

 **MedPro Group**  
a Deltek Healthcare company

PLACE BY HAND   EXPERTISE   CHOICE   THE MEDPRO GROUP DIFFERENCE

## Pediatric Code Blue: Practice Like You Play

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### Objectives

- Discuss the need for simulation training
- Explore the advantages of simulation learning
- Discuss the elements of pediatric code simulation
- Review the barriers to implementing the program
- Review contents of a pediatric mock code toolkit

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### Society for Simulation in Healthcare (SSH)

"A set of techniques to replace or amplify real experiences with planned experiences to evoke or replicate substantial aspects of the real world in an interactive fashion."

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**Simulation training provides...**

- Safe learning environment
- Demonstrate competencies
- No risk to patients

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**Why use simulation?**

- Education
- Assessment
- Research
- Health system integration
- Understanding of human behavior

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**Evidence of simulation**



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### Simulation benefits

Range learning opportunities	Freedom to make mistakes
Detailed feedback and evaluation	Customized learning experience

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### Pediatric codes

27% survival rate

Of those, 34% with neurological deficits

Respiratory and cardiac failures less frequent in children than adults



Source: Auerbach, M., Kessler, D., & Foltin J.C. (2011, January). Repetitive pediatric simulation resuscitation training. *Pediatric Emergency Care*, 27(1), 29-31.

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### Common fears

 <p>Becoming anxious and uncertain</p>	 <p>Not knowing how to use the equipment</p>
 <p>Medication errors</p>	

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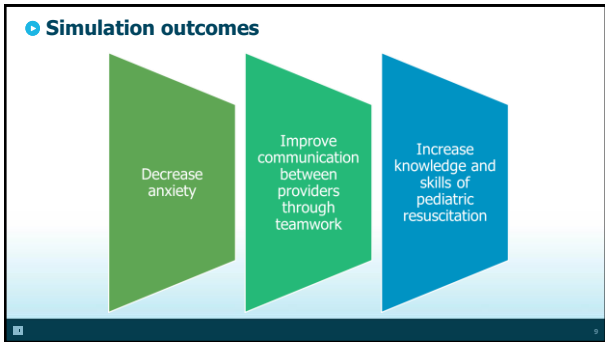
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**MedPro Group**  
a Boston Children's Hospital

PHASE OF CARE    OPERATIONS    CHANGES    THE MEDPRO GROUP EXPERIENCE

### Where to begin....?

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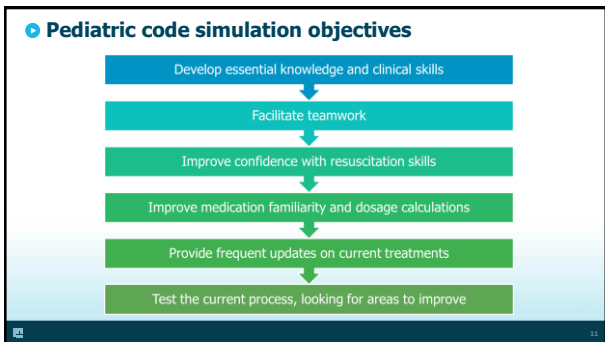
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### Simulation training

Questions to answer

- Who should be part of the team?
- How often should training occur?
- What equipment should be included?
- How long should the mock code take?
- What should be discussed in the debriefing session?
- How should the activity be evaluated?
- What scenarios should be included?

Source: Illinois Emergency Medical Services for Children. (2012, March). Pediatric mock code toolkit (second edition). Retrieved from [http://www.ihs.org/depts/emsc/Mock\\_Code2nED\\_Revised\\_Final\\_2012.pdf](http://www.ihs.org/depts/emsc/Mock_Code2nED_Revised_Final_2012.pdf)

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### Team roles

Interdisciplinary team

ED physician, ED/ICU nurse, patient care tech, supervisor, respiratory therapist, pharmacist

Others: Hospitalist, advance practice provider, anesthesia provider, chaplain, interpreter, security, social worker

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### Frequency of training

Monthly

- Full code or specific components identified as difficult for the lead and/or team

Quarterly

- Full code simulation on each shift



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**Equipment**

Crash cart	Broselow tape	Monitor
Defibrillator	Manikin/dolls	Medications
Syringes	Intubation supplies	

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**Simulation length**

- Brief
- Frequent
- Intense with instruction and practice



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**Debriefing session**

- Description of the mock code
- Analysis of what was effective and what was not
- Application of learning
- Review of the video recording
- The positive aspects of the performance

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### Simulation evaluation

- Team leadership and team communication
- Pediatric ABC's
- IV/IO placement
- Intubation — tubed and checking for breath sounds
- Use of pediatric weight-based emergency reference tools
- Medications — correct type, dosage, preparation, and administration of medications; call-out communication
- Implementation of proper treatment protocols
- ECG interpretation
- Frequent reassessments
- Communication with family

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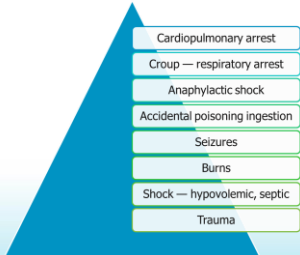
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### Scenario topics



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### Barriers to implementation

- Lack of support by hospital/emergency department leaders
- Funding and staffing issues
- Perception that pediatric code simulations are not a priority due to low volume of pediatric patients
- Belief that basic life support and pediatric advanced life support certification is enough

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### • Pediatric mock code toolkit

- Program planner responsibilities
- Making a resource list of necessities
- Sample scenarios
- Observation form
- Mock code evaluation form
- Simulation evaluation by participants

Illinois Emergency Medical Services for Children, Illinois Department of Public Health, Loyola University Health System

<http://www.luhs.org/depts/emsc/MockCode.htm>

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### • What are you waiting for?



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