

TO: Rochester Area Providers

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SUBJECT: Anticoagulation Therapy and the use of the Partial thromboplastin time (PTT), anti-Xa assays, Prothrombin Time (PT)/International Normalized Ratio (INR)

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Laboratory testing is frequently needed for managing anticoagulant therapy. Some issues have come to our attention based on reviews of current patterns of test use.

Monitoring patients on coumadin or warfarin therapy:

We frequently receive orders for both a PT/INR and PTT for monitoring patients on coumadin/warfarin therapy. Only the PT/INR is useful; the PTT is not needed.

Monitoring the effects of low-molecular-weight heparins:

The PTT is not useful in monitoring the effects of low-molecular-weight heparins. Most often, no monitoring is needed for either prophylaxis or therapy. If monitoring is needed, the anti-Xa test should be ordered.

When to order the PTT:

In the outpatient setting, a PTT is mostly needed in patients with history, or suspicion of a condition known to be associated with the risk of hemorrhage or thrombosis, such as:

- Bleeding Disorders; von Willebrand's disease, hemophilia A or B
- Venous or Arterial Thrombosis or Disseminated Intravascular Coagulation (DIC)
- Patients with liver disease.
- Autoimmune Disorders, to rule out circulating inhibitors such as a Lupus Anticoagulant or specific Factor Inhibitor.
- Dysfibrinogenemia or Afibrinogenemia
- Preparation for surgery; to assess the risk of thrombosis or hemorrhage in patients who are going to have an invasive intervention known to be associated with increased risk of bleeding or thrombosis.