CINHC *Optimizing Health through Nursing Excellence*

CALIFORNIA INSTITUTE FOR NURSING & HEALTH CARE

California Simulation Alliance (CSA)
Simulation Scenario Template

The California Simulation Alliance (CSA) is comprised of simulation users from all disciplines from throughout the state. Several regional collaboratives have formed totaling 7 as of March, 2011: The Rural North Area Simulation Collaborative (RNASC), the Capital Area Simulation Collaborative (CASC), the Bay Area Simulation Collaborative (BASC), the Central Valley Simulation Collaborative (CVSC, the Southern California Simulation Collaborative (SCSC), the Inland Empire Simulation Collaborative (IESC), and the San Diego Simulation Collaborative (SDSC). The CINHC, a non-profit organization focused on workforce development in healthcare provides leadership for the CSA.

The purpose of the California Simulation Alliance (CSA) is to become a cohesive voice for simulation in healthcare education in the state, to provide for inter-organizational research on simulation, to disseminate information to stakeholders, to create a common language for simulation, and to provide simulation educational courses. The goals of the alliance will include providing a home within the CINHC for best practice identification, information sharing, faculty development, equipment/vendor pricing agreements, scenario development, sharing and partnership models. More information can be found on the CSA website at www.californiasimulationalliance.org

All scenarios have been validated by subject matter experts, pilot tested and approved by the CSA before they were published online. All scenarios are the property of the CINHC/CSA. The writers have agreed to release authorship and waive any and all of their individual intellectual property (I.P.) rights surrounding all scenarios. I.P release forms can be found at www.bayareanrc.org/rsc and click documents. (Please send signed I.P. release forms to KT at kt@cinhc.org)

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SECTION I: SCENARIO OVERVIEW

Scenario Title:	Seizure at School
Original Scenario Developer(s):	Charlotte Sense MSN, RN, CNS; Debra Brady DNP, RN, CNS; Nancy Miller, MS, MA, RN
Date - original scenario	January 2014
Validation:	Marjorie Miller, MA, RN, CHSE
Revision Dates:	April 29, 2014, December 10, 2014
Pilot testing:	March 24, 2014, December 6, 2014
QSEN revision:	Included in original scenario

Estimated Scenario Time: 12-15 minutes Debriefing time: 25 minutes

Target group: School Nurses continuing education course reviewing pediatric assessment and School Nurse Green Book Protocols

Core case: 8 year old student on campus in a library and has a grand mal seizure.

QSEN Competencies: Patient Centered Care; Patient Safety; Teamwork and Collaboration

Brief Summary of Case: The client is an 8 year old student who has a 4 year history of seizures as noted on the emergency card; he has an Emergency Care Plan (ERCP) indicating Diastat rectal administration for seizure activity lasting greater than 3 minutes with notification of parents and administrator. Student has been healthy and has not had any seizure activity at school. Last known seizure was one year ago at home, at which time the parents administered Diastat rectally with no side-effects. The student was at school today in the library with a substitute teacher. The student complained of vague symptoms of not feeling well and the teacher sent the student to the school health office.

EVIDENCE BASE / REFERENCES (APA Format)

Avner, J.R., Olympia, R.P., Wan, E., (2005). The preparedness of schools to respond to emergencies in children: a national survey of school nurses. *Pediatrics*. 116 (6) 738-745.

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Hegenbarth, M.A., and the Committee on Drugs. (2008) Preparing for pediatric emergencies: drugs to consider. *Pediatrics*. 121 (2) 433-443.

Kreutzer, C, Hirschkorn, N, Stack, W, Maki, M, & Raad, M. (2009) ***Epilepsy and seizure disorders: a resource guide for parents***. University of Southern California University Center for Excellence in Developmental Disabilities at Children's Hospital Los Angeles, California. Retrieved December 19, 2013 from http://www.epilepsynorcal.org/docs/parent_guide.pdf

National Institute of Health. *Safe and effective treatment for acute repetitive seizures available for at-home use. Retrieved 11.20.2013 from. www.ninds.nih.gov*

Taylor, S. (2011). *The green book: Guidelines for specialized physical healthcare services in school settings* (2ed). Sacramento California: California School Nurses Association

