data collection, using Likert-scale and open-ended questions regarding educational value, engagement, practicality, and cognitive impact.

Results: Preliminary data show 100% of residents who used the Spinner Wheel reported that it enhanced on-shift learning and that the topics were relevant to their clinical cases. Residents describe it as "fun," "engaging," and "a great way to think beyond the immediate case," noting that it "breaks up the intensity of a busy shift" and "makes teaching feel effortless."

Conclusions: The Spinner Wheel is a simple, gamified, competency-based micro-teaching tool that integrates seamlessly into ED workflow. It promotes cognitive agility, engagement, and deeper connections between real-time cases and core EM competencies. This low-cost intervention offers an innovative and scalable model for energizing on-shift learning in emergency medicine.

8 A Simulation-Based Curriculum for Junior Residents on Intrahospital Transport of Critically Ill Patients

Kayla Basedow, Timothy Friedmann, Duncan Grossman

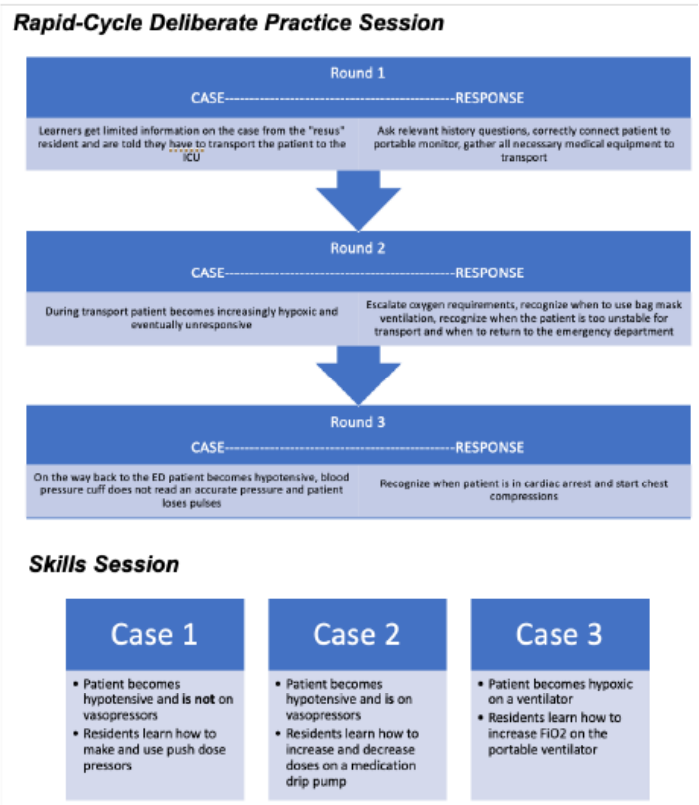
Introduction: Intrahospital transport of critically ill patients from the ED to another destination (ie. Radiology, ICU) is a high-risk period in a patients' care. Literature suggests it is associated with adverse events including vital sign derangements and even cardiac arrest. New residents are often tasked with being the accompanying physician during critical transports despite limited experience with equipment, medications, and critical care. This course aimed to provide standardized training for junior residents to safely manage intrahospital transport.

Objectives: We developed a simulation-based curriculum to train residents to respond to various adverse events during intrahospital transport. The overarching goal of the project was to have residents feel more confident in transporting critically ill patients and develop the necessary clinical skills to respond to adverse events during transport.

Curricular Design: Residents were split into two small groups and completed both sessions. The first was a SIM session using the Rapid-Cycle Deliberate Practice (RCDP) model. Learners managed a critically ill SIM patient they "transported" to the ICU using a high-fidelity mannequin. The SIM patient experienced adverse events including oxygen desaturation, unresponsiveness, hypotension, and cardiac arrest. Per the RCDP model, after each event the SIM was paused for debrief before restarting. The second session was a hands-on, case-based skills lab using real equipment where residents learned three essential tasks: creating push-dose pressors, adjusting IV pump medication doses, and modifying ventilator settings.

