

## 12 An Emergency Medicine Residency Didactics Revolution: The Use of a Multidisciplinary Team and Branding to Inspire and Support Curricular Change

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**Background:** The ACGME requires EM residencies to provide a set number of educational hours via didactics with the intention to teach core topics in EM. The use of innovative teaching techniques and active participation can increase information retention and comprehension. Previous literature has shown success in developing a didactics curriculum based upon active learning formats. However, change within an established residency program can be difficult due to the multiple stakeholders within the department.

**Educational Objectives:** To highlight how a team-based model can create an environment in which drastic curricular reform can be successful.

**Curricular Design:** Twenty EM residents and 5 faculty were recruited to form a committee to critically evaluate the curriculum, under the brand the “Didactics Revolution.” They identified a desire to increase engagement in the didactics curriculum via more active presentation formats. Additionally, after each didactic in the original curriculum, an “educational autopsy” was held, providing constructive feedback on the style, design, and educational methods of each presentation. The direct input of residents and results from the educational autopsies led the committee to redesign didactics to minimize podium presentations, placing emphasis on 15-minute presentations, panel discussions, and small group sessions. Through effective branding and engagement, residents bought into the design process as a means to effect positive change in how they are taught and learned core EM concepts.

**Impact/Effectiveness:** Through the use of effective branding and early involvement of both residents and faculty, the “Didactics Revolution” has successfully generated resident and key faculty ownership of resident didactics. Additionally, the use of “educational autopsies” has increased engagement and fostered ongoing open discussions for continued curricular improvement.

## 13 An Integrative “Flipped Classroom” Model for Emergency Medicine Residency Education

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**Background:** The “flipped classroom” is a relatively new method of teaching in Emergency Medicine that

requires residents to complete basic learning at home prior to weekly education time. It promotes active learning and participation in the classroom by requiring residents to present to a group, as opposed to simply attending lectures. We present an integrative model of the flipped conference that has been successfully implemented at our 3-year program of 63 residents by assigning roles and ensuring that learning objectives are consistently met for 3 different resident levels. It also fosters increased faculty participation in residency education.

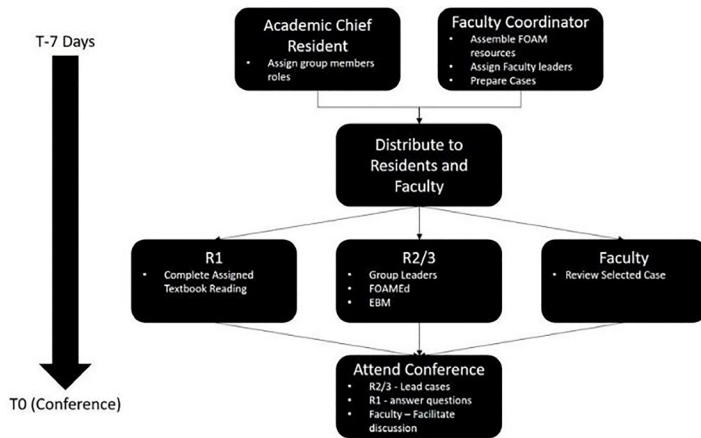
### Educational Objectives:

1. Interns will develop a foundation of basic EM core content
2. R2 and R3 level residents will learn more challenging and evidence-based practices for diagnosing and managing EM patients
3. Residents will become more confident in teaching in the small group setting
4. Faculty will participate more in residency conference education and will be more engaged in teaching

### Curricular Design:

1. An 18-month curriculum based on the model curriculum for EM with 1 to 2 core topics covered each month
2. A problem-based learning slide set is created containing 3 different cases based on the core topic of the month. Each slide set contains progressively difficult questions relating to the case, with teaching points immediately after each slide to answer the clinical question.
3. Groups of residents from all levels are created for each session:
  - a. Interns: assigned core content reading from a textbook. Questions for each case are initially directed to them
  - b. R2 and R3 residents: assigned review articles and FOAMED resources on each case. One resident in each group is assigned to be the group leader for one case. This resident must TEACH the content on the slides. One additional resident in each group is assigned to bring one evidence-based article, and discuss what is relevant to his or her assigned case.
4. Faculty are assigned to be the facilitator for ONE case for the group discussion, and rotate between the 3 groups every 25 minutes. See Figures 1 and 2.

**Impact/Effectiveness:** Although this format involves more work for all residents, it has had a positive impact on our resident learning and has increased our faculty involvement and teaching at weekly conferences.



**Figure 1.** Roles and responsibilities of each participant of “flipped conference” day.

Assignments	Case 1	Case 2	Case 3
Presenter	PGY2 #1	PGY2 #2	PGY2 #3
EBM	PGY3 #1	PGY3 #2	PGY3 #3
Faculty	Faculty 1	Faculty 2	Faculty 3

Time	Group 1	Group 2	Group 3
0000	Case 1	Case 3	Case 2
0025	Case 2	Case 1	Case 3
0050	Case 3	Case 2	Case 1

**Figure 2.** Example of assignment sheet and schedule for “flipped conference” day.

## 14 Capturing Resident Observed Concerns Regarding Both the Patient Safety and the Health Care System: An Innovative Use of Resident Logs

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**Background:** The Accreditation Council on Graduate Medical Education (ACGME) places an emphasis on Quality Improvement (QI) and Patient Safety (PS). LEAN theory suggests that front line clinical staff may be best able to make suggestions for improvement to management.

**Educational Objectives:** We sought to engage every resident in QI and PS by requiring submission of a “Health Systems” log.

**Curricular Design:** After review and approval by the Program Evaluation Committee (PEC), the residency program required each resident to submit one “Health Systems” log per Emergency Medicine (EM) block. The program is a dually approved PGY 1-4 program training 12 residents per class based

at a suburban integrated health care network. The Emergency Departments and EM program are all Chaired by a unified network Department with a dedicated Vice Chair of Quality. “Health Systems” logs were submitted using New Innovations (NI) software. Residents could choose to either submit an observation of the Health Care System or a formal PS report to Risk Management (RM) and Process Improvement (PI) in an effort to capture both near misses and actual events. PS reports were initially submitted using RL Solutions software, with the resident only logging the submission number in NI for RM purposes. The requirement was implemented in the 2016-17 academic year. Table One demonstrates the information collected.

**Impact/Effectiveness:** Since August 1, 2016, 104 logs have been submitted, of which 21 were PS. The observations most commonly concerned communication, including shift change, followed by stocking. Other issues observed included fall prevention, use of checklists/protocols, staffing/hallway beds, triage, and cognitive error. Next steps include formalizing feedback on the logs and utilization to direct future, PGY class-based QI projects.

**Table 1.** Information with the “Health Systems” Log.

All Logs: Date of Log	Resident Name	PGY Year		
PS Logs also Include:	Event Date	RL Solutions Submission Number		
System Observation Logs also Include:	Date of Observation	Describe an instance when the health care system was not optimal for patient safety	Identify possible root causes for this observation	Suggest possible counter measures to prevent a similar observation in the future

## 15 Clinical Competency Committee by Wiki

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**Background:** The Accreditation Council for Graduate Medical Education (ACGME) mandated mandates residency programs to form a clinical competency committee (CCC) to evaluate residents across the milestone continuum. However, there is not a way delineated onto guidelines define the structure of the CCC or how the information is obtained, reviewed and submitted. Wide and there is a wide variety in CCC structure and function across programsexist. CCCs meet at varying intervals across residency programs. In the majority of programs the primary focus of discussion are the resident progress against the milestones.

The Regions Hospital Emergency EM Residency Program is a 3- year program with a total of 30 residents. The CCC meets