

## **Avoid routine prothrombin time (PT) and partial thromboplastin time (PTT, APTT) pre-operative screens on unselected patients.**

Nine observational studies, including three prospective studies, reported the positive predictive values for hemostatic complications for the PT and PTT ranged from 0.03 to 0.22, whereas computed 95% confidence intervals for each assay generates a 2.5% positive rate from normal subjects. A review of 27,737 PT and PTT results over two decades showed that only 8% of PTs and PTTs were clinically indicated based on current or prior patient history of bleeding. A study of general hospital unregulated coagulation screening requests produced few abnormal results with no evidence that they were associated with an increased bleeding risk. In this study, all bleeding cases could be attributed to an underlying condition. The 1989 Medical Necessity Project of the Blue Cross and Blue Shield Association endorsed by the American College of Physicians found that at least 70% of PT and PTT tests were not clinically indicated. The risk of intraoperative bleeding is best predicted from a careful history that includes a questionnaire-based bleeding assessment test (BAT).

### **American Society for Clinical Laboratory Science**

This American Society for Clinical Laboratory Science (ASCLS) recommendation was developed under the leadership of ASCLS's Choosing Wisely Task Force and the ASCLS president and executive vice president. The Task Force examined hundreds of options based on evidence available through an extensive review of the literature. The PT and PTT are typically performed on patients without indications and their results do not improve medical or surgical care. Eliminating screening PTs and PTTs is within the control of a facility's medical and surgical review boards. Instituting this recommendation improves care, lower costs, and employs laboratory resources effectively and economically. Subject matter experts from the ASCLS Hematology/Hemostasis Scientific Assembly reviewed and recommended approval of this recommendation, which was subsequently approved by the ASCLS Board of Directors.

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