

## **UC Irvine**

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

#### **Title**

ABEM Content Areas of EM Resident on Shift Evidence Based Medicine Questions

#### **Permalink**

<https://escholarship.org/uc/item/57b0x2hg>

#### **Journal**

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 23(1.1)

#### **ISSN**

1936-900X

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#### **Publication Date**

2022

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**Table.**

Themes	Representative Comments
Education	"I think there are challenges in pretty much every aspect of education and training, challenges in online format for didactics, where you are not learning in person but rather at home, there are challenges in socialization and bonding (which are normally part of training), because our training helps us feel comfortable with working with one another, with our colleagues, this impacts our training."  "This conversation will be very different if there is a second wave in September or November and we stopped seeing appendicitis, kidney stones and we start seeing one COVID patient after the other for like a month or two. We stop rotating on other electives where we might have learned more about specialties but end up only learning about COVID."
Professional Identity Formation	"I hate the healthcare heroes' concept. I hate that we have been shunted and labelled as such, as being forced into this army that is sacrificing their lives and that we didn't ask for this—I don't like the message that is being sent out regarding this."  "I think that we are learning about how political our jobs are and that learning that a lot earlier on and that this is a context that we never saw this in before. I originally said that I don't like politics and that's why I went to medicine, but I realize that it's half my job."
Grief related to COVID-19	"We were unable to celebrate the end of our 4 <sup>th</sup> year and our entire medical school experience, which we should have been through Match and graduation. It feels selfish to feel upset about these things, but these events are something we looked forward to the entire 4 years."  "We weren't allowed to grieve for the fact that we missed all this stuff, rather we had to suck it up and remember that we signed up for this, and that it's okay we missed graduation. You are going to be doctors and everyone looks up to you, so missing graduation should not be a concern."
Mental Health	"I think a lot of the anxiety I felt about starting intern year, as it might be the hardest thing I have ever done and what if I start going down a dark place mentally."  "In normal circumstances, I would be surrounded by people, building relationships, and have support if needed, but now we are in a time and place where we aren't encouraged to reach out or have relationships, but rather be isolated."
Physical Health	"In terms of this, we signed up for the risk, but the people we live with and the people that support us they haven't signed up for this risk."  "I don't feel that I need to be better at this point, I just want to be careful."

saturation was achieved, final codes were re-applied by an initial coder and a third author. After consensus discussion, agreement reached 100%, and codes were grouped for thematic analysis.

**Results:** We identified two major themes: education and professional identity formation. Interns expressed concerns about the quality and breadth of their medical training during COVID. Interns also voiced frustration with the politicization of medicine and uncertainty about their roles as physicians during the pandemic. Minor themes included physical health, mental health, and grief related to COVID-19.

**Conclusions:** Our analysis suggests that new EM interns have significant concerns about their medical knowledge and the quality of their education as well as their identity as emergency physicians and public health advocates. These results may inform future decisions regarding dedicated support and training necessary for this unique group of learners.

## 5 A Year of Changes: Does Participation in Our Novel Curriculum Improve Medical Students Self Perception of Preparedness for Video Interviews

*Matthew Ledford, MD*

**Learning Objectives:** The goal of the study was to assess

the effectiveness of our educational program on the students self perception of preparedness for video interviews. Use of mock interviews and a video tutorial increased how well students felt they were prepared for a video interview for residency.

**Background:** Because of recommendations related to COVID-19, programs across the breadth of medical specialties committed to video interviews for the 2020/21 interview season.

**Objectives:** To assess if there was a difference in students self perception of preparedness for video interviews before and after our educational program.

**Methods:** Medical students at our institution were offered to participate in two mock video interview days. A pre and post-survey was completed by students participating in the interviews. Students who participated in the first interview day were provided formal feedback prior to the second interview. Participating students were also provided a 15 minute instructional video on tips for a successful video interview between interview days 1 and 2. 78 respondents completed the pre-survey, 55 respondents completed the post survey. Of the post survey respondents, 46 participated in both interview days, 7 participated in one interview day and 2 did not participate in either interview day. Responses from those who did not participate in either interview were removed from the data.

**Results:** Students were asked to rate themselves on a scale from 0-100. Students self confidence in their ability to do well on a virtual interview for residency increased from 56 to 73 (30% improvement). Students confidence that they knew common questions they were likely to encounter during a residency interview increased from 47 to 73 (55% improvement). Students confidence in their ability to provide successful answers to common questions encountered during a residency interview increased from 53 to 72 (38% improvement). How well the student felt they were prepared for virtual residency interviews increased from 40 to 68 (70% improvement).

**Conclusion:** Use of mock interviews and a video tutorial increased students confidence in their ability to do well, know common questions, provide successful answers and their overall preparedness for video interviews.

## 6 ABEM Content Areas of EM Resident on Shift Evidence Based Medicine Questions

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**Learning Objectives:** Using the American Board of EM (ABEM) 2019 Model of Clinical Practice of EM, describe EM resident on shift EBM questions.

**Background:** Evidence Based Medicine (EBM) skills allow EM providers to obtain and apply new information

while on shift in the ED. The clinical content of on shift EBM questions by EM residents has not been previously described.

**Objective:** Using the American Board of EM (ABEM) 2019 Model of Clinical Practice of EM, describe EM resident on shift EBM questions.

