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Incorporation of Team Based Learning in Emergency Medicine Residency Training

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Curricular Design: Each teaching session lasts 15 minutes and occurs during afternoon rounds. Oral boards cases are chosen from a commercially available source. A senior resident moderates each case and a junior resident acts as the oral boards examinee. At the case conclusion, the senior resident solicits questions from all residents. They provide teaching points and are encouraged to relate the case to a patient presentation from that shift. A monthly orientation email is sent to all residents and includes a template of the oral boards format. The residents are emailed monthly to solicit feedback.

Impact: This innovation provides an easily implementable means to expose residents to the oral boards format and through repetition, increases familiarity with that format. In a survey of residents conducted 5 months after the initiation of these teaching sessions, the majority of participants expressed an increased level of comfort with the oral boards format (Figure 1). With regards to EM knowledge base, 14 of 15 junior residents somewhat or strongly agreed with the statement, "Participating in the oral boards cases has improved my understanding of core EM topics." Finally, this interactive format provides senior residents experiences with both didactic teaching and the opportunity to practice deliberate feedback with the examinee.

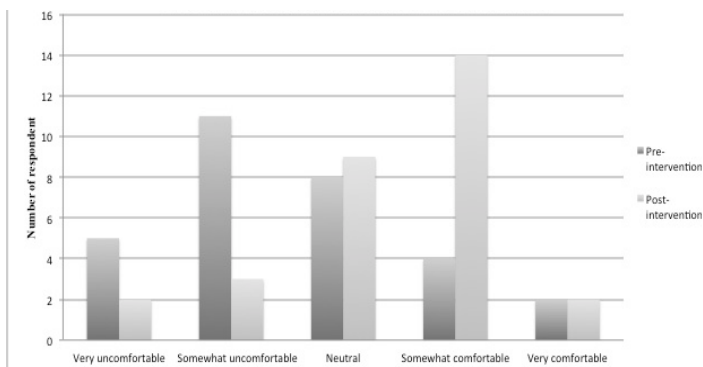


Figure 1. Resident reported comfort level with the oral board format before and after implementation of a daily oral boards teaching case.

35 In the Eye of the Beholder: Differences in Perception of Patient Turnover Between EM and IM Residents

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Background: Insufficient patient handoffs causes a significant source of medical errors that can lead to serious morbidity and mortality. Proper communication of patient disease, treatment, and pending issues is essential to patient

safety and quality of care.

Objectives: 1) Identify differences between Emergency Medicine (EM) and Internal Medicine (IM) residents' perceptions of patient turnover between the two specialties 2) Identify areas to improve communication.

Methods: This study utilized a 12 question survey to poll EM residents (n=29) and IM residents (n=49). A Wilcoxon rank-sum test was used to analyze data and a p value of 0.004 was assumed as significant after applying a Bonferroni adjustment. Eligible participants were all EM residents and second/third year IM residents with hospital admissions experience.

Results: 29/36 eligible EM and 49/70 eligible residents completed the survey. EM residents felt more strongly that current handoff strategies are comprehensive (p=0.0005), efficient (p=0.0029), and safe (p=0.0018) when compared to IM residents. IM residents reported that often patient turnover from the emergency department did not correlate to the patient's needs (p=0.0008) and bed requests often needed to be changed to match the patient's level of care (p=0.0001). IM residents felt more strongly that there needs to be improvement in patient handoff between specialties when compared to EM residents (p=0.00001). Both EM and IM residents agreed that standardizing verbal and written sign-out and improving electronic medical record documentation are possible ways to improve communication.

Conclusions: There are significant differences in perception of patient hand off between EM and IM residents. EM residents are generally satisfied with patient turnover while IM residents feel that there needs to be improvement in current practices. Possible outlets for improvement are standardization of verbal and written handoffs between providers.

36 Incorporation of Team Based Learning in Emergency Medicine Residency Training

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Educational Goal: To introduce Team Based Learning (TBL) as an alternative to didactic lectures in an emergency medicine (EM) residency program.

Background: The Accreditation Council for Graduate Medical Education (ACGME) requires 5 hours per week of regularly scheduled didactic conferences for EM. Many undergraduate and graduate schools have shifted to small group learning, case based instruction and in some institutions TBL but residency programs for the most part have not.

Methods: The EM Residency Program at LIJ is fully accredited with 47 residents. In selected sessions TBL sessions were implemented during scheduled didactics. Prior to the session residents were assigned reading assignments and a case related to the topic. At the beginning of the TBL session the residents were divided randomly into groups of 5-6 so that each group consisted

of an equal number of senior and junior residents. The case was presented followed by an Individual Readiness Assurance Test (IRAT) based on the assigned readings. After the IRAT, the same test was administered to the teams Group Readiness Assurance Test (GRAT) and the teams simultaneously displayed their answers using lettered cards. Discussion and misunderstanding of content or error in reasoning were resolved. If all teams displayed the same answer, the instructor added a pearl or raised a question to stimulate discussion. The groups then discussed the case and presented and defended their final diagnosis. Preliminary satisfaction data was collected from the residents. The scale had 6 criteria that were scored from strongly disagree (1) to strongly agree (5). Comments from residents included “loved it”, “every lecture should be TBL”.

