

## SECTION I: SCENARIO OVERVIEW

<b>Scenario Title:</b>	Acute Ischemic Stroke (Inpatient)	
<b>Original Scenario Developer(s):</b>	Malia La Vallee, RN, MSN, CCRN Debra Brady RN, DNP, CHSE	
<b>Date - original scenario</b>	12/4/2017	
<b>Validation:</b>	Crystal Durawa SLP- Lisa Trondsen SLP- Content Experts SLP Review Panel and Kaiser Permanente South Sacramento Interprofessional Stroke Committee	
<b>Revision Dates:</b>	3/2/2018; 6/28/2018	
<b>Pilot testing:</b>	2/28/2018;6/27/2018	
<p><u>Estimated Scenario Time:</u> 10-12 minutes      <u>Debriefing time:</u> 25-30 minutes</p> <p><u>Target group:</u> Interprofessional health care clinicians pre – and post- licensure</p> <p><u>Core case:</u> Adult Post-Surgical Patient</p> <p><u>QSEN/IOM Competencies:</u> Patient/Family Centered Care, Teamwork, Interprofessional Collaboration, Patient Safety, Interprofessional communication, SBAR, Decision Making, Problem Solving, Patient Education</p> <p><u>Brief Summary of Case:</u> Marcus Smart, a 65-year-old, recently separated, Caucasian male, s/p transoral robotic surgery (TORS) for lingual resection secondary to cancer. Post op day 2. JP drain was removed yesterday. Patient tolerating lip care and anterior oral cavity care. PMH significant for hypertension, and 15-year 2-pack/day smoker. Patient to be discharged tomorrow after swallow evaluation done today by SLP, determination of diet, and reassessment of how patient is tolerating diet orders. Pt is currently on full liquid diet. At change of shift patient verbalized to nurse he was looking forward to eating something and going home.</p>		

### EVIDENCE BASE / REFERENCES (APA Format)

Fransen, P. S. S., Beumer, D., Berkhemer, O. A., van den Berg, Lucie A, Lingsma, H., van der Lugt, A., . . . for the MR CLEAN Investigators. (2014). MR CLEAN, a multicenter randomized clinical trial of endovascular treatment for acute ischemic stroke in the netherlands: Study protocol for a randomized controlled trial. *Trials*, *15*(1), 343. doi:10.1186/1745-6215-15-343

Hall, P., Williams, D., Hickey, A., Brewer, L., Mellon, L., Dolan, E., . . . on behalf of the ASPIRE-S study group. (2016). Access to rehabilitation at six months post stroke: A profile from the action on secondary prevention interventions and rehabilitation in stroke (ASPIRE-S) study. *Cerebrovascular Diseases*, *42*(3-4), 247-254. doi:10.1159/000446080

Wu, T. Y., Reimers, J., Griffiths, M., Coleman, E., Hurrell, M., Meretoja, A., . . . Fink, J. N. (2018). Helsinki stroke model is transferrable with "real-world" resources and reduced stroke thrombolysis delay to 34 min in christchurch. *Frontiers in Neurology*,

Meretoja, A., Weir, L., Ugalde, M., Yassi, N., Yan, B., Hand, P., . . . Campbell, B. C. V. (2013). Helsinki model cut stroke thrombolysis delays to 25 minutes in melbourne in only 4 months. *Neurology*, *81*(12), 1071-1076. doi:10.1212/WNL.0b013e3182a4a4d2

