## **UC Irvine**

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

#### **Title**

How Do I Find the Answer? Resident Learning Simulation of the Master Adaptive Learner Planning Phase

#### **Permalink**

https://escholarship.org/uc/item/1xc2p3r2

#### **Journal**

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

#### **ISSN**

1936-900X

#### **Authors**

Choi, April Ojha, Jeremiah Lorenz, Kathryn et al.

#### **Publication Date**

2024-03-24

#### DOI

10.5811/westjem.20498

## **Supplemental Material**

https://escholarship.org/uc/item/1xc2p3r2#supplemental

## **Copyright Information**

This work is made available under the terms of a Creative Commons Attribution License, available at <a href="https://creativecommons.org/licenses/by/4.0/">https://creativecommons.org/licenses/by/4.0/</a>

# **PECARN Pediatric Head CT Rule**

Based on a study of >42,000 children with head injuries in the Emergency Department

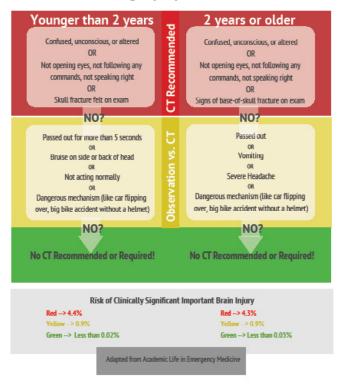


Figure.

Use of a film curriculum in a multidisciplinary setting to further resident understanding of unrepresented communities in the United States

Kathleen Williams, Mary Elizabeth Schroeder, Amber Brandolino, Alicia Pilarkski

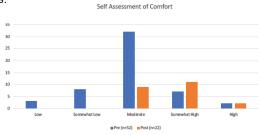
Introduction/ Background: Cultural competency impacts care by improving physician therapeutic effectiveness, improving patient physiologic response and shortening hospital stays. Educational programming focused on improving empathy and cultural competency is a common need for all specialties. Few opportunities exist for trainees to learn about shared populations across specialties. There is limited literature describing best practices for teaching these principles. While film curriculums have been utilized to teach empathy and communication to students, this educational platform has not been previously described for resident learners.

**Educational Objectives:** We aimed to further knowledge and understanding of diverse communities served at our institution utilizing a series of documentary films with accompanying panel discussions. These sessions were open to all graduate trainees and students on campus.

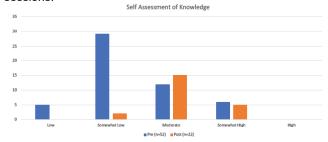
**Curricular Design:** Four films were chosen to highlight underrepresented populations within our community and streamed for resident learners and students for one week. Panel discussions, with representatives from the community, were held to highlight themes of the film and create dialogue about these populations.

Impact/Effectiveness: Surveys were utilized to assess knowledge and comfort approaching the group represented in the film before and after the sessions. Open ended questions were utilized for self-reflection. A delayed survey was conducted to determine sustained impact. After the sessions, trainees reported improvement in comfort (table 1) and knowledge (table 2) approaching the patient populations. On reflection, learner comments focused on themes regarding community mistrust of healthcare systems and ways to improve communication. Delayed survey data revealed this impact was sustained. Future directions include determining ways this curriculum may translate into clinical care provided.

**Table 1**. Learner self assessment of comfort before and after the sessions.



**Table 2**. Learner self assessment of knowledge before and after the sessions.



How Do I Find the Answer? Resident
Learning Simulation of the Master Adaptive
Learner Planning Phase

April Choi, Jeremiah Ojha, Kathryn Lorenz, Jeremy Branzetti, Laura Hopson, Mike Gisondi, Linda Regan

**Introduction/ Background:** Emergency medicine (EM) residency programs must strive to teach adaptive

expertise (AE) so that graduates can navigate new challenges. Master Adaptive Learner (MAL) is a framework for the development of AE that can inform curricular design. Prior work shows that successful resident learners share skills in approaching the planning phase of the MAL cycle. However, we do not understand with what skills novice learners enter residency.

**Educational Objectives:** The objectives of our innovation were to observe how interns process the steps of the planning phase and to provide a controlled setting for interns to work through these steps.

Curricular Design: Simulation is an established educational strategy leveraging experiential learning. We developed a learning simulation guiding interns through the steps of the MAL planning phase. In our simulation, 57 EM interns at two academic centers in 2021 and 2022 were given a scripted case scenario of an intern presenting an intoxicated patient with facial trauma and a bloody airway to an attending. Interns were asked to list and prioritize their knowledge gaps and then fill their top gap using any resource until satisfied. Each intern then explained their gap prioritization and resource selection. These prompts led learners through the steps of the MAL planning phase: gap identification, gap prioritization and resource selection.

Impact: In our simulation, participants most often prioritized factual followed by conceptual knowledge, reinforcing the idea that foundational knowledge must precede practical application. Table 2 shows participants' top rationales for gap prioritization and resource selection. This data reinforces past findings about resident decision-making in learning, with 90% of participants able to fill their identified knowledge gap. This shows that in a controlled setting, novice learners can be led through the MAL model to direct their thoughts and learn from their community.

Table 1. Top gaps and types of knowledge.

Top overall and priority #1 gaps selected by participants	
1. LeForte Fractures	
2. Alrway Management	
3. Anterior Neck Injuries	
Types of knowledge associated with overall and priority #1 knowledge gaps in descending frequency	
1. Factual Knowledge	
2. Conceptual Knowledge	
3. Procedural Knowledge	
4. Metacognitive Knowledge	

**Table 2**. Top rationales for gap prioritization and resource selection.

Top rationales for selec	tion of #1 priority gap in order of decreasing frequency	
1. Alrway as a time-se	nsitive decision and recognized (mowledge gap (2-way tie)	
2. Knowledge gap Impeding offnical decision-making		
:	3. Ability to communicate with others	
Top rationales for re	esource selection in order of decreasing frequency	
1. Familiarity	domifort from prior clinical rotations/experiences	
2. Pt	athway to single comprehensive resource	
	3. Efficiency	
	4. Perceived to be credible	
	5. Need for visual information	
6. Preferred learning style, pr	ovides evidence support, tailored for EM, and user friendly (4-way tie)	
7	. Pathway to other possible resources	
8. Information that is	up to date and convenience/readily accessible (2-way tie)	

# 38 Give Me a Break

Sadie Robinson, Lauren Wendell, Sarah Hirner, Rebecca Bloch, Amanda Deutsch, Loice Swisher

**Background:** When emergency medicine (EM) residents were polled, only 1 in 3 took a break to eat on shift, 1 in 6 didn't go to the bathroom, and 1 in 10 took a break longer than 10 minutes, according to a multi-institutional study presented at the 2023 SAEM meeting. EM is known for long, busy shifts. There are known negative cognitive and emotional impacts when people are dehydrated and hungry, yet emergency residents are working under these conditions almost daily. Maine Medical Center explored a framework to confront this practice and incorporate a break for residents.

**Objective:** Implement a system to allow emergency medicine residents a 15-minute break.

**Design:** A coverage system was developed to allow residents 15 minutes to step off the floor during ED shifts. A chart was used to outline which residents would cover specific roles. Attendings were notified and helped to facilitate the break. This plan was presented to the department, residency leadership, and residents, who all approved and supported this project. A survey was designed for residents to complete at the end of each shift to collect data on whether a break was taken, barriers to taking a break, and emotional well-being at the end of each shift. IRB determined this project exempt.