

## **UC Irvine**

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Integrating developmental medicine into longitudinal pediatric emergency medicine teaching for EM residents

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shift social opportunities.

**Impact/Effectiveness:** Pre- and post-pilot data will be collected using a set of well-validated measures of wellbeing and burnout, including the Mini Z. Patient outcomes and department flow will also be studied to ensure there is no harm caused by the staffing changes. Based on feedback the schedule may be adjusted and piloted again in a later block. We expect residents involved in this pilot study will report lower levels of burnout, with increased time for sleep, exercise, and socializing. If results are promising, these changes will become the standard schedule in this residency program for following years.

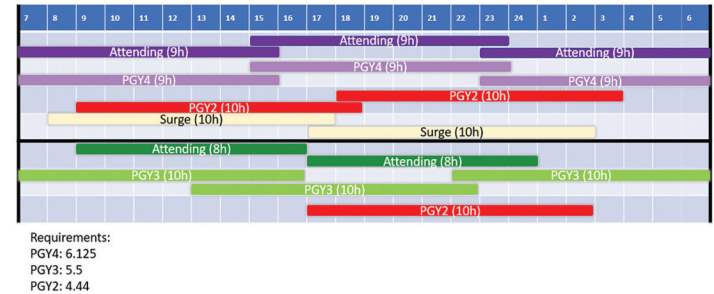


Figure 1. The current resident schedule.

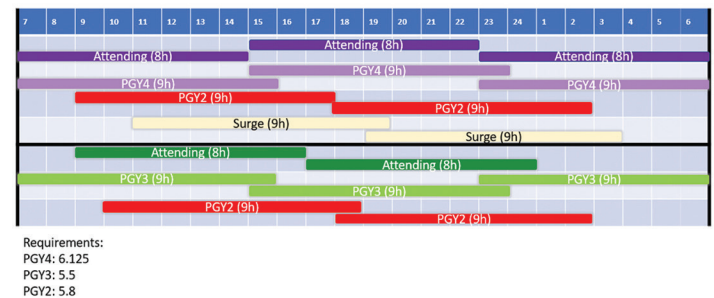


Figure 2. The pilot schedule.

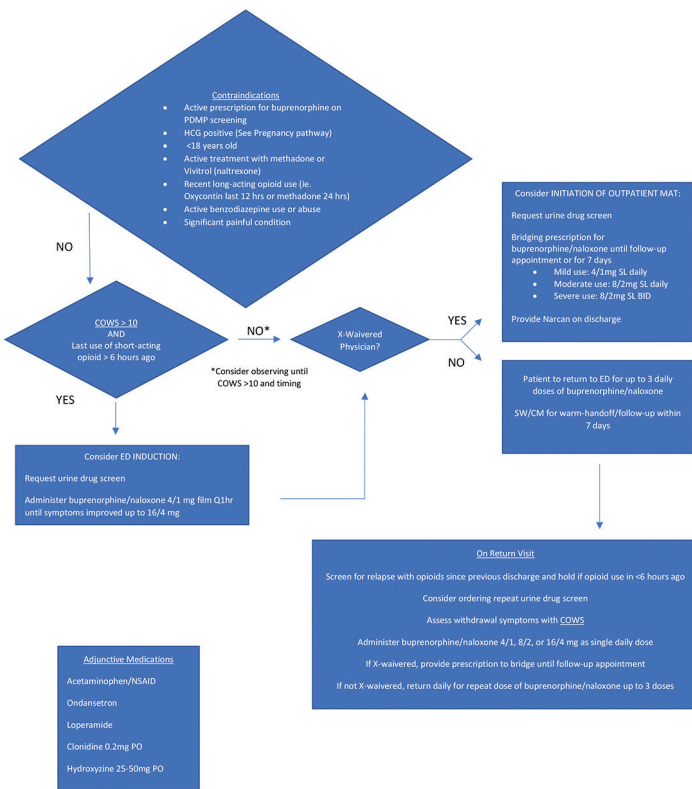


Figure 2. ED Discharge Buprenorphine/Naloxone Pathway.

