MedPro Group
a Berkshire Hathaway company

Checklist

Reducing Risks Associated With Anticoagulants

Although it's necessary to prescribe anticoagulants to treat patients for certain health conditions, healthcare organizations need to thoroughly understand the risks associated with them to keep their patients safe. Anticoagulants are high-risk medications with the potential for serious adverse drug events (ADEs). Healthcare organizations can mitigate risks by identifying any system-based cause of errors involving anticoagulants as well as educating their providers and patients, among other steps.

This checklist presents numerous risk-reducing efforts to help healthcare organizations review their systems and standard processes and pinpoint areas for improvement.[1]

	Yes	No
Systems and Standard Processes		
Does your organization's electronic health record (EHR) system use alerts — such as hard stops — to flag duplicate orders, potential drug interactions, and abnormal lab errors?	☐	☐
Does your organization use standardized written orders instead of verbal orders to prescribe anticoagulants in nonemergency situations?	☐	☐
When verbal orders are used, does a nurse document the order electronically and then read it back to the prescriber to ensure all dose, frequency, and duration information is accurate?	☐	☐
Does your EHR system always have the latest lab results available on any patient so the prescriber can see them before prescribing anticoagulants?	☐	☐
Does your healthcare organization have a standard process for handling any "hold" orders, and does it require providers to renew these orders daily?	☐	☐
Do providers enter hold orders into the EHR system as a form of a nursing communication?	☐	☐

	Yes	No
Systems and Standard Processes (continued)		
Does every active order list the drug, route, and frequency, with a clear note to ensure that a dose is prescribed each day according to lab values?	☐	☐
Does your organization have an anticoagulation management service program for monitoring and dosing of anticoagulants?	☐	☐
• Does the program include assessing the current clinical practices and developing guidelines on anticoagulant use?	☐	☐
• Does the program include auditing health records to ensure the protocol is working successfully?	☐	☐
• Does the program include educating patients/families about anticoagulation therapy?	☐	☐
Does your organization have a standard protocol for rapid or emergency reversal of anticoagulation as well as how to restart the therapy?	☐	☐
Does your organization have a standard protocol for medication reconciliation during handoffs, and does handoff communication involve telling the receiving provider about the dose of anticoagulants for any patient and any pending lab results?	☐	☐
Has your organization standardized baseline information, such as weight in kilograms and serum creatinine function, for ordering anticoagulants?	☐	☐
Does your organization prohibit the use of abbreviations, including NOAC (novel oral anticoagulants), when writing out any medication order to avoid the possibility of error or misinterpretation?	☐	☐
Does your organization prohibit prescribing “blanket” orders, such as “resume all medications”?	☐	☐
Do all patients taking anticoagulants have an alert placed in their EHR indicating that they are on a high-risk medication?	☐	☐
Do providers always check elderly patients’ renal function and body weight before prescribing anticoagulants to them as they may require lower starting doses?	☐	☐

	Yes	No
Systems and Standard Processes (continued)		
Is warfarin administered at a set time every day to allow for review of lab results and any necessary dose adjustments?	☐	☐
Are trends in INR values for patients displayed to assist with dosing anticoagulants, especially warfarin	☐	☐
Has your organization defined policies and procedures for therapeutic substitution or a way to approve use of a patient's own medication to avoid doses?	☐	☐
Pharmacy		
Does the pharmacist review all drug orders by verifying the drug and its dose against therapeutic indication?	☐	☐
Does the pharmacist check the automated dispensing cabinets (ADCs) every day and verify all new orders as well as one-time orders with a nurse?	☐	☐
Does the pharmacist check the stock medications for units before leaving the pharmacy?	☐	☐
Do computerized order entry and pharmacy information systems include clinical decision support?	☐	☐
Does a nurse speak to the pharmacist when an anticoagulant is ordered to avoid duplicate orders?	☐	☐
Is barcode scanning used during stock replenishment of ADCs and in the pharmacy to ensure the correct dosage and proper drug selection?	☐	☐
Staff and Patient Education		
Does your organization conduct annual competency assessments for providers who prescribe, dispense, or administer anticoagulants?	☐	☐
When a new anticoagulant is added to the formulary, does your organization:		
• Notify staff and provide information about the new drug?	☐	☐
• Ensure that related protocols, including anticoagulant reversal procedures, are up to date?	☐	☐

	Yes	No
Staff and Patient Education (continued)		
Does your organization ensure that patients who are prescribed anticoagulants: • Are educated about the medication and taught how to take it when their therapy begins and prior to discharge? • Learn about the potential for bleeding, serious drug–drug interactions, and other risks — as well as available tools that can help manage these risks?	☐ ☐	☐ ☐
Monitoring of Adverse Drug Events		
Do providers monitor for ADE triggers — such as INR greater than 6, sudden decline in renal function, bleeding, or hypercoagulability — to proactively identify potential ADEs?	☐	☐
Does your organization encourage staff to report near-miss and harmful events to identify possible errors and areas for improvement?	☐	☐
Does your organization thoroughly investigate medication errors and share details about them with providers?	☐	☐

Endnote

[1] This checklist is based on information from the following resources: Amaraneni, A., Chippa, V., & Rettew, A. C. (2022, November 27 [last updated]). Anticoagulation safety. *StatPearls.* Retrieved from www.ncbi.nlm.nih.gov/books/NBK519025/; Andreica, I., & Grissinger, M. (2015). Oral anticoagulants: A review of common errors and risk reduction strategies. Pennsylvania *Patient Safety Advisory, 12*(2):54–61. Retrieved from http://patientsafety.pa.gov/ADVISORIES/Pages/201506_54.aspx