

# Simulation Scenario Template

## Section 1: Case Summary

<b>Scenario Title:</b>	
Keywords:	Pediatric Trauma
Brief Description of Case:	Severe Head Injury

Goals and Objectives	
Educational Goal:	
Objectives: (Medical and CRM)	<ul style="list-style-type: none"><li>• Medical Management of Pediatric Trauma and Head Injury in resource limited setting</li><li>• Use of RTVS Support Pathways in complex cases</li></ul>
EPAs Assessed:	

Learners, Setting and Personnel					
Target Learners:	<input type="checkbox"/> Junior Learners		<input type="checkbox"/> Senior Learners		<input checked="" type="checkbox"/> Staff
	<input checked="" type="checkbox"/> Physicians	<input checked="" type="checkbox"/> Nurses	<input checked="" type="checkbox"/> RTs	<input checked="" type="checkbox"/> Inter-professional	
	<input type="checkbox"/> Other Learners:				
Location:	<input type="checkbox"/> Sim Lab		<input checked="" type="checkbox"/> In Situ		<input type="checkbox"/> Other:
Recommended Number of Facilitators:	Instructors: 1				
	Confederates: 0				
	Sim Techs: 0-1				

Scenario Development	
Date of Development:	November 16, 2020
Scenario Developer(s):	Alysha Mackenzie-Feder
Affiliations/Institutions(s):	Kelowna
Contact E-mail:	a.macfed@gmail.com
Last Revision Date:	
Revised By:	
Version Number:	



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## Section 2A: Initial Patient Information

A. Patient Chart					
Patient Name: Sam		Age: 20 Month		Gender: M	Weight: 12kg
Presenting complaint: Crush Injury from TV					
Temp: 36.5	HR: 100	BP: 110/85	RR: 8-10	O <sub>2</sub> Sat: 98%	FiO <sub>2</sub> : Face Mask
Cap glucose: 6.0			GCS: (E V M ) 3		
<p>Triage note:</p> <p>At 0630 patient climbed onto mother's dresser and pulled TV down onto himself, found immediately by Mother. Called EHS, arrived 0642 found patient obtunded with GCS of 4 and posturing. IO started Right Tibia, bolus NS 120ml x 1 given. Ativan 1.5mg via IO Given.</p> <p>On Arrival Vital signs as above. Pupils dilated and fixed, Slow Spontaneous Respirations</p>					
Allergies: Penicillin					
Past Medical History: Healthy			Current Medications: None		

## Section 2B: Extra Patient Information

A. Further History	
On Primary survey: Spontaneous Breathing, Airway intact, no facial trauma. Palpable pulses, normal heart sounds. GCS 3	

B. Physical Exam	
<i>List any pertinent positive and negative findings</i>	
Cardio: Normal HS	Neuro: GCS 3, Decerebrate posturing
Resp: Slow Equal AE	Head & Neck: Clear
Abdo: Soft, no bruising noted	MSK/skin: No Deformities to limbs
FAST Neg	

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## Section 3: Technical Requirements/Room Vision

A. Patient
<input checked="" type="checkbox"/> Mannequin ( <i>specify type and whether infant/child/adult</i> )
<input type="checkbox"/> Standardized Patient
<input checked="" type="checkbox"/> Task Trainer
<input type="checkbox"/> Hybrid
B. Special Equipment Required
Intubation equipment if available Broselow Tape Telehealth Cart
C. Required Medications
Mannitol 3% NS Dilantin
D. Moulage
None
E. Monitors at Case Onset
<input checked="" type="checkbox"/> Patient on monitor with vitals displayed
<input type="checkbox"/> Patient not yet on monitor
F. Patient Reactions and Exam
None

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## Section 4: Confederates and Standardized Patients

Confederate and Standardized Patient Roles and Scripts	
Role	Description of role, expected behavior, and key moments to intervene/prompt learners. Include any script required (including conveying patient information if patient is unable)



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## Section 5: Scenario Progression

