia Start Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b.If the Anesthesia Start Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

c.If the Anesthesia Start Time equals a Non Unable to Determine Value, continue processing and proceed to Anesthesia End Date.

16.Check Anesthesia End Date

a.If the Anesthesia End Date is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b.If the Anesthesia End Date equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

c.If the Anesthesia End Date equals a Non Unable to Determine Value, continue processing and proceed to Anesthesia End Time.

17.Check Anesthesia End Time

a.If the Anesthesia End Time is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b.If the Anesthesia End Time equals Unable to Determine, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

c.If the Anesthesia End Time equals a Non Unable to Determine Value, continue processing and proceed to the Surgery Length calculation.

18.Calculate Surgery Length. Surgery Length, in minutes, is equal to the Anesthesia End Date and Anesthesia End Time minus the Anesthesia Start Date and Anesthesia Start Time.

19.Check Surgery Length

a.If the Surgery Length is less than or equal to 60 minutes, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

b.If the Surgery Length is greater than 60 minutes, continue processing proceed to Reason for Not Administering VTE Prophylaxis.

20.Check Reason for Not Administering VTE Prophylaxis

a.If Reason for Not Administering VTE Prophylaxis is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b.If Reason for Not Administering VTE Prophylaxis equals 3, the case will proceed to a Measure Category Assignment of B and will not be in the Measure Population. Stop processing.

c.If Reason for Not Administering VTE Prophylaxis equals 1, 2, or 4, continue processing and proceed to VTE Prophylaxis.

21.Check VTE Prophylaxis

a.If no values are populated in the VTE grid, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

b.If VTE Prophylaxis equals A, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

c.If the VTE grid is populated with any of values 1, 2, 3, 4, 5, 6, 7, or 8, continue processing and proceed to



recheck the ICD-9-CM Principal Procedure Code. Note: If VTE Prophylaxis field is populated with an allowable value of 1, 2, 3, 4, 5, 6, 7, or 8 and the corresponding VTE Timely field is Missing, the entire case will be rejected by The Joint Commission and Centers for Medicare and Medicaid Services (CMS) warehouses.

#### 22.Recheck ICD-9-CM Principal Procedure Code

- a.If the ICD-9-CM Principal Procedure Code is on Tables 5.17, 5.20, 5.21, or 5.23, continue processing. Proceed to step 27 and recheck ICD-9-CM Principal Procedure Code for Tables 5.17, 5.20, 5.21, 5.22, 5.23, and 5.24. Do not check steps 23 through 26 for ICD-9-CM Principal Procedure Code for Tables 5.17, 5.20, 5.21, 5.22, 5.23, and 5.24 as steps 23 through 26 check for codes on Tables 5.19, 5.22, and 5.24 only.
- b.If the ICD-9-CM Principal Procedure Code is on Tables 5.19, 5.22, or 5.24, continue processing and recheck ICD-9-CM Principal Procedure Code.

#### 23.Recheck ICD-9-CM Principal Procedure Code only if the ICD-9-CM Principal Procedure Code is not on Tables 5.17, 5.20, 5.21 or 5.23

- a.If the ICD-9-CM Principal Procedure Code is on Table 5.19, continue processing and recheck VTE Prophylaxis.
- b.If the ICD-9-CM Principal Procedure Code is on Tables 5.22 or 5.24, continue processing. Proceed to step 27 and recheck ICD-9-CM Principal Procedure Code for Tables 5.17, 5.20, 5.21, 5.22, 5.23, and 5.24. Do not recheck step 24 VTE Prophylaxis, step 25 Reason for Not Administering VTE Prophylaxis or step 26 Anesthesia Type.

#### 24.Recheck VTE Prophylaxis only if the ICD-9-CM Principal Procedure Code is on Table 5.19

- a.If any VTE Prophylaxis equals 1, 2, or 5, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.
- b.If none of the VTE Prophylaxis equals 1, 2, or 5, continue processing and proceed to recheck Reason for Not Administering VTE Prophylaxis.

