

# LABQUALITY DAYS

## Educational preanalytical cases support end-to-end EQA in bacteriology laboratories

Elina Tuovinen<sup>1\*</sup>, Kristel Virtanen<sup>1</sup>, Yvonne Björkman<sup>1</sup>, Jonna Pelanti<sup>1</sup>, Heidi Berghäll<sup>1</sup>

<sup>1</sup>Labquality, Helsinki, Finland

\*elina.tuovinen@labquality.com

### Introduction

Labquality's external quality assessment (EQA) service has since 2017 included educational pre- and post-analytical cases in addition to the traditional sample distributions. This service named integrated EQA (EQA<sup>3</sup>), supports the clinical laboratories and point-of-care testing (POCT) sites in meeting the requirements of ISO 15189 standard stating that all steps of the laboratory process should be monitored. According to the results of a survey conducted in 2023, the participants of Labquality's schemes for General bacteriology and Urine culture find the EQA<sup>3</sup> service suitable for their needs.

### Aims

The aim of EQA<sup>3</sup> is to enhance the end-to-end EQA service provided by Labquality. The aim of this study was to gain feedback on the usefulness of the EQA<sup>3</sup> service in order to serve the clients needs.

### Methods

Integrated preanalytical cases are added to Labquality's General bacteriology and Urine culture schemes every year. In addition to the physical EQA samples distributed, a preanalytical case is presented. The participants are asked to answer questions regarding the described case and indicate preanalytical errors. In the final report, the response distribution is presented along with expert comments. For this study, Labquality included a feedback questionnaire to all participants of the Urine culture round 2-2023 and the General bacteriology round 3-2023 in order to evaluate the satisfaction of the participants on the preanalytical cases over the past 5 years.

### Results

The overall satisfaction among the 130 responders was good. On average 86% found the cases suitable and 82% reported that the questions asked correspond with issues they need to address regarding routine patient sample analysis.

### Conclusions

The results of the feedback questionnaire indicate that the participants are satisfied with the integrated EQA<sup>3</sup> service and the preanalytical cases which are found to be relevant for their routine work. The educational aspect enhances the knowledge of the preanalytical processes and best practices. The addition of EQA<sup>3</sup> to traditional schemes provides an excellent learning tool and this appreciated feature contributes to the overall usefulness of external quality assessment.