

# Exploring Australian acute care nurses' competency in electrocardiogram interpretation from a nurse educator perspective: a qualitative study

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## Abstract

### Background

Nurses are often the first responders to escalate care for cardiac patients when rhythm abnormalities are detected; however, there is limited evidence of Australian nurses' competency in this area. The study aimed to explore barriers and facilitators to nurses' competency in ECG interpretation in Australian acute care hospitals from a nurse educator perspective.

### Methods

This was a nationwide qualitative exploratory study. We conducted semi-structured interviews/focus groups with nurse educators from September to October 2024 via Zoom. Thematic analysis was undertaken.

### Results

A total of 18 participants participated in interviews/focus groups. Nurses often lacked a systematic approach in ECG interpretation and there was a variability in nurses' ECG competency, interests, and confidence with a strong link to where nurses worked. Different opinions on how often nurses should be reassessed for their competency in ECG interpretation exist. Challenges were nurses' not seeing ECG interpretation as their responsibility, lack of exposure, and weak clinical culture. The main enablers included nurses' perceiving ECG interpretation as an expectation, collaboration between nurses and doctors, available time, and different learning modalities. Participants expressed the need for free and available ECG resources, effective teaching modalities, a consistent approach from universities, and a standardised training program with validated tools.

### Conclusion

The findings revealed key challenges and enablers to Australian nurses' ECG competency from a nurse educator perspective. Strategies must be developed to address those challenges to improve nurses' competency in ECG interpretation. Future research should focus on developing a standardised training program and validated tools.