

Rapid-cycle Improvement Program

Venous Thromboembolism Assessment



WHAT IS THIS TOOL?

This assessment allows hospitals to identify opportunities for improvement in venous thromboembolism prevention, including through the appropriate use of anticoagulants. Use this tool to interview unit-based staff and compare current practices with recommended evidence-based best practices.

WHO SHOULD USE THIS TOOL?

Hospital-based quality improvement teams focused on preventing VTE.

ASSESSMENT PROCESS:

- Review the hospital's internal policies and protocols.
- Review electronic medical records for selected patients to evaluate the presence of documented assessments and interventions.
- Complete the assessment with unit-based staff from multiple hospital areas to ensure that unit-to-unit variation is accounted for in any hospital-wide action plans developed as a result of the assessment.
- Review responses with your EQIC project manager for additional guidance and next steps.

EVIDENCE-BASED PRACTICE	PRACTICE IN PLACE?	NOTES
ORGANIZATIONAL STRUCTURE AND CULTURE		
An interdisciplinary team or committee focused on VTE prevention meets regularly.	Yes No	
This team reports to the hospital quality improvement committee or board of directors.	Yes No	
The hospital has identified an executive sponsor.	Yes No	
The hospital has a performance improvement program in place.	Yes No	
Policies/protocols have been developed and updated with current guidelines/evidence-based recommendations.	Yes No	
New treatments, equipment designed to assist with treatment and prevention are frequently evaluated.	Yes No	
DATA COLLECTION AND REPORTING		
VTE rates are tracked regularly.	Yes No	
Anticoagulation ADE rates are tracked regularly.	Yes No	
Tracked VTE and anticoagulation ADE rates are delineated by unit location.	Yes No	
The hospital uses a standardized reporting mechanism (i.e., dashboard) to track incidence and outcomes.	Yes No	
Data are shared with clinicians, frontline staff and key stakeholders.	Yes No	
STAFF EDUCATION		
Staff that receive education and training on VTE prevention strategies include (<i>check all that apply</i>):	Providers Frontline staff Clinical support staff Transport staff Environmental staff	

EVIDENCE-BASED PRACTICE	PRACTICE IN PLACE?	NOTES																
STAFF EDUCATION (CONTINUED)																		
Staff education about VTE prevention and treatment is provided:	At orientation Annually Other; describe: _____																	
A VTE/anticoagulant subject matter expert or champion is available to staff for questions and real-time education.	Yes No																	
A patient and family advisory council or another committee with patient representation is involved in developing VTE education.	Yes No																	
QUALITY IMPROVEMENT																		
The VTE interdisciplinary team includes: <ul style="list-style-type: none"> • Physician • Pharmacist • Nurse leaders • Subject matter expert in anticoagulant safety • Frontline staff • Quality improvement staff • Information technology staff • PFAC member 	<table border="0"> <tr><td>Yes</td><td>No</td></tr> <tr><td>Yes</td><td>No</td></tr> <tr><td>Yes</td><td>No</td></tr> <tr><td>Yes</td><td>No</td></tr> <tr><td>Yes</td><td>No</td></tr> <tr><td>Yes</td><td>No</td></tr> <tr><td>Yes</td><td>No</td></tr> <tr><td>Yes</td><td>No</td></tr> </table>	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Yes	No																	
Yes	No																	
Yes	No																	
Yes	No																	
Yes	No																	
Yes	No																	
Yes	No																	
Yes	No																	
The VTE team routinely reviews reports that address VTE prevention and treatment including:	<table border="0"> <tr><td>Yes</td><td>No</td></tr> </table>	Yes	No															
Yes	No																	
<ul style="list-style-type: none"> • Time in therapeutic range of warfarin (e.g., Rosendaal method) 	<table border="0"> <tr><td>Yes</td><td>No</td></tr> </table>	Yes	No															
Yes	No																	
<ul style="list-style-type: none"> • International normalized ratio above and below target range (consider EQIC measure) 	<table border="0"> <tr><td>Yes</td><td>No</td></tr> </table>	Yes	No															
Yes	No																	
<ul style="list-style-type: none"> • Clinical events, such as relevant bleeding (e.g., use of rescue agents) 	<table border="0"> <tr><td>Yes</td><td>No</td></tr> </table>	Yes	No															
Yes	No																	
<ul style="list-style-type: none"> • Thromboembolic events 	<table border="0"> <tr><td>Yes</td><td>No</td></tr> </table>	Yes	No															
Yes	No																	
<ul style="list-style-type: none"> • Safety monitoring for heparin-induced thrombocytopenia 	<table border="0"> <tr><td>Yes</td><td>No</td></tr> </table>	Yes	No															
Yes	No																	
<i>(continued on next page)</i>																		

