

34	Biases and Mitigation Strategies	Identify and teach about common cognitive biases and strategies to mitigate them.
35	Time Out!	Use and teach diagnostic time outs while engaging in patient care.
36	Navigating a Minefield	Model behaviors that limit the effect of biases on clinical decision making.
37	Learners Everywhere!	Effectively engage and manage learners of multiple levels.
38	Teaching to Teach	Teach teaching and supervision strategies to senior learners.
39	Milestones	Explain the intended role of the milestones in EM training.
40	Entrustable Professional Activities (EPAs)	Explain the concept of entrustability as it relates to the EPAs.
41	Gimme a Break	Role model breaks in clinical shifts. Help learners take them, too.
42	Your Feedback Sandwich Gives Me Indigestion	Utilize evidence-based feedback frameworks.
43	You Have Needs, Too!	Solicit and incorporate feedback on clinical teaching from learners.
44	Hooray for Science!	Incorporate evidence-based medicine into clinical teaching.
45	What does efficiency even mean?	Help learners reframe their goals to be "efficient."
46	Efficiency is an outcome, not a goal	Teach residents developmentally appropriate strategies for improving efficiency.
47	Sign-Outs as Teaching Tools	Use team sign-outs as opportunities to assess communication.
48	Optimizing Communication with Consultants	Teach principles that improve communication with other members of the care team.
49	Assessing Communication with Patients and Families	Observe and provide feedback on communication with patients and families.
50	Addressing Practice Variation With Evidence	Assist trainees in putting faculty practice variation into context.
51	Winter Blahs	Share strategies to overcome seasonally-related job frustrations.
52	Happy New Year!	Review mid-year expectations with learners.

## 29 Organize and Improve Your Clinical Competency Committee With Google Sheets

Fallon T/ Maine Medical Center

**Objective:** We identified the process of preparation for the Clinical Competency Committee (CCC) meeting as time consuming and prone to individual variability. We aimed to create a data tool that would allow us to easily aggregate, compare, and evaluated data and present this information to our CCC.

**Abstract:** The clinical competency committee (CCC) must review a broad array of data in an efficient and standardized way. Creation of a structured tool will improve the work of the clinical competency committee and resident assessment.

CCC leaders set out to design a tool that would organize the available data ahead of the CCC meeting, facilitate review of this information by the faculty, and allow for a structured presentation

to the committee. We also hoped to reduce the amount of repetitive data entry required by our program coordinator and simplify the process of semiannual review meetings.

A CCC Data Tool was created using Google Sheets. Fields are color coded to identify those that are completed by the program coordinator during a data entry phase as well as those to be completed by the faculty reviewer. A presentation slide is projected during the CCC discussion and used to identify key data. Additional pages present a graph of the 23 milestone scores and aggregate data for export. Color codes are used to highlight milestones where the resident has failed to progress or is more than a standard deviation from the mean for their class. Data is exported using a mail merge to create a semimanual review letter for each resident that can be used by the program director to facilitate the feedback meeting. This ensures that the work product of the CCC is effectively communicated to the resident.

CCC members reported that they would recommend this system to another EM program. Faculty noted decreased time required to prepare for the CCC and a more uniform format to the meeting. Moving forward, we will compare inter-rater reliability amongst faculty and provide ongoing professional development for our CCC members. Our program coordinator estimated that this has reduced her preparation time by over 50% for each meeting and she no longer needs to import hand written data into an electronic format. This system has been adopted by a second EM training program.

Table 1.

