acute angle-closure glaucoma. Differences in intraocular pressure measurements may result from true variability (diurnal variation, disease progression) or from inaccurate testing (uncalibrated device, user error). Our goal is to help practitioners minimize user error by presenting a relatively life-like eye model that learners may practice various parts of an ocular exam, including measuring intraocular pressure, foreign body removal, and basic slit lamp exam skills.

Objective: Our objective is to provide learners with an eye model that can be used to practice measuring intraocular pressure, ocular foreign body removal, and basic slit lamp exam skills.

Curricular Design: An educational conference was held for emergency medicine residents on eye exam skills. Through the use of our model, we learned that residents were making common mistakes including incorrect positioning when using the Tono-Pen and inappropriate patient globe compression. Additionally, many residents lacked experience or confidence with ocular foreign body removal with a small-gauge needle and slit lamp exam skills. We designed this simple eye model at our institution using inexpensive materials such as a Styrofoam head, a hard-boiled egg, and a contact lens to help providers learn how to use a Tono-Pen correctly as well as practice with foreign body removal and slit lamp exam techniques.

Impact/Effectiveness: New practitioners often feel uncomfortable with performing ocular exams on real-life patients. On reflection, we believe our eye model helped our residents develop confidence and effective ocular exam skills. Our innovation can easily be applied at other institutions to help others develop these skills on an eye model before practicing on actual patients.

Image 1.

10 An Innovative Approach to Teaching Residents about Charting and Billing

Edens M, Hutchinson K / Louisiana State University HSC, Shreveport

Background: It is incumbent on residency programs to teach residents about the administrative aspects of Emergency Medicine. This includes information on charting and billing. Like most Emergency Medicine residency programs, our program had a well-established curriculum to teach charting. However, what we were lacking was a way to teach residents how their charting relates to billing in a way that was meaningful to them.

Learning Objective: The objective of this innovation is to identify gaps in knowledge regarding documentation, billing and reimbursement and to determine if said gaps can be filled with innovative “invoice education”

Curricular Design: After every shift, as I am cosigning the resident’s charts, I will keep track of what each patient’s charge should be based on the chief complaint, presentation, work-up and ED course. I will also record detailed feedback to the resident regarding how any of their charting could result in a “down code” of the charge. These will be recorded on a form that we are calling an “invoice”. The residents will then be given this “invoice” detailing “How much money they could have made” based on the patients seen with me during the shift, as well as “How much money they would have lost” based on their charting mistakes. This puts the feedback into a perspective that is meaningful to the residents – MONEY.

Impact/Effectiveness: After the innovation had been implemented for approximately 6 months, the residents were surveyed regarding whether they felt the innovation helped them understand, charting, billing and reimbursement better. 27 of 34 residents answered the survey. 100% of residents answering the survey felt either very satisfied or satisfied that the innovation helped them understand aspects of good charting practices and how charting relates to billing. 96% of residents answering the survey felt either very satisfied or satisfied that the innovation helped them understand principles of reimbursement. We are currently reviewing the “invoices” to determine if certain types of charting errors were able to be decreased through this simple intervention.

Example invoice

Resident: John Everyman
Date: 8/24/19
Shift: Day Main
Hours with faculty: 8 hours
Faculty: Edens

CPT code	wRVU	$ per	Description	Number	Total RVU	Total $
99282	0.88	$32	Level 2			
99283	1.34	$48	Level 3 - I	1	1.34	$48
99284	2.56	$92	Level 4 - II	2	5.12	$184
99285	3.8	$137	Level 5 - III	3	11.4	$411
99291	4.5	$162	Critical Care 30-74 min - I	1	4.5	$162
93010	0.17	$6	ECG - II	2	0.34	$12
					Total potential earned for patients seen 22.7	$817

Charting concerns	$ lost on charting
- On your chest pain patient, you only had 6 systems documented on your review of systems. This will result in a downcode of your chart from Level 5 → Level 4	-$45
Total $ lost on charting	-$45
Total $ earned for day	$772

Image 1.

11 Development of a Medical Education Scholarship Track Within A Residency Career Enrichment Program

Caretta-Weyer H / Stanford University

Introduction: Many residents identify an interest in medical education during residency. Several programs have developed concentrations or tracks to address these interests. However, medical education is becoming increasingly challenging secondary to the growing complexity of practice and the expanding roles within this domain ranging from clinical teacher, to educational administrator, to clinician educator, or even education researcher.

Learning Objective: We sought to design and implement an education scholarship track within our residency career enrichment program spanning all four years of training to address the full range of roles and allow our residents the opportunity to develop a scholarly niche within medical education.

Curricular Design: Following Kern's model for curriculum development, we performed a literature review and utilized published models for education scholarship fellowships as a guide. We performed a targeted needs assessment of our residents regarding their interests within medical education. As part of the needs assessment, residents wanted to ensure that there was room for individualization within the curriculum such that they could tailor the track to their interests. The needs assessments provided the following topics for inclusion in the medical education scholarship track: resident as teacher, education theory, presentation skills, small group facilitation, team-based and problem-based learning, curriculum development, assessment, competency-based medical education, program evaluation, education research methods, survey development, study design, manuscript writing, grant writing, and peer review. Goals and objectives were developed for each course.

Impact: Eight residents have joined the education scholarship track since its inception. Each resident has chosen a different route based upon his or her interests. Several have focused on clinical teaching while others have focused on areas within the clinician educator niche such as curriculum development and assessment. Two residents have pursued education research projects, one focusing on qualitative methods to investigate psychological safety in feedback and the other focusing on resident communication with patients. Both will be submitted for publication upon completion.

12 Disaster Preparedness Training in Emergency Medicine Residents Using a Tabletop Exercise

Sena A, Forde F, Masters M / Rutgers New Jersey Medical School; University of Cincinnati College of Medicine

Learning Objective: To expose emergency medicine residents to principles of disaster preparedness and allow them to practice the principles in a simulated setting.

Abstract: Emergency medicine (EM) physicians serve at the frontline during disasters within our communities, events increasingly on the rise. The 2016 Model of Clinical Practice of Emergency Medicine identifies the importance of the EM physician's ability to practice mass casualty/disaster management including the principles of preparedness, triage, mitigation, response and recovery. We describe an affordable and feasible way to implement such training for EM residents. This tabletop drill was developed with the objectives to expose residents to concepts in mass casualty incidents such as START triage, incident command system, and surge capacity. The drill took place during two hours of resident didactic time. A brief lecture introduced the incident command system and triage concepts. This was followed by a tabletop scenario with a map of a disaster scene or emergency department. Questions and tasks prompted residents to prepare for the influx of