#### 25.Recheck Reason for Not Administering VTE Prophylaxis

- a.If Reason for Not Administering VTE Prophylaxis equals 1 or 4, continue processing and proceed to Anesthesia Type.
- 1.If Anesthesia Type is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
- 2.If Anesthesia Type equals 1 or 4, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
- 3.If Anesthesia Type equals 2 or 3, continue processing and recheck VTE Prophylaxis.
- b.If Reason for Not Administering VTE Prophylaxis equals 2, continue processing and recheck VTE Prophylaxis.

#### 26.Recheck VTE Prophylaxis

- a.If any VTE Prophylaxis equals 3 or 4, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.
- b.If none of the VTE Prophylaxis equals 3 or 4, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

#### 27.Recheck ICD-9-CM Principal Procedure Code for Tables 5.17, 5.20, 5.21, 5.22, 5.23, and 5.24 only if ICD-9-CM Principal Procedure Code was not on Table 5.19

- a.If the ICD-9-CM Principal Procedure Code is on Table 5.17, continue processing and recheck VTE Prophylaxis.
- 1.If any VTE Prophylaxis equals 1, 2, or 3, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.
- 2.If none of the VTE Prophylaxis equals 1, 2, or 3, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
- b.If the ICD-9-CM Principal Procedure Code is on Tables 5.20, 5.21, 5.22, 5.23, or 5.24, continue processing and recheck ICD-9-CM Principal Procedure Code.

#### 28.Recheck ICD-9-CM Principal Procedure Code for Tables 5.20, 5.21, 5.22, 5.23, and 5.24 only if the ICD-9-CM Principal Procedure Code was not on Tables 5.17 or 5.19

- a.If the ICD-9-CM Principal Procedure Code is on Table 5.20, continue processing and recheck VTE Prophylaxis.
- 1.If any VTE Prophylaxis equals 1, 2, 3 or 5, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.
- 2.If none of the VTE Prophylaxis equals 1, 2, 3, or 5, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

b.If the ICD-9-CM Principal Procedure Code is on Tables 5.21, 5.22, 5.23, or 5.24, continue processing and recheck ICD-9-CM Principal Procedure Code.

29.Recheck ICD-9-CM Principal Procedure Code for Tables 5.21, 5.22, 5.23, and 5.24 only if the ICD-9-CM Principal Procedure Code is not on Tables 5.17, 5.19 or 5.20

a.If the ICD-9-CM Principal Procedure Code is on Table 5.21, continue processing and recheck VTE Prophylaxis.

1.If any VTE Prophylaxis equals 1, 2, 3, 4, or 5, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

2.If none of the VTE Prophylaxis equals 1, 2, 3, 4, or 5, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

b. If the ICD-9-CM Principal Procedure Code is on Tables 5.22, 5.23, or 5.24, continue processing and recheck ICD-9-CM Principal Procedure Code.

30.Recheck ICD-9-CM Principal Procedure Code for Tables 5.22, 5.23, and 5.24 only if the ICD-9-CM Principal Procedure Code is not on Tables 5.17, 5.19, 5.20 or 5.21

a.If the ICD-9-CM Principal Procedure Code is on Table 5.22, continue processing and recheck VTE Prophylaxis.

b.If the ICD-9-CM Principal Procedure Code is on Tables 5.23 or 5.24, continue processing. Proceed to step 35 and recheck ICD-9-CM Principal Procedure Code for Tables 5.23 and 5.24. Do not recheck step 31, 32 and 34 VTE Prophylaxis or step 33 Reason for Not Administering VTE Prophylaxis.

31.Recheck VTE Prophylaxis only if the ICD-9-CM Principal Procedure Code is on Table 5.22

a.If any VTE Prophylaxis equals 2, 5, 6, or 8, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

b.If none of the VTE Prophylaxis equals 2, 5, 6, or 8, continue processing and proceed to recheck VTE Prophylaxis.