Scenario States, Modifiers and Triggers				
Patient State/Vitals	Patient Status	Learner Actions, Modifiers & Triggers to Move to Next State		Facilitator Notes
<b>1. Baseline State</b> Rhythm: Sinus HR: 80-100 BP: 110/85 RR: 8-10 O <sub>2</sub> SAT: 97% T: 36.5°C GCS: 3	Unresponsive Pupils Fixed Posturing noted	<u>Expected Learner Actions</u> <input type="checkbox"/> Recognize signs of head injury <input type="checkbox"/> Head of bed to 30 Degrees <input type="checkbox"/> Second IV/IO <input type="checkbox"/> Support Respirations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>Modifiers</u> -Desaturation if resp not supported  <u>Triggers</u> <i>For progression to next state</i> - When actions completed, or 5 mins passed -	
<b>2. Imaging/Support</b> Rhythm: Sinus HR:90 BP: 112/82 RR: 8 Sat: 95% T: 36.0 GCS 3	Unresponsive Right Pupil > L	<u>Expected Learner Actions</u> <input type="checkbox"/> Initiate call to CHARLIE <input type="checkbox"/> Arrange CT if available <input type="checkbox"/> Charlie to support prep for Intubation <input type="checkbox"/> Charlie to support Giving 3% NS <input type="checkbox"/>	<u>Modifiers</u> - - - <u>Triggers</u> -When actions completed, or 5 mins passed -	
<b>3. Resuscitation</b> Rhythm: Sinus HR 90-100 BP 114/90 RR: Bagged 20 Sat: 100% T 35.4 GCS: 3	Unresponsive Right Pupil Reactive after 3% NS Large Subdural R with shift and herniation on imaging	<u>Expected Learner Actions</u> <input type="checkbox"/> Charlie DOC to Call PTN request Nsx and PICU on the line <input type="checkbox"/> Hyperventilate <input type="checkbox"/> Nsx advised of need for Emergent Craniotomy/Burr hole <input type="checkbox"/> Call local Surgeon if available <input type="checkbox"/> Charlie to remain on Zoom video to support local care	<u>Modifiers</u> - - - <u>Triggers</u> - -	<u>Ideally PTN, Nsx , PICU are brought in over zoom call</u>
<b>4. Local Action</b> Rhythm: Sinus	Unresponsive	<u>Expected Learner Actions</u> <input type="checkbox"/> Mannitol as advised by Nsx	<u>Modifiers</u>	<u>Transport can be arranged to closest neurosurgical center.</u>



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HR: 80-90 BP 100/70 RR: 20 Bagged or on Vent Sats 100% T: 36.6 with warming GCS: 3	Pupils minimally reactive post 3% NS	<input type="checkbox"/> Local surgeon to come in <input type="checkbox"/> Transport in 2-4 hours <input type="checkbox"/> Send labs <input type="checkbox"/> Maintain Normothermia, normal glucose, normal Sodium, normal BP	- If local Surgical Team Available/able Nsx to support intervention via telehealth/phone - - <u>Triggers</u> - -	
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## Appendix A: Laboratory Results

### CBC

WBC 12

Hgb 90

Plt 255

### Lytes

Na 139

K 4.5

Cl 110

HCO<sub>3</sub> 22

AG Normal

Urea 6.5

Cr 35

Glucose 5.0

### VBG

pH 7.30

pCO<sub>2</sub> 37

pO<sub>2</sub> 35

HCO<sub>3</sub> 23

Lactate 2.0

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## Appendix B: ECGs, X-rays, Ultrasounds and Pictures

*Paste in any auxiliary files required for running the session. Don't forget to include their source so you can find them later!*





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## Appendix C: Facilitator Cheat Sheet & Debriefing Tips

*Include key errors to watch for and common challenges with the case. List issues expected to be part of the debriefing discussion. Supplemental information regarding any relevant pathophysiology, guidelines, or management information that may be reviewed during debriefing should be provided for facilitators to have as a reference.*

## References

- 1.
- 2.
- 3.