Impact/Effectiveness: This course ran in both 2024 and 2025. Residents completed pre- and post-tests assessing critical actions that may be required during transport and rated their confidence in each skill. Confidence significantly improved across all skills in both years. Our residency program received feedback indicating that this was an essential course to continue annually during intern orientation. As a result, the course has now been implemented as a required annual training for all new emergency medicine residents. Future iterations of this study may expand to evaluate higher levels of Kirkpatrick data and potentially assess impacts on patient outcomes.

FIGURE 1:



9 Look, I Finished My PEM Sticker Chart!

Bryan Kane, Dawn Yenser, Kimberly Fugok, Sarah Fish, Kira Galeano, Kyle Wilson

Introduction/Background: Pediatric emergency departments (PED) hosting pediatric emergency medicine (PEM) rotations often have residents from multiple specialties at various stages of training. This creates a challenging teaching environment for both educators and learners. Gamification has been previously demonstrated to effectively engage residents in their education.

Educational Objective: This project sought to develop a gamified approach to tracking EM PGY 1 PEM rotational

goals on a 4-week rotation.

Curricular Design: This project was conducted at a PGY 1-4 EM program training 16 residents a year. PEM rotation occurs in the PGY 1 and 4 years in a dedicated PED at a level II peds trauma center with a level IV NICU and PICU. Pediatric and family medicine residents also rotate in the PED, which is staffed by PEM-boarded attendings. Using a modified Delphi process, 10 PEM attendings and 4 EM chief residents created a sticker chart (Table 1) of observable and measurable educational activities. The activities were then categorized by ACGME Milestones for purposes of evaluation and feedback. The goals achieved were denoted by the placement of a sticker on the card. EM interns who completed the entire chart, or who had the highest number of completed activities in each 4-week block, were recognized. The chart was introduced in the summer of 2023. Rotational scores were entered by the residents into New Innovations on a 1-5 scale. The project was reviewed by the IRB.

Impact/Effectiveness: Core metrics for the PEM rotation universally increased, suggesting that a sticker chart of learner activities improved PGY 1 EM learner experience. Overall rotational scores for the rotation from EM residents for AY 22-23 (pre-chart), AY 23-24 (chart year 1) and AY 24-25 (chart year 2) increased from 4.09, to 4.34, and then 4.56. Resident scores on the quality of feedback faculty provided improved from 3.96, to 4.10, then to 4.42. Resident perception of whether the goals of the rotation were met started at 4.07 and improved to 4.31 and then to 4.57. Positive qualitative feedback from attendings, residents and nurses prompted the development of a second card, using a Bingo style, for the senior teaching resident rotation using a similar Delphi process. That card, shown in Table 2, is being implemented this academic year.

