
SPN 36TH ANNUAL CONFERENCE
A BRIGHTER FUTURE
Starts Here
APRIL 27 – APRIL 29, 2026
Renaissance Orlando at SeaWorld | Orlando, Florida

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Micro Learning Utilizing in situ Simulation (MicroSim)
Seattle Children's Hospital
Julia Martinez, BSN, RN, CCRN | Sam Koehler, BSN, RN, CPHON

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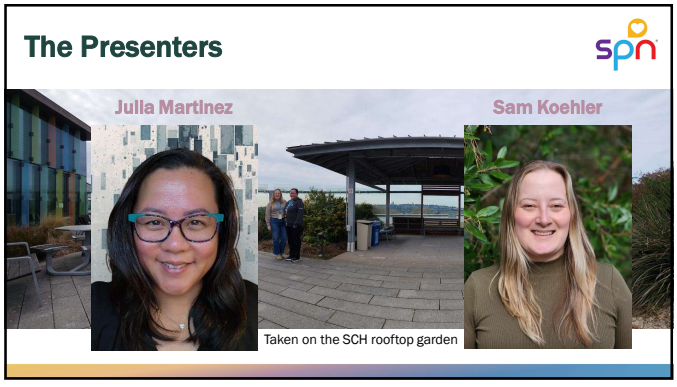
The Presenters
Julia Martinez
Sam Koehler
Taken on the SCH rooftop garden

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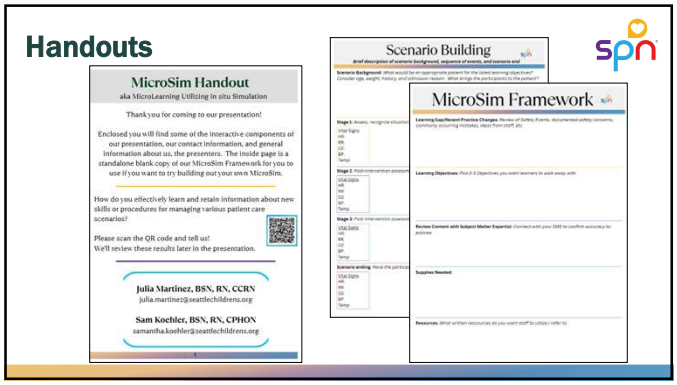
Handouts
MicroSim Handout
aka MicroLearning Utilizing in situ Simulation
Thank you for coming to our presentation!
Enclosed you will find some of the interactive components of our presentation, our contact information, and general information about us, the presenters. The inside page is a standalone blank copy of our MicroSim Framework for you to use if you want to try building out your own MicroSim.
How do you effectively learn and retain information about new skills or procedures for managing various patient care scenarios?
Please scan the QR code and tell us!
We'll review these results later in the presentation.
Julia Martinez, BSN, RN, CCRN
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Sam Koehler, BSN, RN, CPHON
samantha.koehler@seattlechildrens.org
Scenario Building
MicroSim Framework

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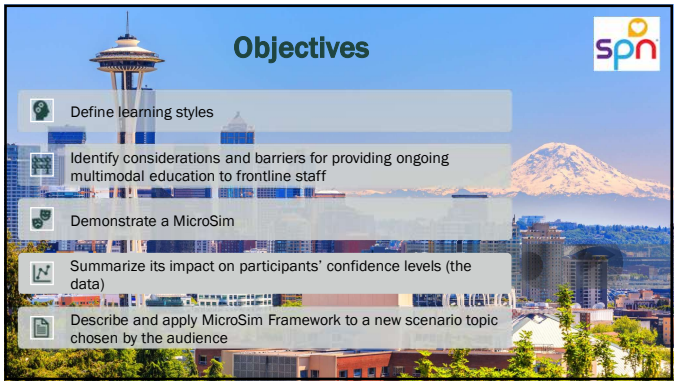
Objectives
Define learning styles
Identify considerations and barriers for providing ongoing multimodal education to frontline staff
Demonstrate a MicroSim
Summarize its impact on participants' confidence levels (the data)
Describe and apply MicroSim Framework to a new scenario topic chosen by the audience

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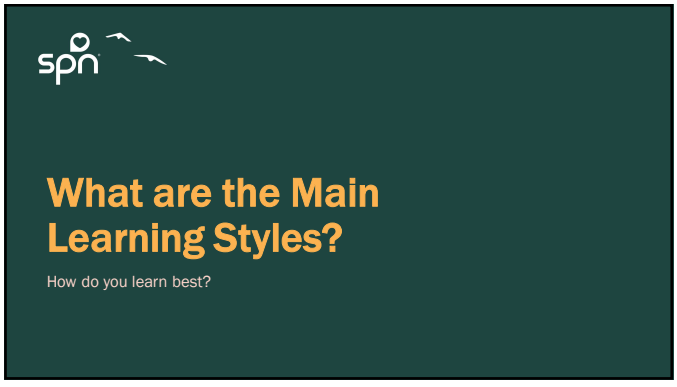
What are the Main Learning Styles?
How do you learn best?

