

TEE ESSENTIALS

Patient preparation for TEE: Quality assurance

We should aim for clinical excellence at all times. But how do we know that we're giving our patients the best care possible? It's important to have an ongoing process of **Quality Assurance** to audit the quality of care that we're providing, and to identify areas where we could improve. There are several ways of providing Quality Assurance in TEE, and a good TEE service will undertake elements of all of them.

Adherence to published guidelines

Members of the TEE team should maintain CME/ CPD to ensure that they are always up to date with the latest guidelines.

The TEE service should undertake regular audits of compliance with guidelines. For instance, TEE studies/reports can be audited to see how closely they adhere to published minimum datasets.

Group blinded re-reading

Regular review meetings should be held where TEE operators re-read each other's blinded studies and discuss any issues such as suboptimal image optimization, incomplete datasets, and incorrect interpretation of lesion severity.

Interobserver variability

All TEE operators should regularly be asked to assess a set of selected studies for such parameters such as valvular stenosis/regurgitation severity or left ventricular size and function. A comparison of operators' performance provides data on interobserver variability within the department.



Surgical correlation

For all patients who undergo cardiac surgery after their TEE study, a post-surgery review should be undertaken to confirm if the surgical findings correlate with the prior TEE findings.

Significant events

Any significant or untoward events (e.g., TEE complications) should be fully investigated and any relevant learning shared with the TEE team.

Patient feedback

Patient surveys will provide valuable data on how patients experience the TEE service.



Further reading

Popescu BA, Andrade MJ, Badano LP, et al. 2009. European Association of Echocardiography recommendations for training, competence, and quality improvement in echocardiography. *Eur J Echocardiogr.* **10**: 893–905.