	A	B	C	D
38	SDOT	SDOT By:	SDOT Date:	
39	SDOT 1 Data	Sholl	not done yet	
40	SDOT 2 Data	Barker	6/4/18	
41				
42	ROSH Reviews Avg%		84%	
43	ROSH Reviews Up to Date through:	July- mini test 2 due & August		
44	Cumulative Conference Attendance		94%	
45	Moonlighting	No	-	
46	Administrative/Jana Comments:	ROSH review, Patient Care FUs June 2018 & July, & August Teaching duties		
47	Research Project Complete	Yes	-	
48	Research Project Title	Pedi Abdominal Catastrophe Image Published		
49	Previously Completed Research Projects	US Guided hematoma block proposal writing and surprise question in Sepsis drafting manuscript		
50	In-Service Exam:			
51	PGY1		87	
52	Percentile		99%	
53	Chance of Passing		99%	
54	PGY2		97	
55	Percentile		99%	
56	Chance of Passing		99%	
57	PGY3			
58	Percentile			
59	Chance of Passing			
60				
61	Total # Procedures		1224	
62	Class Range Procedures	740-1,543		
63	Specific Procedures Below Required	Peds resusc (6/15), Peds Trauma 8 (10)		
64				
65	Milestones	Avg		PRN Comments:
66	Emergency Stabilization	PC1	4	Fallon: At the top of his class. Haydar: Very strong. Managed a trauma patient and remained the clear team leader while also placing femoral A line and working with trauma attending on REBOA.
67	History and Physical	PC2	3	Nelson: Rarely have to add to his presentation, he has the answers. A few comments to be aware of his affect with patients and to not minimize patients with less emergent complaints.
68	Diagnostic Studies	PC3	3.5	Nelson and Perron: Occasionally hesitant to do it the attending's way. Fallon: Takes medical management to the next level, starting ICU therapy, etc. Crispo: Occasionally has difficulty revising differential in response to updated information.
69	Diagnosis	PC4	3	Fallon: Considered appropriate med changes for patient being intubated after being found down. Did appropriate post ROSC management of pt in MCB.
70	Pharmacotherapy	PC5	4	Perron: One of the few areas that is not a strength.
71	Observation and Reassessment	PC6	3	MacKenzie: Don't see admission as a failure. Fallon: consider social reasons for admission, don't be dogmatic.
72	Disposition	PC7	3.5	15.7 Ppt/shft (11.5-17.3), 1.97 per hour (1.49-2.17), multiple comments that he does this well but should push himself to be at the top of his class for efficiency.
73	Multi-Tasking	PC8	3.5	

Table 2.

	a	b	c	d	e	f
1	John Smith			Monitor Meeting	Cliff	
2	CCC Reviewer: Fallon			SDOT	SDOT By:	SDOT Date:
3	From Prior CCC:			SDOT 1 Data	Sheet	not done yet
4	Strengths:			SDOT 2 Data	Banker	6/1/18
5	1 Multi-tasking			ROSH Reviewer Aug/15		84%
6	2 Medical Knowledge			ROSH Reviewers Up to Date through	July-Nov 16/2	
7	3 Professional Values			Conference Attendance	84%	
8	4.6			MOOTing/ing	No	
9	Opportunity			ROSH review, Patient Care	Flu, June 2018	
10	1 History & Physical			Administrative/Jana Comments:	Teaching duties	
11	2 Technology			Research Project Complete	Yes	Pod Abdominal Catastrophe Image Published
12	3 Patient Centered			In-Service Exam:		US Guided hematoma block proposal writing and surprise question
13	4.6			PGY1	87	in Septe drafting manuscript
14	Team Management			Percentile	99%	
15	Current CCC:	Milestone	Summative Statement	Chance of Passing	99%	
16	Strengths:		Overall competence with critical care including medical management, team leadership, and procedural competency is a strength for Dr. Smith.	PGY2	97	
17	1 Emergency Stabilization		Continued performance at 99 percentile nationally on in-service exam with matching clinical knowledge.	Percentile	99%	
18	2 Medical Knowledge		Across the board in terms of general procedures as well as lines and airway management he is facile and confident.	Chance of Passing	99%	
19	3 Communication		Owns the critical care room, is the clear leader through his voice and actions.	PGY3	Percentile	
20	4.6			Chance of Passing		
21	Team Management			Total # Procedures	1224	
22	Opportunity		Although performing well, he has been encouraged by multiple attendings to push himself and be the top of his class.	Class Range Procedures	740-1643	
23	1 Multi-Tasking		Believed on administrative duties. Needs to be a leader as a chief.	Specific Procedures Below Required		
24	2 Accountability		Seems to be improving. There are some very positive comments. Still some comments on his interaction with patients with less acute complaints. Be sure to address patient's concerns.			Peds reusu: 6(15), Peds Trauma 8 (10)
25	3 Patient communication			Milestone Average		
26	4.6			Low	3	
27				High	4	
28	Summative Comments:		Dr. Smith has demonstrated himself to be a strong clinician over his training and this is evident on the PGY3 year. He has a strong mastery of critical care medicine which is evident not only in medical knowledge but the top of the team management and procedural skills around CC. Moving forward, he can work on his accountability in the program and his administrative duties as well as his communication with patients, ensuring that he establishes a therapeutic relationship independent of the patients chief complaint.			

