Long-Term Care Survey Alert

Medication Management: 6 Ways to Keep Coumadin Therapy in the Safety Zone

This plan will help you get the best of this tricky medication.

Coumadin can quickly turn lethal if your facility doesn't cross the T's and dot the I's in monitoring patients receiving the clot-preventing treatment. Not only that, but surveyors are focusing like never before on this area of medication management,including lab test monitoring.

Case in point: One facility got hit with a retroactive immediate jeopardy citation and over $500,000 in civil monetary penalties because it missed doing two INR lab tests for a Coumadin patient, reports attorney **Christopher Puri**, with Boult, Cummings, Conners & Berry PLC in Nashville, Tenn.

"Coumadin is a huge, huge issue," and one where surveyors tend to cite IJ in almost every instance, he adds.

Solution: Using the following checklist will help promote optimal outcomes for residents taking the blood thinner.

1. Make sure INR results drive therapy. "All patients on Coumadin (warfarin) should have INR testing," emphasizes **Tom Snader, PharmD, CPG,** a consultant in North Wales, Pa.

Therapeutic INR ranges are usually between 2.0 up to 3.5, says Snader. The upper range of 3.5 would be to prevent clot formation after a heart valve replacement, for example, he adds. And "a 2.0 to 3.0 INR is considered therapeutic ... for atrial fibrillation."

2. Know when to perform more frequent INR monitoring. Facilities typically do weekly INRs in the afternoons so the nursing staff can contact the prescriber with the results before giving the next morning's Coumadin dose, Snader notes. But the prescribing clinician should order more frequent INRs during a dose adjustment -- or if the patient has a potential unavoidable drug-drug interaction, such as a sulfa or quinolone antibiotic, which increases Coumadin's anticoagulant effect, he adds. "The facility needs to monitor INRs more frequently in such cases in order to detect any adverse effect and to facilitate any necessary warfarin dosage adjustments." The effect of some medications can persist for a week after the patient stops the medication, he cautions. Thus, the prescriber should also consider ordering more frequent INR monitoring during that time.

A major safety challenge: Coumadin is notorious for causing drug-drug interactions. "Not only are certain antibiotics ... problematic, but so are some of the older anti-epileptics and antiarrhythmics," cautions Snader. In addition, "NSAIDs and aspirin increase the risk for GI bleeding, which may be difficult to control in an anticoagulated patient."

Cautionary example: One patient taking Coumadin had his INR checked right before starting a quinolone antibiotic. Four days into the antibiotic therapy, the nurse noted the resident had a large thigh hematoma and asked for an immediate INR, Snader reports. The INR result was life-threatening, requiring the resident to receive a fresh plasma transfusion to replenish clotting factors. "In this case, routinely scheduled weekly INRs would have not detected the potentially life threatening elevation in the INR," he notes.

3. Implement a consistent protocol for reporting INRs to the physician. The standard of practice is to call all INR results to the physician, says Snader. As an alternative, some nursing homes could have a policy where they fax therapeutic INR results to the physician, and only call when results are outside the therapeutic parameters, he suggests.

Get the info in a row: When the nurse does call the physician to report an INR, she should also be prepared to report the following, suggests Snader:

• The current Coumadin dose;

• Reason for treatment;

• Previous INRs

• Any recently prescribed drugs that might be affecting the INR.

Safety tip: Snader "strongly advocates" nursing homes designate a separate part of the patient chart for INR results. "That way, the physician or pharmacist doesn't have to thumb through pages of routine lab results to find the latest INRs."

4. Collaborate with pharmacy to avoid drug-drug interactions. The dispensing pharmacy has the primary responsibility for intercepting potential safety threats, such as changes in dosages for patients on Coumadin, and new drug-drug interactions, including short-term medications, says Snader. So make sure the pharmacy is on board with the facility in preventing problems. The consultant pharmacist should also feel comfortable issuing "preventive communications" or drug alerts when the physician increases the dosage of a medication that the pharmacy previously cleared. "Some consultant pharmacists are reluctant to write this communication because they assume the staff is aware of the potential risk and may be offended by the alert," Snader notes. But that extra safety alert can save the patient.

Address this threat: Alterations in dietary vitamin K levels can also affect anticoagulation --" for details, see the sidebar on the previous page.

5. Care plan to detect over-coagulation. Caregivers should monitor anyone on a blood thinner, including Coumadin or heparin, at every contact, emphasizes **Marilyn Mines, RN, RAC-CT, BC**, manager of clinical services for FR&R Healthcare Consulting in Deerfield, Ill. "The resident's care plan should indicate potential signs of bleeding, and all caregivers should be aware of these," she adds. Examples include "pettechiae [pinpoint hemorrhages under the skin], even a small nose bleed, or a lot of black and blue areas on the skin, although such areas can occur in old age." Bleeding when brushing the teeth -- or blood in the urine or stool -- are other signs.

6. Develop fall and accident protocols for residents on anticoagulants. The facility should have a 72-hour post-fall follow-up to monitor these residents for bruising or changes in mental status, says **Bet Ellis, RN**, a consultant with LarsonAllen in Charlotte, N.C. Also keep in mind that signs of a chronic subdural hematoma can occur long after a fall. So always consider that possibility when a resident has a change in mental status -- especially if he's on Coumadin, Ellis advises.

Resource: A September 2008 Joint Commission sentinel alert suggests establishing organization-wide dose limits on anticoagulants, requiring physicians to override them. Also promptly re-evaluate patients whose anticoagulant is being held for a procedure, the alert advises. "The re-evaluation should include an assessment of the need to reorder anticoagulant therapy,"