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VARK

LEARNING STYLES

Fleming, 1987

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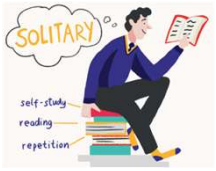
Types of Learning Styles - The Extra Three

Solitary (Intrapersonal):



Social (Interpersonal):

Logical (Mathematical):

Storm, 2017

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How do you prefer to learn?

How do you effectively learn and retain information about new skills or procedures for managing various patient care scenarios?

Please scan the QR code and tell us!

We'll review these results later in the presentation.

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Considerations and Barriers for Providing Ongoing Multimodal Education

Background information about the hospital

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Seattle Children's Hospital in 2025

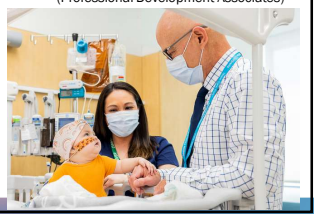
Regional Children's Hospital for WAMI Region

Annual patient visits: 600,680

- Hospital Campus: 185,685
  - Total # of beds: 423
- Ambulatory clinics: 222,290
- Emergency Department: 60,679
- Behavioral Medicine: 69,188
- Surgeries
  - Outpatient: 19,002
  - Inpatient: 6,311

Total # of:

- RNs: 2,145
- NPD Practitioners: 32 + 3 PDAs (Professional Development Associates)



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Existing Training

Typical training for acute care nurses

- New hire orientation / residency (1st year of hire)
- Pediatric Emergency Recognition, Assessment, and Stabilization (PEARS) biannual training
  - Pediatric Advanced Life Support (PALS) is only required for critical care staff
- After 1st year, training options include:
  - Unit-based education offerings
  - In-service education before/after staff meetings
  - Skillsfest

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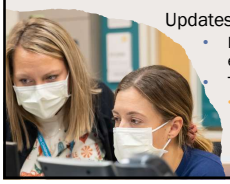
Resources and Updates

Over 3000 published resources

- Policy and Procedure, Guidelines of Care (> 2800)
- Clinical Standard Work Pathways (70+)
- Job aids (~500)
- AHA prescribed content every other year – PEARS or PALS



Updates and changes primarily communicated electronically

- Disruptions in supply chain – changes in medication, equipment, supplies
- Temporary vs Permanent
  - Temporary changes are not always reflected in published resources

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Escalation Resources in Acute Care

Cancer and Blood Disorders Unit Resources:

- 48 private beds divided into 3 16-bed wings
- 18-20 RNs, 6 CNAs, 4 Charge Nurses
- Primary Provider teams are typically on unit
  - Other acute care units do not typically have this

Types of escalations:

- Recognized Illness Severity in Kids (RISK) nurse
- Code Blue
- Rapid Response Team (RRT)
- Medical Emergency Team (MET)

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Challenges and Barriers

Challenges

Staff reported:

- !! Wanting more simulation-based education
- !! Electronically communicated practice changes and updates
- !! Decreased ongoing education opportunities (post-pandemic)
- !! Lack of familiarity with resources
- !! High volume of new graduate nurse hires

Barriers

Identified by leadership and staff:

- × No budget for additional / optional training
- × Staff reluctant to come on site for optional training
- × Resource allocation of the NPD team

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Summary of Literature Review

Published literature proves simulation to be effective at:

- Increasing self-confidence
  - (Liu, Q., Zheng, X., Xu, L., Chen, Q., Zhou, F., & Peng, L. (2023))
- Increasing clinical competency and critical thinking
  - (Ren, Q., Chen, F., Zhang, H., Tu, J., Xu, X., & Liu, C., 2022)
- Reducing delays in interventions including escalation of care
  - (Lambert, C., Wiencek, C., & Francis-Parr, J. (2023)
- Empowering frontline staff to activate escalations of care
  - (Egozcue, E., King, M. A., Bermudez, N., Sadule Rios, N., Villalba, M., & Miller, A., 2023)

Most effective simulation offerings included one or more of the following:

- High-fidelity
- In situ - a training method conducted in the actual clinical environment, using real equipment and on-duty healthcare teams to improve skills, teamwork, and patient safety
- Multidisciplinary
- Dedicated time (typically ≥ 1 hour)

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MicroSim was Born!

