A Team-based Learning Curricular Framework as an Effective Vehicle for Milestone-based Evaluations

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A Team-based Learning Curricular Framework as an Effective Vehicle for Milestone-based Evaluations

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Introduction: With the institution of the Emergency Medicine (EM) Milestones paradigm for EM resident assessment and development, there is a increasing need for effective and engaging educational programming that can easily incorporate milestones assessments.

Objectives: To create an effective Team-Based Learning (TBL) framework for the EM resident didactic curriculum that can be implemented to easily evaluate all 23 EM Milestones.

Curricular Design: Framework implemented during resident educational conference:

I. Residents complete an Individual Readiness Assurance Test (iRAT) based on assigned pre-reading. Then, working in pre-assigned teams, they complete a Team Readiness Assurance Test (tRAT), which is scored using an Immediate Feedback Assessment Technique (IF-AT) scoring card, which identifies the correct answer when chosen.

II. Students then engage in team-based application exercises, which are designed to apply knowledge from the pre-reading, including: (1) simulations; (2) oral-board style case-based vignettes; (3) team research/teaching activity. For the research/teaching activity, teams are provided with an interesting or controversial clinical case, and they use information technology to research evidence-based medicine resources to help guide management. Each team communicates their findings to the class. A faculty member precepting each group will have pre-printed checklists for each of the three application exercises with the appropriate milestones listed.

Impact: This TBL curricular framework takes advantage of the interactive learning environment as an opportunity to evaluate residents on all twenty-three milestones. Residents’ scores on the iRAT/tRAT evaluate the Medical Knowledge milestone. The residents’ performance on the three application exercises encompass the remaining Patient Care, Professionalism, Interpersonal Communications Skills, Problem-Based Performance Improvement and Systems-Based Practice based milestones.

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Figure 1. Curriculum framework covers milestones.