

Towards sustainable EQA

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The ECAT Foundation, established in 1994, started as a small international External Quality Assessment (EQA) programme in thrombophilia in Western Europe. Today it is one of the largest EQA providers in specialised coagulation testing worldwide.

EQA is an indispensable part of the total quality management of the medical laboratory. The major purpose of EQA is to assess the accuracy of measurement. Does my laboratory test provides me the true value? In addition, it helps the laboratory to compare their results with other laboratories measuring the same parameter. Important evaluation parameters in survey reports are the Z-score (trueness) and between-laboratory variation (precision).

But the question is whether laboratories can advance more from EQA programmes. Recently the term "perfect EQA" has been introduced (Miller *et al*; Clin Chem 2011;57:1670-1680). A perfect EQA programme use samples with a target value traceable to a reference measurement procedure and/or a certified reference material (standard), use commutable sample material and replicate samples. Can this be achieved in blood coagulation?

In addition, what kind of survey result evaluation is appropriate? How to evaluate a single survey result and how to perform long-term survey result evaluation? Furthermore, how do we know the quality of test performance is sufficient? What kind of performance specifications do we need?

These questions will be addressed in the presentation and it will be discussed how ECAT would like to develop their programme to sustainable EQA. We believe this may benefit the laboratory to fulfil the criteria for accreditation. But more important, this may benefit the patient because accurate test results produced by the laboratory support the physician in making the correct diagnosis and/or monitoring treatment.