What is MicroSim?

- A method of delivering education in an engaging, innovative, and cost-neutral way that can be done within 15 minutes
- Initially focused on the following goals:
  - Recognition and appropriate escalation of care based on vital signs and initial assessment
  - Prioritization of nursing tasks
  - Actions and preparation while waiting
  - Interrupting incorrect decisions and behaviors

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Evolution of MicroSim Goals

Additional opportunities for:

- Evaluating critical thinking skills
- Hands on practice
- Reviewing equipment location, use, and troubleshooting
- Identifying and addressing unexpected knowledge / skill gaps
- Awareness and proper use of published resources

Humidified Blow-By

Supplemental Oxygen Blow-By

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Scenario Selection

Built based on gaps in practice identified with unit leadership through:

- Audits
- Escalations to Leadership
- QI reporting database
- Rescue Reviews
- Code Blue Reviews
- Staff rounding

Examples of our learning objectives:

- When to call an RRT vs a Code Blue
- Review proper technique for providing rescue breaths
- How to administer and waste intranasal medication
- Who can administer IM epinephrine and when
- Awareness of pathway/policy
- Commonly missed documentation items

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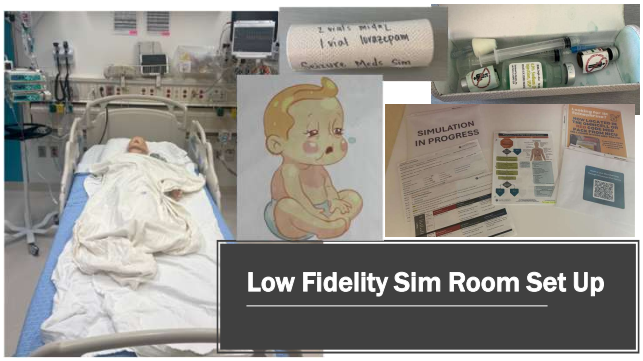

Low Fidelity Sim Room Set Up

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Let's See a MicroSim in Action!

Please welcome Erika and Rachel who will help us demonstrate.

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Simulation Agreement

- Ground Rules:
  - Participate fully
  - Maintain confidentiality
  - Be professional
  - Suspend disbelief
- Complete pre-survey questions
- You are sitting alone at the nurses station and…

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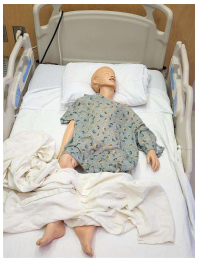
Stage 1 - Walk in the room and see…

Mom states “Indigo is seizing again”

- Focal seizures – lip smacking and staring off



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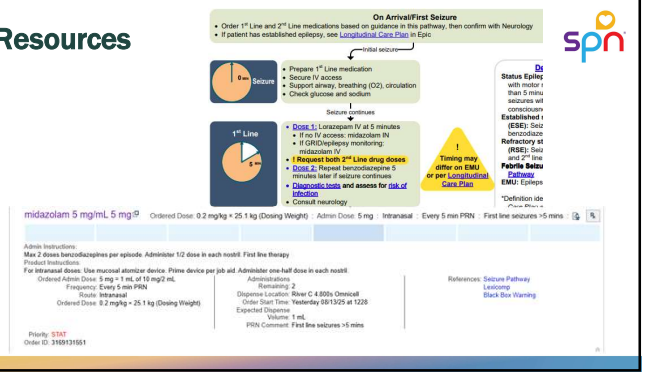
Resources



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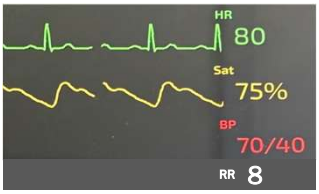
Stage 2

Indigo is still seizing after 1st intranasal midazolam was given



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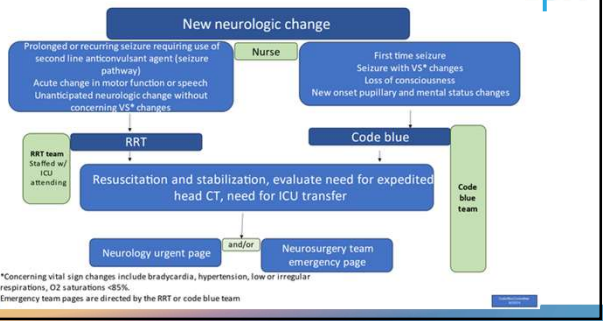
Escalation?



