

EP News: Quality Improvement and Outcomes: Engaging pharmacists to improve patient adherence to prescribed medication

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Pharmacists have a unique role and responsibility in an individual's care, especially for those with chronic disease. Insights into how pharmacy fellows can be engaged to assess and improve guideline-concordant anticoagulation for atrial fibrillation (AF) were gathered from a quality improvement project sponsored by the Heart Rhythm Society, in collaboration with the University of Florida.

A recent Centers for Disease Control and Prevention fact sheet (https://www.cdc.gov/heartdisease/atrial_fibrillation.htm) estimates that by 2030, 12.1 million people in the United States will receive a diagnosis of AF. AF accounts for a 5-fold increased risk of ischemic stroke and causes about 1 in 7 strokes.

The Heart Rhythm Society Preventing Preventable Strokes initiative currently underway at the University of Florida aims to improve guideline-concordant anticoagulation via patient communication. With the help of IT analysts using Epic electronic health record databases, patients with AF were identified and grouped on the basis of the presence of an active oral anticoagulation (OAC) medication and placed into 1 of 3 groups:

1. Patients with a CHA₂DS₂-VASc score warranting OAC but with no current record of anticoagulation were urged to talk to their doctor as soon as possible to discuss how to prevent stroke.
2. Patients with a CHA₂DS₂-VASc score warranting OAC and currently receiving anticoagulation therapy were reminded of the importance of medication adherence to prevent stroke.
3. Patients with a CHA₂DS₂-VASc score too low to warrant OAC at this time were informed that their risk can change as they age and as new health conditions arise. Continued discussions with their physician to reassess their risk of stroke were recommended.

Pharmacy fellows helped with this effort in multiple ways:

- **Reviewed all records** before any messages were sent to ensure that the database records were accurate.
- **Sent the messages** to patients via Epic MyChart.
- **Reviewed patient profiles**, in order to determine whether another message was warranted.
- **Sent follow-up messages** to those at highest risk based on CHA₂DS₂-VASc score and lack of current anticoagulation.

While the pharmacy fellows helped identify and reach the patients, they also learned important lessons, including the following:

- **Some patients do not have a full understanding of their medication therapy.** Many patients stated that they were currently on anticoagulation therapy with clopidogrel or aspirin; however, treatment with antiplatelet medications is not sufficient to lower a patient's risk of stroke. *This gap in patient knowledge illustrates the need for patient education, and the pharmacist is uniquely positioned to play the role of an educator.*
- **Some patients are not aware of the importance of following their medication regimen.** It is critical that patients remain consistent with their medication schedule and do not miss doses. When reviewing patient histories, it is clear that some patients do not take their medication as instructed and are not picking up their prescriptions as expected. *Pharmacists can offer interventions and guidance to patients so that they can keep up with their medication and eliminate any barriers causing the patient not to take their medication.*
- **Some patients may be hesitant or wary to take anticoagulation medications because of the potential associated bleeding risks.** Current guidelines recommend the use of warfarin or direct acting OAC in order to reduce the risk of stroke. Some of these medications require extensive counseling regarding international normalized ratio tests, diet modification, bleeding risk, and other associated side effects. *Pharmacists can play a key role in educating patients about how to mitigate these risks and take the medication safely to yield optimal efficacy.*
- **The data in the electronic health record does not always accurately reflect the diagnosis of AF, the anticoagulation status of patients, or care received from other health systems.** *Pharmacists can delve into the details to find individuals categorized incorrectly on the basis of errors in data entry.*

Conclusion

It is evident that pharmacists and pharmacy students have a role in improving anticoagulation rates for patients with AF. In addition to helping with process management, patients need counseling and guidance on their disease state and the medications that are prescribed. With the proper guidance, patients can reduce their risk of stroke while also mitigating the associated side effects. Physicians should feel comfortable asking pharmacists to assist. An interprofessional collaboration between the patient, the physician, and the pharmacist can help improve outcomes for patients with AF.

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