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# Title

A Novel Curriculum In Free Open Access Medical Education (FOAM) Utilization and Evaluation For Emergency Medicine Residents

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Image 2.

#### **4** A Novel approach to Neonatal Resuscitation Education for Senior Emergency Medicine (EM) Residents

Buchanan J, McCormick T, Roosevelt G, Sungar W, Angerhofer C, Byyny R, Moreira M / Denver Health Medical Center; Denver Health and Hospital Authority

**Introduction:** Caring for critically ill children, and in particular neonates, is a low-frequency and high-stakes scenario; EM physicians must be facile in the management of these stressful cases. Most emergency medicine training focuses on experience in pediatric ICUs, neonatal ICUs or the resuscitations that occur in the ED. We describe a novel approach to EM resident training that specifically augments skills in neonatal resuscitation.

**Educational Objective:** Our educational objective was to design a rotation focused on training in and exposure to neonatal resuscitation. During this novel rotation, senior EM residents attend emergent deliveries and resuscitations in the hospital as part of the neonatal resuscitation team.

**Curricular Design:** Prior to this week rotation, residents received training from a pediatric ED nurse educator and pediatric EM attending in neonatal resuscitation and obtain Neonatal Resuscitation Program (NRP) certification. The residents attend and participate in all deliveries in the hospital. They also participate in the obstetric, PICU, and NICU rounds and may assist with procedures in those units. At rotation end, residents give a short presentation on a neonatal resuscitation topic. On rotation completion, they are expected to set-up a neonatal resuscitation, lead the team through the NRP resuscitation, and care for the critically ill newborn in the first minutes after birth.

**Impact:** After implementation during the 2018-2019 year we compared the rotation's mean score by senior residents to all other off-service rotations (1-lowest and 4-highest). The mean score of the neonatal resuscitation rotation was 3.67 (95% CI; 3.49-3.84), compared to 3.00 (95% CI; 2.84-3.16) for all other off-service rotations, the highest ranked senior rotation. Programs should consider implementing a directed neonatal resuscitation experience for EM residents given the critical and high risk nature of caring for this low frequency population.

# A Novel Curriculum In Free Open Access Medical Education (FOAM) Utilization and Evaluation For Emergency Medicine Residents

#### Fisher K, Turner A, Pillow T / Baylor College of Medicine, Baylor College of Medicine

**Objective:** Implement a novel curriculum for resident physicians to obtain critical evaluation skills for FOAM resources

1) Define FOAM, its impact and utility 2) Use tools for evaluation and 3) Implement these skills to apply FOAM sources in didactic learning and real-time clinical applications

**Abstract:** Free open access medical education (FOAM) resources are ubiquitous and frequently utilized in Emergency Medicine (EM). EM residents regularly use FOAM sources for on-shift clinical application and didactic learning without the necessary training or tools to critically analyze their variable quality and utility. Though FOAM has been used and studied for content delivery, no formal curriculum exists to our knowledge to teach evidence-based evaluation of FOAM sources. We present the first, formal didactic curriculum on critical evaluation and application of FOAM sources for Emergency Medicine residents.

The goal of our curriculum is to focus on the process of utilizing FOAM rather than the content itself. The curriculum consists of an innovative, structured series of small group didactic sessions each relating to a core component of FOAM utilization and evaluation in real-time using evidence-based principles (Table 1). Sessions were designed following elements of problem-based and team-based learning in a small-group, active learning setting and include preparation, a short didactic component, an interactive exercise and a group discussion. Each session focuses on a core concept in FOAM utilization and evaluation in stepwise fashion using an emerging clinical content area as a concrete example (Table 2). All sessions include pre- and post-surveys as assessments of content acquisition and session effectiveness.

This curriculum has been piloted at our institution with success. Residents unanimously expressed satisfaction with the session format, felt more comfortable using FOAM sources clinically in real-time, and expressed desire for further knowledge in the area.

Immediate next steps include completion of our institutional pilot and development of a summative tool to be used clinically to demonstrate effectiveness and application of the FOAM curriculum. Long term, we plan to expand our innovative curriculum and add assessments to measure its effectiveness.





#### Table 2. Curriculum Design and Sample Session Format.



#### 6 A Residency Driven Emergency Medicine Wellness Initiative

#### Robak M, Romeo M, Worthing J, Tsao J / NYU/Bellevue Emergency Medicine

**Introduction:** Burnout has become widely prevalent and has been linked to physicians leaving the workforce, reduced patient satisfaction, and medical errors. EM residents are at

particularly high risk. To combat this issue, the NYU/Bellevue EM Residency program formed a task force with the mission of creating a culture that promotes individual and group wellbeing as well as nurturing workplace enjoyment, creating outlets for stress mitigation, and allowing a forum to bring co-workers together to cultivate a community through new relationships, collegiality, and peer support.

**Objectives:** The task force proposed the creation of a Residency Wellness Committee that was approved and is now fully funded by the Emergency Department with a budget of \$24,00 annually. The Committee's goals include: transformation of attitudes towards mental health, enhancing self-awareness and reflection, personal growth and emotional support. Enhancing resident wellness by transforming attitudes towards mental health, enhancing self-awareness and reflection, promoting personal growth and providing emotional support

**Design:** Within the hospital, the Committee promotes multiple ongoing endeavors. These include Project SafeSpace, closed-door meetings between mental health professionals and residents; Resiliency Round, a series of didactic sessions focused on mindfulness techniques; the Exceptional Events Reporting system, a system to highlight excellent resident medical care; and the Peer Support Network, a multi-disciplinary group of providers trained in supporting practitioners after psychologically taxing cases.

Beyond the hospital, the Wellness Committee strives to provide an outlet for mental and physical health as well as community-building, including monthly fitness and cultural events, as well as seasonal outings to take advantage of the region.

**Impact:** The Wellness Committee surveyed physicians within the ED on the impact of the wellness committee. 87% of respondents either strongly agreed or agreed has improved residency wellness. Qualitative feedback was also overwhelmingly positive, largely expressing appreciation of the Committee's efforts.

#### A Simulation-Based Program of Assessment for Emergency Medicine Milestones

#### Leung C, Yee J / Ohio State University

**Background:** EM residency programs are required to report milestone levels for all residents biannually, though there is no consensus on the best methods for assessing milestones. Traditional methods of assessing clinical competence are often confounded by variability of patient presentations and the clinical environment. Assessing management of critically ill patients may also be hindered by infrequent incidence of pathology. High fidelity simulation may overcome these issues by offering highly reproducible