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Stage 3

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Scenario End and Debrief

Debrief
- How did that feel?
- What went well?
- What could have gone better
- What would you do differently next time?

Facilitator education points
- Documentation considerations
- Review content and where to find any resources referenced

Complete post-survey

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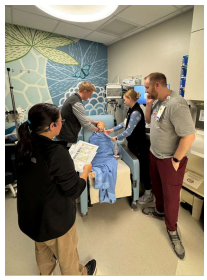
IntraSim Data - How did they do?

Name	Timing		O_2 via blowby		1st line rescue	
	Independent	Coached	Independent	Coached	Independent	Coached
Erika						
Rachel						

Name	IN Midazolam		Rescue Breaths		Code Blue	
	Independent	Coached	Independent	Coached	Independent	Coached
Erika						
Rachel						



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The Impacts of MicroSim

Reviewing the collected data

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Learning Objectives (IntraSim) Data
- Seizure MicroSim (Medical Unit)

Stable seizing → RRT (n=17)

Call for 1st line rescue medication
- 100% completed independently

Proper IV med admin and waste
- 71% correctly demonstrated

Timed seizure
- 100% verbalized necessity upon entry

Call Rapid Response Team (RRT)
- 100% initiated without coaching

SBAR (to summarize handoff)
- 65% completed independently

Knowledge of available resources
- 42% verbalized knowledge

Unstable seizing → Code Blue (n=23)

Call for 1st line rescue medication
- 87% completed independently

Proper IN med admin and waste
- 74% correctly demonstrated

Administered Rescue Breaths
- 57% initiated independently

Call Code Blue
- 57% initiated without coaching

1-liner (succinct handoff to code team)
- 48% completed independently

Knowledge of available resources
- 18% verbalized knowledge

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Data Collection – Confidence Scores

Pre-Survey Questions

How confident…
- Knowing when to call the following without consulting your peers or the charge nurse first?
  - Provider, Staff Assist, RRT, Code Blue
- Determining and initiating the appropriate next steps once a patient's condition is identified?
- Do you feel in knowing when to escalate a patient experiencing (insert relevant scenarios)?

Post-Survey Questions

Contained the exact same confidence score questions as the pre-survey and:
- How helpful was this training?
- Additional Comments?
- Ideas for future scenarios?

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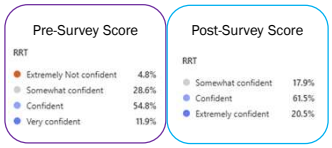
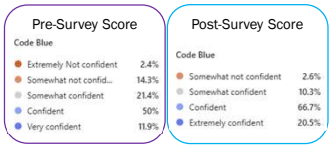
Comparing Pre- and Post-Survey Data
- Seizure MicroSim (Medical Unit)

Combined seizure scenarios score data:
How confident are you in properly escalating to an RRT or Code Blue without consulting your peers or the charge nurse first?

RRT escalation



Code Blue



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Comparing Pre- and Post-Survey Data
- Seizure MicroSim (Medical Unit)

Combined seizure scenarios (RRT & Code Blue) score data: How confident do you feel in knowing when to escalate a patient having a seizure?

Pre-Survey Score	Post-Survey Score
4.05	4.33
Average Rating	Average Rating
1 2 3 4 5	1 2 3 4 5

How helpful was this training?

Seizure Scenario	
Somewhat Helpful	7.7%
Very Helpful	92.3%

- Some staff comments
  - "Thank you for making it low key!"
  - "great job"
  - "Thanks for being kind and educational"
  - "thank you!!!!!"

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Comparing Pre- and Post-Survey Data
- Anaphylaxis MicroSim (CBDC Unit Pilot)

Learning Objectives: (n=70)
- Recognize severe anaphylaxis requiring a Code Blue
  - 57% required coaching
- Role of bedside RN in drawing up and administering IM Epi
  - 25% correctly verbalized
- How to properly set up and administer blow-by using ambubag
  - 67% required coaching
- Aware of Anaphylaxis Pathway resource
  - 13% demonstrated awareness

Anaphylaxis Scenario: How confident are you in properly escalating to an RRT or Code Blue without consulting your peers or the charge nurse first?

Pre-Survey Score		Post-Survey Score	
Code Blue		Code Blue	
Somewhat not confid...	20.7%	Somewhat Not Confid...	2.9%
Somewhat confident	15.5%	Somewhat Confident	20.6%
Confident	41.4%	Confident	52.9%
Very confident	22.4%	Very Confident	23.5%

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Comparing Pre- and Post-Survey Data
- Anaphylaxis MicroSim (CBDC Unit Pilot)

How confident do you feel in knowing when to escalate a patient experiencing severe anaphylaxis?