SECTION II: CURRICULUM INTEGRATION

A. SCENARIO LEARNING OBJECTIVES
Learning Outcomes
1. Communicates is a compassionate and client center manner (Patient Centered Care)
2. Recognizes signs and symptoms of tonic clonic seizure
3. Implements airway, neurological, and seizure assessments and interventions to promote patient safety
4. Implements administration of Seizure/ Diastat protocol (Safety)
5.Synthesizes case study data to determine need for additional medications/medical treatment follow up
Specific Learning Objectives
1. Recognizes symptoms of seizure
2. Implements safety position and airway monitory of unresponsive student
3. Monitors and documents seizure start time and activity of student on Seizure Record
4. Implements Emergency Care Plan
5. Demonstrates appropriate prioritization by assessing seizure and administrating emergency medication Diastat
6. Initiates the appropriate communication with Emergency Personnel, parents, and administrator
7. Implements SBAR communication for handoff report
Critical Learner Actions
1. Greets student in calm, open manner, initiates verbal assessment.
2. Positions student for optimal safety when seizure began (turns student on side; moves things out of the way; soft jacket under head; monitors airway, breathing, loosens clothing). 3. Notes time seizure began (and ended) 4. Delegates health clerk to obtain emergency card, emergency care plan and obtain medication 5. Delegates health clerk to call parent and administrator
6. Assesses student vital signs
7. Focused respiratory and neurological assessment
8. Stays with student and protects from injury until health clerk returns
9. Verifies medication order and 5 rights
10. Follows Emergency Care Plan
11. Administers Diastat as per ERCP and MD orders after 3 minutes of seizure activity
12. Continuous assessment of student during seizure
13. Stays with student, assess post ictal status until EMS and arrives

B. PRE-SCENARIO LEARNER ACTIVITIES	
Prerequisite Competencies Required prior to participating in the scenario	
Knowledge	Skills/ Attitudes
❑ Signs/Symptoms of seizures	❑ Physical assessment skills
❑ Diastat medication and side effects	❑ Seizure assessment
❑ Rationale for MD order for administration of Diastat	❑ Administration of Diastat
❑ Complications of seizures	❑ Documentation

SECTION III: SCENARIO SCRIPT

A. Case summary
The client is an 8 year old student who has a 4 year history of seizures as noted on the emergency card; he has an Emergency Care Plan (ERCP) indicating Diastat administration for seizure activity lasting greater than 5 minutes with notification of parents and administrator. Student has been healthy and has not had any seizure activity at school and has not had administration of Diastat at school. The student was at school today in the library with a substitute teacher. The student complained of vague symptoms of not feeling well and the teacher sent the student to the office. The nurse took the student's temperature and found it to be 102.5. While the nurse was assessing the student he began to have tonic clonic seizure activity.

B. Key contextual details
School nurse office in elementary school. School nurse and Administrator or office assistant on duty.

C. Scenario Cast		
Patient/ Client	X High fidelity simulator Sim Jr,	
	❑ Mid-level simulator	
	❑ Task trainer	
	❑ Hybrid (Blended simulator)	
	Standardized patient (age range 16-20)	
Role	**Brief Descriptor (Optional)**	**Confederate (C) or Learner (L)**
RN 1	School Nurse	Learner
RN 2	School Nurse	Learner
School Secretary	Voice on Phone	Computer Programmer
Administrator	Voice on Phone	

D. Patient/Client Profile				
Last name:	Clark		First name: John	
Gender: Male	Age: 8 yr	Ht: 46”	Wt: 48#	Code Status: Full
Spiritual Practice: none		Ethnicity: Caucasian		Primary Language: English
1. History of present illness				
4 year history of seizures on medication, with no observed seizures in the last year;				
Primary Medical Diagnosis	Seizure Disorder			

2. Review of Systems	
CNS	Generalized Tonic/Clonic Seizure ; dilated pupils,
Cardiovascular	None no murmur, tachycardia
Pulmonary	At two minutes into seizure appears to be breathing at slow respiratory rate
Renal/Hepatic	NA
HEENT	No cold symptoms; normal
Gastrointestinal	Incontinent of stool & urine during seizure
Endocrine	NA
Heme/Coag	NA
Musculoskeletal	Spastic and rhythmic movement of extremities
Integument	Pale
Developmental Hx	WNL
Social Hx	Cared for at home by mom and dad; has 1 older brother age 11.
Alternative/ Complementary Medicine Hx	none

Medication allergies:	None	Reaction:	
Food/other allergies:	None	Reaction:	

3. Current medications	**Drug**	**Dose**	**Route**	**Frequency**
	Depakote	250mg	By mouth	Two times a day
	Diastat Gel	7.5 mg	Rectal	As needed for seizure activity lasting greater than 3 minutes or for 3 or more cluster seizures in one hour .