**Methods:** This IRB approved study was conducted by a PGY 1-4 EM residency. Residents are required to complete logs of on-shift EBM activity in the program’s procedure software system New Innovations™ (NI). The logs are a convenience sample, with an N of 3-5 per 28 day EM rotation. The logs include a patient description, clinical question, search strategy, information found, and subsequent application. Logs were coded to clinical content areas of the 2019 ABEM Model. The Model provided acuity definitions. ABEM special populations (pediatrics and geriatrics) were identified.

**Results:** From June 2013 until May 2020, 10,455 discrete completed logs were identified in NI. Table 1 demonstrates log proportion for each of the 20 ABEM content areas. Table 2 contains the most common specific sub-categories. “Emergent conditions” (N=7,770) were most commonly searched ABEM acuity, followed by “lower acuity” (N=5,341) and “critical” (N=5,192). Note, not all conditions have ABEM acuity codes, and some have multiple. Special populations were the source of on shift questions in logs 10.16% (N=1,061) for pediatrics and 8.05% (N=841) for geriatrics.

**Conclusions:** In this single site cohort “Procedures and Skills” were the most common source of on shift questions for EM residents, perhaps representing just in time training. Trauma was the most common sub-category and, along with toxicology, has a large content outline. Time on shift may have impacted acuity dispersal. Programmatic understanding of resident on shift EBM questions could serve to identify educational gaps and opportunities.

**Table 1.** EBM log assignments to the 2019 ABEM model of clinical practice.

ABEM Content Area	Number of Logs	Proportion of Total
1. Signs, Symptoms and Presentations	892	8.54%
2. Abdominal and GI Disorders	878	8.41%
3. Cardiovascular Disorders	991	9.49%
4. Cutaneous Disorders	263	2.52%
5. Endocrine, Metabolic, & Nutritional Disorders	292	2.8%
6. Environmental Disorders	142	1.36%
7. Head, Ear, Eye, Nose, Throat Disorders	559	5.35%
8. Hematologic & Oncologic Disorders	244	2.34%
9. Immune System Disorders	252	2.41%
10. Systemic Infection Disorders	472	4.52%
11. Musculoskeletal Disorders (Non-Traumatic)	303	2.90%
12. Nervous System Disorders	801	7.67%
13. Obstetrics and Gynecology	356	3.41%
14. Psychobehavioral Disorders	143	1.37%
15. Renal and Urogenital Disorders	375	3.59%
16. Thoracic-Respiratory Disorders	737	7.06%
17. Toxicologic Disorders	748	7.17%
18. Traumatic Disorders	861	8.24%
19. Procedures and Skills Integral to Practice of EM	1110	10.63%
20. Other Core Competencies to Practice of EM	25	0.24%
Totals	10,445	100%

**Table 2.** Most common ABEM model of sub-categorical identified in EBM logs.

Rank	ABEM Sub-Category	Number of Logs	Proportion of Total
1	18.1 Trauma	812	7.77%
2	17.1 Drugs and Chemical Classes	749	7.17%
3	1.3 General	527	5.05%
4	19.4 Diagnostic and Therapeutic Procedures	500	4.79%
5	3.5 Diseases of the Myocardium, Acquired	316	3.03%
6	16.4 Obstructive/Restrictive Lung Disease	268	2.57%
7	1.2 Pain	266	2.55%
8	3.3 Disorders of Circulation	263	2.52%
9	2.9 Large Bowel	251	2.40%
10	3.4 Disturbances of Cardiac Rhythm	239	2.29%
11	7.4 Oropharynx/Throat	223	2.13%
12	10.6 Viral	220	2.11%
13	13.3 Complications of Pregnancy	218	2.09%
14	19.5 Ultrasound	182	1.74%
15	16.6 Pulmonary Embolism/Infarct	176	1.69%
16	4.4 Infections	168	1.61%
17	16.7 Pulmonary Infections	164	1.57%
18	2.7 Stomach	163	1.56%
19	19.2 Resuscitation	162	1.55%
20	9.2 Hypersensitivity	159	1.52%
20	19.3 Anesthesia & Acute Pain Management	159	1.52%

## 7 An “Asynchronous” Curriculum: Learner Perspectives in the Time of COVID-19

*Emily Wilkins, MD; Semhar Tesfai, MD; Alejandro Palma, MD; Adriana Segura Olson, MD, MA.Ed*

**Learning Objectives:** To understand the EM resident perception of a newly introduced asynchronous curriculum during the COVID-19 pandemic and assess the effects of the curricular modification on convenience, retention of information, work/life balance, enjoyability, and overall preference for didactic format.

**Background:** Didactic education in EM residencies has been impacted by the advent of asynchronous learning (AL) and recently by a shift towards remote, web-based conference education due to COVID-19. Although studies demonstrate the efficacy of AL, few have focused on resident reaction to curricular modification and none have looked at resident reaction during the COVID-19 era. We implemented an asynchronous curriculum in the Spring of 2020 that replaced 20% of weekly didactics with one-hour’s worth of online resources. After each module, resident-submitted learning points are reviewed in conference through gamification.

**Objectives:** This study aimed to evaluate resident perception of a newly introduced asynchronous curriculum. We hypothesized that a combination of didactic conference and AL is more valuable to learners than didactic conference alone, and that in the COVID-19 era of remote weekly conferences, AL is increasingly valuable to the learner.

**Methods:** A cross-sectional survey was administered online to residents of a 3-year EM program. The survey assessed how residents perceive in-person vs. remote didactics with and without AL. Questions addressed convenience, retention of information, work/life balance, enjoyability, overall preference, and whether residents would like the asynchronous curriculum to continue. Responses