

of the curriculum on a Likert scale (0=poor, 2=below average, 5=average, 8=above average, 10=excellent). Means on all of the components of the curriculum ranged from 7.1 (reflecting writing exercise and practice making empathetic statements) to 8.8 (discussion of positive ED patient experiences). 9/10 residents recommend the training to other residents. This curriculum can be easily incorporated into residency conference didactics nationally.

## 65 The Consultant Chat: A Novel Didactic Method for Specialist Presentations to Emergency Medicine Residents

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**Background:** While emergency medicine (EM) faculty are generally the most appropriate teachers for EM residents in the didactic setting, there are particular components of the EM curriculum that benefit from specialist input. Many times, however, specialists have little appreciation for the challenges inherent in EM practice. In addition, presentations by specialists may address topics that are relevant to their practice, but outside the scope of EM. Residency leaders feel challenged in giving constructive feedback to speakers from outside departments, as many specialists are contributing their time without contractual requirements or personal benefit.

**Educational Objectives:** We developed the “Consultant Chat,” a novel didactic format for specialists that are frequently consulted by the ED. These experts are motivated to share knowledge with our residents that will impact patient care and may even prevent unnecessary phone calls from the ED. Furthermore, the educational needs of our residents are met without delving into issues outside the scope of EM.

**Curricular Design:** Expert consultants are selected by the senior EM residents and invited to come have a “chat” with our residents for one hour during the EM conference time. These specialists do not prepare a presentation; they simply answer questions and share their experience. Residents are instructed to come prepared with questions that are specific, case-based, or pragmatic: how would you expect us to approach “x” presentation? Under what circumstances would you want to be called in the middle of the night? What is your biggest “gripe” about things that you have seen from the ED? Take home points are recorded and distributed to residents as a summary document of “clinical pearls.”

**Impact/Effectiveness:** The “Consultant Chat” has greatly fostered collaboration with our specialists from other departments. The consultants feel honored to be selected by the residents, there is minimal time commitment on their part, and the informal atmosphere is engaging for all parties. The residents drive the discussion to meet their education needs and this self-directed learning style allows them to

derive maximal value from the session. Lastly, our faculty enjoy attending these sessions, as they can contribute their experience and management viewpoints and engage their specialist colleagues in a friendly educational atmosphere.

## 66 The Effectiveness of Individualized End-of-Shift Milestone Assessment Tools for Remediation

*Lall M, White M, Stettner E, Siegelman J/Emory University, Atlanta, GA*

**Background:** Among EM residency directors, there has been debate over how best to assess residents using the milestones in particular, when remediation is needed. Many programs currently use an end-of-shift (EOS) evaluation tool that presents the milestones for levels 1-5 for multiple sub-competencies. Because each sub-competency level encompass so many components, it is difficult to provide residents with detailed feedback regarding specific areas requiring improvement and to design an appropriate remediation plan.

**Educational Objectives:** Our objective was to create individual assessment tools (IATs) to identify the specific milestones requiring improvement for residents on remediation. Secondary objectives included assessing resident satisfaction with the IATs and perceived quality of faculty feedback.

**Curricular Design:** An IAT was designed for each of 5 PGY II residents on remediation. Each IAT included multiple milestones encompassing levels 2-4, with the language taken directly from the emergency medicine milestones. The IATs assessed 8-20 milestones and were used for a period of 2-3 months. At the end of each clinical shift, the resident was instructed to provide their IAT to the attending who would rate the resident’s performance as either meeting, having some difficulties, or failing to meet the milestone. The completed IAT was returned to the PGY II Assistant Residency Director (ARD). A paper form was employed to facilitate real time evaluation.

**Impact/Effectiveness:** The IAT allowed us to collect multiple data points for each milestone, and compare that data with the EOS evaluations obtained during the same time period. These were found to be concordant across almost all milestones. The residents received more IATs compared to standard EOS evaluations during the remediation period (Table 1). This approach can be applied to any individual resident to identify specific deficiencies within a sub-competency, facilitating a more complete and targeted approach to remediation. The residents using the IATs were anonymously surveyed regarding the tool. They reported that the IATs were easy to use, and that they were more likely to receive honest feedback about their shortcomings and more concrete suggestions for improvement using the IAT. The IATs worked well as a remediation tool because they provided

a more focused assessment of resident performance with specific written feedback.

