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## 46 Resident as Expert: A Novel Approach to Teaching and Practicing Quality Improvement

*del Portal D, DeAngelis M, Schreyer K, Repanshek Z / Lewis Katz School of Medicine at Temple University, Philadelphia, PA*

**Background:** Physicians are increasingly expected to participate in quality improvement. At teaching hospitals, residents constitute a valuable “brain trust.” As front-line providers, they identify operational inefficiency. As learners, they review the latest literature to inform clinical practice. Naming the resident learner as the department’s “expert” in a clinical area provides a means to harvest this “brain trust” to improve patients’ experience and outcomes. However, many residents have limited, if any, experience in conducting quality improvement.

**Educational Objectives:** To create a framework for residents to learn and practice quality improvement while developing an area of expertise within the broad scope of emergency medicine (EM) practice.

**Curricular Design:** Each of 36 EM residents in a PGY1-3 program selects a clinical area on which to focus. With a faculty advisor, the resident critically appraises the latest published literature and assesses current institutional practice. The expert identifies a need and develops a quality improvement project.

A steering committee reviews the progress of each project annually to identify barriers, opportunities, and methods of dissemination. These may include educational sessions (lectures, workshops, simulation) or updating existing protocols/guidelines.

The expert becomes the department’s “point person” for the topic area, leading discussions on rounds and presenting at resident conference. Faculty advisors support the resident experts by directing them to high quality sources of information, helping to select metrics, and sharing publication/presentation opportunities.

**Impact/Effectiveness:** In the pilot year (2015-2016) only PGY1-2 residents (n=24) participated, so as to develop longitudinal projects. At the end of the year, nearly 90% reported they learned about their topic. The majority felt such a program would help them professionally and help their department/institution.

We identified opportunities for clarifying expectations, as well as improving support from advisors and from the steering committee. We added flexibility with regard to topic selection and types of projects. In fewer than 18 months, the program has generated 16 new or updated clinical protocols or guidelines, and resident involvement in quality improvement has increased dramatically.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
I have learned about my assigned content area by participating in the Content Expert Program (CEP).	0.00% 0	4.17% 1	8.33% 2	58.33% 14	29.17% 7	24
I believe the Content Expert Program will help me professionally.	4.17% 1	0.00% 0	25.00% 6	41.67% 10	29.17% 7	24
I believe the Content Expert Program will help my department/institution.	0.00% 0	0.00% 0	20.83% 5	54.17% 13	25.00% 6	24

## 47 Role of Teaching Resident in Emergency Medicine Residency Program

*Mauldin J, Mueller P /Orlando Health, Orlando, FL*

**Background:** Medical student rotations in Emergency Medicine (EM) can be difficult for students to obtain autonomy and proficiency due to high volumes and acuity. The creation of a dedicated teaching rotation is a novel concept that enables students to have constant supervision and guidance by a senior resident while honing vital skills like obtaining H&P’s, formulating differential diagnoses and treatment plans, and performing a wide array of procedures rarely afforded in a busy Emergency Department (ED). This rotation allows the senior resident to become a teaching supervisor and ultimately introduces them to the role as a clinical educator.

**Educational Objectives:** Expose students to patient assessment, procedures, and emergency management of patients entering a metropolitan ED and Trauma Center under the supervision of a senior resident. Allow residents the opportunity to demonstrate level 4-5 milestone achievement in sub-competencies such as General Approach to Procedures, Airway Management, Practice-based Performance Improvement, Systems Based Practice, Wound Management and Vascular Access.

**Curricular Design:** Structured educational rotation with 4th year medical students working directly with 3rd year EM residents at high-volume Level 1 Trauma Adult and Pediatric ED’s. Students were scheduled fifteen 8 hour shifts during their rotation, five of which were in the pediatric ED where there was no dedicated teaching resident. Students were involved in their patients’ care throughout their ED stay from door to disposition, including all associated procedures. They were also involved in interesting educational cases that were in the ED during their shift (trauma alerts, medical codes, etc.). Students and residents completed surveys via free text response and online ranking (1-9) respectively at the end of the rotation.

**Impact/Effectiveness:** At the end of their rotation, each student was asked to complete a free response survey including the best/worst aspects of their rotation. From 08/12-10/16, a total of the 214 students submitted surveys. Of these students, 140/306 (46%) of responses found the teaching resident as the best aspect of the rotation. 51/241 (21%) responses listed “Nothing/ Not Applicable” as the