

9th PT/EQA Workshop - Portoroz 2017

Report from WG 4

Traditional vs virtual PT/EQA

- Convenors:
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- Objectives:
Consider the merits of the use of traditional vs virtual PT/EQA items



Questions

1. What is understood by virtual PT/EQA items:
 - a. What type of virtual PT/EQA items exist?
 - b. What sectors are they used in?
2. What are the strengths and weaknesses of virtual vs traditional PT/EQA items?
3. What are the challenges of developing virtual PT/EQA items?
4. What feedback has been received on the use of virtual PT/EQA items:
 - a. From participants?
 - b. From accreditation bodies?



1. What is understood by virtual PT/EQA items:

a. What type of virtual PT/EQA items exist?

b. What sectors are they used in?

a. What type...

- All part of analysis where images have to be evaluated
- Interpretation of many types of results (incl. MS chromatograms a.o.)
- An excel sheet to be judged on the result of a sampling scheme ("virtual sampling")



a. What type...(cont'd)

- Fiber analysis
- Metal residues in oil
- Fingerprints
- Where photographs (and videos) are part of the test
- Surface measurements ("soft gauge"),
- including acquisition and measurement

- Using Virtual schemes "in reverse" – i.e. sending back the picture of a sample



1. What is understood(cont'd)

b. What sectors...

- Sectors where something visual has be evaluated
- Microbiology schemes
- Cytology
- Both pre-analytical and post-analytical
- Forensics (pictures from crime scene)

- Really no limitations...!



2. What are the strengths and weaknesses of virtual vs traditional PT/EQA items?

Strengths

- Useful for tests with rare or expensive samples
- Easier to distribute (no custom issues)
- Lower price (?? . see question 3)
- May be the only approach in some fields (fingerprints)
- Avoiding issues of poor stability of samples
- Good for educational purposes
- Better accesibility for clients



2. What are the strengths and weaknesses of virtual vs traditional PT/EQA items?

Strengths

- More clients can be served (internationally) (see though issues under 3 on regional differences)
- Same sample can be assessed by many people (no "sub-sampling needed)
- Quality of samples can be re-assessed if mistakes in preparation has occured
- Reducing work for labs which have to participate in a number of PTs for the same diagnostic tests

2. What are the strengths and weaknesses...(cont'd)

Weaknesses

- Samples not very realistic (a virtual re-creation of reality)
- IT issues (but according to experience not seriously)
- Not covering an entire measurement process
- Not feasible for all types of samples
- Color quality can be an issue (crucial in some cases)

2. What are the strengths and weaknesses...(cont'd)

Weaknesses

- Difficult to disguise as a PT sample (not to be treated special)
- Maybe powerful virtual images – but unrealistic in relation to real images seen in the labs
- Must be a complementary approach to real schemes



3. What are the challenges of developing virtual PT/EQA items?

- Need for better tools for balancing the costs (...at least initially, until tools are in place)
- Preparation time consuming
- Preparation requires special expertise
- Dealing with large image sizes
- Training of traditional PT providers to deal with VPT
- Lack of expertise for making good VPTs



3. What are the challenges ... (cont'd)

- Dealing with samples which may be treated special regionally because of differences in symptoms/pictures (e.g. various diseases)
- Possible outsourcing of parts of the preparation
- Difficult to meet special customer requirements
- Digitalizing images may be very hard in some cases (e.g. related to "slicing" 3D images)
- Regulation has no experience in the field (yet)



4. What feedback has been received on the use of virtual PT/EQA items:

- a. From participants?**
- b. From accreditation bodies?**

a. From participants?

- A few complaints about poor samples
- Participants not used to this (prefer real samples)
- Positive feed-back
- Good uptaken from clients who used to participate in traditional schemes (but the old ways still needed – due to technique)
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4. What feedback(cont'd)

b. From ABs

- No issues from Abs (...yet)
- Very few experiences
- Good feed-back from other regulators and authorities
- Opinion: Cannot replace real samples



General comments

- Participants generally happy with the new approach (based on the few schemes so far)
- Lot of opportunities still to be explored in the field
- Need for building up experience (based on the entrepreneurs in the field)
- VPTs can only be complementary to real PTs