

# Clinical Simulation Center Instructional Plan

OFFICE USE ONLY

IP #:

## ---- Part 1 ----

**Primary Contact Name:** John Doe, MD

**Date of File:** 1/7/10

**Department:** Emergency Medicine

**Frequency:**  1 time

**Course Title:** Airway Management

recurring\*

**Instructor(s):** Doe, John; Doe, Jane; Doe, Jane

*\* Part 2 required no later than 2 weeks after 1<sup>st</sup> scheduled session.*

### Learners (check all that apply):

Pre-Med

Nurse Student (year):  1  2  3  4

Med Student (year):  1  2  3  4

PGY:  1  2  3  4  5  6  7  8

Staff:  MD  RN  PA  NP  CRNA  PT  PharmD  PhD

Paramedic  EMT  Technologist  Other:

**Number of Learners per Session:** 4

**Total Number of Learners for all sessions:** 30

### Purpose of Session:

Teach resident physicians how to properly intubate an adult patient when clinically indicated.

### Learning Activities (list):

Resident physicians will learn how to identify, assemble, and use all equipment used to intubate an adult patient when clinically indicated.

**Simulators Used** (Check all that apply):

Task Trainers	Mannequins	Procedural Trainers	Other
<input type="checkbox"/> ABG Model Arm	<input type="checkbox"/> ALS Trainer – Adult	<input type="checkbox"/> Arthroscopic Sim (DKAS)	<input type="checkbox"/> Aloka Ultrasound
<input checked="" type="checkbox"/> Airway Head (Adult)	<input type="checkbox"/> ALS Trainer – Infant	<input type="checkbox"/> Endoscopy	<input type="checkbox"/> Anesthesia Machine
<input type="checkbox"/> Airway Head (Peds)	<input type="checkbox"/> BLS Mannequin	<input type="checkbox"/> Hystero Trainer	<input type="checkbox"/> B-Line AV System
<input type="checkbox"/> Airway Heads (Infant)	<input type="checkbox"/> Blue Baby	<input type="checkbox"/> LapMentor Express	<input type="checkbox"/> Crash Cart
<input type="checkbox"/> Box Trainers	<input type="checkbox"/> HAL – Adult	<input type="checkbox"/> LapSim 1	<input type="checkbox"/> Defibrillator
<input type="checkbox"/> Central Line U/S Model	<input type="checkbox"/> HAL – Pediatric	<input type="checkbox"/> LapSim 2	<input type="checkbox"/> Knot Board
<input type="checkbox"/> Chest Tube (Low Fidelity)	<input type="checkbox"/> HAL – Infant	<input type="checkbox"/> Orpheus Perfusion	<input type="checkbox"/> Physio Monitor
<input type="checkbox"/> Cric (Low Fidelity)	<input type="checkbox"/> HAL – newborn	<input type="checkbox"/> UroMentor	<input type="checkbox"/> SonoSite Ultrasound
<input type="checkbox"/> Fiberoptic Scope	<input type="checkbox"/> HPS – Adult	<input type="checkbox"/> VIST Endovascular	<input type="checkbox"/>
<input type="checkbox"/> FLS Trainers	<input type="checkbox"/> HPS – Pediatric	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Harvey CardioPulmonary	<input checked="" type="checkbox"/> MegaCode Kelly (Adult)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> IV Models	<input type="checkbox"/> MegaCode Kid (Peds)	<input type="checkbox"/>	
<input type="checkbox"/> Lumbar Puncture (Adult)	<input type="checkbox"/> Noelle		
<input type="checkbox"/> Lumbar Puncture (Infant)	<input type="checkbox"/> Resuscitation Baby		
<input type="checkbox"/> Pelvic Exam Trainer	<input type="checkbox"/> SimBaby		
<input type="checkbox"/> PICC Models	<input type="checkbox"/> SimMan		
<input type="checkbox"/> Suture Blocks	<input type="checkbox"/>		
<input type="checkbox"/> Trauma Man	<input type="checkbox"/>		
<input type="checkbox"/> Urogenital Models (Male)	<input type="checkbox"/>		
<input type="checkbox"/> Urogenital Models (Female)			
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			

**NOTE:** For detailed description of our simulators, please see our webpage:  
<http://www.med.umich.edu/umcsc/equipment/index.html>

---- Part 2 ----

**Learning Objectives**

**Instructions:** Please write the learning objectives for each domain and indicate how you will assess the objectives in the corresponding box.

Cognitive Objectives	Cognitive Assessment
<p>Example:</p> <ul style="list-style-type: none"> <li>• Resident and fellow physicians will be able to list and identify all equipment used in an adult intubation procedure without omissions or errors.</li> <li>• Resident and fellow physicians will list any medications, dosage, and order of administration when clinically indicated for adult intubation without the use of references and with 100% accuracy.</li> </ul>	<p>Example:</p> <ul style="list-style-type: none"> <li>• Four item Likert scale with five performance classifications for each item. The performance classifications include the following:               <ol style="list-style-type: none"> <li>1. Verbal instruction + demonstration</li> <li>2. Verbal prompts, with errors</li> <li>3. Independent with minor errors</li> <li>4. Independent without errors</li> <li>5. Independent + efficient without errors</li> </ol> </li> <li>• The four items to be assessed include:               <ol style="list-style-type: none"> <li>1. Proper positioning of simulated patient for intubation</li> <li>2. Listing components of the laryngoscope and stating how they are to be assembled</li> <li>3. Identifying capnometer and ambu bag and stating how they are assembled as one piece</li> <li>4. Listing proper sequence and dosage of medications</li> </ol> </li> </ul>

