

# Innovative Simulation Education of Hybrid Staffing Model for Registered Nurses and Respiratory Therapists



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# **PURPOSE**

This simulation project enhanced registered nurses' (RN) knowledge and confidence in performing routine respiratory therapy (RT) procedures, using rapid cycle deliberate practice (RDCP) methodology.

#### **BACKGROUND**

- A national shortage of RTs led to exploring alternative staffing models for collaborative work between RNs and RTs
- Integrating routine respiratory procedures, such as suctioning and administering respiratory medications for pediatric patients, into nursing workload could improve efficiency by allowing RTs to focus on complex procedures

# **METHODS**



- Didactic education
- Skills practice

Simulation
Design &
Development

- 2 RCDP scenarios developed
- Focus on bronchiolitis and asthma management

Targeted
Simulationpased Education

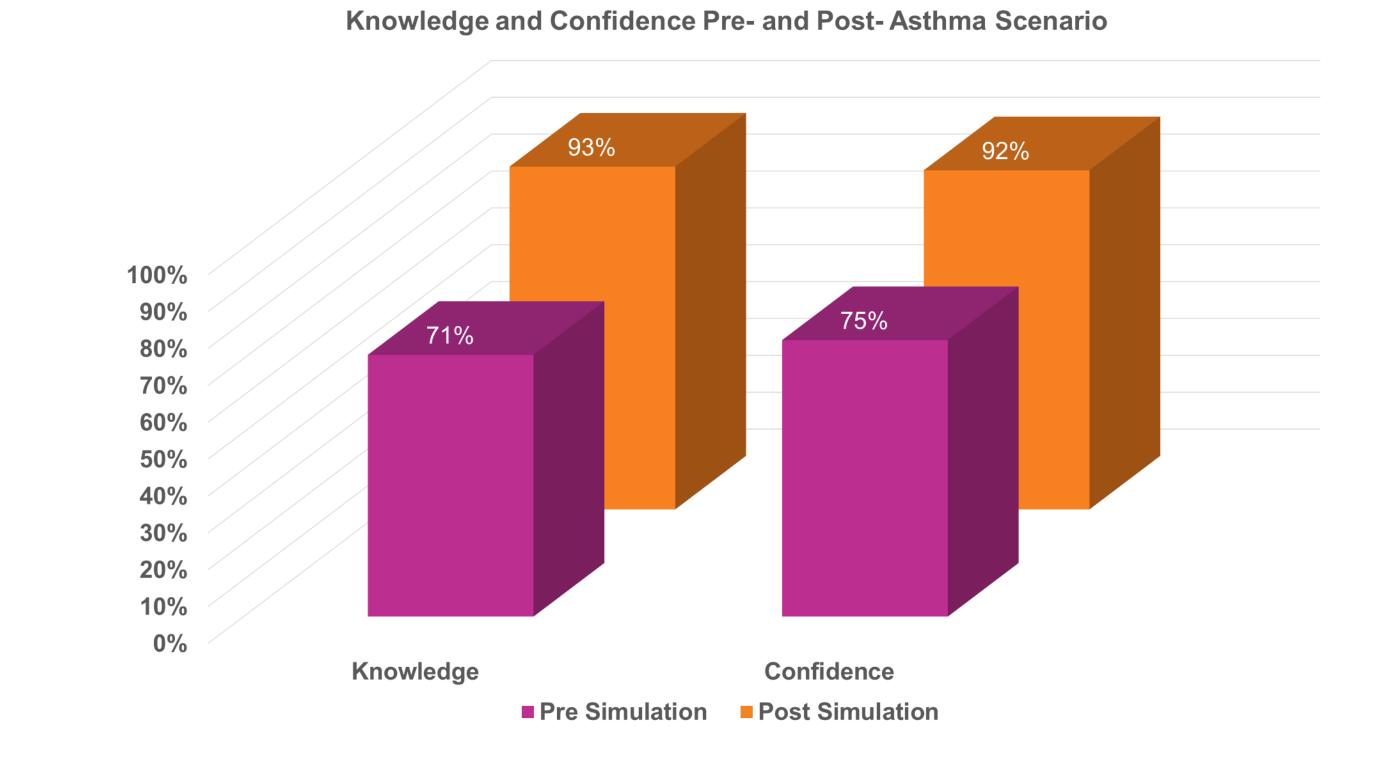
- Train the Trainer approach
- Implementation on units by simulation educators

Outcome Measurement

- Simulation surveys captured self-reported knowledge and confidence changes
- NASA TLX captured perceived impact to nursing workload

