

### INTRODUCTION

To guide clinical care and improve patient outcomes, nurses need proficient critical thinking skills to analyze, evaluate, and synthesize information.

Providing ongoing education that enhances critical thinking skills is essential, yet can be challenging due to factors that may include:

- Staffing and scheduling constraints
- Balancing asynchronous vs. synchronous learning
- Differences in learning styles

Our pediatric sepsis workgroup identified opportunities for improvement in the alert process for sepsis recognition. Changes were implemented to the pediatric sepsis Best Practice Advisory Alerts (BPA's) within the electronic medical record (EMR). These changes required Pediatric Emergency Department staff to:

- Understand the updated BPA workflow to quickly identify possible sepsis and initiate timely treatment
- Apply knowledge of BPA updates in the clinical setting

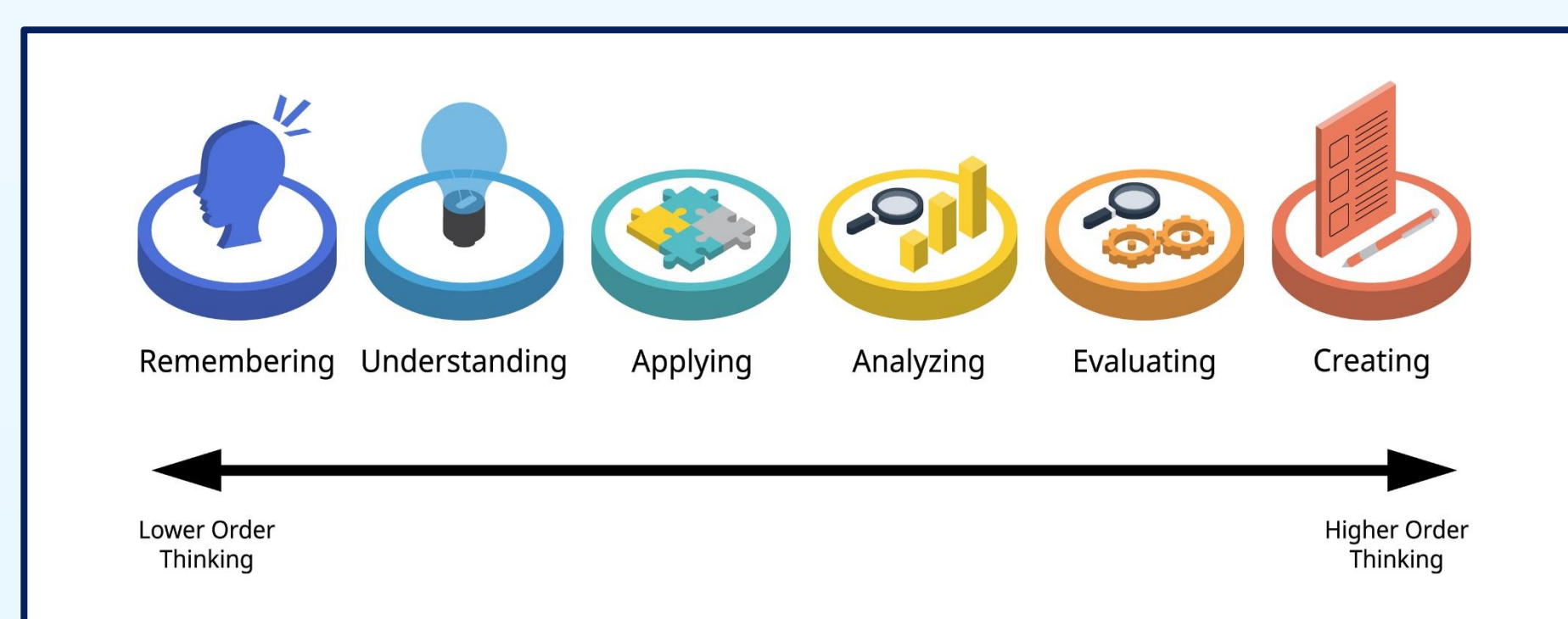
### SETTING

11-bed Pediatric Emergency Department of an urban community hospital

### DESIGN

Using Bloom's Taxonomy framework, the Clinical Nurse Educator and Clinical Nurse Specialist partnered to create a multifaceted approach to education. Both asynchronous and synchronous education modalities were utilized with a goal of moving staff from knowledge acquisition to application-based practice.

Bloom's  
Taxonomy



Asynchronous Prewrite Activity:

- Independent review of a one-page flyer describing the functionality of the BPA and important reminders about pediatric sepsis

Synchronous Escape Bag Activity:

- Progression through a 10-step patient scenario to "escape" and "save" the patient from sepsis
- Scenario included puzzles or challenges pertaining to the pediatric sepsis bundle, with the answer providing the key to unlock the next step
- Utilized common objects such as locks, pencil pouches, blocks, playing cards, a blacklight, and keys to create the escape bag steps