Table One: EM PGY 1 Sticker Chart

Emergency Stabilize (PC1)	Identifies unstable child	Initiates basic stabilization	Reassesses after stabilization attempt	Admits a patient to the PICU	Discusses airway equipment, sizes	Manages child with complex PMH	Participates in neonatal resus
History & Physical (PC 2)	Performs observed H+P	Performs observed GU exam	Completes HEADSS assessment	Uses Peds BP table	Identifies SIRS vitals	Performs Trauma Survey	Uses Peds Triage Assessment
Diagnostic Studies (PC 3)	Discusses benefit & risk of CT	Interprets peds Xray	Interprets peds EKG	Uses decision rule	Uses Chooses Wisely	Interprets POCUS	Uses PECARN TBI rule
Diagnosis (PC 4)	DKA	Peds rash	"Fussy" baby	SCIWORA	Appendicitis	ALTE/ BRUE	Acute otitis media
Pharmaco-Therapy (PC 5)	Orders ingestion antidote	Orders ABX for sepsis <60 min	Differentiates epinephrine dosing	Describes glucose dosing	Calculates bum IVF volume	Manages acute agitation	Status epilepticus dosing
Reassess & Dispo (PC 6)	Calculates asthma score	Reassesses hydration status	Makes a PCP appointment	Arranges specialist f/up	Calculates bronchiolitis score	Works with access coordinator	Plan change after re-assessment
Multi tasking (PC 7)	Assesses multiple patients	Assists RN or tech	Prepares discharge instructions	Provides early PO challenge	Edits patient pharmacy in EMR	Provides UA cup and instructions	Creates an EMR "dot" phrase
Procedures (PC 8)	Intubates	U/S Guided IV placed	Laceration repair	Lumbar puncture	Procedural sedation	Dislocation reduction	FB removal
Patient Safety (SBP 1)	Discusses "no ABX" with parents	Describes abuse reporting process	Provides observed dc instructions	Knows weight-based dosing	Completes state form (i.e, dog bite)	Completes patient safety form	Confirms drug dose with pharmacy
Local Goals (See notes)	All charts completed (SBP 4)	Oral rehydration (PC 5)	Logs 10 resuscitation (PC 1)	Manages siblings (PC 7)	Nursemaids reduction (PC 8)	Arranges a transfer (PC 6)	Uses AAP guideline (PBL 1)

Table Two: EM PGY 4 Bingo Card

Intubation <1 yo (including simulation)	Teaches pediatric ventilator settings and vasopressors	Performs neonatal resuscitation (including simulation)	Teaches a learner about vaccine preventable illness's: diagnosis & recommendations	Describes congenital heart abnormalities to a learner
Teaches common pediatric toxic ingestions	Leads a pediatric resuscitation	Creates personal list of medication dosages to memorize	Teaches a learner the placement of an IO	On shift management of a patient with metabolic derangement
Teaches how to perform a pediatric LP	Teaches the management of refractory hypoglycemia	Teaches something new not otherwise listed (Wild Card)	Foreign body ingestion at rural site	Successfully conducts a difficult conversation
Teaches congenital adrenal hyperplasia management	Demonstrates use of the infant warmer	Discusses infant feeding: how much and how often	Demonstrates how to determine correct size of peds CVC	Teaches delivery of medications via ETT
Teaches the evaluation of fever <28 day old	Teaches recognition of child abuse	Places umbilical line (including simulation)	Demonstrates how to hold a conversation on human trafficking	Teaches management of mucous plug in community setting

10 The Pyloric Learning on Repeat Ultrasound Simulator (PyLORUS)

Quinn Bushman, Thomas Sanchez, Hannah Park, KeriAnne Brady, Richard Shin

Introduction: Hypertrophic pyloric stenosis is the most common surgical cause of nonbilious vomiting in infancy and requires prompt diagnosis for optimal outcomes. Ultrasound is the imaging standard for diagnosing pyloric stenosis, with point-of-care ultrasound (POCUS) demonstrating high sensitivity and specificity when performed by trained emergency medicine (EM) physicians and pediatric EM providers (1). Developing an ultrasound training model for EM residents to identify pyloric stenosis addresses a critical educational need. It enables residents to gain hands-on experience recognizing the characteristic sonographic findings of pyloric stenosis, such as increased pyloric muscle thickness and channel length, and to practice reproducible and accurate measurement techniques. Such training improves diagnostic confidence and expedites patient care in the emergency department.

Objective: Our aim was to create a simulated model of pediatric pyloric stenosis using inexpensive and readily available materials. Creating an open-source, reproducible, and durable model would allow for effective teaching and familiarization with this skill for all EM residents.

Design: We used ballistic gel, a water balloon, and a Gastrostomy tube (G-tube). An empty water balloon was placed around the stoma end of the G-tube, with the G-tube balloon inside. The G-tube balloon was inflated with cornstarch-thickened water to simulate muscle. The balloon was tied to