

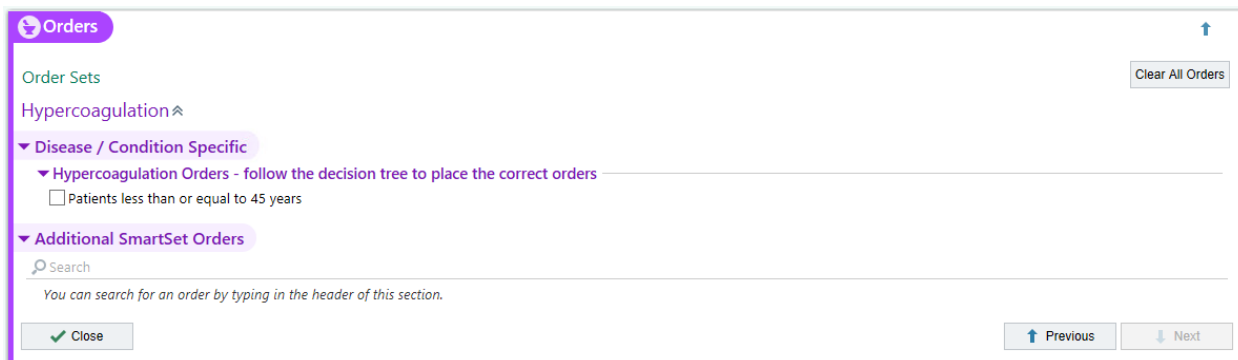
Hereditary thrombophilia testing

Testing for a genetic or acquired predisposition for an increased risk of spontaneous clot formation in select patients is important for the long-term medical care of those patients. However, to correctly interpret the results of these tests, this testing should **only** be performed in select patients **and** in the appropriate clinical setting.

Many of the hereditary thrombophilia tests are not reliable in acutely ill patients, patients with recent thrombotic events, or patients on anticoagulants. Ideally, testing should be performed after resolution of the acute thrombosis and after completion of an initial period of anticoagulation.

Inpatient testing should be considered for patients who are young (<45 years), have personal or family history of multiple clotting events, have clots in abnormal areas (e.g. cerebral, splanchnic, or hepatic vessels), and whose clot was unprovoked (e.g. not associated with trauma, surgery, pregnancy, stasis, malignancy, etc). For these patients, consider a consultation to Hematology/Oncology for consideration of other conditions that may predispose to clotting (e.g. Paroxysmal Nocturnal Hemoglobinemia, Essential Thrombocytosis). Testing should only be considered for in-patients if the results of that testing will result in a change in the patient's acute management or to provide information necessary for genetic counseling during that patient's admission.

Based on the current literature and guidance from our experts here at Upstate, the Laboratory Formulary Committee has built an algorithm in Epic to help guide appropriate testing usage for our patients. Through a few simple nested questions, this algorithm helps to identify those patients for whom testing **should be performed**, those for whom **testing is NOT indicated**, and those for whom **testing should be performed at a later date**.



The screenshot shows the Epic Orders interface. At the top, there is a purple header with a home icon and the word "Orders". Below this, there is a section for "Order Sets" with a "Clear All Orders" button. The main section is titled "Hypercoagulation" and is expanded to show "Disease / Condition Specific" options. Under this, there is a sub-section "Hypercoagulation Orders - follow the decision tree to place the correct orders" with a checkbox for "Patients less than or equal to 45 years". Below that is a section for "Additional SmartSet Orders" with a search bar and a note: "You can search for an order by typing in the header of this section." At the bottom, there are buttons for "Close", "Previous", and "Next".

To ensure that hypercoagulability testing which should be delayed (because the patient is immediately post-clot or is currently on anticoagulation) is performed at the appropriate time, there is an order in this decision tree which will add a reminder to the patient's AVS that the patient requires thrombophilia testing at a later date.

HAD recent clot within last 3 months
 Hypercoagulation testing should be done 3 months after resolution

This order algorithm can be found by searching for "coagulation" or "hypercoagulation" through order entry in Epic.