

Managing anticoagulants

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Medication management is back in the spotlight, this time for the protocols for anticoagulant treatments. According to the [National Action Plan for Adverse Drug Event Prevention](#), anticoagulants are one of the three most commonly implicated drug classes in adverse drug events (ADEs). But whether it's the recent [ProPublica report highlighting the mismanagement of residents on warfarin](#) or July's [memorandum](#) from the Centers for Medicare & Medicaid Services (CMS) urging a heightened focus on medication monitoring, one thing is clear: Anticoagulant-related ADEs need to be reduced.

"Warfarin does have a high potential for medication error," says Joan Baird, PharmD, CGP, FASCP and Director of Education and Clinical Affairs with the [American Society of Consultant Pharmacists](#). The drug interacts with many other medications and requires frequent lab work to monitor dosage and effectiveness, Baird says.

Understanding the risks

In a 2011 *New England Journal of Medicine* [article](#), warfarin was implicated in about one-third of the ADE emergency hospitalizations among older adults. But does the age of the user increase the risk?

"[An older adult] can have a slower metabolism, as well as less body fluid and muscle mass, and that can affect how the medications are metabolized," Baird explains. "In general, it means that medications stay in the system longer than they would with a younger, more robust patient. But it's important to remember that warfarin is a highly effective medication and responds well to the risk of stroke, afib [atrial fibrillation] and other conditions. It may need more oversight because of the risks, but it can be a life saver."

The good news is, the majority of ADEs are viewed as preventable with better medication management. Medication regimen reviews, which are federally mandated for skilled nursing facilities at least once every 30 days, can help.

A consultant pharmacist can serve as a second set of eyes when looking at the whole health record of a resident. A consultant pharmacist's assessment may include reviews of anticoagulant levels, lab work, physician orders and medication administration schedules. Such reviews also routinely check for drug redundancies, potential drug interactions, and dosing concerns. "It's also important to observe residents physically for their overall condition, including evidence of bruising or bleeding and assessing any possible interactions with other medications," Baird says.

Faster testing, faster care

Delays or errors in communicating test results can be a barrier to anticoagulant management. After researching the industry's best practices, Silvercrest Center for Nursing and Rehabilitation, a high-acuity skilled nursing facility in Briarwood, N.Y., began its own trial to reduce the time it takes to receive blood test results for INR (International Normalized Ratio [for blood clotting time]) levels and the timeframe for adjusting a resident's medication dose.

Under the initiative, caregivers changed the way they collected blood samples, switching from a venous draw method to a point-of-care capillary finger stick. The new method allows for in-house analysis of blood samples, instead of sending them to an outside blood lab. Speeding up the turnaround time means that the physician often is still in the building when the lab results return, allowing caregivers to get the physician's response right away on any dosage changes, explains Peaches Smith-Grinion, RN, nurse educator at Silvercrest.

When more of the team is available to look at the results and examine the resident, a better understanding of the overall condition is achieved, Smith-Grinion adds. “Since we’ve implemented the protocol, it’s only been positive feedback from both nurses and doctors alike.”

Education matters

For a drug that’s characterized as both dangerous and lifesaving, the search for better warfarin management strategies will no doubt continue. Reviewing the CMS [ADE trigger tool](#) can help facilities evaluate processes on obtaining and communicating lab results, educating caregivers and residents on risk factors and symptoms of bleeding, alerting staff when anticoagulants are being combined with other drugs that increase ADE risk, monitoring the resident’s dietary plan for foods that can adversely interact with anticoagulants.

Newer medications are available now, but it’s unclear whether they’ll solve warfarin’s monitoring challenges. “There are new anticoagulant drugs which may be less likely to cause bleeding, but their data is still unfolding,” Baird says. “Per labeling, INR is not required, but there’s also no antidote at this time if there’s a problem with bleeding.”

Baird cautions that news reports of safety issues with some nursing home residents taking anticoagulants aren’t representative of all facilities. Most facilities work hard and do a great job of monitoring medications and training their staff, she says. “But what’s always needed is strong, collaborative care with the entire team, including nurses, physicians and pharmacists.”

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