

Letter to the Editor

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CDC Report Assesses the State of Proficiency Testing

What Changes Lie Ahead?

By Phil Kibak, CLN Senior Editor

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In the article about a recent Centers for Disease Control and Prevention (CDC) review of proficiency testing (PT) services in the United States, “CDC Report Assesses the State of Proficiency Testing,” Phil Kibak states, “PT also helps reassure lab personnel that their work is accurate and an asset to patient care.”

Numerous articles and reviews have been published that discuss the limitations of PT, including the review that is the subject of Kibak’s article. One major limitation arises when non-commutable materials are used as testing samples. In programs using non-commutable samples, a laboratory can only be evaluated against the mean value of a peer group that includes other laboratories that use the same or similar measurement conditions (e.g., the same manufacturer’s measurement procedure). In such a case, it is not possible to evaluate a laboratory’s accuracy or a measurement system’s trueness¹. While a laboratory’s accuracy is not directly evaluated, the PT results are still useful to provide the laboratory with an assessment of how they are performing relative to other laboratories using the same procedures. Ideally, trueness of the measurement procedure is provided by the manufacturer establishing traceability to a reference system and the laboratory can confirm its conformance to the manufacturer’s calibration traceability. Therefore, it is important to use measurement procedures according to manufacturers’ instructions.

While most PT programs provided to U.S. laboratories are peer group based, a growing number are accuracy based. In these programs, a reference method is used to assign a target value to commutable materials, allowing for evaluation of individual laboratories against the reference method. These programs can indeed serve as reassurance that laboratory personnel are performing a method accurately.

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¹ Miller WG, Myers GL, Rej R. Why commutability matters. Clin Chem 2006;52:553-4

(editorial)