The Beat Goes On: Resuscitate Your ECG Program
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Background
• In response to the pandemic, electrocardiogram (ECG) rhythm interpretation education transitioned to an online, self-paced course with optional instructor-led virtual labs. Challenges were identified leading to competency concerns and inaccurate passing rate data.

Challenges
• Technology issues
• Limited learner engagement
• Inefficient use of instructor time
• Low pass rates
• Low optional lab usage (average of 5.5/30 seats)
• Multiple testing attempts
• Prescheduled tutoring required instructor availability with only 25% of offerings attended

Purpose
• Create an innovative hybrid ECG program engaging learners, increasing learner confidence and competence, while improving valuable human resource allocation.

Methods
• Reviewed literature for data and best practices
• Explored engagement tools
• Evaluated legacy course learner evaluations
• Existing 15-hour program was reinvented, resulting in a streamlined 10-hour hybrid approach (Figure 2)
• Confidence data was collected utilizing a Likert scale through anonymous surveys

Results
• Confidence data shows an increase from 2.86 to 4.07 (5.0) in ECG rhythm interpretation and intervention (Figure 3).
• Monitoring of electronic exam results shows decreases in failure notifications, the need for individualized tutoring, and additional exams.
• Learners have a 95% passing rate on the critical rhythm exam and 98% on the general ECG exam.
• Restructured lab schedule and as-needed tutoring for remediation led to decreased instructor workload.
• Data shows monthly costs reduced by 32% with an annual savings forecast of $500,000.

Conclusions
• Mandatory virtual instructor-led labs included practice and gamification opportunities to assess knowledge (Figure 4)
• Exam moved to a new electronic platform preventing retesting
• Interactive self-paced course allowed for increased engagement
• Positive impact on learner satisfaction
• Effective use of instructor time

Implications for Practice
• Structured multimodal course content with gamification positively impacts learners and can be easily implemented in other workflows and content.

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References