Educational Preanalytical Cases Support End-to-end EQA in Bacteriology Laboratories



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Introduction

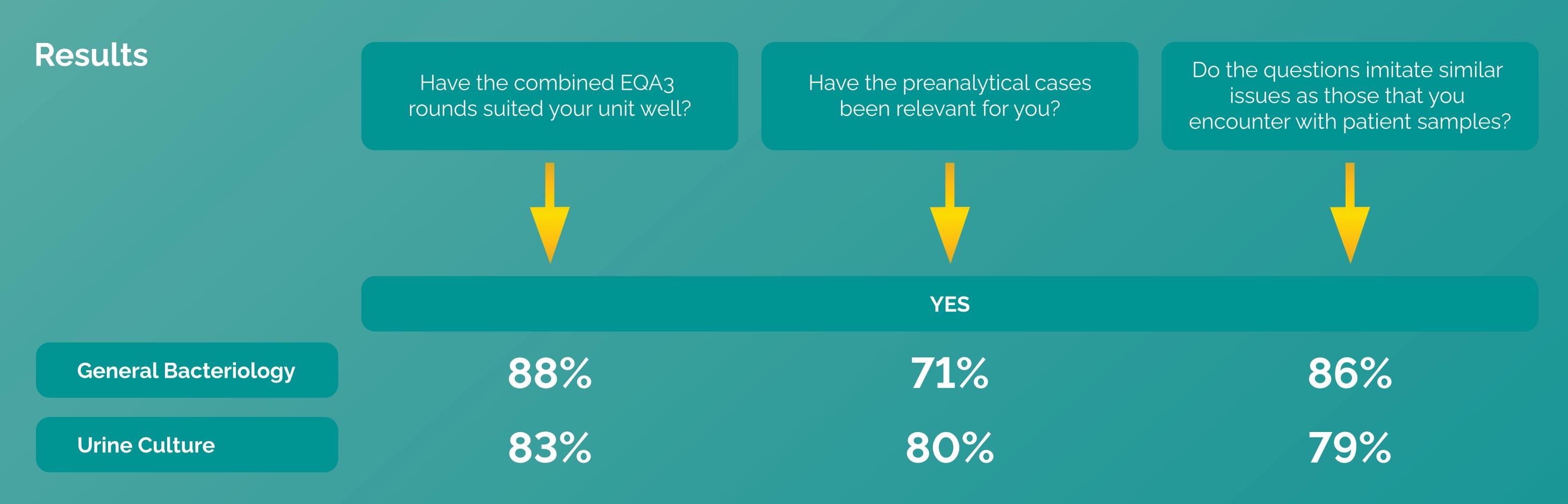
Aurevia's external quality assessment (EQA) service has since 2017 included educational pre- and post-analytical cases in addition to the traditional sample distributions. This service named integrated EQA (EQA3), supports the clinical laboratories and point-of-care testing (POCT) sites in meeting the 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 Aurevia's schemes for General bacteriology and Urine culture find the EQA3 service suitable for their needs.

Conclusions

- Responders (n=130) are satisfied with the integrated pre-analytical service.
- The EQA3 cases are relevant for the routine work.
- The educational aspects enhance the knowledge of the pre-analytical processes and best practices.
- The addition of EQA3 to traditional schemes provides an excellent learning tool and this appreciated feature contributes to the overall usefulness of external quality assessment.

Aims

The aim of EQA3 is to enhance the end-to-end EQA service provided by Aurevia. The aim of this study was to gain knowledge on the usefulness of the EQA3 service in order to serve the clients needs.



Methods

Integrated preanalytical cases are added to Aurevia'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, Aurevia 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.

Example of a case description included in EQA3 sheme

A first morning urine sample of a woman living in a nursing home is sent to the laboratory after doctor's consultation. The scarce sample is in a tube with preservative, having appropriate details on the label. Small local laboratory doesn't perform cultures and the sample is transported to a hospital laboratory in the next shipment. The sample is placed in the refrigerator to await the shipment. It is noticed when packing that the tube has touched the back wall of the refrigerator and it is covered with frost. The tube is found to be cold enough and therefore cold packs are not included in the package. Shipment to the hospital laboratory takes 3 hours and the sample is processed quickly upon arrival.

