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## 15 “I Heart ECGs: A Novel ECG Curriculum Designed for Adult Learners”

Brian Smith, David Simon, Timothy Khowong, Anita Lui, Nao Yoneda, Saumil Parikh

**Introduction/ Background:** Emergency Medicine residents learn more from interactive, case-based, self-directed, and experiential learning strategies over traditional lecture-based didactics. Integration of an ECG curriculum grounded in these adult learning principles can facilitate a learning environment that maximizes engagement and skill acquisition.

**Objectives:** We implemented an ECG curriculum tailored to adult learners to meet our residents’ needs. We hypothesize this will bolster residents’ confidence in ECG interpretation skills.

**Curricular Design:** A problem-centered general needs assessment found that our residents lacked confidence in ECG competency and were dissatisfied with the ECG curricula. A multifaceted targeted needs assessment uncovered residents’ knowledge gaps. We designed the “I Heart ECGs” curriculum to address identified needs. On Mondays, residents receive an ECG, case vignette, and 2-3 open-ended questions. During weekly conference, residents and faculty openly discuss appropriate triage, potential diagnoses, and optimal management. Faculty then unveils the diagnosis and leads a debrief on recognition, management, and clinical insights.

**Impact:** “I Heart ECGs” has gained popularity with residents and enhanced confidence in ECG interpretation, yielding benefits at both Kirkpatrick levels 1 and 2. Residents completed a 5-point Likert scale survey before curriculum implementation and one year after. Pre-implementation, 76% strongly agreed that an interactive ECG curriculum would be beneficial for their education. This rose to 100% post-implementation. Pre-implementation, only 19% of residents reported confidence in ECG interpretation skills. Post-implementation, this surged to 100%. Similar improvements were seen in confidence identifying and managing various ECG subcategories, showcasing advancement in learning. Future research will explore the curriculum’s impact on resident ECG competency and patient outcomes (Kirkpatrick levels 3 and 4).

## 16 Documentation Curriculum for Emergency Medicine Residents

April Choi, Lisa Saffire, Jeremiah Ojha, Linda Regan

**Introduction/ Background:** Documentation is a key skill for emergency medicine (EM) physicians and part of Accreditation Council for Graduate Medical Education (ACGME) milestones. Much literature on resident

documentation curricula focuses on billing and coding and does not incorporate 2023 American Medical Association (AMA) Current Procedural Terminology (CPT) coding changes. We sought to fill the need for comprehensive and updated resident documentation training by creating a curriculum addressing documentation around 2023 AMA CPT codes, defensive documentation, and medical decision-making (MDM).

**Educational Objectives:** By the end of our curriculum, residents will be able to: 1. Correctly code EM charts 2. Analyze charts for defensive documentation elements 3. Report increased confidence in documentation for billing and coding, defensive documentation, and MDM 4. Evaluate self and peer charts for documentation best practices

**Curricular Design:** Our needs assessment showed residents felt least confident documenting for MDM, defensive documentation, and billing and coding and preferred case-based learning. Our curriculum featured case-based synchronous sessions on 2023 AMA CPT codes with simulated charts and on high-risk documentation areas with historical medicolegal cases. We also included longitudinal asynchronous chart review with new self and peer chart assessment forms. This promoted active learning, which is integral to successful resident documentation curricula.

**Impact/Effectiveness:** Pre/post-session surveys showed statistically significant increases in self-confidence in our targeted documentation areas. A majority of residents felt the case-based format promoted learning. Residency leadership accepted the chart assessment forms as a formal part of program requirements. Future plans include sessions tailored for interns and assessment of chart review compliance. This curriculum can be implemented broadly to help train EM residents in documentation.

**Table 1.** Average Likert Scale ratings of agreement on pre-/post didactic surveys

	Pre-survey (n = 14)	Post-billing and coding session {n = 14}	Post- medicolegal session {n = 10}
I feel confident in my ability to document for different levels of billing and coding.	2.2	4.1*	NA
I feel confident in my ability to document my medical decision making.	2.5	3.9*	3.4*
I feel confident in my ability to document defensively.	2.4	NA	3.3*
This session added to my documentation skills as an emergency medicine physician.	NA	4.4	4.6
The format of this session was conducive to my learning about documentation.	NA	4.6	4.6
The duration of this session was appropriate for the content.	NA	4.5	4.3
I would recommend having this session again next year.	NA	4.5	4.7

Likert statements were rated on a 5-point scale with 1 = strongly disagree and 5 = strongly agree.

\*Statistically significant difference compared to pre-survey data at p < 0.05