1. Do you perform prothrombin time testing for any of the following purposes?

A. Evaluation of bleeding	_____ Yes	_____ No
B. Detection of factor deficiencies	_____ Yes	_____ No
C. Assessment of liver disease	_____ Yes	_____ No
D. Monitoring of oral anticoagulation therapy	_____ Yes	_____ No

E. Other, please describe: _____

If you answered "No" for question 1.D. you have completed this questionnaire.
Please detach this page and return it in the enclosed envelope. Thank you for your participation.

2. A. Are prothrombin times/INRs performed in more than one location in your facility?

_____ Yes _____ No

- ♦ If "No", skip to question 3.
- ♦ If "Yes",

B. Which of the following describe the location(s), **other than your own**, where prothrombin times/INRs are performed in your facility?

Nursing station	_____
Anticoagulation clinic	_____
Patient drawing station	_____

Other, please describe**:** _____

NOTE: Please answer the remaining questions only for the method you perform. Do not answer for testing done in any other location in your facility.

3. Please answer the following questions about the thromboplastin reagent you use:

A. What is the name and manufacturer of your reagent? _____

B. What is the International Sensitivity Index (ISI) value of your reagent? _____

C. Did you determine the sensitivity of your prothrombin time assay to heparin?

_____ Yes _____ No

D. Did you select a reagent that is insensitive to heparin in the heparin therapeutic range?

_____ Yes _____ No

E. Did you use a voluntary practice standard to guide you in the selection of your reagent?

_____ Yes _____ No _____ Do not know

- ♦ If "Yes",

F. Which practice standard? _____

- ♦ If "No",

G. Why did you not use a voluntary practice standard for this decision?

Not aware of practice standards addressing this	_____ Yes	_____ No
Cannot afford to purchase practice standards	_____ Yes	_____ No
Standards do not apply to my method	_____ Yes	_____ No
Standards are too complicated	_____ Yes	_____ No
Performed our own studies	_____ Yes	_____ No
Do not agree with the standard	_____ Yes	_____ No
Performed our own literature review	_____ Yes	_____ No

Other, please describe: _____

4. Write the number of testing personnel that perform prothrombin time/INR at your site, according to the following educational and/or experience backgrounds:
_____ Medical Technologist or Clinical Laboratory Scientist
_____ Medical Laboratory Technician or Clinical Laboratory Technician
_____ Registered Nurse
_____ Licensed Practical Nurse
_____ Medical Assistant
_____ Pharmacist
_____ On the job trained
_____ Other, please describe: _____

5. Do any of your patients perform prothrombin times/INRs on themselves using a patient self-testing device? _____ Yes _____ No

6. A. Do you collect samples for prothrombin time/INR by venipuncture?
_____ Yes _____ No

♦If "No", skip to question 9.

♦If "Yes",
B. What is the concentration of sodium citrate in the collection tubes you use? (Check any that apply) _____ 3.2% _____ 3.8%

C. Did you use a voluntary practice standard to guide your selection of the citrate concentration of the collection tubes you use? _____ Yes _____ No _____ Do not know

♦If "Yes",
D. Which practice standard? _____

♦If "No",
E. Why did you not use a voluntary practice standard for this decision?

Not aware of practice standards addressing this	_____ Yes	_____ No
Cannot afford to purchase practice standards	_____ Yes	_____ No
Standards do not apply to my method	_____ Yes	_____ No
Standards are too complicated	_____ Yes	_____ No
Performed our own studies	_____ Yes	_____ No
Do not agree with the standard	_____ Yes	_____ No
Performed our own literature review	_____ Yes	_____ No

Other, please describe: _____

7. A. Do you have a written policy addressing specimen acceptability and rejection for prothrombin time/INR testing? _____ Yes _____ No

♦If "No", skip to question 9.

♦If "Yes",

B. Did you use a voluntary practice standard to develop your policy for specimen acceptability and rejection? _____ Yes _____ No _____ Do not know

♦If "Yes",

C. Which practice standard? _____

♦If "No",

D. Why did you not use a voluntary practice standard for your policy?

Not aware of practice standards addressing this	_____ Yes	_____ No
Cannot afford to purchase practice standards	_____ Yes	_____ No
Standards do not apply to my method	_____ Yes	_____ No
Standards are too complicated	_____ Yes	_____ No
Performed our own studies	_____ Yes	_____ No
Do not agree with the standard	_____ Yes	_____ No
Performed our own literature review	_____ Yes	_____ No