### 30 PEM for EM: A Novel Pediatric Emergency Medicine Curriculum

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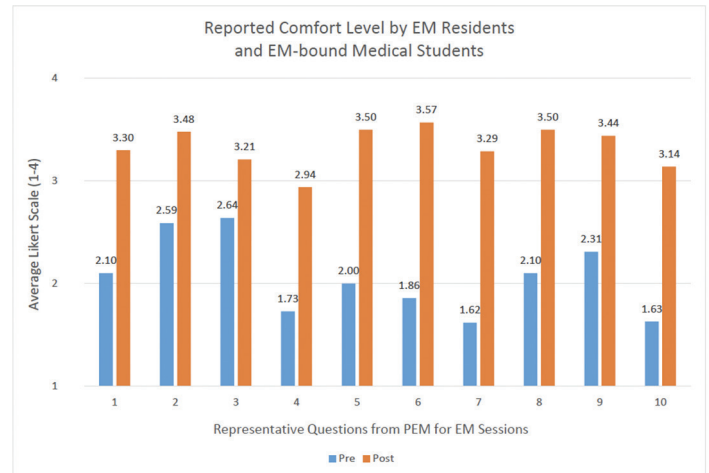
**Introduction/Background:** Children comprise approximately 20% of the emergency medicine (EM) patient population and graduates of EM residencies report a desire for more training in pediatric emergency care. Expertise from Pediatric EM (PEM) trained physicians may not be available at every institution.

**Learning Objective:** Design a comprehensive, interactive pediatric emergency medicine curriculum that is translatable to any EM residency.

**Curricular Design:** A novel PEM curriculum was devised by PEM fellowship trained physicians/educators. Each session comprised a one-hour module on an essential PEM topic. They involved team-based learning, flipped classroom, simulation, procedural workshops, and educational games. Examples included, "The Crumping Newborn," "Pediatric Respiratory Distress Toolbox," "Oregon Trail: Pediatric ID in the ED," and "Magic Bubbles: The Art of the Pediatric Exam, Pain Control, and Distraction." A facilitators' guide, educational resources, and any necessary stimuli were provided to PEM faculty, who led the module and contributed feedback. Learners were EM residents at all levels and some sessions also included rotating EM-bound medical students. Anonymous pre and post-session evaluations were collected.

**Impact/Effectiveness:** PEM for EM implemented gamification, team-based learning, and simulation to teach essential pediatric EM care. Pre and post-session Likert 1-4 evaluations appraised learner self-assessment of preparation and/or comfort level with common pediatric ED management. The 10 modules, each of which were evaluated individually,

showed an increase in confidence level (see Figure 1) and qualitative feedback was overwhelmingly positive. Suggested areas for improvement included requests for follow-up materials, which were incorporated in later sessions, and use of this curricular style in other aspects of didactics. The curriculum is currently in preparation for use at other institutions, including an additional site implemented this year.



Key: Representative Questions from PEM for EM Sessions

- 1) Appropriate BRUE Management
- 2) Abdominal Emergency Ddx by Age
- 3) Common Peds ID Diagnosis
- 4) Respiratory Support Use
- 5) U/S for Intussusception
- 6) Restraint for Procedures
- 7) Palatable Abx Choice
- 8) Salter-Harris Fracture Identification/Management
- 9) High Risk Non-Accidental Trauma Identification
- 10) Perform Peds GU Exam

Figure 1. Reported Comfort Level by EM Residents an EM-bound Medical Students.

### 31 Pork Belly Procedural Trainers: Creating Realistic, Cost-effective and Reusable Simulation Tools for Resident Education

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**Introduction:** The field of emergency medicine (EM) requires physicians to master a variety of different procedural skills. However, many commercially available task trainers and simulation mannequins lack fidelity and are extremely expensive. Often made of plastic or rubber, they make the overall experience unrealistic and unsatisfying. Pork belly with tissue and skin can be used to create several realistic and cost effective procedural trainers.

**Educational Objectives:** Pork belly simulation trainers (PBSTs) were created with the following educational objectives in mind: 1) provide learners with an authentic procedural experience, replicating human flesh and 2) allow learners to refine and perfect their procedural skills without harming patients in the process. Pork belly simulation trainers were