Psycho-Motor Skills Objectives	Psycho-Motor Skills Assessment
<p>Example:</p> <ul style="list-style-type: none"> <li>• Resident and fellow physicians will be able to assemble unassisted the called for laryngoscope handle and blade without error and within ten seconds time.</li> <li>• Resident and fellow physicians will be able to assemble the capnometer to the ambu bag and properly attach this to the endotracheal tube without error within ten seconds time.</li> </ul>	<p>Example:</p> <ul style="list-style-type: none"> <li>• Likert scale with five performance classifications and five time classifications for assembly of laryngoscope handle and blade as well as assembly of capnometer to ambu bag and attachment of this assembled device to the endotracheal tube. The performance classifications include the following:               <ol style="list-style-type: none"> <li>1. Verbal instruction + demonstration</li> <li>2. Verbal prompts, with errors</li> <li>3. Independent with minor errors</li> <li>4. Independent without errors</li> <li>5. Independent + efficient without errors</li> </ol> </li> <li>The five time classifications include:               <ol style="list-style-type: none"> <li>1. &gt; 40 seconds</li> <li>2. ≤ 30-40 seconds</li> <li>3. ≤ 20-30 seconds</li> <li>4. ≤ 10-20 seconds</li> <li>5. &lt; 10 sec</li> </ol> </li> </ul>

Procedural Knowledge Objectives	Procedural Knowledge Assessment
<p>Example:</p> <p>Residents and fellows will be able to place an endotracheal tube for adult intubation in the correct sequence without error, including:</p> <ul style="list-style-type: none"> <li>• Properly position simulated patient for intubation and indicate medications if needed.</li> <li>• Insert the laryngoscope blade into the anatomically correct airway of the simulated patient.</li> <li>• Positively identify the vocal cords for passage of the endotracheal tube.</li> </ul>	<p>Example:</p> <ul style="list-style-type: none"> <li>• Likert scale with five performance classifications for the intubation procedure. The performance classifications include the following:               <ol style="list-style-type: none"> <li>1. Verbal instruction + demonstration</li> <li>2. Verbal prompts, with errors</li> <li>3. Independent with minor errors</li> <li>4. Independent without errors</li> <li>5. Independent + efficient without errors</li> </ol> </li> </ul>

<ul style="list-style-type: none"> <li>Place the endotracheal tube.</li> <li>Verify correct placement of the endotracheal tube by recognizing and stating proper color change from the capnometer and by auscultating lung sounds over several lung fields.</li> </ul>	
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Critical Thinking Skills Objectives	Critical Thinking Skills Assessment
<p>Example:</p> <ul style="list-style-type: none"> <li>Resident and fellow physicians will be able to state when intubation is clinically indicated.</li> <li>Resident and fellow physicians will be able to list possible reasons for an intubation attempt not being effective for a patient and how to correct such problems.</li> </ul>	<p>Example:</p> <p>Assessment will use the following four performance classifications:</p> <ul style="list-style-type: none"> <li>Accomplished: examines inconsistencies, synthesizes data, justifies decisions</li> <li>Competent: identifies inconsistencies, draws conclusions, suggests solutions</li> <li>Developing: Identifies some questions, information seen as valid, presents few options</li> <li>Beginning: Does not question data, does not draw conclusions, no options presented</li> </ul>

Transfer Objective (Applied Context) Objectives	Transfer Assessment
<p>Example:</p> <ul style="list-style-type: none"> <li>Be able to perform cognitive, psychomotor, procedural, and critical thinking objectives in the emergency room with a real patient.</li> </ul>	<p>Example:</p> <p>Four performance items will be assessed using a five classification Likert scale. The four performance items include:</p> <ul style="list-style-type: none"> <li>Performed primary assessment of patient</li> <li>Prioritized need for intubation of patient</li> <li>Performed appropriate management of airway using proper instruments and medications</li> <li>Maintained composure</li> </ul> <p>The five assessment classifications include:</p> <ul style="list-style-type: none"> <li>Verbal instruction + demonstration</li> <li>Verbal prompts, with errors</li> <li>Independent with minor errors</li> <li>Independent without errors</li> <li>Independent + efficient without errors</li> </ul>

Affective Objective (Confidence, Attitude) Objectives	Affective Assessment
<p>Example:</p> <ul style="list-style-type: none"> <li>Resident and fellow physicians will have increased ability to self assess performance.</li> <li>Resident and fellow physicians will have increased self efficacy in adult intubation.</li> <li>Resident and fellow physicians will offer help to other team members in the process of intubation without bias.</li> </ul>	<p>Example:</p> <p>This will be a self-evaluation completed by the learner and will consist of a scale with four performance characteristics. The learner can also write comments explaining their self-evaluation.</p> <p>1   2   3   4   5   6   7   8   9   10        Poor                      Marginal                      Adequate        Outstanding</p> <p>Outstanding: Competent to perform the procedure unsupervised and can deal with complications appropriately</p> <p>Adequate: Does not usually require supervision but may need help occasionally</p> <p>Marginal: Able to perform the procedure under supervision</p>

	Poor: Unable to perform the procedure even with supervision
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