32.Recheck VTE Prophylaxis

a.If any VTE Prophylaxis equals 1, continue processing and check ICD-9-CM Principal or Other Diagnosis Codes.

1.If any of the ICD-9-CM Principal or Other Diagnosis Codes is on Table 5.13, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

2.If none of the ICD-9-CM Principal or Other Diagnosis Codes is on Table 5.13, continue processing and recheck Reason for Not Administering VTE Prophylaxis.

b.If none of the VTE Prophylaxis equals 1, continue processing and proceed to recheck Reason for Not Administering VTE Prophylaxis.

33.Recheck Reason for Not Administering VTE Prophylaxis

a.If Reason for Not Administering VTE Prophylaxis equals 1 or 4, continue processing and recheck Anesthesia Type.

1.If Anesthesia Type is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

2.If Anesthesia Type equals 1 or 4, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

3.If Anesthesia Type equals 2 or 3, continue processing and recheck VTE Prophylaxis.

b.If Reason for Not Administering VTE Prophylaxis equals 2, continue processing and proceed to recheck VTE Prophylaxis.

34.Recheck VTE Prophylaxis

a.If any VTE Prophylaxis equals 3 or 7, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

b.If none of the VTE Prophylaxis equals 3 or 7, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

35.Recheck ICD-9-CM Principal Procedure Code for Tables 5.23 and 5.24 only if the ICD-9-CM Principal Procedure Code was not on Tables 5.17, 5.19, 5.20, 5.21, or 5.22

a.If the ICD-9-CM Principal Procedure Code is on Table 5.23, continue processing and recheck VTE Prophylaxis.

1.If Any VTE Prophylaxis is equal to 2, 3, 5, 6, 7, or 8, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

2.If None of the VTE Prophylaxis is equal to 2, 3, 5, 6, 7, or 8, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

b.If the ICD-9-CM Principal Procedure Code is on Table 5.24, continue processing and recheck VTE

**Prophylaxis.****36.Recheck VTE Prophylaxis**

a.If any VTE Prophylaxis equals 1, 2, 5, 6, or 8, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

b.If none of the VTE Prophylaxis equals 1, 2, 5, 6, or 8, continue processing and proceed to recheck Reason for Not Administering VTE Prophylaxis.

**37.Recheck Reason for Not Administering VTE Prophylaxis**

a.If Reason for Not Administering VTE Prophylaxis equals 1 or 4, continue processing and recheck Anesthesia Type.

1.If Anesthesia Type is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.

2.If Anesthesia Type equals 1 or 4, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

3.If Anesthesia Type equals 2 or 3, continue processing and recheck VTE Prophylaxis.

b.If Reason for Not Administering VTE Prophylaxis equals 2, continue processing and proceed to recheck VTE Prophylaxis.

**38.Recheck VTE Prophylaxis**

a.If any VTE Prophylaxis equals 3, 4, or 7, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.

b.If none of the VTE Prophylaxis equals 3, 4, or 7, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.

**2a.22 Describe the method for discriminating performance (e.g., significance testing):**

Benchmarks are established using the ABC methodology, based on the actual performance of the top facilities. ABC benchmarks identify superior performance and encourage poorer performers to improve. It is data-driven, peer-group performance feedback used to positively affect outcomes.

**2a.23 Sampling (Survey) Methodology** *If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):*

The SCIP Topic Population (common to all SCIP measures) is defined as patients admitted to the hospital for inpatient acute care with an ICD-9-CM Principal Procedure Code for SCIP as defined in Appendix A, Table 5.10 and a Length of Stay (Discharge Date - Admission Date) <= 120 days. There are eight distinct strata or sub-populations within the SCIP Topic Population, each identified by a specific group of procedure codes. The patients in each stratum are counted in the Initial Patient Population of multiple measures.