Other, please describe: _____

8. Do you address the following issues in your written specimen acceptance/rejection policy?

Collection of samples in a syringe	_____ Yes	_____ No
Properly anticoagulated specimen	_____ Yes	_____ No
Drawing specimens from patient lines	_____ Yes	_____ No
Time delays prior to testing	_____ Yes	_____ No
Order of multiple tubes	_____ Yes	_____ No
Correct volume of blood	_____ Yes	_____ No
Icterus	_____ Yes	_____ No
Lipemia	_____ Yes	_____ No
Abnormal hematocrits	_____ Yes	_____ No
Heparinized specimens	_____ Yes	_____ No
Difficult draws	_____ Yes	_____ No
Appropriate storage temperature	_____ Yes	_____ No
Adequate centrifugation (speed and time)	_____ Yes	_____ No
Hemolysis	_____ Yes	_____ No
Appropriate transport times	_____ Yes	_____ No
Adequate labeling of specimens	_____ Yes	_____ No
Adequate information on requisition	_____ Yes	_____ No
Information on requisition & specimen label match	_____ Yes	_____ No

Other, please describe: _____

9. A. Do you collect samples for prothrombin time/INR by finger stick or capillary collection?
_____Yes _____ No

♦If "No", skip to question 10.

♦If "Yes",
B. Do you have a written policy addressing the proper collection of capillary specimens for prothrombin time/INR testing? (i.e., minimal manipulation of finger, not squeezing or "milking" the finger, etc) _____ Yes _____ No

10. Do you perform the following when new lots of thromboplastin reagents are placed into use?

Verify the ISI value is correct for your instrument/reagent combination	_____ Yes	_____ No
Establish ISI value with calibrators	_____ Yes	_____ No
Verify reference range (normal range)	_____ Yes	_____ No
Establish patient mean of normal	_____ Yes	_____ No
Conduct parallel testing between lots	_____ Yes	_____ No
Perform correlation studies with another method or site	_____ Yes	_____ No
Confirm calculation of INR	_____ Yes	_____ No
Alert clinicians when a new reagent or reagent with a different ISI is placed into use	_____ Yes	_____ No

11. A. Did you use a voluntary practice standard to develop your policy for checking out new lots of reagents? _____ Yes _____ No _____ Do not know

♦If "Yes",
B. Which practice standard? _____

♦If "No",
C. Why did you not use a voluntary practice standard for your policy?

Not aware of practice standards addressing this	_____ Yes	_____ No
Cannot afford to purchase practice standards	_____ Yes	_____ No
Standards do not apply to my method	_____ Yes	_____ No
Standards are too complicated	_____ Yes	_____ No
Performed our own studies	_____ Yes	_____ No
Do not agree with the standard	_____ Yes	_____ No
Performed our own literature review	_____ Yes	_____ No

Other, please describe: _____

12. Do you report the following values on the patient test report?

Patient prothrombin time (in seconds)	_____ Yes	_____ No
Patient prothrombin time ratio	_____ Yes	_____ No
Patient International Normalized Ratio (INR) value	_____ Yes	_____ No

Other, please describe: _____

13. In the patient report to clinicians, do you provide the following?

Specimen comments	_____ Yes	_____ No
Therapeutic ranges	_____ Yes	_____ No
Reference ranges (normal ranges)	_____ Yes	_____ No
Interpretation	_____ Yes	_____ No

Other, please describe: _____

14. Do the following prompt you to repeat a patient test result?

Abnormal patient value	_____ Yes	_____ No
Critical patient value	_____ Yes	_____ No
Unusual value for patient's history	_____ Yes	_____ No
Instrument failure or flag	_____ Yes	_____ No
Quality control value outside of acceptable limits	_____ Yes	_____ No
Information from patient interview	_____ Yes	_____ No
Computer tracking system	_____ Yes	_____ No

Other, please describe: _____

15. Do you perform the following quality assurance procedures?

Compare instrument print out to reported patient value	_____ Yes	_____ No
Compare patient value to previous values (delta check)	_____ Yes	_____ No
Immediately alert clinician about critical test results	_____ Yes	_____ No
Verify performance of new analytical test systems	_____ Yes	_____ No
Periodically verify calibration of all instrumentation	_____ Yes	_____ No
Participate in proficiency testing for protime/INR	_____ Yes	_____ No
Monitor your rate of patient specimen redraws	_____ Yes	_____ No
Monitor your rate of critical values reported	_____ Yes	_____ No
Monitor your rate of patient test repeats	_____ Yes	_____ No
Assure that clinician receives patient test results	_____ Yes	_____ No

16. Do you use the following approaches to evaluate the competency of your testing personnel?

Periodic written exam	_____ Yes	_____ No
Analysis of unknown samples	_____ Yes	_____ No
Review of procedure manuals	_____ Yes	_____ No
Direct observation of testing	_____ Yes	_____ No
Participation in continuing education	_____ Yes	_____ No
Successful performance of quality control	_____ Yes	_____ No

End of questionnaire
Please return your completed questionnaire in the enclosed envelope
Thank you for your participation