Pre-Survey Score	Post-Survey Score
3.88	4.31
Average Rating	Average Rating
1 2 3 4 5	1 2 3 4 5

How helpful was this training?

Anaphylaxis Scenario	
Somewhat Helpful	25%
Very Helpful	75%

- Some staff comments
  - "great explanations"
  - "info was very helpful"
  - "great refresher"
  - "quick and helpful"

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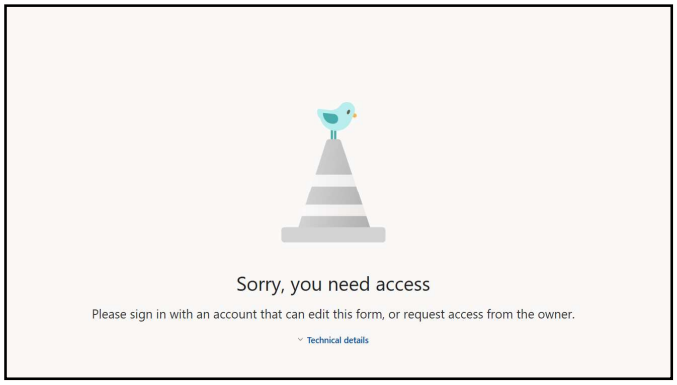

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Teaching to Different Learning Styles

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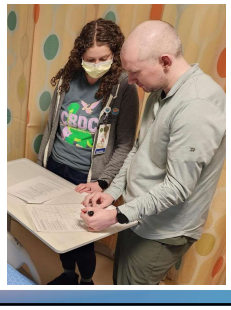
Teaching to Different Learning Styles

Individual learning (Solitary)

Working through written resources (Logical)



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Let's Walk Through a MicroSim Framework Build

Understanding the background information needed to build a MicroSim

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Microsoft

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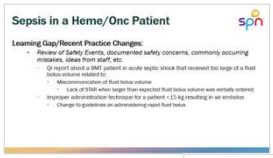
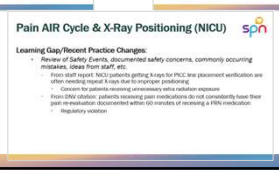
Which MicroSim would you like to see built?





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Future MicroSim Applications

It's not just for escalation of care practice in acute care settings!

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How Else Can MicroSim Be Used?

Pharmacy
- Blinatumomab changing from hazardous drug to non-hazardous drug

ICU
- Cardiac ICU - VAD (Ventricular Assist Device) Management

Acute Care
- Hematology / Oncology - Acute Chest (sickle cell) & pain crisis
- Extra-ventricular Drain (EVD) assessment and troubleshooting

Urgent Care
- Triaging respiratory distress and interdisciplinary application of supplemental oxygen

Increase staff engagement
- Have Shared Governance nurses that are interested in professionally developing other skills without leaving the bedside

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Questions?

Interested in bringing MicroSim to your organization?
- Reach out to us for more information!
- Contact information is also on the handouts

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References

Egozcue, E., King, M. A., Bermudez, N., Sadule Rios, N., Villalba, M., & Miller, A. (2023). Empowering nursing staff to activate rapid response teams: Using in situ simulation to bolster knowledge and confidence. *Nursing & Health Sciences Research Journal*, *6*(1), 34–48. https://doi.org/10.55481/2578-3750.1168

Lambert, C., Wiencek, C., & Francis-Parr, J. (2023). Effect of simulation-based training on the self-confidence of new nurses in the care of patients with acute deterioration and activation of the Rapid Response Team. *The Journal of Continuing Education in Nursing*, *54*(8), 367–376. https://doi.org/10.3928/00220124-20230711-07

Liu, Q., Zheng, X., Xu, L., Chen, Q., Zhou, F., & Peng, L. (2023). The effectiveness of education strategies for nurses to recognise and manage clinical deterioration: A systematic review. *Nurse Education Today*, *126*, 105838. https://doi.org/10.1016/j.nedt.2023.105838

Ren, Q., Chen, F., Zhang, H., Tu, J., Xu, X., & Liu, C. (2022). Effects of a standardized patient-based simulation in anaphylactic shock management for new graduate nurses. *BMC Nursing*, *21*(1). https://doi.org/10.1186/s12912-022-00995-y

The vark modalities: Visual, aural, read/write & kinesthetic. VARK. (2024, August 12). https://vark-learn.com/introduction-to-vark/the-vark-modalities

