



New York State
Partnership
for Patients



Nursing Centered Initiatives

Venous Thromboembolism

ORGANIZATIONAL ANALYSIS TO IMPROVE VTE PREVENTION AND TREATMENT

This organizational analysis, collaboratively developed by NYSPFP and IPRO, will support the development of a plan to improve VTE prevention strategies through the review and analysis of:

1. Quality Improvement Team Members and Workflow
2. Hospital Performance on Quality Data
3. Use of Anticoagulation Experts at the Point of Care
4. Protocols and Risk Assessment Models (RAMs)
5. Past Quality Improvement (QI) Efforts
6. Patient Education
7. Care Transitions (Patient Handover)

RECOMMENDED ACTION	BEST-PRACTICE ELEMENTS	CHECKLIST OF IMPLEMENTATION STATUS		IMPROVEMENT ACTION PLAN
		YES	NO	
1. REVIEW QUALITY IMPROVEMENT TEAM MEMBERS.				
Evaluate team composition and examine the workflow process of each discipline.	Does the VTE team represent each of the following?			
	Senior leadership			
	Physician			
	Pharmacist			
	Nursing leaders			
	Subject matter expert in anticoagulant (AC) safety			
	Frontline staff			
	Quality improvement staff			
	Information technology staff			
	Patient safety officer			
	Patient or family advisor			
	Does each team member or discipline have clearly defined roles and responsibilities?			
	Does each discipline follow their role in VTE prevention?			

ORGANIZATIONAL ANALYSIS TO IMPROVE VTE PREVENTION AND TREATMENT (continued)

RECOMMENDED ACTION	BEST-PRACTICE ELEMENTS	CHECKLIST OF IMPLEMENTATION STATUS		IMPROVEMENT ACTION PLAN
		YES	NO	
2. REVIEW HOSPITAL PERFORMANCE ON QUALITY DATA.				
Conduct routine evaluation of quality metrics and related safety monitoring.	Does the VTE team routinely review reports that address VTE prevention and treatment?			
	Centers for Medicare & Medicaid Services reports: <ul style="list-style-type: none"> • VTE and Stroke measure sets • The Joint Commission national patient safety goal adherence • Agency for Healthcare Research and Quality Patient Safety Indicators • Hospital-acquired conditions • Surgical Care Improvement Project VTE-2 • Hospital Readmission Reduction reports • Coding and claims data 			
	Events reported to the New York Patient Occurrence and Tracking System			
	Other internal reporting (specify):			
	Time in therapeutic range of warfarin (e.g., Rosendaal method)			
	International Normalized Ratio (INR) excursions above and below target range (consider NYSPFP Measure)			
	Clinical events, such as relevant bleeding (e.g., use of rescue agents)			
	Any thromboembolic event			
	Safety monitoring for heparin-induced thrombocytopenia (HIT): <ul style="list-style-type: none"> • Unfractionated heparin • Low-molecular-weight heparin 			
	Protocol for HIT			
	Hospitalization and mortality related to AC use (include complications related to target-specific oral anticoagulants [TSOAC] utilization)			

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RECOMMENDED ACTION	BEST-PRACTICE ELEMENTS	CHECKLIST OF IMPLEMENTATION STATUS		IMPROVEMENT ACTION PLAN
		YES	NO	
3. ANALYZE USE OF ANTICOAGULATION EXPERTS AT THE POINT OF CARE.				
Ensure that experts are available to prescribers 24 hours a day, seven days a week.	Is guidance is available to frontline staff that supports:			
	Initiation of pharmacological VTE prevention for patients at high risk for bleeding			
	Anticoagulation therapy, maintenance, discontinuation, and interruption			
	Switching from warfarin to TSOACs			
	Management of potential or actual anticoagulation therapy–related bleeding			
	Management of potential and actual thromboembolic complications			
	Managing extremes of anticoagulation therapy			
	Peri-procedural anticoagulation monitoring and management			
4. ANALYZE PROTOCOLS AND RAMS.				
Gather all organizational protocols and order sets (electronic or paper) that address VTE prevention and treatment.	Is there a systematic, standardized approach in place for assessing a patient’s risk for VTE?			
	Medical			
	Surgical			
	Other service areas			
	Does this approach provide evidence-based guidance at the point of care and address:			
	VTE risk stratification			
	Bleeding risk			
	Mechanical prophylaxis			
	Evidence-based guidance on pharmacological choices for VTE prevention			
	Evidence-based guidance on pharmacological choices for VTE treatment			
	Baseline labs (including INR for the initiation of warfarin)			