### CONTACTS

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### DISCUSSION

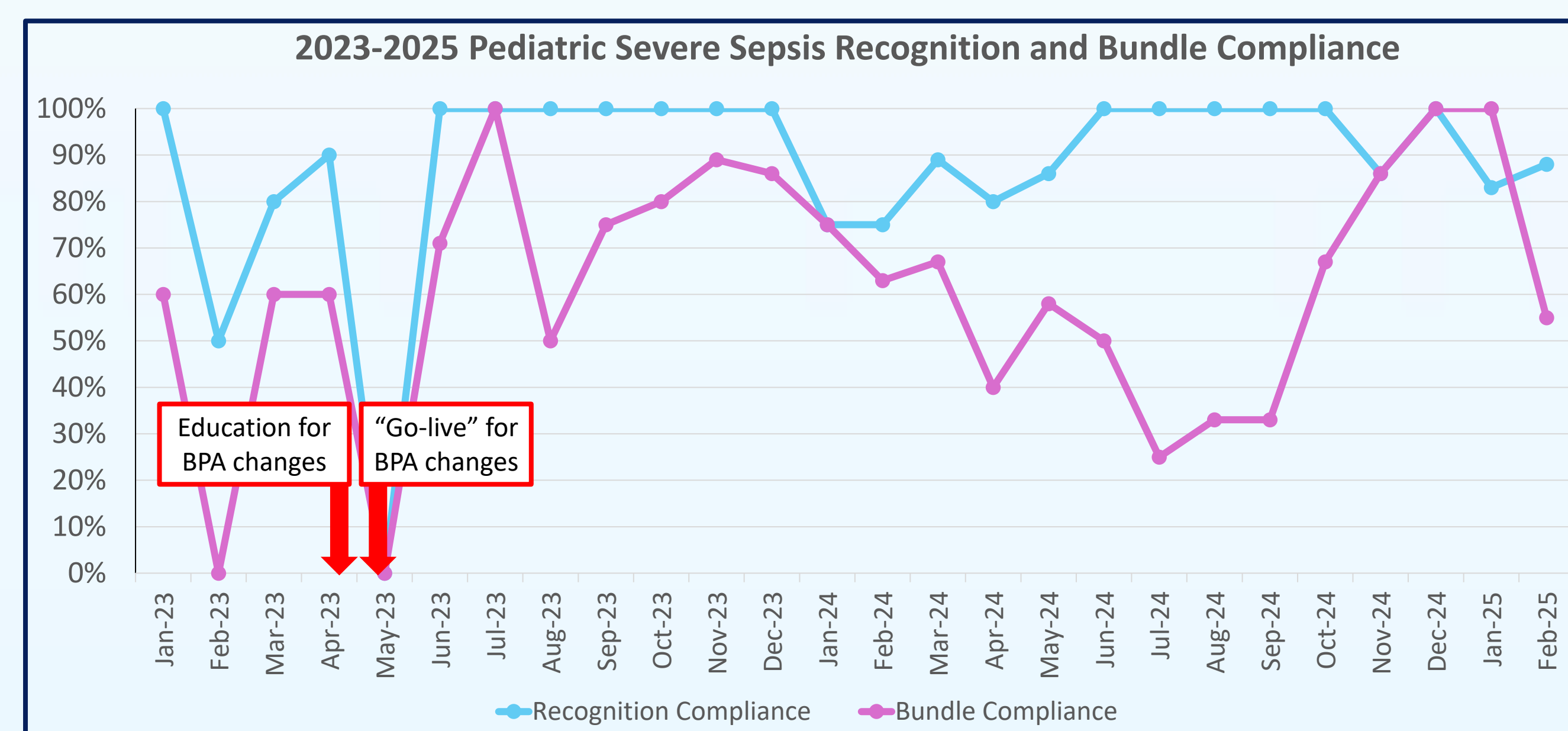
By solving puzzles and challenges in a non-threatening, simulated environment, nurses were able to apply theoretical knowledge to practical scenarios.

The immersive nature of escape bags:

- Transforms the way educators provide critical information
- Enhances retention of information and fosters learner engagement
- Allows for transferability to a variety of settings and populations
- Promotes sustainability of resources
- Enables portability and convenience without the need to reserve classroom or conference room space
- Serves to prepare nurses for the challenges they may face in the clinical setting

### CLINICAL RESULTS

After education was provided and BPA alerts were updated in the EMR, our pediatric sepsis recognition compliance for severe sepsis cases improved from roughly 65% to 100%, with continued sustainability.



### STAFF FEEDBACK

Nurses were engaged with the escape bags and provided positive feedback on the learning activity.

Feedback included:

- Satisfaction with learning in a different format
- Convenience of the activity without the need to come in on days off or travel to a secondary location
- Memorable and effective learning experience utilizing hands-on activities and interactive elements
- Appreciation of having the opportunity to visualize unfamiliar supplies and assemble infrequently used equipment

Comments included:

- "This was fun and will help me remember the information."
- "I appreciated being able to do this during work hours!"
- "The patient in the activity was reflective of a patient that we would see in the Peds ED."
- "This was more helpful than getting an email about a practice change."
- "It's nice to be able to put your hands on equipment and practice."

### REFERENCES

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- Shah, et al. (2023). ESCAPE the boring lecture: Tips and tricks on building puzzles for medical education escape rooms. *Journal of Medical Education and Curricular Development*, 10. <https://doi.org/10.1177/23821205231211200>