## SECTION II: CURRICULUM INTEGRATION

<b>A. SCENARIO LEARNING OBJECTIVES</b>
<b>Learning Outcomes</b>
1. Provide evidence-based care for the patient with neurological deterioration signs and symptoms
2. Apply clinical judgement decision-making skills, interpreting, analyzing data in evolving situation
3. Prioritize interventions based on accurate interpretation of assessment data
4. Communicate with members of interprofessional team using SBAR, closed-loop communication
5. Escalate care for the rapidly deteriorating patient condition
<b>Specific Learning Objectives</b>
1. Communicate effectively and focus on patient’s needs
2. Initiate vital signs assessment; and recognize signs of neurological decline
3. Obtain blood glucose level
4. Perform focused neurological assessment
5. Perform BEFAST and NIHSS assessment
6. Initiate escalation in care, Primary RN, Rapid Response Team (RRT)
7. Provide SBAR to Rapid Response Team with last known well, current weight and glucose level
8. Recommend STAT head CT and CT Angiogram
9. Identify need to keep patient NPO
10. Identify/utilize assistive devices for transport (HoverMatt/Slide Board) for safe patient mobility
<b>Critical Learner Actions</b>
1. Introduce self and role upon entering room (knocks before entering)
2. Perform hand hygiene, identify patient using two identifiers
3. Prioritize focused assessment- swallow/neurological
4. <u>SLP</u> – stop swallow evaluation; initiate call to primary RN providing findings via SBAR
5. <u>Primary RN</u> - respond to SLP call and immediately go to patient
6. Assessment: surgical site, Vital Signs- BP, HR, O2 saturation, RR, Pain,
7. Obtain blood glucose level
8. Identify actual time last known well time
9. Keep patient (and family if present) informed of team actions and status
10. Initiate overhead page to RRT; collect critical assessment data for RRT
11. Verify weight obtained by scale within last 24 hours or obtain current weight while awaiting RRT
12. Correctly identify patient and introduce team to patient (and family if present)
13. Provide RRT with SBAR regarding patient and any interventions provided

**B. PRE-SCENARIO LEARNER ACTIVITIES**

<b>Prerequisite Competencies</b>	
<b>Knowledge</b>	<b>Skills/ Attitudes</b>
<input type="checkbox"/> VS assessment, Pain assessment	<input type="checkbox"/> Keep patient/family well informed throughout care, sets goals with patient
<input type="checkbox"/> S/S of neurological deterioration	<input type="checkbox"/> Maintains patient safety, calls for help early
<input type="checkbox"/> EBP for stroke- possible tPa candidate or need for transfer to comprehensive stroke center for removal of clot from large vessel	<input type="checkbox"/> Performs focused assessment- neuro, last known well time, NIHSS if trained
<input type="checkbox"/> Awareness of stroke protocol- need to involve RRT and tele neurologist	<input type="checkbox"/> Labs obtained if needed (CBC and anticoags) & glucose level
<input type="checkbox"/> Awareness to hold discharge home and additional testing, STAT head CT and CT angiogram	<input type="checkbox"/> Referral for neurology consult, may need PT and SLP in future depending on CT results and condition of patient
<input type="checkbox"/> Use of safe patient mobility equipment and/or assistive devices	<input type="checkbox"/> Explains calmly in reassuring manner to patient the need for safety devices

### SECTION III: SCENARIO SCRIPT

#### A. Case summary

A 65-year-old, recently separated, Caucasian male, s/p transoral robotic surgery (TORS) for lingual resection secondary to cancer. Post op day 3. JP drain was removed yesterday. Patient tolerating lip care and anterior oral cavity care. PMH significant for hypertension, and 15 year 2-pack/day smoker. Current medications include: Metoprolol (Lopressor) 100 mg PO BID; Morphine sulfa 5 mg/IV Q4 hours last does give yesterday at 2200. Colace 100 mg PO BID. Milk of Magnesium 30 ml PO QHS PRN no BM in last 3 days, acetaminophen IV 1000mg Q 6 Hours x 24 hours, Nicotine patch 21 mg applied daily take off patient at 2200 apply at 0600, Zolpidime 5 mg PO Q HS PRN never given, NS infusion IV at 50 ml/hr through 20 gauge IV in right AC. Oxygen to maintain saturation greater than or equal to 94%.

Patient expected to be discharged this afternoon after swallow evaluation done by SLP and to assess how patient is tolerating diet orders. Pt is currently on full liquid diet. At change of shift patient verbalized to nurse he was looking forward to going home.

