

## Preliminary Information

### Patient Data

<b>Patient Name, Age, and Gender:</b>	Jack Frost 45 y/o male
<b>Date of Birth:</b>	June 22, 1963
<b>Medical Records #:</b>	0001
<b>Chief Complaint:</b>	V. Fib Cardiac arrest
<b>History of Present Illness:</b>	45 y/o male patient complaining of severe sharp chest pain with radiation to the left arm. Three minutes prior to EMS arrival, pt collapsed and bystander CPR (compression only) was initiated. Upon EMS arrival, ACLS guidelines were initiated for VF; pt was given 2 mg of epinephrine, intubated, defibrillated 2 times and ROSC was achieved. Pt was given 2 liters of cooled NS in the field.
<b>Past Medical History:</b>	HTN, DM, CAD
<b>Current Medications:</b>	<ol style="list-style-type: none"> <li>1. Lopressor 25 mg PO BID</li> <li>2. ASA 81mg PO Every day</li> </ol>
<b>Allergies:</b>	NKDA
<b>Height / Weight</b>	5' 10" / 70KG
<b>Levels Of End Of Life Care:</b>	Full Code

### Scenario Data

<b>Admission Date:</b>	Today
<b>Admission Diagnosis:</b>	V. Fib arrest
<b>Admitting Physician:</b>	Dr. Feelgood
<b>Admission Orders:</b>	<ul style="list-style-type: none"> <li>• See Therapeutic Hypothermia order set</li> </ul>

### Procedures Performance Evaluation Checklists & Learning Objectives

<b>Procedures Performance Evaluation Checklists:</b>	AACN procedures: <ol style="list-style-type: none"> <li>1. #59 Arterial Catheter Insertion (Assist), Care and Removal</li> <li>2. #86 Bispectral Index Monitoring</li> <li>3. #60 Blood Sampling From an Arterial Catheter</li> <li>4. #66 Central Venous/Right Atrial Pressure Monitoring</li> <li>5. #65 Central Venous Catheter Site Care</li> </ol>
<b>Learning Objectives:</b>	By the end of this scenario, the participant will be able to: <ol style="list-style-type: none"> <li>1. Determine appropriate nursing and medical interventions             <ol style="list-style-type: none"> <li>a. Titration of antilytic drips</li> <li>b. Titration of analgesic drips</li> </ol> </li> <li>2. Describe the appropriate hypothermia care for patients after a cardiac arrest, based on the protocol approach.</li> <li>3. Recall safety issues and risks for mild therapeutic hypothermia care.</li> <li>4. Integrate theoretical knowledge from sciences and nursing into professional practice.</li> <li>5. Utilizes evidence base, critical thinking, and the nursing process as a framework for patient care.</li> <li>6. Determine nursing priorities by formulating an individualized hypothermia plan of care.</li> <li>7. Evaluate the effectiveness of therapeutic interventions and makes appropriate care choices accordingly.</li> </ol>

<b>Scenario Development</b>	
<p><b>Summary of Scenario Stage by Stage</b></p> <p><u>Please use "Scenario Progression" sheets for Stage by Stage Details</u></p>	<ol style="list-style-type: none"> <li>1. Is critical but stable, on ventilator &amp; drips (gtt) Versed &amp; Fentanyl. A line/CVP/NGT/Foley and BIS in place. Participants to place Arctic Sun device.</li> <li>2. Temp drops, pt. shivers and becomes unstable</li> <li>3. After titration of gtt's and addition of Demerol pt stabilizes and temp drops to 33°C</li> </ol> <p><b>For ICU only</b></p> <ol style="list-style-type: none"> <li>4. Re-warming phase begins and Arctic Sun device is set to warm.</li> <li>5. Patient begins to shiver and drops BP. Immediately give fluids.</li> <li>6. Patient is re-warmed and stable.</li> </ol>
<b>Simulator Required:</b>	iStan with all fluids
<b>Equipment Required:</b>	<ol style="list-style-type: none"> <li>1. 4 IV pumps with IV tubing</li> <li>2. BIS monitor</li> <li>3. Ventilator with circuit &amp; HME</li> <li>4. Intubation equipment</li> <li>5. SCD's</li> <li>6. Arctic Sun Cooling Device</li> </ol>
<b>Supplies Required:</b>	<ol style="list-style-type: none"> <li>1. Complete A. Line set up</li> <li>2. Complete CVP set up</li> <li>3. Foley cath</li> <li>4. NGT with suction canister</li> <li>5. Hypothermia order set with Policy and procedures</li> <li>6. AE hose</li> <li>7. 10 ml syringes</li> </ol>
<b>Medications Required:</b>	<p><b>Simulated drugs needed:</b></p> <ol style="list-style-type: none"> <li>1. Nimbex – (bolus 10mg/10ml)</li> <li>2. Fentanyl (bolus 200mcg/10ml) &amp; (gtt = 1mg in 100ml)</li> <li>3. Versed (bolus 10mg/10ml) &amp; (gtt = Versed 100mg/100ml)</li> <li>4. Case of 1 liter bags NS</li> <li>5. Box of 100ml NS bags</li> <li>6. Demerol 25mg/10ml</li> <li>7. Magnesium 2gm in 100ml NS</li> <li>8. Albumin 5%/250ML</li> <li>9. 1 amp Calcium chloride</li> </ol>
<b>Lab Reports:</b>	<ul style="list-style-type: none"> <li>• See scenario progression</li> </ul>
<b>X-Ray Reports:</b>	<ul style="list-style-type: none"> <li>• See scenario progression</li> </ul>
<b>ECG Reports:</b>	<ul style="list-style-type: none"> <li>• See scenario progression</li> </ul>
<b>Physician Admission/Progress Notes:</b>	<ul style="list-style-type: none"> <li>• See Therapeutic Hypothermia order set</li> </ul>

## References:

- American Association of Critical Care Nurses (2005). *AACN Procedure Manual for Critical Care (5th ed.)*. Philadelphia: Saunders.
- American Heart Association (2008). *ACLS Resource Text for Instructors and Experienced Providers*. Dallas, TX: American Heart Association. (American Heart Association, 2008)
- American Heart Association (2005). Postresuscitation Support. *Circulation: Journal of the American Heart Association*, 112, 84-88. doi:10.1161/CIRCULATIONAHA.105.166560
- Bernard, S. (2006). Therapeutic Hypothermia after Cardiac Arrest. *Neurologic Clinics*, 24, 61-71.  
doi:10.1016/j.ncl.2005.10.007
- Oddo, M. (2008). *Therapeutic Hypothermia for Comatose Survivors of Cardiac Arrest: From Evidence to Clinical Practice* [PowerPoint slides].
- Oddo, M., Ribordy, V., Feihl, F., Rossetti, A. O., Schaller, M. D., Chiolero, R., et al. (2008). Early predictors of outcome in comatose survivors of ventricular fibrillation and non-ventricular fibrillation cardiac arrest treated with hypothermia: A prospective study. *Critical Care*
- Oddo, M., Schaller, M. D., Feihl, F., Ribordy, V., & Liaudet, L. (2006). From evidence to clinical practice: Effective implementation of therapeutic hypothermia to improve patient outcome after cardiac arrest. *Critical Care Medicine*, 34(7), 1865-1873. doi:10.1097/01.CCM.0000221922.08878.49
- Pyle, K., Pierson, G., Lepman, D., & Hewett, M. (2007). Keeping Cardiac Arrest Patients Alive with Therapeutic Hypothermia. *American Nurse Today*, 2(7), 32-36.