

Supplement 1. Pediatric Simulation Template

I. This tool is a draft template developed through literature review for the development of pediatric nursing simulation scenarios. The template consists of a total of 9 parts. First, please review whether to maintain the relevant part, and then review the items and contents of the subsequent parts. Please provide your opinions by adding comments to each item for review.

Part 1. Initial elements
 Part 2. Objectives and Expected Outcomes
 Part 3. Preparation
 Part 4. Pre-briefing Plan
 Part 5. Case Information
 Part 6. Scenario Progression
 Part 7. Debriefing Planning
 Part 8. Evaluation Tools Development of scenario

I. This is a draft template for pediatric nursing simulation scenarios under study. It consists of a total of 9 parts.

Simulation Scenario Template for Child’s Care (SST-CC)						
Part 1. Initial Elements						
Title						
Target learners	<input type="checkbox"/> Students (grade 1, grade 2, grade 3, grade 4) <input type="checkbox"/> Nurse (Registered Nurse, Nurse Practitioner, Nurse Educator) <input type="checkbox"/> Others ()					
Target skill acquisition	<input type="checkbox"/> Novice <input type="checkbox"/> Advanced beginner <input type="checkbox"/> Competent <input type="checkbox"/> Proficient <input type="checkbox"/> Expert					
Approximate Timing	Pre-briefing		Running		Debriefing	
Prerequisite competencies	Knowledge		Skill		Attitudes	
Brief description of case						
Instructors						

Part 2. Objectives and Expected Outcomes		
Scenario Objectives		SMART TEST
		<input type="checkbox"/> Specific <input type="checkbox"/> Measurable <input type="checkbox"/> Attainable <input type="checkbox"/> Relevant <input type="checkbox"/> Timely
Expected outcomes		<input type="checkbox"/> Psychomotor <input type="checkbox"/> Cognition <input type="checkbox"/> Affection
Evaluation		<input type="checkbox"/> Psychomotor <input type="checkbox"/> Cognition <input type="checkbox"/> Affection

Part 3. Preparation		
Environment and Setting	<input type="checkbox"/> Pediatric and Adolescent Ward <input type="checkbox"/> Pediatric Emergency Department <input type="checkbox"/> Neonatal Intensive Care Unit, NICU <input type="checkbox"/> Newborn baby Room, NR <input type="checkbox"/> Pediatric Intensive Care Unit, PICU <input type="checkbox"/> Others ()	
Fidelity & Patient	<input type="checkbox"/> No patient	<input type="checkbox"/> Task trainers
	<input type="checkbox"/> Standard patient	<input type="checkbox"/> Low-fidelity simulator
	<input type="checkbox"/> Virtual patient	<input type="checkbox"/> High-fidelity simulator
Equipment required	Monitoring	Medication & Fluids
	<input type="checkbox"/> ECG & Respiration leads <input type="checkbox"/> Temperature probe <input type="checkbox"/> NIBP cuff <input type="checkbox"/> Pulse oximeter <input type="checkbox"/> Others ()	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Embedded participants and Roles	<input type="checkbox"/> Nurse <input type="checkbox"/> Doctor <input type="checkbox"/> Patient <input type="checkbox"/> Guardian <input type="checkbox"/> Others ()	

Part 4. Pre-briefing Plan	
Briefing lists	<input type="checkbox"/> Learning objectives <input type="checkbox"/> Learner preparation(knowledge, skills, attitudes) <input type="checkbox"/> Brief scenario <input type="checkbox"/> Simulation room orientation: modality and equipment <input type="checkbox"/> Method of evaluation <input type="checkbox"/> Time allotment <input type="checkbox"/> Roles <input type="checkbox"/> Debriefing: purpose, methods, process
Psychologically safe learning environment	Giving permission for participants to make mistakes in the simulation Establishing rules for a safe environment Setting ground rules for open communication

Part 5. Case Information						
Name	Age	Gender	Weight	Height	Head Circumference	Others
Chief complaints & Concerns						
Present illness & medications						
Past health history & medications						
Allergies			Family history			
Attachment (Others)	Physical exam Dr's order Laboratory results Radiology results Progress note					

Part 6. Scenario Progression					
State	Time	Patient status	Learner Actions, Modifiers & Trigger to Move to Next state		Facilitator Notes
1. Initial State			<u>Expected Learner's Actions</u> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>Modifiers</u> <u>Triggers</u>	
2. Secondary State			<u>Expected Learner's Actions</u> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>Modifiers</u> <u>Triggers</u>	
3. Third State			<u>Expected Learner's Actions</u> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>Modifiers</u> <u>Triggers</u>	
4. Final State			<u>Expected Learner's Actions</u> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>Modifiers</u> <u>Triggers</u>	

Part 7. Debriefing Planning	
Types	<input type="checkbox"/> Video Review <input type="checkbox"/> Peer-Led <input type="checkbox"/> Written <input type="checkbox"/> Others <input type="checkbox"/> Individual (below 2 person) <input type="checkbox"/> Small Group (3-8 person) <input type="checkbox"/> Large Group (above 9 person)
Gather	What they think and how they feel about the simulation?
Analyze	Providing feedback on performance, facilitating participant reflection and analyzing actions and performance gaps.
Summarize	Identifying lessons learned.
Self-reflection	
Discussion	
Phrampus, P. E., & O'Donnell, J. M. (2013). Debriefing using a structured and supported approach. In A. I. Levine, S. DeMaria, A.D. Schwartz, & A. J. Sim (Eds.), The comprehensive textbook of healthcare simulation (p. 73-84). New York, NY: Springer.	
Evaluating the debriefing–DASH or	

Part 8. Evaluation Tools	
Reaction	
Learning Outcomes	Pre-test :
	Post-test :
Behavior	Competency Checklist (by Observer or system)
Results	Debriefing

Part 9. Development of scenario	
Content validity	
Reliability	
Evidence & reference	
Theoretical framework (Optional)	