#### B. Key contextual details

Patient waiting to be examined by speech language pathologist to assess speech and swallow evaluation to determined diet for home. Patient noted to be staring up at ceiling and not communicative or engaged with his environment.

#### C. Scenario Cast

Patient/ Client	<input checked="" type="checkbox"/> High fidelity simulator	
	<input type="checkbox"/> Mid-level simulator	
	<input type="checkbox"/> Task trainer	
	<input checked="" type="checkbox"/> Hybrid (Blended simulator)	
	<input checked="" type="checkbox"/> Standardized patient	
Role	Brief Descriptor (Optional)	Standardized Participant (P) or Learner (L)
Primary RN		L
SLP		L
Patient	Slurred speech, newly confused, left arm weakness	S/P
RRT Nurse		L
No visitors at bedside		

D. Patient/Client Profile				
Last name:	Smart		First name:	Marcus
Gender: Male	Age: 65	Ht: 6'0"	Wt: 102 kg	Code Status: Full
Spiritual Practice: Romain Catholic		Ethnicity: Caucasian		Primary Language spoken: English
1. Past history				
15-year 2-pack/day smoker and occasional insomnia				
<b>Primary Medical Diagnosis</b>		Oral cancer at lingual base		

2. Review of Systems	
CNS	New onset confusion, starring at ceiling, slurred speech, right visual field cut
Cardiovascular	Hx of Hypertension
Pulmonary	Smoker 15 year 2-pack/day history- no pulmonary changes noted
Renal/Hepatic	WNL
Gastrointestinal	WNL on full liquid diet
Endocrine	WNL
Heme/Coag	WNL
Musculoskeletal	New onset left arm and leg weakness
Integument	Dressing (C/D/I) to neck where JP drain was removed the day prior
Developmental Hx	WNL
Psychiatric Hx	WNL
Social Hx	Recently separated from spouse
Alternative/ Complementary Medicine Hx	N/A

Med allergies:	Penicillin	Reaction:	Rash
Food allergies:	N/A	Reaction:	

3. Current medications	Drug	Dose	Route	Frequency
	Metoprolol (Lopressor)	100 mg	PO	BID
	Morphine sulfate	5 mg	IV	Q4 h last dose give yesterday at 2200
	Colace	100 mg	PO	BID
	Milk of Magnesium	30 ml	PO	QHS PRN no BM in past 3 days
	Acetaminophen	1000 mg	IV	Q 6 hours
	Nicotine patch	21 mg	Transdermal	applied daily- apply at 0660 and take off patient at 2200
	Normal Saline 0.9 %	50 ml/hr	IV	Continuous through 20 gauge IV in right AC

Oxygen	Titrate as needed for O2 Sat ≥ 94%
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4. Laboratory, Diagnostic Study Results					
Na: 141	K: 4.6	Cl: 111	HCO3: 25	BUN: 34	Cr: 2.56
Ca: 9.2	Mg: 1.9	Phos: 3.1	Glucose: 86	HgA1C:	
Hgb: 14.8	Hct: 45.3	Plt: 380	WBC: 10.8	ABO Blood Type: O+	
PT: 13	PTT:	INR: 1	Troponin:	BNP:	
ABG-pH:	paO2:	paCO2:	HCO3/BE:	SaO2: 93%	
VDRL:	GBS:	Herpes:	HIV:	Cxr:	EKG

E. Baseline Simulator/Standardized Patient State (This may vary from the baseline data provided to learners)			
1. Initial physical appearance			
Gender: Male	Attire: Hospital gown		
<u>Alterations in appearance (moulage):</u> Dressing to right neck			
✓ ID band present, accurate	ID band present, inaccurate	ID band absent or not applicable	
✓ Allergy band present, accurate	Allergy band inaccurate	Allergy band absent or N/A	