EVIDENCE-BASED PRACTICE	PRACTICE IN PLACE?	NOTES												
QUALITY IMPROVEMENT (CONTINUED)														
<ul style="list-style-type: none"> Protocol for HIT 	Yes No													
<ul style="list-style-type: none"> Hospitalization and mortality related to anticoagulant use (include complications related to target-specific oral anticoagulant and direct oral anticoagulant utilization) 	Yes No													
PROTOCOLS														
There a systematic, standardized approach in place for assessing a patient’s risk for VTE for the following patients: <ul style="list-style-type: none"> Medical Surgical Other service areas 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No	Yes	No	Yes	No							
Yes	No													
Yes	No													
Yes	No													
The standardized approach provides evidence-based guidance related to: <ul style="list-style-type: none"> VTE risk stratification Bleeding risk Mechanical prophylaxis Pharmacological choices for VTE prevention Pharmacological choices for VTE treatment Baseline laboratory tests 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Yes	No													
Yes	No													
Yes	No													
Yes	No													
Yes	No													
Yes	No													
POINT OF CARE RESOURCES														
Guidance is available to frontline staff that supports: <ul style="list-style-type: none"> Initiation of pharmacological VTE prevention for patients at high risk for bleeding Anticoagulation therapy, maintenance, discontinuation and interruption Switching from warfarin to TSOACs or DOACs Management of potential or actual anticoagulation therapy-related bleeding Managing extremes of anticoagulation therapy Peri-procedural anticoagulation monitoring and management 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Yes	No													
Yes	No													
Yes	No													
Yes	No													
Yes	No													
Yes	No													

EVIDENCE-BASED PRACTICE	PRACTICE IN PLACE?	NOTES												
PATIENT EDUCATION														
Patient education on VTE is provided: <ul style="list-style-type: none"> • Verbally • In written form • Using audio-visual • With a demonstration of understanding (teach-back) 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No	Yes	No	Yes	No	Yes	No					
Yes	No													
Yes	No													
Yes	No													
Yes	No													
Standardized, age-appropriate patient education for all anticoagulants is provided, including for: <ul style="list-style-type: none"> • Warfarin • Heparin • DOACs • TSOACs 	<table border="0"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> </table>	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	
Yes	No	N/A												
Yes	No	N/A												
Yes	No	N/A												
Yes	No	N/A												
The patient education program: <ul style="list-style-type: none"> • Ensures patients understand drug titration and maintenance plan, including the importance of adhering to the dosage schedule. 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No											
Yes	No													
<ul style="list-style-type: none"> • Provides education relevant to disease and associated drug therapy. 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No											
Yes	No													
CARE TRANSITIONS														
Discharge summary and referral materials accurately communicate the treatment plan to the next care setting and include: <ul style="list-style-type: none"> • An accurate medication list that details medications stopped, started or changed during the hospital stay 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No											
Yes	No													
<ul style="list-style-type: none"> • Dietary habits (i.e., vegetarian, other) and what impact, if any, this may have on the drug 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No											
Yes	No													
<ul style="list-style-type: none"> • History of falls 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No											
Yes	No													
<ul style="list-style-type: none"> • Other significant past medical history 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No											
Yes	No													
<ul style="list-style-type: none"> • Diagnosis or indication for anticoagulant therapy 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No											
Yes	No													
(continued on next page)														

EVIDENCE-BASED PRACTICE	PRACTICE IN PLACE?		NOTES
CARE TRANSITIONS (CONTINUED)			
• Start date if new to anticoagulant therapy	Yes	No	
• Date, time and dose of last dose given	Yes	No	
• Date, time and dose of the next dose due	Yes	No	
• Duration of therapy with a stop/end date for all agents prescribed	Yes	No	
• Target INR and range, if appropriate	Yes	No	
• Next INR due, if appropriate	Yes	No	
• Pertinent labs:			
▫ Last 2-3 INR results	Yes	No	
▫ Serum creatinine or creatinine clearance	Yes	No	
▫ Hematocrit/hemoglobin, platelets	Yes	No	
▫ Other	Yes	No	

THIS TOOL IS BASED ON:

Ansell, J.; Streiff, M.; Crowther, M., Guidance for the Treatment of Deep Vein Thrombosis and Pulmonary Embolism, Anticoagulation Forum webinar, Jan. 20, 2016 <https://acforum.org/web/education-guidance.php>

Cuker, A., Burnett, A., Triller, D., Crowther, M., Ansell, J., Van Cott, E. M., Wirth, D., & Kaatz, S. (2019). Reversal of direct oral anticoagulants: Guidance from the Anticoagulation Forum. American Journal of Hematology, 94(6), 697-709. <https://doi.org/10.1002/ajh.25475>

Core Elements of Anticoagulation Stewardship Programs. Anticoagulation Forum, 2019. <https://acforum.org/web/downloads/ACF%20Anticoagulation%20Stewardship%20Guide.pdf>

The Joint Commission. R3 Report: Requirement, Rationale, Reference. National Patient Safety Goal for anticoagulant therapy. TJC, Issue 19, Dec. 7, 2018. https://www.jointcommission.org/-/media/tjc/documents/standards/r3-reports/r3_19_anticoagulant_therapy_rev_final1.pdf

National Quality Forum. Advancing Anticoagulation Stewardship: A Playbook. Washington, DC: NQF; 2022. https://acforum-excellence.org/Resource-Center/resource_files/1977-2022-08-24-063128.pdf