**2a.24 Data Source** *(Check the source(s) for which the measure is specified and tested)*

Other, Paper medical record/flow-sheet

**2a.25 Data source/data collection instrument** *(Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):*

Vendor tools (electronic) or CART. CART is available for download free at

<http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1138900279093>

**2a.26-28 Data source/data collection instrument reference web page URL or attachment:** URL

<http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1138900279093>

**2a.29-31 Data dictionary/code table web page URL or attachment:** URL

<http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier4&cid=1228695698425>

**2a.32-35 Level of Measurement/Analysis** *(Check the level(s) for which the measure is specified and tested)*

Can be measured at all levels, Facility/Agency, Other

**2a.36-37 Care Settings** *(Check the setting(s) for which the measure is specified and tested)*

Hospital

2a.38-41 Clinical Services (Healthcare services being measured, check all that apply)	
TESTING/ANALYSIS	
2b. Reliability testing	
2b.1 Data/sample (description of data/sample and size): Measure has been used for reporting program since 2007.	
2b.2 Analytic Method (type of reliability) & rationale, method for testing): Feedback from the hospital abstractors and the independent validation team is collected and incorporated. Reports on mismatches between national abstractors and the independent abstraction/validation contractor are reviewed quarterly. Revisions to data element are made accordingly.	2b CO PO MO NO
2b.3 Testing Results (reliability statistics, assessment of adequacy in the context of norms for the test conducted): NA	
2c. Validity testing	
2c.1 Data/sample (description of data/sample and size): The measure is reviewed by a Technical Expert panel quarterly for validity. Specifications (including codes and data elements) are modified every six months according to feedback provided by clinicians and hospital staff collecting the data for the measure. National performance of the measure is monitored by the measure steward with quarterly benchmarks of hospital submitte data developed for distribution by QIOs.	
2c.2 Analytic Method (type of validity) & rationale, method for testing): The TEP determines if the measure is still providing the information that it is intended to capture.	2c CO PO MO NO
2c.3 Testing Results (statistical results, assessment of adequacy in the context of norms for the test conducted): NA	
2d. Exclusions Justified	
2d.1 Summary of Evidence supporting exclusion(s): The exclusions to this measure were suggested by the TEP or are routine exclusions used by the SCIP measure set.	
2d.2 Citations for Evidence: NA	
2d.3 Data/sample (description of data/sample and size): NA	
2d.4 Analytic Method (type analysis & rationale): NA	2d CO PO MO NO NA
2d.5 Testing Results (e.g., frequency, variability, sensitivity analyses): NA	
2e. Risk Adjustment for Outcomes/ Resource Use Measures	2e
2e.1 Data/sample (description of data/sample and size): No risk adjustment performed.	CO PO MO NO NA
2e.2 Analytic Method (type of risk adjustment, analysis, & rationale): NA	

**Comment [KP]:** 2b. Reliability testing demonstrates the measure results are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period.

**Comment [k]:** 8 Examples of reliability testing include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing may address the data items or final measure score.

**Comment [KP]:** 2c. Validity testing demonstrates that the measure reflects the quality of care provided, adequately distinguishing good and poor quality. If face validity is the only validity addressed, it is systematically assessed.

**Comment [k]:** 9 Examples of validity testing include, but are not limited to: determining if measure scores adequately distinguish between providers known to have good or poor quality assessed by another valid method; correlation of measure scores with another valid method.

**Comment [KP]:** 2d. Clinically necessary measure exclusions are identified and must be:  
• supported by evidence of sufficient frequency of occurrence so that results are distorted without the exclusion;  
AND

**Comment [k]:** 10 Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, sensitivity analyses with and without the exclusion, and variability of exclusions across providers.

