Eurachem
A Focus for Analytical Chemistry in Europe

10th PT/EQA Workshop - Windsor 2023

Report from WG5

Performance Assessment in Non-quantitative PT/EQA

Convenors:

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Objective

- Consider the need and challenges in harmonization of performance assessment in non-quantitative PT/EQA schemes

Participants

- Institution & type of organisation :

PT providers 23

AB 5

Academics 8

Labs 11

- Field of expertise (e.g. environment, food, health, production…)

Environment 8

Food 17

Health 6

Other 1

1. Current practices

13:45

a. What are the different types of non-quantitative PT/EQA schemes?

- Microbiology
- Identification
- Screening methods
- Identification of forms (eg fibers)
- Disease level : identify threshold
- Taste,
- Intensity of tests
- Classification

1. Current practices

13:45

b. Is there currently any degree of harmonization, e.g. by sector, by country etc?

- Microbiology : Guidelines UKAS, US regulation
- Guideline fot Taste tests (Sweden)
- Some harmonization described in 13528
- Pesticides screening tests in Europe
- Clinical test in US

13:45

1. Current practices

c. What difficulties does the lack of harmonization cause?

- in the laboratory?
- for the PT provider?
- for the end-user of the data?

- Many method of evaluation cause difficulties for assessor,
- Difficulties of understanding for the laboratory regarding the number of statistical models possible,
- Many method of evaluation cause difficulties of treatment of the PT results for laboratory
- Not so many qualitative PT so hard to harmonize,

13:45

1. Current practices

d. How is the evaluation of performance carried out in different non-quantitative PT/EQA schemes?

- Scores?
- Other judgement?

- Yes/No (binary)
- Shades of colors,
- Multi-analytes representation and combinaison of results make things challenging
- Classification
- Percentage of false + or false –

2. Harmonization of practices

14:00

a. What are the issues that can be harmonized in non-quantitative PT/EQA schemes?

i. Scoring principles?
ii. Evaluation of performance?
iii. Statistical handling of results?

- Pesticides screening
- Different system of scoring from PT provider, harmonize the grading, find a scale Excellent good not good
- Scoring system in health according to the severity of the disease
- Harmonize scoring by sector is not possible but harmonize according the type of result (binary, scale from 1 to 10, identification, etc.. Could be possible,
- Effort to be made not to complicate the statitics, need of simplification,
- Evaluation should depend on risk
- Harmonize the way we define consensus or true value,
- Develop how to find outliyers
- All of the items could be harmonized
- Is harmonization good ?, different offer respond to different needs

14:15

2. Harmonization of practices

b. How can we achieve harmonization and what is needed to accomplish this?

i. Can the nomenclature of responses collected in the PT/EQA schemes be harmonised?
ii. How should the assigned values be defined? (pre-established, consensus, mode?)
iii. What kind of guidance is needed for harmonization e.g., in ISO standards?

- Hard to achieve harmonization,
- Wish to have an iso standard,
- Establish same way of calculation of the assigned value as it is for quantitative,
- Any guidance from others bodies that ISO standards that could be not per sector, but general,
- Yes we can harmonize, although it's going to be difficult, We'd like to see guidelines or general practices in 13528 (part II),
- Different wording from diffrents sector will be an issue : nomenclature could be harmonized by sector,
- Pre-establish value will be better for traceability

14:30

2. Harmonization of practices

c. What are the participant needs/wishes for performance assessment in non-quantitative PT/EQA?

- Clarify the meaning of the score,
- Kind of evaluation : against true value or against others laboratoiries,
- More frequent evaluation,
- Being able to understand the report, so they can know why they failed,
- Scoring as simple as possible and understandable for the laboratories,
- Time to get experience so the laboratory will be able to establish his real needs,
- Understanding the level of satisfactory/questionnable/unsatisfactory,
- Knowing why the results were not assessed ?
- Simple scores.

14:45

3. Future practices

a. What will be the future benefits of a harmonized approach to performance assessment in non-quantitative PT/EQA?

- in the laboratory?
- for the PT provider?
- for the end-user of the data?

- Comparability between different PTP,
- Better understanding for laboratories and AB,
- PTP should adapt the PTS to the needs of the laboratories,

14:45

3. Future practices

b. To what extent can harmonized practices be implemented?

- Harmonization could review the offer (in terms of limitation), Laboratories could have a better choice,
- A standard on what is not standardized is a challenge,
- The standard will make it easier for AB, regulators and large multinational network of laboratories

14:45

3. Future practices

c. What would be the best practices to promote harmonization?

i. What role can Eurachem play?

ii. What role can PT/EQA providers play

- PTP contribute to ISO 13528 part II,
- Eurachem could provide guides and leaflets to help laboratories and AB,
- Create a WG through Eurachem to involve laboratories in discussion, PTP could provide examples of schemes,