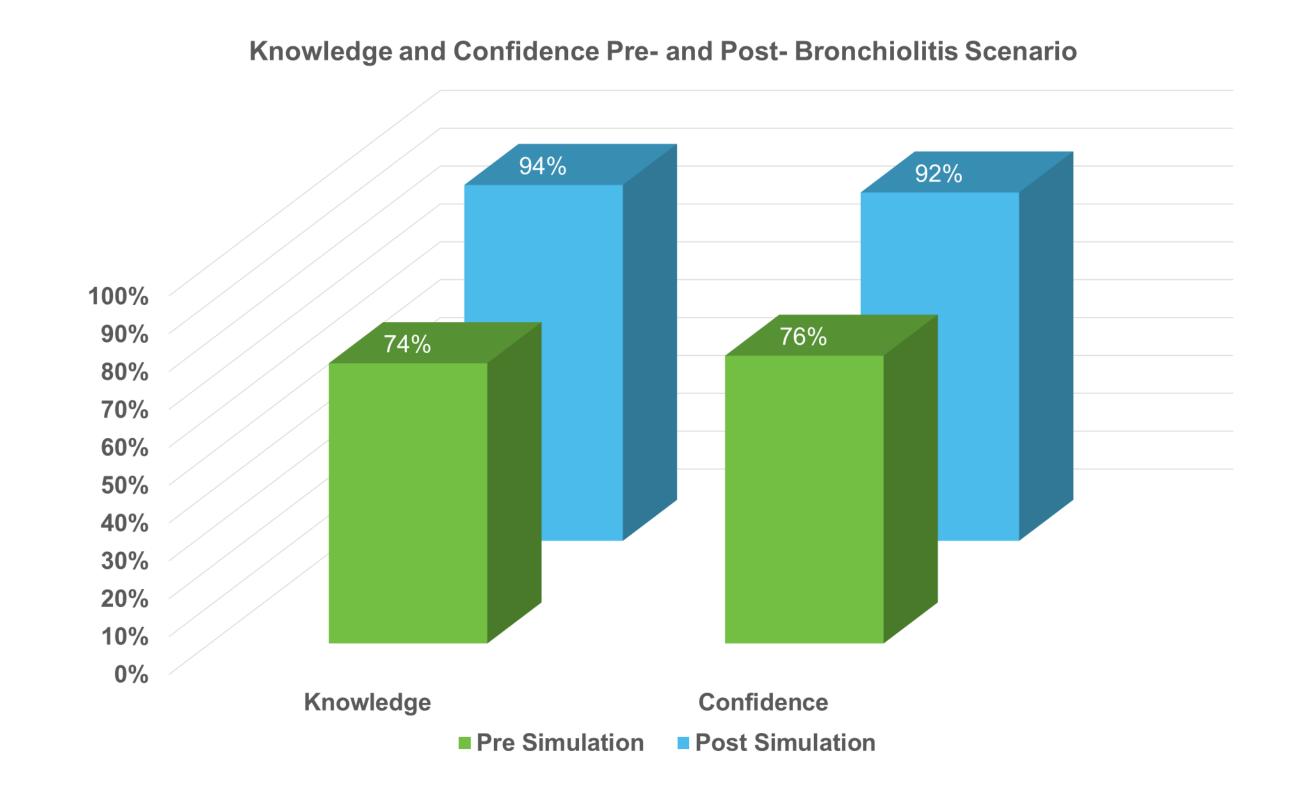
# **RESULTS**

#### **Asthma scenario:**



- 31% self-reported knowledge increase
- 23% confidence increase in identifying appropriate therapy based on respiratory assessment

#### **Bronchiolitis scenario:**



- 27% self-reported knowledge increase
- 21% confidence increase in identifying appropriate therapy based on respiratory assessment

#### **NASA TLX outcomes:**

 NASA TLX scores indicated that nurses did not perceive a significant change in their workload after integrating routine respiratory tasks

### IMPLICATIONS FOR PRACTICE

- RNs and RTs reported increased interdisciplinary collaboration after the simulation experience
- Increase in RN confidence & competence in providing routine respiratory care
- By decreasing RT workload, RTs are available for acute and complex respiratory patient needs



Participants practice nasopharyngeal suctioning during simulation

#### CONCLUSION

RCDP simulation training enhanced RN confidence and knowledge in performing routine respiratory procedures, allowing for RTs to focus on complex respiratory procedures.

Interdisciplinary collaboration during simulation



# Acknowledgements

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