**Comment [KP]:** 2e. For outcome measures and other measures (e.g., resource use) when indicated:  
• an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified and is based on patient clinical factors that

**Comment [k]:** 13 Risk models should not obscure disparities in care for populations by including factors that are associated with differences/inequalities in care such as race, socioeconomic status, gender (e.g., poorer treatment outcomes of African American men with prostate

2e.3 Testing Results (risk model performance metrics): NA	
2e.4 If outcome or resource use measure is not risk adjusted, provide rationale: NA	
2f. Identification of Meaningful Differences in Performance	
2f.1 Data/sample from Testing or Current Use (description of data/sample and size): Analysts review quarterly benchmarks and trends to identify differences in performance scores and investigate the possible causes. If measure specification (algorithms, data elements) are causing variation, they are reviewed for possible updates or revision.	
2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance (type of analysis & rationale): Analysts review quarterly benchmarks and trends to identify differences in performance scores and investigate the possible causes. If measure specifications (algorithms, data elements) are causing variation, they are reviewed for possible updates or revision.	
2f.3 Provide Measure Scores from Testing or Current Use (description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance): Q109:92.8 Q209:93.1 Q309:93.4 Q409:93.4 Q110: 94.2	2f CO PO MO NO
2g. Comparability of Multiple Data Sources/Methods	
2g.1 Data/sample (description of data/sample and size): At this time, the data source is the inpatient medical record only.	
2g.2 Analytic Method (type of analysis & rationale): NA	2g CO PO MO NO NA
2g.3 Testing Results (e.g., correlation statistics, comparison of rankings): NA	
2h. Disparities in Care	
2h.1 If measure is stratified, provide stratified results (scores by stratified categories/cohorts): Measure is not stratified, but a disparities report is attached to submission.	2h CO PO MO NO NA
2h.2 If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: See attached.	
TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Scientific Acceptability of Measure Properties?	2
Steering Committee: Overall, to what extent was the criterion, Scientific Acceptability of Measure Properties, met? Rationale:	2 CO PO MO NO
3. USABILITY	
Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)	Eval Rating

**Comment [KP]:** 2f. Data analysis demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful differences in performance.

**Comment [k]:** 14 With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74% v. 75%) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v. \$5,025) is practically meaningful. Measures with overall poor performance may not demonstrate much variability across providers.

**Comment [KP]:** 2g. If multiple data sources/methods are allowed, there is demonstration they produce comparable results.

**Comment [KP]:** 2h. If disparities in care have been identified, measure specifications, scoring, and analysis allow for identification of disparities through stratification of results (e.g., by race, ethnicity, socioeconomic status, gender); OR rationale/data justifies why stratification is not necessary or not feasible.



<b>3a. Meaningful, Understandable, and Useful Information</b>	
<p><b>3a.1 Current Use:</b> <a href="#">In use</a></p> <p><b>3a.2 Use in a public reporting initiative (disclosure of performance results to the public at large)</b> (If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years):  <a href="#">Measure is used in Hospital Quality Reporting Program (formerly RHQDAPU)</a></p> <p><b>3a.3 If used in other programs/initiatives</b> (If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years):  <a href="#">Measure is also used for accreditation by the Joint Commission.</a></p> <p><b>Testing of Interpretability</b> (Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement)</p> <p><b>3a.4 Data/sample</b> (description of data/sample and size): <a href="#">Measure is reported on a public website, Hospital Compare. Feedback on this website is collected through another contractor.</a></p> <p><b>3a.5 Methods</b> (e.g., focus group, survey, QI project):  <a href="#">Measure is reported on a public website, Hospital Compare. Feedback on this website is collected through another contractor.</a></p> <p><b>3a.6 Results</b> (qualitative and/or quantitative results and conclusions):  <a href="#">Measure is reported on a public website, Hospital Compare. Feedback on this website is collected through another contractor.</a></p>	<p>3a</p> <p>C●</p> <p>P●</p> <p>M●</p> <p>N●</p>
<b>3b/3c. Relation to other NQF-endorsed measures</b>	
<b>3b.1 NQF # and Title of similar or related measures:</b>	
<b>(for NQF staff use) Notes on similar/related <a href="#">endorsed</a> or submitted measures:</b>	
<b>3b. Harmonization</b>	3b
If this measure is related to measure(s) already <a href="#">endorsed by NQF</a> (e.g., same topic, but different target population/setting/data source or different topic but same target population):	C●
<b>3b.2 Are the measure specifications <a href="#">harmonized</a>? If not, why?</b>	P●
<a href="#">There is a Joint Commission measure that covers hospitalized patients, but their measure excludes those undergoing surgery. There is no competition.</a>	M●
	N●
	NA●
<b>3c. Distinctive or Additive Value</b>	
<b>3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:</b>	3c
<a href="#">Not applicable.</a>	C●
	P●
	M●
	N●
	NA●
<b>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Usability?</b>	3
<b>Steering Committee: Overall, to what extent was the criterion, Usability, met?</b>	3
<b>Rationale:</b>	C●
	P●
	M●
	N●
<b>4. FEASIBILITY</b>	
Extent to which the required data are readily available, retrievable without undue burden, and can be	<a href="#">Eval</a>