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		YES	NO	
5. REVIEW PAST QI EFFORTS.				
Use lessons learned from past QI activities to avoid implementation pitfalls.	Is there a system in place to integrate lessons learned from past QI efforts to improve VTE prevention?			
6. ANALYZE PATIENT EDUCATION EFFORTS.				
Ensure that all patients with an anticoagulant prescribed at discharge will receive comprehensive education.	Are a variety of teaching methods used to provide patient education?			
	Verbal			
	Written			
	Audio-visual			
	Demonstration of understanding (teach back)			
	Group instruction			
	Standardized, age-appropriate, patient education for all ACs is provided, including:			
	Warfarin			
	Dabigatran			
	Rivaroxaban			
	Apixaban			
	Dalteparin			
	Enoxaparin			
	Fragmin			
	Innohep			
	Lovenox			
	Tinzaparin			
Heparin				
The patient education program:				
Addresses barriers to the learning process such as limited English proficiency, illiteracy, visual or hearing impairment, and reliance on caregivers				

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		YES	NO	
Ensure that all patients with an anticoagulant prescribed at discharge will receive comprehensive education. <i>cont.</i>	Determines patient’s preferred language to receive health-related information and uses teach back to demonstrate understanding			
	Ensures patient understanding of drug titration and maintenance plan.			
	Provides education relevant to disease and associated drug therapy			
7. EXAMINE TRANSITIONS IN CARE (PATIENT HANDOVER).				
Ensure that critical information is provided to the next care provider (including patients discharged to home health, skilled nursing facility, community physician, or other care).	Does all discharge summary material (any referral communication) contain a systematic way of communicating meaningful information that can be used to validate the treatment plan by the next care setting?			
	Does it include the discrete elements of care listed below?			
	Patient demographics			
	Accurate medication list that details meds stopped, started, or changed during hospital stay			
	Dietary habits (i.e., vegetarian, other) and what impact, if any, this may have on the drug			
	History of falls			
	Other significant past medical history			
	Diagnosis or indication for AC therapy			
	If new to AC therapy, start date provided			
	Date, time, dose of last dose given provided			
	Date, time, dose of the next dose due provided			
	Duration of therapy—A stop/end date for all agents prescribed is provided			
	Target INR and range			
Next INR due				

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		YES	NO	
Ensure that critical information is provided to the next care provider (including patients discharged to home health, skilled nursing facility, community physician, or other care). <i>cont.</i>	Pertinent labs: <ul style="list-style-type: none"> • Last 2–3 INR results • Serum creatinine or creatinine clearance • Hematocrit/hemoglobin, platelets, other 			
	Is documentation of patient education communicated to next provider or health care setting? <ul style="list-style-type: none"> • State name and type of educational materials provided • Assessment of patient and caregiver’s understanding of the education • Indicate whether follow-up teaching is needed 			

WORKS CONSULTED

1. E. A. Nutescu, Wittkowsky, A.K., Burnett, A., Merli, G.J., Ansell, J.E., and Garcia, D.A. “Delivery of Optimized Inpatient Anticoagulation Therapy: Consensus Statement from the Anticoagulation Forum.” Available at http://excellence.acforum.org/?page=resource_list&resource_page=Transition%20and%20Coordination%20of%20Care (click on “Transitions Between Care Settings”); accessed May 15, 2014.
2. IPRO. “Care Transition Medication Reconciliation and Medication Management of Anticoagulation Pilot Project 10th Scope of Work” (2014).
3. Maynard, G., Jenkins, I., et. al. *Optimizing Inpatient Anticoagulation: Strategies for Quality Improvement, Inpatient Anticoagulation*, First Edition. John Wiley & Sons, Inc. (2011).
4. Maynard, G. Humber, D., Jenkins, I. “Multidisciplinary Initiative to Improve Inpatient Anticoagulation and Management of VTE.” *American Journal of Health System Pharmacists*, vol. 71 (February 15, 2014).

Please share the assessment results with your hospital’s NYSPFP Project Manager.