Accuracy of Cardiac Rhythm Interpretation by Medical-Surgical Nurses
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Problem: Nurses outside of cardiac specific units do not receive adequate training and experience in reading cardiac rhythms leading to a delay in treatment. This failure to recognize changes in a patient’s condition can lead to major complications or death.

Evidence: Research shows that in approximately 80% of in-hospital cardiac arrests, the patient showed signs of previous deterioration. With in-hospital cardiac arrest rates between 1 and 5 events per 1000 hospital admissions annually, the ability to recognize cardiac changes becomes increasingly important.

Strategy: The research team performed a pilot study using a stratified random sample of 32 medical-surgical nurses. Group mean scores for all nurses were 48.5%. The RN group mean was significantly higher than the LVN group mean. Nurses who attended class and passed the post-class exam had improved mean scores.

Practice Change: (1) Immediate change in policy to require testing at the end of the course instead of returning at a later date. (2) The significant discrepancy between the RN and LVN populations caused concern and demonstrated a need to expand education leading to the development of LVN specific content taught prior to the dysrhythmia course.

Evaluation: For 2011, both anecdotal comments and end of course test scores have improved. A follow-up larger study of all medical-surgical nurses has begun to determine the effectiveness of the implemented changes. The secondary study will be complete in May 2012.

Results: In 2010, LVNs averaged a 43% initial pass rate. That increased to a 95% pass rate in 2011 after the addition of the course.

Recommendations: While more research is needed, the issue of competence in cardiac monitoring has broad implications for patient safety in many areas. Our findings suggest that medical-surgical nurses may need more education and training in this area.

Lessons Learned: A onetime course in cardiac rhythm interpretation is not sufficient to fulfill the learning needs of all nursing staff.
Bibliography:


