UNIVERSITY MEDICINE ASSOCIATES

PROTOCOL

Protocol For: Anticoagulation Management Protocol for Providers and Nursing staff

Definition: To document written protocol for medication management of patients on warfarin (Coumadin)

I. Types of patients that may be managed by this protocol
   a. Patients who have been referred to the anticoagulation clinic by their health care provider for various conditions to include (but not limited):
      i. Deep vein thrombosis (DVT)
      ii. Pulmonary embolism (PE)
      iii. Inherited thrombophilias
      iv. Mechanical heart valve replacements
      v. Valve disease repairs
      vi. Atrial fibrillation
   b. Patient on direct oral anticoagulants (DOACs) are to be managed by their PCPs or other prescribing provider.

II. Providers will follow attached protocol for medication management related to anticoagulation treatment
   a. Follow recommendations in the UHS Anticoagulation Therapy Guidelines, which can be access on the UHS Clinical Pathways and Guidelines page, under Anticoagulation. Slight deviation from the guidelines may occur per clinical judgment.
   b. Provide patient instructions regarding warfarin use peri-procedure for bridging therapy with low molecular weight heparin or unfractionated heparin
   c. Call in new or refill prescriptions for warfarin, enoxaparin, unfractionated heparin and Vitamin K if deemed necessary for appropriate and update medication list accordingly.
   d. Document services rendered in patient's medical records according to UHS policies

III. Support staff working with the anticoagulation provider will
   a. Have new patients read and sign the patient anticoagulation clinic policy statement (See Appendix A)
   b. Carry out all orders as appropriate and document in medical records actions taken
   c. Forward appropriate messages from the call center/patients to the provider via Secure Health Message (SHM)
   d. Schedule follow-up appointments for patients
e. Request medical records from patients primary care/specialty clinics as directed by the clinic provider
f. Order clinic supplies as needed and ensured that clinic area is properly stocked

IV. Continuous Quality Improvement: This protocol will be reviewed every three years and revised as needed by the clinical pharmacists and providers.

V. **STEP 1:** All Patients will have blood pressure and pulse, height, weight, temperature, and pulse oxygen taken by nursing support staff and be asked for the following information
   a. Social history: Tobacco use, Alcohol intake, Drug use
   b. Domestic violence screening
   c. Fall risk screening

VI. **STEP 2:** The INR will be checked using the POC machine unless the patient has one of the following conditions that require a lab draw INR via venipuncture
   a. INR greater than 5.0
   b. Antiphospholipid syndrome (APS)
   c. Lupus anticoagulant (LAC)
   d. Current use of enoxaparin (Lovenox)*
   e. Hematocrit less than 30

VII. **STEP 3:** The INR results will be classified into 3 categories
   a. At Goal
   b. Above Goal
   c. Below Goal

VIII. **STEP 4:**
   a. The patients’ warfarin dose will be adjusted according to dose adjustment nomograms located in the “Anticoagulation Therapy Guidelines” located on the UHS intranet

IX. **STEP 5:**
   a. Patients will receive patient education via in-person discussion, handouts and a mandatory educational video at all new patient visits and any follow-up visits as needed.
   b. Patient will be counseled regarding their warfarin regimen, diet and activity, importance of compliance with follow-up appointments, and to notify the clinic of any changes or questions regarding the patients' medications or medical history.
   c. A baseline complete blood count (CBC) will be obtained within four weeks of starting anticoagulation therapy and every six months thereafter.

*Last dose of enoxaparin (Lovenox) within 24 hours prior to visit requires lab INR.*
Appendix A

University Health System

Anticoagulation Clinic Policy

DOSE
1. Take warfarin (Coumadin®) at the same time every day
2. If you forget to take it, take it as soon as you remember that day
3. If you miss a day, do NOT take an extra dose to “catch up”
4. When you take your warfarin (Coumadin®), check to make sure you are taking the right tablets in terms of:
   a. Dosage, Color and Number of tablets

INR testing
1. All INR checks must be done either in the anticoagulation clinic on the same day as your appointment, OR no more than one day before your appointment with a UHS laboratory
2. We do NOT manage warfarin over the phone or with the use of at home INR machines
3. We do NOT adjust warfarin doses based on INR levels that are >24 hours old
4. We do NOT order INR labs for an outside facility over the phone

PROVIDING INFORMATION
1. Ask clinic before taking any over-the-counter medications, herbal supplements, or vitamins
2. Tell other doctors and dentists you are taking warfarin (Coumadin®)
3. Call your doctor or go to the Emergency Room if you have any of the following symptoms:
   a. Prolonged bleeding, chest pain, bad headache, vision loss, red or dark urine, sudden weakness/paralysis, significant arm/leg pain or swelling, difficulty breathing, red or black stools

Medications
1. Bring ALL of your medications to your INR appointments OR
2. Bring a list of your current medications including
   a. The name of the medication
   b. The dose/frequency that you take it
   c. The indication

Medication Refills
1. The anticoagulation clinic only gives refills for Warfarin (Coumadin®), Enoxaparin (Lovenox®) and Fondaparinux (Arixtra®)
2. ALL other refills must go through your PCP (primary care provider)
3. Refills will only be given to established patients of the anticoagulation clinic
4. If you miss multiple appointments, or do not have a follow-up appointment scheduled at the time that a refill is requested, the anticoagulation clinic reserves the right to only prescribe a limited amount of medication until you are seen in person in the clinic for a follow up appointment.

Blood draws
Are required for
1. Patients with an INR of 5.0 or greater
2. Patients with Antiphospholipid syndrome (APS)
3. Patients with Lupus anticoagulant (LAC)
4. Patient on enoxaparin (Lovenox®)
5. Patients with a hematocrit less than 30

Alert Card or Medical ID
1. Always carry a card on your person stating that you are taking warfarin (Coumadin)
2. Consider getting a Medical Alert ID stating you are taking warfarin

Women
1. Notify clinic immediately if you are or plan on becoming pregnant

Appointments
1. It is very important that you keep all your appointments
2. Time between appointments vary between a couple of days to up to 6 weeks depending on your INR
3. The maximum time between appointments is 6 weeks

Clinic contact information
Office Phone: 210-358-3296
Office Fax: 210-358-4327
Anticoagulation Clinic, RBG Campus
903 W. Martin, San Antonio, TX 78207
If you have any questions or concerns please ask before you sign.
By signing this document you are agreeing to the terms and conditions set forth by this clinic.

Clinic Staff Signature/Date_____________  Patient Signature/Date__________________