## 23 Improving Burnout through Resident Shift Adjustments: A Wellness Innovation

Manchester L, McParlane J, Dehon E / Yale Emergency Medicine Residency; Beaumont, University of Mississippi Medical Center

**Introduction/Background:** According to the 2017 National Emergency Medicine (EM) Wellness Survey, 76% of EM residents report symptoms of burnout. Shift work is frequently cited as a leading source of burnout. Recent evidence has indicated that 8-hour shifts are ideal for EM, yet most residencies are not using such short shifts. Physician workload and emergency department (ED) crowding are also commonly cited causes of burnout.

**Learning Objective:** The objective of this innovation is to improve resident self-reported burnout by adjusting shift times and staffing in the emergency department (ED).

**Curricular Design:** Based on the results of a residency-wide needs assessment which noted frequent concerns over long shift times and resident understaffing, a pilot 4-week block was created (see image 1 and 2). This block reduced all resident shifts to 9 hours (including 1 hour overlap for sign out), and increased resident staffing during busier times. Second year residents will also work fewer “swing shifts” per block, and sign-out times were clustered across most shifts to foster post-

## 24 Integrating Developmental Medicine into Longitudinal Pediatric Emergency Medicine Teaching for EM Residents

Picard L, Bodkin R, Pasternack J/ University of Rochester Strong Memorial Hospital

**Introduction:** The pediatric component of the core curriculum at the University of Rochester was previously covered in lectures from pediatric emergency medicine (PEM) fellows and faculty members along with simulated cases run by PEM faculty. The redesigned PEM curriculum now includes small group sessions where the residents discuss cases with PEM fellows and faculty members; each session with its own theme (cardiac, GI, etc.), each group also explores the intricacies of taking care of patients suffering with developmental delays, autism and ADHD. Additionally, the curriculum includes simulations and hands-on sessions with standardized pediatric patients.

**Learning Objective:** Understand behavioral differences in the pediatric population based on age and developmental disorders. Integrate developmental medicine into longitudinal case-based curriculum of pediatric emergency medicine. Learn and practice communication and hands-on skills with patients and families

**Curricular design:** The new pediatric core curriculum for the EM residents integrates the medical knowledge and skills to not only treat the typical pediatric patients, but also how to properly care for behaviorally-complex pediatric patients with similar complaints. Each small group session runs through themed pediatrics cases in a pediatric patient, after which facilitators discuss how management of these cases through the lens of developmental medicine. Residents have the opportunity to splint toddlers and school-aged children during a splinting lab after discussing pediatric orthopedic cases with PEM fellows and faculty. During a trauma simulation day, one case focuses on interacting with a scared child and frantic parents, working through the complexity of the social interactions, gaining consent, and creating a therapeutic alliance with caregivers and child.

**Impact:** Developmental medicine plays a much larger role in the pediatric population. Interacting with children suffering with autism, ADHD, and developmental delays is an imperative skill. This integrated curriculum has provided a unique, well-rounded pediatric education that covers the basic pediatric knowledge needed to become competent EM physicians and the skills to succeed with complex pediatric patients.



Image 2.

## 25 Low-Cost Orthopedic Fracture Reduction Model

*Pittman M/ Prisma Health - Upstate Emergency Medicine Residency / University of South Carolina SOM Greenville*

**Introduction/Background:** Emergency physicians commonly reduce fractures, yet many emergency medicine (EM) residency graduates do not feel comfortable with this procedure. The competing needs of multiple residencies within an institution and the desire to mitigate complications can lead to decreased hands-on experience. EM residency graduates have reported much of their comfort with fracture reduction was obtained post-graduation. A low-cost model for fracture reduction may increase confidence and ability.

**Education Objectives:** This model was developed to provide a realistic apparatus to practice the reduction of displaced fractures, allowing learners to gain a skillset before its application to patients. Practitioners may also maintain proficiency if clinical practice does not provide a high volume of suitable patients. This model could be used to assess the skills and milestones of training. The objective of this model is to provide a realistic hands-on apparatus to practice the reduction of displaced fractures.

**Design:** The current prototype consists of polyvinyl chloride (PVC) pipes (bones), elastic cords (approximating muscles, tendons, and overall resistance), foam (soft tissue), simulated skin, bolts, and a pre-fabricated hand. Pipes are sized and cut to



Image 1.