**Comment [KP]:** 3a. Demonstration that information produced by the measure is meaningful, understandable, and useful to the intended audience(s) for both public reporting (e.g., focus group, cognitive testing) and informing quality improvement (e.g., quality improvement initiatives). An important outcome that may not have an identified improvement strategy still can be useful for informing quality improvement by identifying the need for and stimulating new approaches to improvement.

**Comment [KP]:** 3b. The measure specifications are harmonized with other measures, and are applicable to multiple levels and settings.

**Comment [k]:** 16 Measure harmonization refers to the standardization of specifications for similar measures on the same topic (e.g., *influenza immunization* of patients in hospitals or nursing homes), or related measures for the same target population (e.g., eye exam and HbA1c for *patients with diabetes*), or definitions applicable to many measures (e.g., age designation for children) so that they are uniform or compatible, unless differences are dictated by the evidence. The dimensions of harmonization can include numerator, denominator, exclusions, and data source and collection instructions. The extent of harmonization depends on the relationship of the measures, the evidence for the specific measure focus, and differences in data sources.

**Comment [KP]:** 3c. Review of existing endorsed measures and measure sets demonstrates that the measure provides a distinctive or additive value to existing NQF-endorsed measures (e.g., provides a more complete picture of quality for a particular condition or aspect of healthcare, is a more valid or efficient way to measure).



implemented for performance measurement. ( <a href="#">evaluation criteria</a> )	<a href="#">Rating</a>
<b>4a. Data Generated as a Byproduct of Care Processes</b>	<b>4a</b>
4a.1-2 How are the data elements that are needed to compute measure scores generated? Coding/abstraction performed by someone other than person obtaining original information (E.g., DRG, ICD-9 codes on claims, chart abstraction for quality measure or registry)	C● P● M● N●
<b>4b. Electronic Sources</b>	
4b.1 Are all the data elements available electronically? ( <i>elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims</i> ) No	4b C● P● M● N●
4b.2 If not, specify the near-term path to achieve electronic capture by most providers. Measure will be retooled for EHR collection in the near future.	4b C● P● M● N●
<b>4c. Exclusions</b>	
4c.1 Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No	4c C● P● M● N●
4c.2 If yes, provide justification.	4c C● P● M● N● NA●
<b>4d. Susceptibility to Inaccuracies, Errors, or Unintended Consequences</b>	
4d.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. No unintended consequences have been identified.	4d C● P● M● N●
<b>4e. Data Collection Strategy/Implementation</b>	
4e.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: There have been no implementation issues identified.	
4e.2 Costs to implement the measure ( <i>costs of data collection, fees associated with proprietary measures</i> ): No information has been collected related to costs associated with implementation of this measure.	
4e.3 Evidence for costs: Data abstraction is usually performed by nurses in the Quality Improvement department of inpatient facilities.	4e C● P● M● N●
4e.4 Business case documentation: There have been no additions to the business case to support this measure since its implementation.	4e C● P● M● N●
<b>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for Feasibility?</b>	<b>4</b>
<b>Steering Committee: Overall, to what extent was the criterion, Feasibility, met?</b> <b>Rationale:</b>	<b>4</b> C● P● M● N●
<b>RECOMMENDATION</b>	

