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Defining the Clinical and Procedural Opportunities Available to Residents During Rural Rotations

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research skills, more than 85% desired CPD on teaching for simulation instruction.

**Conclusions:** This is the first study in the US to assess the needs of both the clinical and non-clinical domains of CPD for EM faculty. The identified preferential topics from the needs assessment will be utilized to develop a targeted CPD curriculum for EM faculty.

## 17 Defining the Clinical and Procedural Opportunities Available to Residents During Rural Rotations

*Brandon Haefke, MD; James Homme, MD; Daniel Scholz, MD; Catherine Yang; Derick Jones, MD*

**Learning Objectives:** The purpose of this research study was to objectively measure the clinical experiences that residents are exposed to during rural rotations, in order to more accurately assess their educational value.

**Background:** Many emergency medicine (EM) residency programs include clinical rotations in rural emergency departments (“rural rotations”) as part of their curriculum. These rotations are designed to expose residents to clinical scenarios which are less frequently encountered in tertiary centers. Additionally, they teach residents how to manage “routine” clinical scenarios in lower-resource settings, often without consulting services and less learner pressure. To date, these proposed benefits have not been empirically studied.

**Objective:** The aim of this study is to determine the rate at which residents were exposed to key clinical or procedural experiences (“CPEs”) while on rural rotations.

**Methods:** We conducted a retrospective chart review of all patient encounters involving EM residents at two rural hospitals in the upper Midwest from 7/1/2019 to 6/30/2020. An expert panel predetermined a list of 21 CPEs to be assessed. A total of 1377 encounters were reviewed. The frequency of each CPE was calculated and expressed as the number of CPEs expected for each 12-hour shift along with 95% confidence intervals.

**Results:** Of the 1377 patient encounters over a total of 1770 resident clinical hours, the most frequently encountered CPEs were: Ambulance Necessity Documentation (1.12 experiences per shift), Critical Care (0.6 per shift), Laceration Repair (0.4 per shift) and Splint/Cast Application (0.18 per shift).

**Conclusion:** Rural EM rotations provide residents exposure to a variety of valuable educational experiences, and for many, after just a few shifts. Future research will compare this data to a tertiary care center to determine whether rural rotations grant superior exposure to any CPEs. Additionally, we plan to expand this study to investigate other proposed benefits of these rotations, including independent decision making and resource allocation.

Table 1.

CPE	Experiences/Shift	95% CI
Ambulance Necessity	1.12	0.96-1.28
Critical Care	0.60	0.48-0.72
Laceration Repair	0.41	0.31-0.51
Splint/Cast Application	0.18	0.11-0.25
Trauma Activation	0.14	0.06-0.20
Psych Evaluation	0.10	0.05-0.15
Stroke Diagnosis	0.08	0.04-0.13
Incision & Drainage	0.08	0.04-0.13
Fracture Reduction	0.05	0.01-0.08
Procedural Sedation	0.05	0.01-0.08
Intubation	0.03	0-0.05
STEMI Diagnosis	0.02	0-0.04
Arthrocentesis	0.02	0-0.04
Cardiac Arrest Diagnosis	0.01	0-0.03
Complex Lac. Repair	0.01	0-0.03
Nailbed Repair	0.01	0-0.03
Lumbar Puncture	0.01	0-0.02
Vaginal Delivery	0	
Rule Out Labor	0	
Chest Tube	0	
Lateral Canthotomy	0	

## 18 Development of a Resident Lead Critical Care Equipment Checklist and Consistency of Equipment Readiness

*Jared Ditekowsky, MD; Samia Cabezas, BS; Jose Miguel Juarez, MD; Arjun Prabhu, MD, MBE; Erick Eiting, MD MPH; Caroline Burmon, MD*

**Learning Objectives:** This study investigates if the initiation of a resident lead interdisciplinary equipment checklist improves acute critical care equipment readiness in the Emergency Department. Furthermore, this study seeks to identify what barriers exist to consistent survey completion.

**Background:** Interdisciplinary efforts ensuring clinical readiness in Emergency Departments (ED) can lead to improved patient care. Studies report that equipment checklists can improve procedural and patient outcomes.

**Objectives:** To evaluate the impact of an resident-led equipment checklist on ED critical care readiness, and to identify barriers to survey completion.

**Methods:** A multidisciplinary team of ED/critical care attendings, residents and nursing staff developed an acute care equipment checklist via REDCap®. One week of control data was collected by investigators prior