SUMMARY

GOALS

- Choose appropriate anticoagulation for each patient based on clinical indication, adherence history, and absence of contraindications
- Monitor INR in every warfarin patient at least monthly
- Designate a sole provider responsible to adjust warfarin for each patient
- Achieve therapeutic INR within 30 days of warfarin initiation
- Identify a single target INR value as goal (e.g., target INR 2.5)

ALERTS

- Significant drug-drug interactions
- High risk of serious bleeding
- International Normalized Ratio (INR) outside desired range
- Extremity pain or swelling/Skin Necrosis
- Altered level of consciousness
- Acute Rash, Hepatitis, Diarrhea/Nausea, GI bleed
- Pregnancy/Breastfeeding

EVALUATION

Identify thrombotic Condition or Risk

Venous Thromboembolism (VTE) Provoked Deep Vein Thrombosis (DVT) or Pulmonary Embolism (PE)
Cancer Associated DVT or PE - See algorithm on page 3

Unprovoked DVT or PE Recurrent VTE - See algorithm on page 4

Cardiovascular Indications i.e., Arterial Thrombus, Valvular Heart Disease, Non-Valvular Atrial Fibrillation (A. fib), Acute Myocardial Infarction (AMI), Left Ventricular (LV) Dysfunction - See algorithm on page 5

Determine Bleeding risk - See assessing the risk of bleeding on page 9

Evaluation - History and Physical: Look for acquired causes of hypercoagulability: (e.g., pregnancy, immobility, trauma, mechanical heart valve, inflammatory bowel disease, oral contraceptives, myeloproliferative disorders, nephrotic syndrome, malignancy, hormone replacement therapy, and recent surgery)
Consider inherited cause of hypercoagulability based on clinical suspicion and patient’s thrombophilic status: (See table below for work-up)
- WEAKLY thrombophilic: First episode of idiopathic VTE ≥ age 50 and no family history of VTE
- STRONGLY thrombophilic: First idiopathic VTE < age 50, or recurrent thrombotic episodes, or first degree relative with thromboembolism < age 50

Diagnostic studies - Initial Labs: CBC including platelets, PT/INR, PTT, chemistry panel, and UA Imaging as clinically appropriate. Additional labs for inherited causes of hypercoagulability as clinically indicated:

Labs to Order – Factor V Leiden
Weakly Thrombophilic - Yes
Strongly Thrombophilic - Yes
Comments – Factor V Leiden is the most common clotting factor mutation in the US, most frequent in Caucasians.

Labs to Order - Prothrombin
Weakly Thrombophilic - Yes
Strongly Thrombophilic - Yes
Comments – Prothrombin mutation most common after Factor V Leiden.

Labs to Order – Antiphospholipid Antibodies
Weakly Thrombophilic - Yes
Strongly Thrombophilic - Yes
Comments – Antiphospholipid antibodies may be present temporarily or permanently. May be measured during thrombotic event.

Labs to Order - Antithrombin
Weakly Thrombophilic - No
Strongly Thrombophilic - Yes
Comments – Antithrombin function and quantity are measured to determine deficiency. The test should not be performed in presence of thrombosis or during treatment for thrombosis.

Labs to Order – Protein C/Protein S
Weakly Thrombophilic - No
Strongly Thrombophilic - Yes
Comments – Protein C and Protein S should not be measured while patient is on warfarin or within 10 days of thrombotic event.