

## **UC Irvine**

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

#### **Title**

Look at That! A Visual Aid-Based Intervention to Improve Patient-Centered Communication Among Emergency Medicine Residents

#### **Permalink**

<https://escholarship.org/uc/item/6rz6722j>

#### **Journal**

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

#### **ISSN**

1936-900X

#### **Authors**

Birch, Eleanor

Bedard, Patrick

Stremick, Justine

#### **Publication Date**

2024-03-24

#### **DOI**

10.5811/westjem.20491

#### **Supplemental Material**

<https://escholarship.org/uc/item/6rz6722j#supplemental>

#### **Copyright Information**

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

risk. It is crucial for Emergency Departments (ED) to proactively educate physicians on these advanced methods to ensure proficiency and stay at the forefront of patient care. Our goal was to develop an introductory advanced airway curriculum, starting with nasopharyngoscopy, that could be taught portably or in-situ, outside of a prototypical simulation (sim) lab.

**Objectives:** 1. Create an expert consensus checklist of laryngoscopy techniques. 2. Develop a didactic and sim for difficult airway training, with focus on nasopharyngoscopy. 3. Assess the feasibility and participant experience with skill acquisition and feedback.

**Curriculum Design:** Following Kerns model of curriculum design, an anonymous needs assessment demonstrated that 89.9% of residents and faculty in our ED had no formal nasopharyngoscopy training, and only 2% used it in their practice. A 1-hour didactic and 2-hour sim session were held for emergency medicine residents and faculty using portable Ambu aView and Trucorp Airsim products purchased with an institutional grant. Following competency-based education methods, participants then attempted a nasopharyngoscopy sim and were assessed with an expert consensus checklist developed by an in-house multidisciplinary team. A post-course evaluation was then distributed to participants.

**Impact:** After the session, all 30 participants were able to successfully complete a nasopharyngoscopy sim without assistance. The post-course evaluation showed 73% of participants felt adequately prepared and felt comfortable performing the procedure. Consequently, we felt that this educational intervention is a feasible, portable teaching modality with skill acquisition and favorable participant experience. With ongoing similar education, perhaps with smaller groups and increased frequency, this has the potential to form the basis of a portable advanced airway curriculum.

## 14 Look at That! A Visual Aid-Based Intervention to Improve Patient-Centered Communication Among Emergency Medicine Residents

Eleanor Birch, Patrick Bedard, Justine Stremick

**Introduction/ Background:** Visual aids are pictorial-based tools that have been used to facilitate patient education and shared decision-making. They have been found to improve patients' understanding, risk perception, and satisfaction with provider communication. Using visual aids to aid patient communication is an important skill, but residency training may not provide adequate training or experience with these tools. This intervention was created to provide experience applying visual aids tools to discussions with patients and family.

**Educational Objectives:** 1. Apply visual aid tools to facilitate patient-centered communication.

**Curricular Design:** In this intervention, printed visual aids with a pictorial representation of the PECARN Head CT rule were placed in the ED. At each change of shift, the resource was highlighted to encourage its use for appropriate patients. The topic was chosen because pediatric head injuries are a common complaint with well-established guidelines for evaluation. The visual aid used was adapted from one developed by the ALiEM, CanadiEM, and PECARN research team. Modifications to this reference image were made based on resident feedback to tailor it for bedside use. Data were collected via an online survey on experience using the aid and feedback for improvement and additional aid development.

**Impact/Effectiveness:** The implementation of this visual aid was widely accepted, with 100% of respondents reporting that the visual aid was helpful and responding affirmatively that they would use it again. Additional visual aids covering antibiotic stewardship, imaging for low back pain, and radiation risks, among others, have been developed based on feedback. Future directions include evaluation of the effect of the intervention on communication skills. This is a low-resource intervention that could be implemented easily in other residencies to provide exposure to the use of visual aids as a patient-education tool.

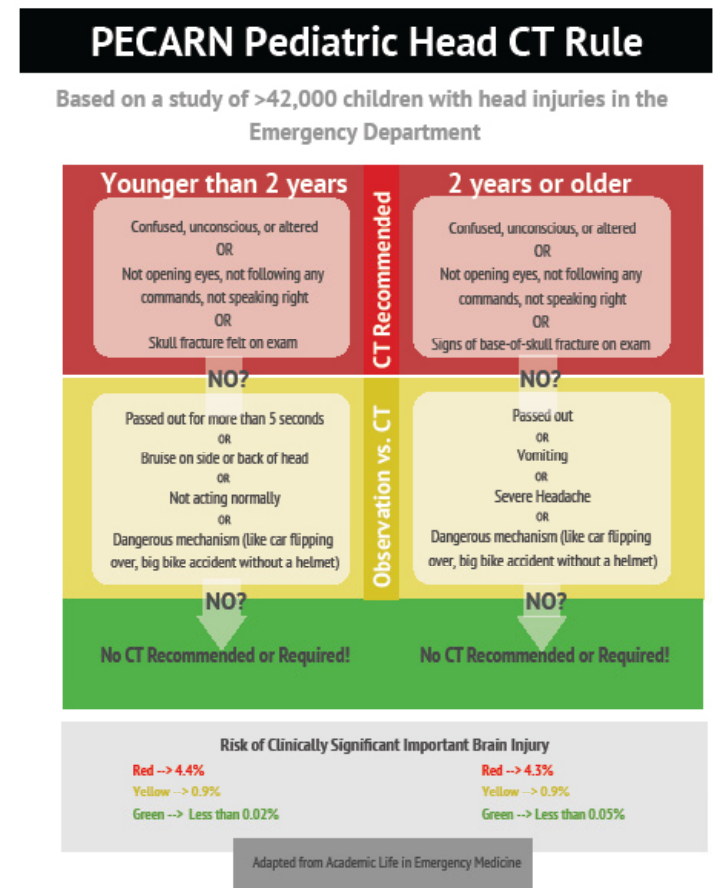


Figure.