**Pre-Surgical Anticoagulation/Antiplatelet Management**

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**Introduction**

- Anticoagulants/Antiplatelets are medications commonly prescribed to patients that have medical conditions that require a blood thinner, to lower the chance of blood clots forming in the body. These blood thinners are usually taken on a long-term basis and part of the patient’s daily medication regimen. Some of the more commonly prescribed Anticoagulants/Antiplatelets include: Aspirin, Brilinta, Coumadin, Effient, Eliquis, Plavix, Pradaxa, and Xarelto.

- Surgeons are routinely called upon to care for patients taking medications that affect normal clotting. These medications increase the patient’s risk of bleeding during and after surgery.

- Increased bleeding is especially a concern when a patient is having surgery. Surgeons may require the patient to stop taking these medications several days before their surgery. Managing blood thinners and surgery is important for patient safety and clinical outcomes.

- The Pre-Anesthesia Testing Department (PAT) calls surgical patients, on behalf of the hospital anesthesiologist, before their scheduled surgery. The phone call includes conducting a thorough health history and medication review. Per our Anesthesia Department Protocol, surgeons should discuss all blood thinning medication therapy with their patients and provide them with specific medication instructions prior to surgery.

- Surgeons at CHS Pineville were not providing medication instructions to all patients currently on blood thinning medications prior to their scheduled surgery. The current baseline data showed that only 56% of patients surveyed during a two-week period, received anticoagulation/antiplatelet medication instructions by their surgeon prior to the PAT Department contacting their patient.

- Each time a patient was not provided with anticoagulation/antiplatelet medication instructions by their surgeon, the PAT nurse had to call the surgeon’s office to receive specific instructions and then call the patient back. Sometimes, this resulted in cancellations and/or rescheduling because there was not enough time for the patient to safely stop taking the medication before their surgery.

- To improve clinical efficiency, clinical outcomes, and patient safety, the project focused on implementing a way to increase the number of patients that receive blood thinning medication instructions by their surgeons, prior to PAT contacting their patients.

**Goal**

- The goal of the anticoagulation/antiplatelet project was to increase the percentage of patients receiving anticoagulation/antiplatelet medication instructions prior to the PAT phone call to 75% by 04/10/17. There was no specific benchmark and 75% was chosen by the PAT Management and Nursing Team as an attainable goal.

**Improvement Process**

- As the primary intervention, an Anticoagulation/Antiplatelet Management - Surgeon Notification Form (See Figure 1) was developed by the project nurse facilitator and reviewed by the PAT nurses, and PAT leadership. The goal was to fax the Surgeon Notification Form to all surgeons that did not provide medication instructions to their patients.

- The PAT nurses were asked to assist in collecting data for two-weeks. They were asked to place a sticker/information on a form (See Figure 2) that indicated if a patient was not provided anticoagulation/antiplatelet medication instructions by their surgeon prior to PAT contacting the patient.

- The project nurse facilitator’s role was to gather the data collected and use that feedback to determine the percentage of patients affected by not knowing whether to stop or continue taking these medications prior to their surgery. The project nurse facilitator then revised the Anticoagulation/Antiplatelet Management - Surgeon Notification Form based on multiple factors including teammate ideas/concerns.

- The PAT nurses began faxing the Surgeon Notification Forms on 01/03/17. The goal was to continue this process for 60 days, and then repeat the original survey. PAT nurses surveyed patients again during a two-week period, from 03/27/17-04/10/17, to re-evaluate if the number of patients that were provided anticoagulation/antiplatelet medication instructions increased after utilizing the Surgeon Notification Form.

**Results/Outcomes**

Following implementation of faxing the Surgeon Notification Form to all surgeons that did not provide medication instructions to their patients prior to their scheduled surgeries, it helped bring awareness to this problem. After utilizing this form for 60 days, the next survey that was conducted during a two-week period, showed the number of patients that were provided medication instructions increased from 56% to 72% and was a 16% improvement from before the project. (See Figure 3)

**Sharing Knowledge**

CHS Union came to our PAT Department to shadow and adopted our Anticoagulation/Antiplatelet Management - Surgeon Notification Form to use at their facility. Also, some surgeon’s offices adopted our form to use as part of their daily practice for patients scheduled for surgery. (See Figure 4) This project can be used to assist other surgeons’ offices and CHS hospitals, having similar problems by sharing the form. Patients and families across CHS can have less anxiety with the implementation of early blood thinning medication instructions provided by their surgeon.

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**Figure 1: Anticoagulation/Antiplatelet Management - Surgeon Notification Form**

- The Pre-Anesthesia Testing Department at CHS-Pineville has screened your patient: [PAT ID/Surgeon: ________________] The Pre-Anesthesia Testing Department at CHS-Pineville has screened your patient: [PAT ID/Surgeon: ________________]

- As the surgeon, please indicate the instructions the patient should follow for his/her anticoagulant/antiplatelet management. Please return a fax to 984-687-900

**Figure 2: PAT Data Collecting Form**

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**Figure 3: "Pre-Surgical Anticoagulation/Antiplatelet Management" PAT Project**

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**Figure 4: Other CHS Hospitals/Surgeons’ Office Forms**

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**Contact Information**

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