2. Initial Vital Signs Monitor display in simulation action room:				
No monitor display	✓ Monitor on, but no data displayed	Monitor on, standard display		
BP: 165/74	HR: 85	RR: 14	T: 98.6	SpO <sup>2</sup> : 93%
CVP:	PAS:	PAD:	PCWP:	CO:
AIRWAY: RA	ETCO <sup>2</sup> :	FHR:		
Lungs: Sounds/mechanics	Left: Clear	Right: Clear		
Heart:	Sounds: S1S2			
	ECG rhythm: NSR			
	Other:			
Bowel sounds:	Active in all 4 quadrants		Other:	

3. Initial Intravenous line set up					
x	Saline lock #1 20 gauge	Site:	Right AC		IV patent (Y/N) Yes
	IV #1	Site:	CVC	Fluid type:	Initial rate:
	Main				
	Piggyback				IV patent (Y/N)

	<b>IV #2</b>	Site:		Fluid type:	Initial rate:		IV patent (Y/N)
	Main						
	Piggyback						
<b>4. Initial Non-invasive monitors set up</b>							
✓	NIBP	✓	ECG First lead: V lead		ECG Second lead: Lead II		
✓	Pulse oximeter		Temp monitor/type		Other:		
<b>5. Initial Hemodynamic monitors set up</b>							
	A-line Site:		Catheter/tubing Patency (Y/N)		CVC Site:		PAC Site:
<b>6. Other monitors/devices</b>							
	Foley catheter	Amount:		Appearance of urine:			
	Epidural catheter		Infusion pump:	Pump settings:			
	Fetal Heart rate monitor/tocometer			Internal		External	
<b>Environment, Equipment, Essential props</b>							
Recommend standardized set ups for each commonly simulated environment							
<b>1. Scenario setting: (example: patient room, home, ED, lobby)</b>							
Patient hospital room							

<b>2. Equipment, supplies, monitors</b>							
(In simulation action room or available in adjacent core storage rooms)							
✓	Bedpan/ Urinal		Foley catheter kit		Straight cath. kit	✓	Incentive spirometer
	IV Infusion pump		Feeding pump		Pressure bag	✓	Wall suction
	Nasogastric tube		ETT suction catheters	✓	Oral suction catheters		Chest tube kit
✓	Defibrillator	✓	Code Cart		12-lead ECG		Chest tube equip
	PCA infusion pump		Epidural pump		Central line Kit	✓	Dressing Δ equip
✓	IV fluid Type: NS 0.9%		IV fluid additives:		Blood products: _____ ABO Type: ____ # of units: __		
✓	Nasal cannula		Face tent		Simple Face Mask		Non-rebreather mask

<b>4. Documentation and Order Forms</b>							
✓	Provider orders	✓	Med Admin Record		Hx & Physical	✓	Lab Results
	Progress Notes		Graphic record		Anes/PACU record		ED Record
	Med Reconciliation		Transfer orders	✓	Standing orders		ICU flow sheet
	Nurses' Notes		Dx test reports		Code Record		Prenatal record
✓	Actual medical record binder			✓	Electronic Medical Record		

5. Medications (to be available in sim action room)								
#	Medication	Dosage	Route		#	Medication	Dosage	Route
1	Metoprolol	100 mg	PO					
2	Labetalol	25 mg/5 ml	IV					