Storm, A. (n.d.). The 7 main types of learning styles (and how to teach to them) | Thinkific. https://www.thinkific.com/blog/learning-styles/

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Sepsis in a Heme/Onc Patient

Learning Gap/Recent Practice Changes:

- *Review of Safety Events, documented safety concerns, commonly occurring mistakes, ideas from staff, etc.*
  - QI report about a BMT patient in acute septic shock that received too large of a fluid bolus volume related to:
    - Miscommunication of fluid bolus volume
      - Lack of STAR when larger than expected fluid bolus volume was verbally ordered
  - Improper administration technique for a patient <15 kg resulting in air embolus
    - Change to guidelines on administering rapid fluid bolus

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Sepsis in a Heme/Onc Patient

Learning Objectives:

- *Pick at least 2 objectives you want learners to walk away with*
  1. Recognize hypotension related to suspected septic shock
  2. Calculate appropriate fluid bolus volumes based on clinical need
  3. Clarify what actions can be taken based on verbally discussed plans
  4. Distinguish RN actions that must wait to be carried out until an order is entered in the EHR
  5. Demonstrate proper fluid bolus administration
  6. Recognize fluid overload and need for RRT escalation

Review Content with Subject Matter Expert(s):

- *To confirm accuracy and minimize ambiguity*
  - Cancer and Blood Disorders BMT CNS
  - HemOnc BMT Suspected Infection (HOBSI) Clinical Standard Work Pathway Owners

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Sepsis in a Heme/Onc Patient

Supplies Needed:

- Manikin
- VS screen printouts
- Functional IV that can be infused into
- Fluid bolus supplies

Resources:

- *What written resources should staff utilize / refer to*
  - Rapid Fluid Bolus Job Aid
  - HOBSI (HemOnc BMT Suspected Infection) CSW Pathway

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Sepsis (Heme/Onc) – Scenario Building

Scenario Background:

- *What would be an appropriate patient for the listed learning objectives? Consider age, weight, history, and admission reason. What brings the participants to the patient?*
  - 6 y/o with ALL admitted for Fever + Neutropenia 36 hours ago, 20 kg, NKA
  - Received 1x 20ml/kg NS bolus in ED, started on antibiotics (Ceftazidime) after labs and blood cultures drawn
  - You are an RN on the oncology unit and enter the room to complete your start of shift assessment and administer scheduled meds. Mom is sleeping at bedside.

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Sepsis (Heme/Onc) – Scenario Building

Stage 1: *Assess, recognize situation needs, necessary escalations, anticipated interventions*

- Full head-to-toe assessment, full set of VS with new BP
  - Assessment details (given by facilitator when prompted):
    - Hot core, cool and mottled extremities, 1+ peripheral pulses, 2+ central pulses
- Recognize hypotension in setting of fever, suspect septic shock
- Call provider to notify of VS and assessment findings
  - Provider responds they will come to bedside to assess
- Anticipate need for fluid bolus (20 mL/kg)

Vital Signs:
HR: 120
RR: 28
O_2: 95% on RA
BP: 80/40
Temp: 38.9

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Sepsis (Heme/Onc) – Scenario Building

Stage 2: *Post-intervention assessment data, expectation of next actions and escalations*

- Obtain supplies for fluid bolus - ask what method they will use to determine supplies
  - Demonstrate the steps for prepping a 400mL fluid bolus (push/pull vs pressure bag)
- Provider assesses patient, verbally confirms fluid bolus order and asks to have it started while they enter the order
  - RN must state they cannot start the fluid bolus until order is entered in EHR
- Once order is entered, demonstrate 5 rights and scanning med into EMR, then RN begins fluid bolus

Vital Signs:
HR: 120
RR: 28
O_2: 95% on RA
BP: 80/40
Temp: 38.9

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Sepsis (Heme/Onc) – Scenario Building

Stage 3: *Post-intervention assessment data, expectation of next actions and escalations*

- When bolus completes, RN actions:
  - Clamp bolus line
  - Reassess patient: obtain full set of VS, assess pulses, perfusion and lung sounds
    - Assessment details: Patient somnolent but arousable, cool and mottled extremities, 1+ peripheral pulses, 2+ central pulses. Lung sounds diminished but crackles when auscultated
  - Recognize fluid overload while still hypotensive
  - Call RRT for escalation of care
    - Likely needs pressors

Vital Signs:
HR: 135
RR: 37
O_2: 92% on RA
BP: 75/38
Temp: 38.9

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Sepsis (Heme/Onc) – Scenario Building