4. Laboratory, Diagnostic Study Results NONE					
Na:	K:	Cl:	HCO3:	BUN:	Cr:
Ca:	Mg:	Phos:	Glucose:	HgA1C:	
Hgb:	Hct:	Plt:	WBC:	ABO Blood Type:	
PT	PTT	INR	Troponin:	BNP:	
Ammonia:	Amylase:	Lipase:	Albumin:	Lactate:	
ABG-pH:	paO2:	paCO2:	HCO3/BE:	SaO2:	
VDRL:	GBS:	Herpes:	HIV:		
CXR:		ECG:			

E. Baseline Simulator/Standardized Patient State	
1. Initial physical appearance	
Gender: Male	Attire: Shorts and tee shirt, tennis shoes; stool on rectum, fluid on shorts

2. Initial Vital Signs Monitor display in simulation action room:							
	No monitor display		Monitor on, but no data displayed		Monitor on, standard display		

BP:	HR: 116	RR: 12	T: 102.5 °F.	SpO^2:
CVP:	PAS:	PAD:	PCWP:	CO:
AIRWAY:	$ETCO^2$:	FHR:		
Lungs:	Left: Wheezes-→ strider		Right: Wheezes--→strider	
Heart:	Sounds:	**normal**		
	ECG rhythm:	Sinus Tach		
	Other:			
Bowel sounds:	normal		Other:	

ALL DATA IN THIS SCENARIO IS FICTICIOUS

3. Initial Intravenous line set up NONE						
	Saline lock #1	Site:				IV patent (Y/N)
	IV #1	Site:		Fluid type:	Initial rate:	IV patent (Y/N)
	Main					
	IV #2	Site:		Fluid type:	Initial rate:	IV patent (Y/N)
	Main					

4. Initial Non-invasive monitors set up						
x	**NIBP**		ECG First lead:		ECG Second lead:	
	Pulse oximeter		Temp monitor/type		Other:	

5. Initial Hemodynamic monitors set up					
	A-line Site:		Catheter/tubing Patency (Y/N)	CVP Site:	PAC Site:

6. Other monitors/devices					
	Foley catheter	Amount:		Appearance of urine:	
	Epidural catheter		Infusion pump:	Pump settings:	

Environment, Equipment, Essential props

1. Scenario setting: (example: patient room, home, ED, lobby)

School Nurse office; gurney and 2 chairs, small desk. Thermometer. BP cuff. Ambu bag;
Medications: Diastat 7.5 mg,

2. Equipment, supplies, monitors **Stethoscope/ baby scales / growth chart for preterm infants**

3. Respiratory therapy equipment/devices							
	Nasal cannula		Face tent		Simple Face Mask		Non re-breather mask
x	BVM/Ambu bag		Nebulizer tx kit		Flowmeters (extra supply)		

4. Documentation and Order Forms							
X	Provider orders	X	Med Adm Record		H & P		Lab Results
	Progress Notes		Graphic record		PACU record		ED Record
	Med. Recon.		Transfer orders		Standing orders		ICU flow sheet
X	Nurses' Notes		Contact		Code Record		Prenatal record

5. Medications (to be available in sim action room)								
#	**Medication**	**Dosage**	**Route**		**#**	**Medication**	**Dosage**	**Route**
1	Diastat	7.5mg	rectal					

CASE FLOW / TRIGGERS/ SCENARIO DEVELOPMENT STATES			
Initiation of Scenario : **Student comes to school office complaining of not feeling well**			
STATE / PATIENT STATUS	**DESIRED LEARNER ACTIONS & TRIGGERS TO MOVE TO NEXT STATE**		
1. Baseline Sitting up on gurney in the nurse's office.	**Operator** **Frame 1: HR 120; RR 30** **Triggers:** Patient states he does not feel good. "I don't feel good." I want my mom to pick me up. **Operator:** Adjust HR to 130 over next minute	**Learner Actions** Engages student; asks how things are going. Observes environment (60 second environmental assessment) Initiates assessment questions. Assesses level of consciousness, breathing, heart rate, skin signs	**Debriefing Points:** What in the student's story made you initially concerned? How did you adjust your communication tone and technique to obtain the information you need from the boy when he seemed panicked? What physical assessment findings concerned you most?

STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
2. Pt slightly pale and cool to touch; states "I really feel bad."	**Operator** Initiate seizure activity **Triggers:** I really feel bad" Then starts to seize	**Learner Actions:** Recognizes seizure activity. Notes time of start of activity Notes body movement during seizure activity Monitors airway and breathing; Creates a safe environment by: ❑ moving things out of the way; ❑ Placing padding under head, ❑ Loosen clothing, ❑ Position student on side; ❑ Stay at student's side ❑ Delegate to School Secretary or Office Assistant to call parent immediately.	**Debriefing Points:** What did you do initially to help calm and focus the child? When the seizure began how did your priorities change? What potential safety risks did you identify and what interventions did you provide to avoid them?

STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
3. Continues to have seizure;	**Operator:** VS: HR 145 BP 138/80 O_2 Sat 95 % **Triggers:** 3 min seizure gets Diastat 2 min after medication seizure stops	**Learner Actions:** Monitors airway and time of seizure onset, type of body movement, level of consciousness, pupil size, airway. Assesses need for supplemental O_2. Assures child's privacy and prepares to administer Diastat if needed. Prepares the student in side lying position facing nurse, top leg bent, rectum exposed; Administers Diastat 7.5 mg of medication as per manufacturer's instructions Continues to monitor patient and timing of seizure and patient safety. Delegates call to administrator, parents , and 911 to School Secretary or Office Assistant	**Debriefing Points:** Were there key aspects of the assessment data helped you determine the level of transport you requested? Where there other treatments you wanted to consider? What was your experience like administering Diastat? Discuss roles and responsibilities during a crisis and what you elected to delegate.

STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
4. **Seizure stops**	**Operator:** Patient non-responsive but breathing; sleeping after seizure in postictal phase VS: HR 133, RR 22, BP 128/76, O_2 Sat 96% **Triggers:** Moans and opens eyes toward the end of the report to First Responders	**Learner Actions:** -Notes time of seizure stops -Continues to monitor airway -Reassess VS -Decides on transport to ER/ provides report to First Responders on the radio. -When parent arrives communicates in a calm and focused manner.	**Debriefing Points** -What three factors were most SIGNIFICANT that you elected to transport to the ER? **-**What effective communication strategies did you use to provide report to the First Responders? (Teamwork and Collaboration) -Would you have communicated some things differently? -Can you identify 2 key points from this simulation experience that you will be able to use in your clinical practice?
Scenario End Point: Report to the First Responders and preparation for transport. Arrival of parent to scene			
Suggestions to <u>decrease</u> complexity: Suggestions to <u>increase</u> complexity: Parent can refuse to have student transported, indicating no insurance or ability to pay for ambulance transport.			

APPENDIX A: HEALTH CARE PROVIDER ORDERS

Patient Name: **DOB:** **Age:** **MR#:**	**Diagnosis:**

† No Known Allergies
† Allergies & Sensitivities

Date	Time	**HEALTH CARE PROVIDER ORDERS AND SIGNATURE**
Signature		

APPENDIX B: Digital images of manikin and/or scenario milieu	
Insert digital photo here	**Insert digital photo here**
Insert digital photo here	**Insert digital photo here**

APPENDIX C: DEBRIEFING GUIDE

General Debriefing Plan			
☐ Individual	X Group	☐ With Video	X Without Video
Debriefing Materials			
☐ Debriefing Guide	☐ Objectives	X Debriefing Points	X QSEN
QSEN Competencies to consider for debriefing scenarios			
X Patient Centered Care	X Teamwork/Collaboration	☐ Evidence-based Practice	
X Safety	☐ Quality Improvement	☐ Informatics	

Sample Questions for Debriefing

1. How did the experience of caring for this patient feel for you and the team?
2. Did you have the knowledge and skills to meet the learning objectives of the scenario?
3. What GAPS did you identify in your own knowledge base and/or preparation for the simulation experience?
4. What RELEVANT information was missing from the scenario that impacted your performance? How did you attempt to fill in the GAP?
5. How would you handle the scenario differently if you could?
6. In what ways did you check feel the need to check ACCURACY of the data you were given?
7. In what ways did you perform well?
8. What communication strategies did you use to validate ACCURACY of your information or decisions with your team members?
9. What three factors were most SIGNIFICANT that you will transfer to the clinical setting?
10. At what points in the scenario were your nursing actions specifically directed toward PREVENTION of a negative outcome?
11. Discuss actual experiences with diverse patient populations.
12. Discuss roles and responsibilities during a crisis.
13. Discuss how current nursing practice continues to evolve in light of new evidence.
14. Consider potential safety risks and how to avoid them.
15. Discuss the nurses' role in design, implementation, and evaluation of information technologies to support patient care.

Notes for future sessions: