Evaluation of anticoagulation policy and treatment using National Patient Safety Goal NPSG 03.05.01 at a rural community teaching hospital

Philip Hutchinson, PharmD    Flint Russett, PharmD   Cathy Shely, PharmD

Background

• In 2007, The Joint Commission published a new National Patient Safety Goal (NPSG) which focused on anticoagulation safety (Reduce the likelihood of patient harm associated with the use of anticoagulation therapy).
• The requirement had a one-year phase-in period, with the expectation of full implementation by January 1, 2009.
• In 2008, St. Claire Regional Medical Center implemented a policy entitled Anticoagulation Safety in the Inpatient Setting.
• This policy provides directions on hospital-approved monitoring for effectiveness and prevention of toxicity with the use of anticoagulants.
• The current policy identifies 4 anticoagulants, including warfarin, unfractionated heparin (UFH), low molecular weight heparin (LMWH), and argatroban.
• The current NPSG has 8 elements of performance, including: Evaluate anticoagulation safety practices, take action to improve practices, and measure the effectiveness of those actions in a time frame determined by the organization.

Policy Standards

• The standards evaluated, included:
  • Warfarin
    - Baseline and daily INRs obtained
    - Information about clinically significant drug interactions are provided to the prescriber
    - Patients (or guardians) receiving information about warfarin therapy.
  • Unfractionated heparin
    - Partial thromboplastin time (PTT) is measured at least daily
    - Complete blood counts (CBC) is measured at least every 2 days
  • Low molecular weight heparin
    - Dosage is based on weight and indication
    - Dose is adjusted for renal function
    - Complete blood counts (CBC) is measured at least every 2 days
  • Argatroban
    - PTT is measured at least daily
    - CBC is measured at least every 2 days

Results

Objective

• Determine the compliance of providers in following the Anticoagulation Safety in the Inpatient Setting

Methods

• A retrospective review of patients receiving the indicated anticoagulants from October through December 2010 was conducted.
• Eligible patients were on the monitored medication for at least 24 hours.
• Patients receiving prophylactic doses were excluded.
• Patient information was obtained from electronic patient records kept on the hospital’s intranet database.
• Monitoring parameters measured are found in the anticoagulation policy

Results, continued

Conclusion

• Identified areas of improvement include:
  • Ordering of relevant labs, specifically baseline and daily INRs
  • Documentation of physician notification of warfarin-drug interactions
  • Documentation of warfarin education
  • Inclusion of new formulary anticoagulants

Recommendations

• Revise the policy to allow pharmacists to order relevant labs when indicated
• Provide education to pharmacists about appropriate warfarin-drug interaction and warfarin education documentation
• Develop a warfarin-drug interaction computer intervention to aid in intervention documentation
• Develop a daily report to identify all patients currently taking warfarin
• Utilize the warfarin report to optimize current tracking of warfarin education
• Update the policy to include safety information about dabigatran

Disclosure

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