**Comment [KP]: 4a.** For clinical measures, required data elements are routinely generated concurrent with and as a byproduct of care processes during care delivery. (e.g., BP recorded in the electronic record, not abstracted from the record later by other personnel; patient self-assessment tools, e.g., depression scale; lab values, meds, etc.)

**Comment [KP]: 4b.** The required data elements are available in electronic sources. If the required data are not in existing electronic sources, a credible, near-term path to electronic collection by most providers is specified and clinical data elements are specified for transition to the electronic health record.

**Comment [KP]: 4c.** Exclusions should not require additional data sources beyond what is required for scoring the measure (e.g., numerator and denominator) unless justified as supporting measure validity.

**Comment [KP]: 4d.** Susceptibility to inaccuracies, errors, or unintended consequences and the ability to audit the data items to detect such problems are identified.

**Comment [KP]: 4e.** Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, etc.) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use).

(for NQF staff use) Check if measure is untested and only eligible for time-limited endorsement.	Time-limited ●
Steering Committee: Do you recommend for endorsement? Comments:	Y● N● A●
<b>CONTACT INFORMATION</b>	
<b>Co.1 Measure Steward (Intellectual Property Owner)</b> <b>Co.1 Organization</b> Centers for Medicare & Medicaid Services, 7500 Security Boulevard , Mail Stop S3-01-02, Baltimore, Maryland, 21244-1850  <b>Co.2 Point of Contact</b> Edward Q., Garcia III, MHS, Health Policy Analyst, MMSNQF@hsag.com, 410-786-6738-	
<b>Measure Developer If different from Measure Steward</b> <b>Co.3 Organization</b> Centers for Medicare & Medicaid Services, 7500 Security Boulevard, Baltimore, Maryland, 21244  <b>Co.4 Point of Contact</b> Kristie, Baus, Kristie.Baus@cms.hhs.gov, 410-786-6738-	
<b>Co.5 Submitter If different from Measure Steward POC</b> Wanda, Johnson, wjohnson@okqio.sdps.org, 410-786-6738-, Centers for Medicare & Medicaid Services	
<b>Co.6 Additional organizations that sponsored/participated in measure development</b> Oklahoma Foundation for Medical Quality under contract to CMS.	
<b>ADDITIONAL INFORMATION</b>	
<b>Workgroup/Expert Panel involved in measure development</b> <b>Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.</b> Surgical Care Improvement Project VTE TEP. Names available from OFMQ. Leading guideline author Bill Geerts MD was instrumental in the development of these two VTE measures. He has been active on the TEP since its inception.	
<b>Ad.2 If adapted, provide name of original measure:</b> NA <b>Ad.3-5 If adapted, provide original specifications URL or attachment</b>	
<b>Measure Developer/Steward Updates and Ongoing Maintenance</b> <b>Ad.6 Year the measure was first released:</b> 2006 <b>Ad.7 Month and Year of most recent revision:</b> 10, 2010 <b>Ad.8 What is your frequency for review/update of this measure?</b> every six months <b>Ad.9 When is the next scheduled review/update for this measure?</b> 04, 2011	
<b>Ad.10 Copyright statement:</b>	
<b>Ad.11 Disclaimers:</b>	
<b>Ad.12 -14 Additional Information web page URL or attachment:</b> Attachment Disparities Table_01_2009-634274316384644430.xls	
<b>Date of Submission (MM/DD/YY):</b> 12/08/2010	