

Project Title: The investigation and evaluation of the proficiency testing provider performance in infectious disease examination in Taiwan.

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Executing Institute:Taiwan Accreditation Foundation

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Abstract:

Proficiency testing is a powerful interlaboratory quality assurance and comparison tool enabling laboratories or inspection body to monitor their performance in activities like testing, measurement, calibration or inspection and compare their results with similar laboratories. Internationally, proficiency testing schemes are used by accreditation bodies as part of the process to assess the ability of laboratories or inspection body to competently perform specific tasks like tests, measurements, calibrations or inspections.

Proficiency testing may be conducted for various different purposes, such as part of the assessment process and reference of external quality assurance. Thus, the quality of a proficiency testing may have great influence on the performance of laboratories or inspection body and the skills and following monitoring of quality assurance that it employs.

This project aims to investigate whether it is, for inspection items in the Communicable Disease Control Act particularly, appropriate to establish a platform for execution and evaluation of proficiency testing schemes by adopting foreign proficiency testing standards like ISO Guide 43 and ILAC G13. The investigation relies mainly on on-site interviews with assistance of document reviews to determine whether accreditation can be applied to current or future proficiency testing providers. The investigation helps to evaluate the compliance of proficiency testing providers to international requirements; on the other hand, more confidence in such execution and evaluation model of proficiency testing schemes has been built through the process. The benefits of the model include assist future participating proficiency testing providers to identify and improve potential problems through effective information obtained from the investigation and provide authorities more confidence in the results of proficiency testing schemes as reference of the competence of a laboratory.

Methodology

This project is executed by data collection, analysis of standards/criteria of proficiency testing schemes and structures, explanation of performance standards for proficiency testing provider and conduct of on-site interview with providers to investigate and plan accreditation system for those providing proficiency testing

schemes in infectious inspection items.

Main findings

ILAC G13 is found to be the common standard that authorities and accreditation bodies use most to evaluate the competence of a proficiency testing provider. Under on-site investigation, except 2 proficiency testing providers are agent's model, 3 proficiency testing providers only need to document and systemize their standard operating procedures and monitor the management systems to comply with the requirements of ILAC G13.

In addition, those proficiency testing providers in this project investigation are very interested to join the evaluation system future. They wish the assessment system not only can improve their technical competence in operation but also reinforce confidence of participating organizations in employing accredited proficiency testing providers.

Conclusion and suggestion

After on-site investigation and symposium, it is suggested that we can use the criteria and evaluation procedure by this project result for a tool to assess the competence of proficiency testing provider. By using the evaluation system, we can help the CDC under its assign organization in Communicable Disease Control Act easy to identify proficiency testing provider whom will meet the international criteria and which proficiency testing report will be acceptable.

At the same time, evaluated proficiency testing provider by this system can not only conduct qualified proficiency testing activities to improve the quality of laboratory or inspection body but also can accept the referring contract by authority to monitor the laboratory or inspection body technical competence indirectly. Finally we suggest authority, professional body or accreditation body will have the competence to implement the evaluation procedure but they shall concern whether will involve any conflict of interest during their operation.

Keyword: Proficiency testing activities 、 ISO Guide 43 、 ILAC G13 、 Interlaboratory comparison 、 Proficiency testing provider