CASE FLOW / TRIGGERS/ SCENARIO DEVELOPMENT STATES			
<p><b>Initiation of Scenario:</b> A 65-year-old, recently separated, Caucasian male, s/p transoral robotic surgery (TORS) for lingual resection r/t to cancer. Post op day 3. JP drain was removed yesterday. Patient tolerating lip care and anterior oral cavity care. PMH significant for hypertension, 15-year 2-pack/day smoker. Current medications include: Metoprolol (Lopressor) 100 mg PO BID; Morphine sulfa 5 mg/IV Q4 hours last does give yesterday at 2200. Colace 100 mg PO BID. Milk of Magnesium 30 ml PO QHS PRN no BM in last 3 days, acetaminophen IV 1000mg Q 6 Hours x 24 hours, Nicotine patch 21 mg applied daily take off patient at 2200 apply at 0600, Zolpidime 5 mg PO Q HS PRN never given, NS infusion IV at 50 ml/hr through 20-gauge IV in right AC. Oxygen to maintain saturation greater than or equal to 94%. Patient to be discharged this afternoon after swallow evaluation done by SLP and to assess how patient is tolerating diet orders. Pt is currently on full liquid diet. At change of shift patient verbalized to nurse he was looking forward to eating something and going home tomorrow. SLP walks into room to perform assessment.</p>			
STATE / PATIENT STATUS	DESIRED LEARNER ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p><b>1. Baseline</b> Patient lying in bed in low fowler's position. Awake and alert. No SO/family at bedside. Patient is staring at wall  (VS [nurse or SLP] not shown until learned connects equipment and assesses; will match vitals, as listed above)</p>	<p><b>Operator:</b> Present VS as learner performs assessment  <b>Vitals taken at 0900</b> RR 14 BP 165/74 SpO2 93% Temp 98.6 HR 85; NSR Weight: 225 lb. Pain: No pain reported  <b>Triggers:</b> SLP identifies new s/s of CVA and contacts nurse</p>	<p><b>Learner Actions</b></p> <ol style="list-style-type: none"> <li>1. Hand hygiene; introductions</li> <li>2. Two forms of identification</li> <li>3. SLP: initiates swallow screen assessment</li> <li>4. SLP identifies new onset s/s of CVA</li> <li>5. SLP communicates findings with RN</li> </ol>	<p><b>Debriefing Points:</b></p> <ol style="list-style-type: none"> <li>1. Hand hygiene performed</li> <li>2. Check 2 forms of ID</li> <li>3. Determination of change in mentation</li> <li>4. Significant change in potential causes: Identifies new onset s/s of CVA</li> <li>5. Communicates pt's change of status to nurse using SBAR format</li> </ol>

STATE / PATIENT STATUS	DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE		
<p>Pt able to verbalize name and one-word answers only</p> <p>Left arm weakness and left leg weakness, unable to lift extremities on own, drops back to bed within 3 seconds of being let go by staff</p>	<p><b>Operator:</b> Present VS as learner performs assessment</p> <p><b>Triggers:</b> RN identifies new s/s of CVA and contacts RRT</p>	<p><b>Learner Actions:</b></p> <ol style="list-style-type: none"> <li>1. Hand hygiene; introductions</li> <li>2. Two forms of identification</li> <li>3. RN performs Neuro assessment with B.E.F.A.S.T. New Onset of any of the following: <b>B</b>-Balance/coordination changes <b>E</b>- Eyes/Vision changes double vision, or blurred vision, or visual field cut <b>F</b>- Facial droop <b>A</b>- Arm weakness/extremity weakness <b>S</b>- Speech (slurred or word salad) <b>T</b>- Time (last known well)</li> <li>4. RN obtains blood glucose</li> <li>5. RN calls RRT</li> <li>6. RN obtains stroke alert packet</li> <li>7. RRT arrives and completes Neuro B.E.F.A.S.T. and NIHSS assessment</li> <li>8. RRT calls stroke alert</li> <li>9. Last known well stated by primary RN (exp. 11:45- not 30 minutes ago)</li> </ol>	<p><b>Debriefing Points:</b></p> <ol style="list-style-type: none"> <li>1. Hand hygiene performed</li> <li>2. Check 2 forms of ID</li> <li>3. Determine change mentation</li> <li>4. Significant change in potential causes: ID new onset s/s of CVA</li> </ol> <p><u>Questions/Reflections:</u></p> <ul style="list-style-type: none"> <li>• What do you think were the objectives of this scenario?</li> <li>• What service standards did we address? (Care without Delay, Care experience, Quality &amp; Safety)</li> <li>• What standards of care did you observe? (Safety, Compassion, Integrity, Excellence, Efficiency)</li> <li>• Which ANA Nursing Standards of Practice were addressed? (Nursing Process, EBP, Communication, Leadership, Collaboration)</li> <li>• What ANA Code of Ethics for Nurses were present in the scenario? (Commitment to the patient, advocacy for the patient,</li> </ul>