Scenario ending: *Have the participant give a scenario summary as a way to segue into debriefing*

- RRT arrives, RISK RN asks "what's going on?"
  - SBAR summary of scenario to RISK RN

Vital Signs:
HR: 135
RR: 37
O_2: 92% on RA
BP: 75/38
Temp: 38.9

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Managing Stable SVT in Acute Care Cardiac Unit

Learning Gap/Recent Practice Changes:

- *Review of Safety Events, documented safety concerns, commonly occurring mistakes, ideas from staff, etc.*
  - From QI report by unit charge nurse: patient was in stable SVT and no clear policy established on the new intermediate cardiac care unit on how to manage the situation
    - Policy established for acute care cardiac unit but the staff training required for that unit is different

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Managing Stable SVT in Acute Care Cardiac Unit

Learning Objectives:

- *Pick at least 2 objectives you want learners to walk away with*
  1. Identify stable SVT
  2. Verbalize appropriate vagal maneuvers to attempt
  3. Demonstrate proper med prep of adenosine with a 2nd RN using 5 Rights
  4. Demonstrate correct adenosine administration using 2 RN method
  5. Recognize the need to call RRT for ICU transfer

Review Content with Subject Matter Expert(s):

- *To confirm accuracy and minimize ambiguity*
  - Angela – unit Clinical Nurse Specialist
  - Resuscitation Committee

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Managing Stable SVT in Acute Care Cardiac Unit

Supplies Needed:

- Pre-printed 12 lead EKG showing SVT
- Fake adenosine
- Training defibrillator pads
- Functional IV with drain bag (to infuse meds into)

Resources:

- *What written resources should staff utilize / refer to*
  - Managing stable SVT
  - Code Blue policy

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Managing Stable SVT in Acute Care Cardiac Unit – Scenario Building

Scenario Background:

- *What would be an appropriate patient for the listed learning objectives? Consider age, weight, history, and admission reason. What brings the participants to the patient?*
  - 2 month old with history of Wolff-Parkinson-White & VSD admitted to CSCU (or floor) s/p VSD closure POD 3. You hear his monitor alarming for high heart rate and go in his room to check on him, parent is sleeping bedside.

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Managing Stable SVT in Acute Care Cardiac Unit – Scenario Building

Stage 1: *Assess, recognize situation needs, necessary escalations, anticipated interventions*

- Display VS screen with waveforms
- Participants will:
  - Recognize SVT
  - Assess patient to determine stable vs unstable
    - Patient awake, fussy but consolable; parent in room
    - Pulses 2+, Cap refill 3 seconds, Pink, warm, afebrile (36.8)
  - Check IV access for patency
  - Call Provider to notify

Vital Signs:
HR: 220
RR: 34
O_2: 97% on RA
BP: 84/58
Temp: normal

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Managing Stable SVT in Acute Care Cardiac Unit – Scenario Building

Stage 2: *Post-intervention assessment data, expectation of next actions and escalations*

- While waiting for Provider to arrive, attempt vagal maneuvers (unsuccessful)
  - Ice to face
  - Knees to chest
  - Carotid massage
  - Suctioning
- 12 lead EKG ordered and obtained
- Provider arrives, assesses patient and reads 12 lead result
  - Confirms stable SVT
  - Orders adenosine
- RN obtains adenosine and supplies (unsuccessful)
- RN draws up ordered dose, primes stopcock with flush and attaches med
  - 5 Rights verbalized and 2 RN administration
  - RN places defib pads on patient to prepare for electrical cardioversion

Vital Signs:
HR: 220
RR: 36
O_2: 97% on RA
BP: 84/58
Temp: normal

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Managing Stable SVT in Acute Care Cardiac Unit – Scenario Building

Stage 3: *Post-intervention assessment data, expectation of next actions and escalations*

- Patient assessment completed by provider and bedside staff
  - Still in stable SVT, adenosine was unsuccessful in chemical cardioversion
- Call RRT if not already called – for transfer to higher level of care
- If patient is in IMCCU:
  - RN places defib pads on patient to prepare for electrical cardioversion

Vital Signs:
HR: 220
RR: 36
O_2: 88% on RA
BP: 110/65
Temp: normal

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Managing Stable SVT in Acute Care Cardiac Unit – Scenario Building

Scenario ending:

- *Have the participant give a scenario summary as a way to segue into debriefing*
  - Rapid Response Team arrives
    - RN gives SBAR to RISK to begin transfer to ICU process
  - Parent in the room asks "what is going on?"
    - RN uses non-medical jargon in response to:
      - Summary of events
      - Decision to transfer to ICU
      - Likely next steps

