

UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

Constructing a Cloud-Based End-of-Shift Entrustable Professional Activity Assessment System

Permalink

<https://escholarship.org/uc/item/3bx3z7kg>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 25(3.1)

ISSN

1936-900X

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Publication Date

2024-03-24

DOI

10.5811/westjem.20500

Supplemental Material

<https://escholarship.org/uc/item/3bx3z7kg#supplemental>

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Table 2. Post-didactic narrative feedback.

Post-billing and coding session	"Real notes and why they got down coded would be helpful. Very helpful!"
	"Actually ways for PGY 1 to know how to write an MDM like the different ways and what's best for efficiency and billing. Great session!! Truly helpful"
	"Incredibly done!!"
	"Let's brainstorm some note templates together that would at their most basic, cover these standards!"
Post-medicolegal session	"We need more time! Great topics and worth more time for discussion"
	"Having a session to understand more about what goes into MDM especially as PGY1's having a session where we create a templates for chief complaints would be great too"

17 Procedure Passports: The Journey to Procedural Competency

Meghan Mitchell, Matthew Klein, David Salzman, Abra Fant

Background: Competency in bedside procedures is crucial in emergency medicine. Frequently changing teams and variable levels of direct observation make assessment and subsequent entrustment challenging. Additionally, the ACGME CLER process recommends that staff have easy access to determine when trainees are entrusted to independently perform bedside procedures. To our knowledge, there are no prior efforts to create a standardized process for assessing, determining, and broadcasting entrustment on bedside procedures in EM residents.

Educational Objectives: We implemented a procedure passport for PGY1 EM residents to enhance direct observation and feedback to the learner and provide an objective indicator of competency to supervising physicians and staff.

Curricular Design: By consensus, senior educators identified 8 procedures that PGY2 EM residents could perform without direct supervision for all portions of the procedure. Previously developed and validated local checklists or published validated checklists were adapted via an iterative process and compiled into Qualtrics. All 15 PGY1 EM residents were given a badge buddy with the procedures as a punch card and a QR coded Qualtrics link (Figure 1). Supervising physicians completed the checklists while directly observing the learner in the clinical environment. Each assessment with all checklist items marked as 'done correctly' received a punch. Residents were considered entrustable after 3-5 punches, depending on the procedure. Interns and supervisors were surveyed on their opinions after 4 months.

Effectiveness: Implementation was successful; all residents completed at least 1 assessment, and several are entrusted on multiple procedures. Overall interns and supervisors found it helpful (Table 1). Potential changes

moving forward include improving access to written feedback and increasing awareness amongst nursing staff.

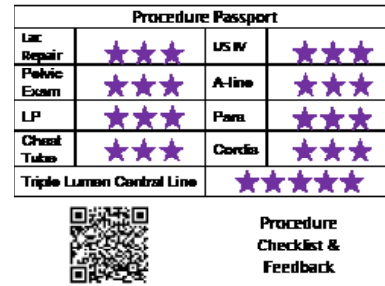


Figure 1. Procedure passport.

Table 1. Representative survey comments.

Intern Comments	Supervisor Comments
"A good way to get good feedback and gain confidence in procedural skills"	"It ensures interns have adequate supervision especially given that they are coming from different medical schools"
"Improved the quality of feedback received on procedures"	"The procedures are very important and reminds you that not every learner starts off being great at any procedure (even lac repairs)"
"A great vessel for procedural observation"	"A good reminder of what steps to ensure are done when you are supervising someone"

18 Constructing a Cloud-Based End-of-Shift Entrustable Professional Activity Assessment System

Amber Akbar, Ryan Tabor, Elise Lovell, Ravi Chacko, Ryan McKillip

Background: The use of competency based entrustable professional activities (EPAs) is transforming the approach to resident assessments across medical disciplines. However, as programs consider transitioning to EPA based assessments, they face the important problem of how to collect and monitor data to promote usage and ensure quality. The solution must be efficient, secure, and support ACGME Milestone reporting.

Objectives: Construct a secure and digital end-of-shift assessment system to increase the frequency and timeliness of feedback to residents; provide an efficient and accessible format to faculty; and include a backend infrastructure to translate EPA data to ACGME Milestones for use by the Clinical Competency Committee.

Design: Utilizing a set of 22 EPAs developed for EM, we designed a resident assessment system using Microsoft's SharePoint cloud platform (Figure). This was chosen for its ease of use and secure sign on capability. QR codes posted in charting rooms enabled access to a Microsoft Form on mobile devices. To assess a resident, faculty members select an EPA on the form and enter the required level of supervision and free text feedback on strengths and areas for improvement.

