

The Big Three of ADE:

Anticoagulants



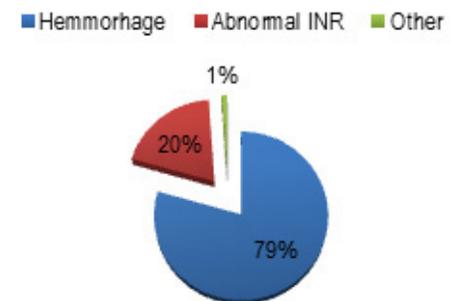
- ✓ Anticoagulants are often implicated in adverse drug events that lead to emergency department (ED) visits
- ✓ A recent study showed oral anticoagulants (warfarin and the direct acting agents) caused about 37% of ADE-related ED visits in people 65 years and older¹
 - Most of these events were due to hemorrhage
- ✓ In the same study, anti-platelet drugs caused an additional 17% of ED events in this population

How Can You Partner With Your Patients to Improve Safety?

Implement use of a simple screening tool with each encounter to assess adherence, potential risks and adverse events – ask about:

- ✓ How do you take this medication? How many doses missed in the past week?
- ✓ Recent bruising, bleeding?
- ✓ Changes in medications (drugs stopped, started, changes in dosage, especially dietary supplements/herbs, antibiotics and NSAIDs)
- ✓ Provide patient with simple written action plan to prevent and recognize bleeding; know when to call provider or 911

Types of ADEs from Oral Anticoagulants (%)



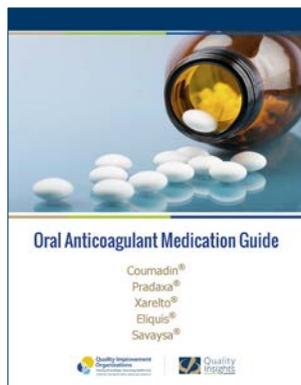
How Can You Partner at the System Level to Improve Safety?

Implement best practices for population management and individualized communication:

- ✓ Update clinical decision software to reflect the most current knowledge on anticoagulant drug interactions (including direct acting oral anticoagulants)
- ✓ Have processes in place for potential drug interaction monitoring; communication and documentation of critical values to providers
- ✓ Evaluate anticoagulant dosing and duration of therapy for appropriateness when possible
- ✓ Use a communication tool (e.g. SBAR) for warm handoffs during care transitions

Anticoagulants: Resources

Visit Quality Insights' website to download resources, including the [Big Three of ADE Toolkit](#) which includes many valuable tools like the Oral Anticoagulant Medication Guide, Clinical Teach Back Cards, an anticoagulant SBAR form and many more.



Anticoagulant	Brand Name(s)	Formulation	Indication	Contraindications	Precautions	Monitoring	Adverse Effects	Drug Interactions	Dietary Interactions
Warfarin	Coumadin, Jantrowin	Tablets, Oral Solution	Prevention and treatment of thromboembolic disorders	Active bleeding, severe liver disease, pregnancy, breastfeeding	Alcohol, vitamin K, soy products, green leafy vegetables, cranberry juice, grapefruit juice, St. John's wort, NSAIDs, aspirin, other blood thinners	INR (International Normalized Ratio)	Bleeding, bruising, skin necrosis, alopecia, hair loss, photosensitivity, discoloration of urine	Aspirin, NSAIDs, antiplatelets, antiarrhythmics, antibiotics, antifungals, antidepressants, antipsychotics, antidiabetics, antiepileptics, antihypertensives, antineoplastic agents, antithrombotics, cardiac glycosides, cholinergics, diuretics, immunosuppressants, insulin, lithium, oral contraceptives, skeletal muscle relaxants, sedatives, sympathomimetics, thyroid medications, vitamin K antagonists	Green leafy vegetables, soy products, cranberry juice, grapefruit juice, St. John's wort
Dabigatran	Pradaxa	Tablets	Prevention and treatment of thromboembolic disorders	Active bleeding, severe liver disease, pregnancy, breastfeeding	Alcohol, vitamin K, soy products, green leafy vegetables, cranberry juice, grapefruit juice, St. John's wort, NSAIDs, aspirin, other blood thinners	None	Bleeding, bruising, skin necrosis, alopecia, hair loss, photosensitivity, discoloration of urine	Aspirin, NSAIDs, antiplatelets, antiarrhythmics, antibiotics, antifungals, antidepressants, antipsychotics, antidiabetics, antiepileptics, antihypertensives, antineoplastic agents, antithrombotics, cardiac glycosides, cholinergics, diuretics, immunosuppressants, insulin, lithium, oral contraceptives, skeletal muscle relaxants, sedatives, sympathomimetics, thyroid medications, vitamin K antagonists	Green leafy vegetables, soy products, cranberry juice, grapefruit juice, St. John's wort
Edoxaban	Xarelto	Tablets	Prevention and treatment of thromboembolic disorders	Active bleeding, severe liver disease, pregnancy, breastfeeding	Alcohol, vitamin K, soy products, green leafy vegetables, cranberry juice, grapefruit juice, St. John's wort, NSAIDs, aspirin, other blood thinners	None	Bleeding, bruising, skin necrosis, alopecia, hair loss, photosensitivity, discoloration of urine	Aspirin, NSAIDs, antiplatelets, antiarrhythmics, antibiotics, antifungals, antidepressants, antipsychotics, antidiabetics, antiepileptics, antihypertensives, antineoplastic agents, antithrombotics, cardiac glycosides, cholinergics, diuretics, immunosuppressants, insulin, lithium, oral contraceptives, skeletal muscle relaxants, sedatives, sympathomimetics, thyroid medications, vitamin K antagonists	Green leafy vegetables, soy products, cranberry juice, grapefruit juice, St. John's wort
Apixiban	Savaysa	Tablets	Prevention and treatment of thromboembolic disorders	Active bleeding, severe liver disease, pregnancy, breastfeeding	Alcohol, vitamin K, soy products, green leafy vegetables, cranberry juice, grapefruit juice, St. John's wort, NSAIDs, aspirin, other blood thinners	None	Bleeding, bruising, skin necrosis, alopecia, hair loss, photosensitivity, discoloration of urine	Aspirin, NSAIDs, antiplatelets, antiarrhythmics, antibiotics, antifungals, antidepressants, antipsychotics, antidiabetics, antiepileptics, antihypertensives, antineoplastic agents, antithrombotics, cardiac glycosides, cholinergics, diuretics, immunosuppressants, insulin, lithium, oral contraceptives, skeletal muscle relaxants, sedatives, sympathomimetics, thyroid medications, vitamin K antagonists	Green leafy vegetables, soy products, cranberry juice, grapefruit juice, St. John's wort



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