Vital Signs:
HR: 220
RR: 36
O_2: 88% on RA
BP: 110/65
Temp: normal

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Pain AIR Cycle & X-Ray Positioning (NICU)

Learning Gap/Recent Practice Changes:

- *Review of Safety Events, documented safety concerns, commonly occurring mistakes, ideas from staff, etc.*
  - From staff report: NICU patients getting X-rays for PICC line placement verification are often needing repeat X-rays due to improper positioning
    - Concern for patients receiving unnecessary extra radiation exposure
  - From DNV citation: patients receiving pain medications do not consistently have their pain re-evaluation documented within 60 minutes of receiving a PRN medication
    - Regulatory violation

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Pain AIR Cycle & X-Ray Positioning (NICU)

Learning Objectives:

- *Pick at least 2 objectives you want learners to walk away with*
  1. Document pain assessment corresponding
  2. Choose appropriate PRN (when multiple options exist) that corresponds with documented pain score
  3. Verbalize when documentation of pain reassessment score is required (within 30-60 minutes of the PRN
  4. Using a positionable doll, position patient appropriately for various PICC line placement verification X-rays

Review Content with Subject Matter Expert(s):

- *To confirm accuracy and minimize ambiguity*
  - NICU Clinical Nurse Specialist
  - PICC insertion-trained RN

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Pain AIR Cycle & X-Ray Positioning (NICU)

Supplies Needed:

- Positionable doll with PICC line
- Printed MAR with various PRN options available
- Printed and laminated screenshot of pain documentation section
  - For staff to indicate what they would document and where

Resources:

- *What written resources should staff utilize / refer to*
  - Peripherally Inserted Central Catheter (PICC) Insertion and Management in the NICU, 10811
  - NICU Comfort Protocol, 10270

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Pain AIR Cycle & X-Ray Positioning (NICU) – Scenario Building

Scenario Background:

- *What would be an appropriate patient for the listed learning objectives? Consider age, weight, history, and admission reason. What brings the participants to the patient?*
  - 37 wk gastroschisis admitted [insert time] for repair at bedside. PICC line placed on admission by NICU PICC RN for parenteral nutrition while NPO. No caregivers at bedside.
    - If night shift: coming on after all procedures were done late afternoon, still needs X-ray done for initial PICC line placement verification
    - If day shift: coming on day after admission, pt needs 24 hour post PICC placement X-ray

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Pain AIR Cycle & X-Ray Positioning (NICU) – Scenario Building

Stage 1: *Assess, recognize situation needs, necessary escalations, anticipated interventions*

- Post procedure, Juniper still has sedation onboard and is resting comfortably
- SL PICC in RUE running:
  - PN @ 8
  - IL @ 1.5
  - Morphine @ 0.002 mg
  - Precedex @ 0.5
- Intubated on Volume Guarantee

Vital Signs:
HR: 130s
RR: 50s
O_2: 97%
BP: 78/40
Temp: normal

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Pain AIR Cycle & X-Ray Positioning (NICU) – Scenario Building

Stage 2: (1 hour later) *Post-intervention assessment data, expectation of next actions and escalations*

- Cardiorespiratory monitor begins alarming
  - Patient is grimacing, fussy, inconsolable with reposition, swaddle, and pats
- RN actions:
  - Assess pain using N-PASS and document
  - Look at available PRN medications
    - Select morphine (rated for moderate-severe pain)
  - Draw up and administer pain med
  - Look at available PRN medications
  - Note time and set reminder to reassess pain ~45 minutes later

Vital Signs:
HR: 170s
RR: 80s
O_2: 91-94%
BP: 88/45
Temp: normal

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Pain AIR Cycle & X-Ray Positioning (NICU) – Scenario Building

Stage 3: (~45 min later) *Post-intervention assessment data, expectation of next actions and escalations*

- RN reassesses patient
  - Pain score now 0, document appropriately
- Portable X-Ray arrives for line placement verification imaging
  - RN positions patient appropriately
    - Refer to policy for proper positioning

Vital Signs:
HR: 130s
RR: 50s
O_2: 97% on VG
BP: 75/38
Temp: normal

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Pain AIR Cycle & X-Ray Positioning (NICU) – Scenario Building

Scenario ending: *Have the participant give a scenario summary as a way to segue into debriefing*

- Going on lunch break – give coworker a brief summary
  - Include latest PRNs given and what may still be available if needed

Vital Signs:
HR: 130s
RR: 50s
O_2: 97% on VG
BP: 75/38
Temp: normal

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