A Microsoft Excel file linked to the form is immediately updated with each submission. Outcomes are sent to individual residents weekly. Using programmed formulas, a resident's mean EPA levels are automatically calculated and mapped to Milestones. Faculty tended to favor certain EPAs, but the system facilitated periodic rotation of EPAs to ensure a broad distribution of assessments.

Impact: Fifty-one faculty members completed 2,151 assessments from February 15 to October 31, 2023, out of 2,999 resident shifts (71.7%). Most assessments (62.4%) were submitted by next day. The average time of completion was 5.6 minutes (median 2.6). We created an efficient and secure system that provides timely feedback to residents and comprehensive assessments across EM EPAs and Milestones.

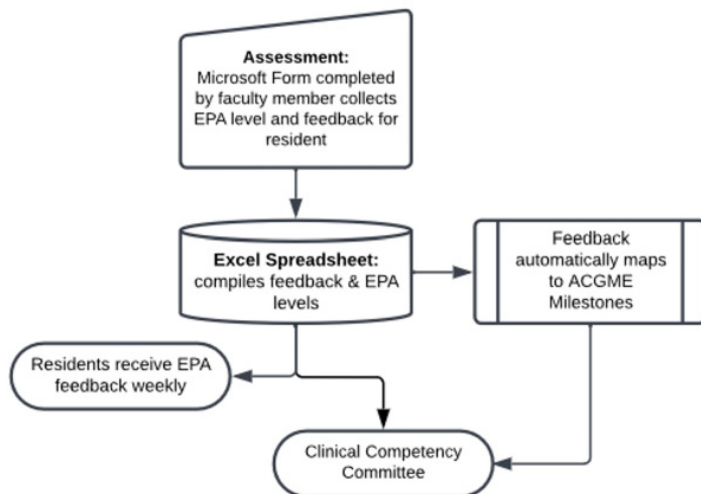


Figure. Flow diagram of EPA based end-of-shift assessment system.

19 Trauma-Informed Care Simulation Workshop for EM Residents

Laura Janneck

Introduction: Many patients come to the ED in the acute post-traumatic period. EM physicians must understand and recognize the impact of trauma, work to mitigate trauma responses, and avoid re-traumatization in the ED. Trauma informed care (TIC) is an approach that incorporates an understanding of the effects of trauma on patient's presentations, experiences, and care. There are few published examples of TIC education for EM physicians.

Objectives: 1. Improve EM residents' confidence in using trauma-informed language and maneuvers in clinical scenarios. 2. Improve EM residents' knowledge of TIC and applications for ED patients.

Curricular Design: A consensus group of EM faculty

and simulation center staff met to develop the two-hour workshop, which was conducted with residents during regular conference time. The workshop began with a 35-minute lecture reviewing basic concepts in TIC. The residents then divided into three groups and rotated between three scenarios for 20 minutes each. Each scenario had a faculty facilitator, who guided discussions and highlighted key points. The scenarios were: 1. 20 yo male presenting with agitation and paranoia. 2. 21 yo female who presented to the ED after sexual assault. 3. 30 yo male who presented with abdominal pain, for whom a history of trauma led him to react negatively to questioning and physical examination. After rotating through each of these scenarios, the residents returned to the large group for a 25-minute discussion of key takeaways.

Impact: Each resident filled out a survey before and after the 2-hour session. We compared responses on baseline knowledge, levels of confidence and agreement, and knowledge and skills between the pre-test and post-test. Initial indicators and verbal feedback from residents were positive. Residents noted increased comfort using verbal de-escalation with agitated patients. We will incorporate the TIC workshop into our standing curriculum.

20 Building, Delivering, and Evaluating a Longitudinal Global Health Curriculum for Emergency Medicine Residents

Blake Stacey, Alexandra Digenakis, Jeremiah Ojha, Elizabeth DeVos, Justin Myers

Background: Interest in global health among emergency medicine (EM) residents continues to increase. Recent research reveals that EM residency applicants are interested in programs that offer global health clinical experiences, yet nearly half of EM residency programs in the United States (US) do not offer global health training or formal education. With a goal to fill this educational gap, we created a novel, online, lecture-based curriculum.

Objective: This curriculum aims to increase accessibility to global health education for EM residents, increase resident preparedness for international clinical experiences, and provide longitudinal exposure to a global EM career path. We intend for the curriculum to be sustainable, delivered yearly, and offered more broadly across US.

Design: We developed an online ten-month "Global Health Curriculum for EM Residents" offered to residents at three separate institutions. Each month a salient global EM topic (e.g., Disaster and Humanitarian Response) was discussed by an expert on that topic. Video presentations were offered asynchronously, to account for participants' stochastic clinical responsibilities. Additionally, virtual