Conclusion: TBL was successfully implemented into our resident conference. We plan to formally study the learning by residents and continued effectiveness of TBL in our EM curriculum comparing traditional didactic and TBL format.

Table 1. Results (n=79).

Understanding	4.53
Challenged	4.56
Engaged	4.70
Peer contribution	4.70
Productive	4.53
Enjoyable	4.71

37 Increasing the Clinical Competency Committee’s Meeting Efficiency via a Novel Data Collection Tool: The Resident Report Card

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Introduction/Background: Research has shown that productivity declines rapidly after 90 minutes in a meeting, and Clinical Competency Committee (CCC) meetings initially were taking more than 8 hours. Residency programs track myriad clinical and institutional measurements. This process is time-consuming and labor-intensive, with no pre-existing tool to streamline the system.

Educational Objectives: A high level, objective data collection tool to consolidate and maintain milestone, credentialing, institutional, and resident produced data was paramount to our success. The intent of the resident report card was to streamline the milestone process for the Clinical Competency Committee (CCC) by having all of the necessary data centrally located prior to the meetings in order to shorten the meeting time required to complete the assessments.

Curricular Design: The information available on the resident report card is extracted from various resources. Our residency management software (RMS) utilized by the institution is a rich resource, but difficult to access and reports

are not easily customizable by our program.

The resident report card was created on a data management suite spreadsheet which enables it to be a living, breathing document that can constantly be updated and changed.

Impact/Effectiveness: Our initial CCC meetings were extremely long and disorganized. The last CCC meeting prior to the implementation of the report card was identical in process and content as the first meeting using the report card, with a reduction of over 4 hours in meeting time.

The universal availability of the electronic spreadsheet application used to create and maintain the report allows for ease of distribution, customization and utilization regardless of an institution’s RMS, data collection or access to resources. This simple, yet elegant tool has transformed our CCC meetings, and we feel that other programs and even specialties can use this tool to help mitigate the data overload residencies face.

DATES OF RESIDENCY: 7/1/13 - 6/30/16						
Milestones:	PGY 1		PGY 2		PGY 3	
	Mid Year	End of Year	Mid Year	End of Year	Mid Year	End of Year
(PC1) Emergency Stabilization	2	2.5	2.5	3	3	4
(PC2) Performance of Focused History and Physical Exam	1	2	2.5	3	3	3.5
(PC3) Diagnostic Studies	1.5	1.5	2	2.5	3.5	3.5
(PC4) Diagnosis	1	2	2	2.5	3.5	4
(PC5) Pharmacotherapy	2	2	2	2.5	2.5	3.5
(PC6) Observation and Reassessment	2	2	2	3	3	3.5
(PC7) Disposition	2	2	2	3	3.5	4
(PC8) Multitasking	2	2.5	2.5	3	3.5	4
(PC9) General Approach to Procedures	2	2.5	2.5	3	3.5	4
(PC10) Airway Management	0.5	1	1.5	2.5	2.5	3.5
(PC11) Anesthesia and Acute Pain Management	1.5	2	2.5	3	3.5	4
(PC12) Other Diagnostic and Therapeutic Procedures: Goal-directed Focused Ultrasound (Diagnostic/Procedural)	1.5	2	2	3	3	4
(PC13) Other Diagnostic and Therapeutic Procedures: Wound Management	1	1.5	2	3	3	4
(PC14) Other Diagnostic and Therapeutic Procedures: Vascular Access	1	1.5	2	3	3	4
(MK) Medical Knowledge	1	1.5	2.5	3	3.5	4
(SBP1) Patient Safety	2	2	2.5	3	3	4
(SBP2) Systems-based Management	2	2	2.5	3	3.5	4
(SBP3) Technology	2	2	2.5	3	3.5	4
(PBL) Practice-based Performance Improvement	2	2	2.5	3	3.5	4
(PROF1) Professional Values	2	2	2.5	3	3.5	4
(PROF2) Accountability	2	2	2.5	3.5	3.5	4
(ICS1) Patient Centered Communication	0.5	1	2	3	3.5	4
(ICS2) Team Management	1	1.5	2	3	3.5	4
OVERALL AVERAGE	1.54	1.87	2.24	2.98	3.26	3.89

Figure 1. PGY, post-graduate year

In-Training Examination:	Score	Percentile
PGY 1	72%	
PGY 2	74%	36
PGY 3		

In-Training SCORE Key:	In-Training PERCENTILE Key:
In-Training Score: < PGY 1 Score	In-Training Percentile: = 30 %
In-Training Score: = PGY 1 Score	In-Training Percentile: = 30%

USMLE/COMLEX	Exam Date	Score	%
USMLE STEP 1	6/1/2010	215	
USMLE STEP 2	10/1/2011	234	
USMLE STEP 2 CS	12/1/2011	Passed	
USMLE STEP 3	Taken	227	Step 3 Date: 4/22/2013

USMLE/COMLEX KEY
USMLE STEP 2 CS PASS
USMLE STEP 2 CS FAIL
USMLE STEP 3 REGISTERED
USMLE STEP 3 NOT REGISTERED
Taken

Figure 2. PGY, post-graduate year