

Anticoagulation Care Guide

September 2021



CALIFORNIA CORRECTIONAL
HEALTH CARE SERVICES

Information contained in the Care Guide is not a substitute for a health care professional's clinical judgment. Evaluation and treatment should be tailored to the individual patient and the circumstances. Furthermore, using this information will not guarantee a specific outcome for each patient. Refer to "Disclaimer Regarding Care guides" for further clarification. <https://cchcs.ca.gov/clinical-resources/>

SUMMARY

GOALS

- ✓ Identify patients with indications (diagnosis) present for anticoagulation
- ✓ Choose appropriate drug for each patient based on clinical indications, adherence history, bleeding risks and absence of contradictions
- ✓ Clearly identify drug, dose, and duration of treatment for each patient on anticoagulation, and ensure proper patient education on diagnosis and treatment plan
- ✓ Know how to evaluate bleeding risk and their roles in managing: Venous Thromboembolism (VTE) vs. Atrial Fibrillation (AFib)/flutter
- ✓ Identify an International Normalized Ratio (INR) target goal for every patient on warfarin (e.g., target INR range 2.0 – 3.0) and monitor

ALERTS

- Significant drug – drug interactions (DDIs)
- High risk of serious bleeding
- INR outside desired range
- Extremity pain or swelling/skin necrosis
- Pregnancy/breastfeeding
- Perioperative management
- Provoked VTE due to COVID – 19
- **COVID vaccine-induced Thrombosis with Thrombocytopenia Syndrome (See Attachment C)**

DIAGNOSTIC CRITERIA

Indications of Anticoagulation

Note: This care guide does not address the use of anticoagulants for VTE prophylaxis

Venous Thromboembolism (VTE) Conditions (See page 4)

- Provoked deep vein thrombosis (DVT)
- Pulmonary embolism (PE)
- Cancer associated DVT or PE
- Unprovoked DVT
- PE Recurrent VTE

Cardiovascular (CV) Conditions (See page 13)

- Arterial thrombus
- Mural thrombus
- Valvular heart disease
- Non-valvular AFib/flutter
- Acute myocardial infarction (AMI)
- Left ventricular (LV) dysfunction

EVALUATION

1. Confirm indication for anticoagulation is present: VTE, such as DVT/PE, or a CV indication such as AFib/flutter
2. Identify presence (if any) of contraindications to anticoagulation for all patients AND determine the need for a higher level of care (HLOC)
3. Conduct risk/benefit assessment for all patients including bleeding risks (See page 6 for VTE; 15 for CV indications)
4. Review current medications to identify potential DDIs and concurrent use of antiplatelet medications (e.g., aspirin and clopidogrel)
5. Review or order diagnostic studies:
 - Initial labs: complete blood count (CBC), comprehensive metabolic panel (CMP), prothrombin time (PT)/INR, Partial thromboplastin time (PTT)

- Electrocardiogram (EKG), echocardiogram (ECHO), and other imaging may be ordered as clinically indicated
- Additional labs for inherited causes of hypercoagulability may be ordered as clinically indicated (See page 11)

TREATMENT

6. Select the anticoagulant that is most appropriate for the patient and determine duration of therapy.
 - DVT of the lower extremity or PE (See pages 8-9)
 - CV indications for anticoagulation: Arterial thrombus, valvular heart disease, non-valvular AFib/flutter, post-acute MI with LV thrombus (See pages 15 – 17)
 - Perioperative Management of Anticoagulation (See page 33)
 - Warfarin Preferred: End stage renal disease, valvular heart disease, patients with poor adherence
 - Direct Oral Anticoagulant Preferred: non-valvular AFib/flutter
 - Low Molecular Weight Heparin Preferred: Malignancy, pregnancy (See chart on the bottom of page 3 for details)
7. Document the following in the Electronic Health Record System (EHRS):
 - Update Problem List with:
 1. Indication for anticoagulation and
 2. “Long-term (current) use of anticoagulants” (ICD10 Z79.01 – to be marked resolved with completion of therapy)
 - Start date with anticipated stop date (if lifelong indicate lifelong)
 - Assessment of bleeding risks and risks/benefits of anticoagulation
 - Target INR (if on warfarin)
 - Next INR check (if on warfarin)
 - Patient Education (See PE1 – PE4)
 - Specialty that is co-managing, if any (i.e., cardiology)
 - Evaluate for lower bunk chrono

FOLLOW-UP AND MONITORING

8. Follow-up and monitor with an individualized treatment plan. For VTE and CV indications:
 - First year: 3 months, 6 months, and 12 months or more often as clinically indicated
 - Follow-up at least every 6 months thereafter
 - Continue to weigh the risks and benefits of continued anticoagulation at each visit
 - Review medication list for DDIs and use antiplatelet medications at each visit

Conduct medication specific lab monitoring. For short-term anticoagulation, re-evaluate need for lower bunk after anticoagulation is stopped.

- Warfarin: INR at least monthly, more frequent if clinically indicated, CBC, CMP every 6 months
- “Direct oral anticoagulants (DOACs) and low molecular weight heparin (LMWH) (enoxaparin): CBC, CMP (including Cr) every 6 months, weight check at each visit

Note: Measures will utilize Time in Therapeutic Range (TTR) for patients on warfarin. This will better reflect the patient’s ongoing anticoagulation status and assist the provider in determining efficacy of treatment plan.

*Direct factor Xa Inhibitors and Direct Thrombin Inhibitors have been referred to as NOACs (Non-vitamin K antagonist oral anticoagulant), DOACs (Direct oral anticoagulants), TOAC/TSOAC (Target-specific oral anticoagulant). Throughout this care guide we will refer to these agents as DOACs.