

2001 National Survey of Hospital Coagulation Laboratory Practices: Quality Assurance

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Introduction: Coagulopathy and bleeding are major public health concerns, and coagulation laboratory tests are principal components of clinical management. To characterize, among other issues, coagulation quality assurance (QA) practices, we conducted a survey of laboratories in 2001.

Methods: From a sampling frame of institutions listed in the 1999 directory of the American Hospital Association, we randomly selected 800 hospital coagulation laboratories (sampling rate, 14%; response rate, 79%). A group of coagulation experts and survey methodologists assisted in survey design and further evaluated content and format of the survey before pilot testing.

Results: Ninety-seven percent of sampled hospitals performed coagulation testing. Responses to QA practices adhered to by < 90% of the respondents were as follows:

Rejection of specimens. Thirty-two percent of the respondents reported rejecting specimens collected via indwelling catheter, 45% reported doing so if a label did not have hospital medical record number, 85% reported rejecting specimens stored at an inappropriate temperature, and 86% reported rejecting specimens if they were hemolyzed.

Repeating a test. Sixteen percent of the respondents reported usually repeating a coagulation test when results were outside of the reference interval, and 73% stated doing so when a result did not agree with previous results.

Management of test results. Seventy-six percent reported reviewing patients' previous results, and 82% noted that they compared instrument printout to the reported value.

Duplicate testing. Thirty-nine percent of the respondents stated they ran specimens from patients in duplicate, and 38% reported doing so for control materials.

Other QA check. Twenty-three percent of the respondents reported checking plasma for platelet count after centrifugation.

Conclusion: We found substantial variability in certain QA practices. Some of these practices are not consistent with best practices and may affect patient outcome.