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A Focus for Analytical Chemistry in Europe

7th PT/EQA Workshop - Istanbul 2011

Report from WG 3

Pre- and post-analytical aspects in PT/EQA



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Pre- and post-analytical aspects in PT/EQA

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- 1. What different types of pre- and post analytical PT/EQA exist?**
- 2. What types of pre- and post analytical PT/EQA are still missed?**
- 3. What are the main organizational challenges for such PT/EQA schemes?**
- 4. How can you evaluate performance in such PT/EQA schemes; what mechanisms are available?**
- 5. Is there need for a greater harmonization for such PT/EQA schemes?**



1. What different types of pre- and post analytical PT/EQA exist?

- EC IMEP PT on toy testing: to measure concentration; to make a judgment to recommend the toy to the market or not
- AB Cyprus: different needs in various sector (area dependent) in correlation with legal aspect (in industry – not medical)
- China: the PT for forensic (the whole study case)
- UK: alcohol (back calculation) PT schemes for competence of the peoples
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1a. What different types of pre- and post analytical PT/EQA exist?

- ABs should seek for the kind of performance in interpretation of the results and its use; the responsibilities of ABs stop at the wall of accredited laboratory (BUT: the validation means that the method is fit for purpose, means results are understandable by customers)
- The problem: misunderstanding of the results by customer (e.g. doctors)
- Sweden: new programme (pilot studies) : the whole chains of events should be considered
 - pre-analytical: how samples were taken, how many samples
 - Post-analytical: how many positive cases (registration)
 - Cross-sectional investigation
 - The guidelines were produced



1b. What different types of pre- and post analytical PT/EQA exist?

- on the top of analytical service the issue of patient service should be taken into account: towards patient (... end users) oriented
- China: a lot of effort to develop such a PT schemes
- Australia: identification (number of samples to be rejected, not-identified, no of incorrect results, ..., to evaluate the problems inside and outside laboratory eg. collection of samples from patients – programme is running for few years now) supported by government



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2. What types of pre- and post analytical PT/EQA are still missed?

Construction area – how to make a cube (standard: how to store ..)

a lot!!!!



3. What are the main organizational challenges for such PT/EQA schemes?

Where is the end of the lab responsibilities ?? : it was discussed among ABs, the end of the lab responsibilities is to give the interpretation of results; but not the use of those results

clear distinguish between those who are making results and those who interprets (knowledge and competence are necessary)

It is consider as a normal of the evolution of PT since the analytical performance of laboratories become better and better

Test is based on equipments / inspection is based on competence (knowledge, experience) [definite vs. subjectivities]



3a. What are the main organizational challenges for such PT/EQA schemes?

-The discussion between pre- and post- lab PT providers and „users” in various fields is needed in order to designed the proper schemes (samples, what to measure, ...)

The result should be put in context, the results alone (even very good one) is not sufficient for its use

- How to organize PT for collection of the samples from patients?? Big challenge
- to organize PT for sample preparation is much easier than for collection of the samples.



4. How can you evaluate performance in such PT/EQA schemes; what mechanisms are available?

It is considered as an educational issue

If guidance or recommendations exist; one can use them

- In medical area
- sampling of environment



5. Is there need for a greater harmonization for such PT/EQA schemes?

The protocol is in much extend area (sector) dependent

The formation of thematic WG is recommended

- Radio pharmaceutical (Australia)
- Trace metals in blood (USA)