			<p>accountability and responsibility for practice)</p> <ul style="list-style-type: none"> <li>• How does this scenario reflect the patient care experience? (Asking the patient’s perspective on how staff 1. Made a personal connection 2. Built trust and confidence 3. Engaged the patient in the plan of care.)</li> </ul>
<p>Scenario End Point: Rapid Response Team arrives, and decision made to take patient for STAT head CT and Stroke Alert called</p>			
<p>Suggestions to <u>decrease</u> complexity: Patient speaking in full sentences with SLP then develops sudden slurred speech and neurological deterioration</p> <p>Suggestions to <u>increase</u> complexity: No slurred speech, make patient non-verbal (grunts only), GCS drops to 7 and possible need for advance airway and collaboration with Respiratory Therapist (post-licensure RRT orientation for initiation of protocols). Prelicensure academia may not have access to SLP; however, the use of Respiratory Therapy can be utilized for with airway protection and interprofessional communication and collaboration.</p>			

**APPENDIX A: HEALTH CARE PROVIDER ORDERS**

<b>Patient Name: Smart, Marcus</b>  <b>DOB: 09/24/19XX</b>  <b>Age: 65</b>  <b>MR#: 110023426072</b>		<b>Diagnosis: Oral cancer S/P lingual base resection</b>
†No Known Allergies √Allergies & Sensitivities: Penicillin		
Date	Time	<b>HEALTH CARE PROVIDER ORDERS AND SIGNATURE</b>
Today MM/DD/YY	0830	Speech Therapy Evaluation and Treatment: for swallow evaluation and tolerance of diet. Progress diet as tolerated based on SLP recommendations.
Today MM/DD/YY	0835	Discharge patient home after clearance from SLP. Follow up appointment in 48 hours in clinic with head and neck surgeon.
<b>Signature</b>		

**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			
<input type="checkbox"/> Individual	✓ <input type="checkbox"/> Group	✓ <input type="checkbox"/> With Video	<input type="checkbox"/> Without Video
Debriefing Materials			
✓ <input type="checkbox"/> Debriefing Guide	✓ <input type="checkbox"/> Objectives	✓ <input type="checkbox"/> Debriefing Points	✓ <input type="checkbox"/> QSEN
QSEN Competencies to consider for debriefing scenarios			
✓ <input type="checkbox"/> Patient Centered Care	✓ <input type="checkbox"/> Teamwork/Collaboration	✓ <input type="checkbox"/> Evidence-based Practice	
✓ <input type="checkbox"/> Safety	✓ <input type="checkbox"/> Quality Improvement	<input type="checkbox"/> Informatics	
Sample Questions for Debriefing			
<ol style="list-style-type: none"> <li>1. How did the experience of caring for this patient feel for you and the team?</li> <li>2. Did you have the knowledge and skills to meet the learning objectives of the scenario?</li> <li>3. What GAPS did you identify in your own knowledge base and/or preparation for the simulation experience?</li> <li>4. What RELEVANT information was missing from the scenario that impacted your performance? How did you attempt to fill in the GAP?</li> <li>5. How would you handle the scenario differently if you could?</li> <li>6. In what ways did you check feel the need to check ACCURACY of the data you were given?</li> <li>7. In what ways did you perform well?</li> <li>8. What communication strategies did you use to validate ACCURACY of your information or decisions with your team members?</li> <li>9. What three factors were most SIGNIFICANT that you will transfer to the clinical setting?</li> <li>10. At what points in the scenario were your nursing actions specifically directed toward PREVENTION of a negative outcome?</li> <li>11. Discuss actual experiences with diverse patient populations.</li> <li>12. Discuss roles and responsibilities during a crisis.</li> <li>13. Discuss how current nursing practice continues to evolve in light of new evidence.</li> <li>14. Consider potential safety risks and how to avoid them.</li> <li>15. Discuss the nurses' role in design, implementation, and evaluation of information technologies to support patient care.</li> </ol>			
<b>Notes for future sessions:</b> Mix of pre- and post- licensure interprofessional learners collaborating in simulation			