**Table 1.** IATs versus standard EOS evaluations.

Resident	# Sub-competencies (IAT)	# Milestones (IAT)	# IATs Completed	# Shift evaluations Completed
1	11	20	19	12
2	11	20	11	4
3	4	6	20	14
4	10	16	12	12
5	10	16	14	7

## 67 The EMR Playground as a Platform to Train Novice Learners in Safely Ordering Weight Based Medications

*Spillane L, Nobay F, Marks L, Acquisto N/University of Rochester, Rochester, NY*

**Background:** Medication Error remains one of the most frequent problems plaguing patient care especially in pediatric patients requiring weight based dosing. Appropriate weight based dosing is a difficult skill to acquire because of a lack of specific training using an EMR, poor system architecture design for practical ordering and novice learners unaware of potential pitfalls of the EMR. Based on the observations of faculty, nurses and ED pharmacists, we identified common sources of errors and designed a curriculum to address these inadequacies in training.

**Educational Objectives:** Provide residents with the skills required to safely order weight based medications in realistic volumes and doses using the EMR. In addition, we wanted to emphasize the concepts of safety gaps inherent to an order entry system.

**Curricular Design:** Patient scenarios were developed in which learners were asked to order commonly prescribed pediatric weight based medications that had been identified as “at risk for error” orders. A virtual learning environment was created within the EMR “Playground”. Learners completed 6 cases in small groups with each learner responsible for a single order entry. At the conclusion of the session, faculty led a review of all orders, types of errors commonly encountered, and demonstrated correct order entry techniques emphasizing systems based issues and strategies to avoid errors. The content was reinforced through a time lapsed review of the learning objectives

**Impact/Effectiveness:** Pediatric faculty, nurses and pharmacists described a decrease in the numbers of errors frequently made when prescribing pediatric weight based medications. They noted a decrease need to clarify minimum and maximum doses and less time correcting impractical

medication orders. Residents felt that they were more confident in ordering pediatric weight based medications using the EMR. This workshop highlighted the danger inherent in using a weight based medication order entry system in the pediatric population. The principles can be extrapolated to a wide range of medications not covered specifically in the scenarios. Future goals would include increasing the time allocated for the workshop, availability of the workshop to non-EM resident learners and implementation of a formal milestone based assessment of competency.

## 68 The Long Path of Milestones

*Calandrella C, Nelson M, Cassara M/North Shore Manhasset, Manhasset, NY*

**Background:** Over the last few years, we have improved the metrics that help guide resident progression and overall competence but we have no great measurement of how we, the faculty are evaluated and evaluating. Often we hear about the tools that we are using to help us evaluate residents appropriately and which method is best to achieve that evaluation but no model exists for the evaluators to be educated and evaluated, We propose a faculty development curriculum to improve the ability our staff to appropriately evaluate residents. We held our first if several sessions to determine if we can all agree on the specific milestone being evaluated in a simulated patient care module and which level that resident achieved.

**Educational Objectives:** The objectives are to improve the understanding of milestones to the entire faculty, from recent graduates to long term physicians.

To introduce objective items that all attendings can use as a guide to help them rank the residents progression thru the milestone correctly.

**Curricular Design:** Our course consisted of a four hour didactics course that consistent of a guest speaker that introduced the evolution of the milestones and their role in resident education and progression.

Next we used four videos of clinical scenarios that highlighted two appropriate interactions of patient care and two inappropriate interactions. The attending group from 2 campuses (approximately 30) then had small group discussions on which milestones were being judged and which level they were achieving thru the simulated encounter.

The session concluded with a summary of which aspects to focus on when evaluating residents and the importance of sending more evals to have a broader data base.

**Impact/Effectiveness:** Since the completion of this session our attending submission rate for end of shift eval forms has increased. The residents are getting more feedback and are content to get more comments as a source of input than just a standard form submitted to corresponding milestones.