

RECONSTRUCTING RHYTHM INTERPRETATION EDUCATION TO INCREASE EFFICIENCY AND COMPETENCY

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Background: Rhythm interpretation is a common expectation of nurses who care for patients requiring cardiac monitoring. Basic rhythm interpretation testing is often required to complete orientation. While most nurses are introduced to basic rhythm identification during undergraduate study, adequate education to interpret rhythms is not often provided. Most health care organizations offer some type of rhythm interpretation training. Additionally, there are some perceptions that pediatric rhythm identification is different and not sufficiently addressed in a basic class.

Objectives:

1. Assess current content and materials utilized in an established two-day rhythm interpretation course.
2. Analyze rhythm interpretation testing results to identify gaps in current class content
3. Identify alternative learning modalities to decrease class time while maintaining or increasing the current testing pass rate for learners.

Methods: A team of Clinical Nurse Educators (CNE) from across a three-hospital health system in the Southeast reviewed current class content. The team identified content suitable for interactive web-based learning to be done prior to a face-to-face class resulting in the development of a two-part module. Part 1 provides education pertaining to cardiac anatomy and physiology while Part 2 introduces basic steps of rhythm interpretation. The face-to-face class content was revised to eliminate material covered in the modules. The content was then reordered to reinforce learning and slides comparing frequently confused rhythms were added. Hands-on rhythm interpretation practice sections were modified to include previously discussed rhythms to each section. In addition, pediatric specific differences were included in the presentation of each rhythm and a pediatric workbook emphasizing pediatric rhythm considerations was developed. The two-part module and one day face-to-face class was implemented as a pilot.

Results/Outcomes/Improvements: The rhythm interpretation test pass rate for the health system prior to implementation of the pilot course was 70%. To date, 160 participants have completed the pilot course with an overall pass rate of 81%. The revisions have resulted in an 11% reduction of remediation time for participants and CNEs. Additionally, the cumulative time a learner spends on this educational activity has been reduced by 25%. The return on investment for unit managers is two-fold. Time away from the unit during orientation has been reduced to one day with the course being accomplished in eight hours. This has also led to a 25% decrease in indirect hours per participant.

Significance/Implications/Relevance: Utilizing web-based modules and decreasing face-to-face classes by 25% is an effective modality for educating nurses on rhythm interpretation. The implementation of prerequisite modules allows adult learners to learn at their own pace, on their own time. The face-to-face class allows learners to ask questions and gain clarity with hands-on practice. The overall reduction of time of the pilot course allows for nurses to spend more time on the unit with their preceptors during orientation.

Overall, rhythm interpretation test rates have increased with decreased remediation time allowing increased clinical time at the bedside. The pilot course will replace the current course permanently.