EMT INTERMEDIATE & PARAMEDIC Training Program
Clinical Instruction Plan:
SURGERY

I. PURPOSE
The purpose of the OR rotation is to enable students to apply classroom theory relative to airway access and intubation to clinical practice. This experience shall be facilitated by a designated preceptor. The EMT-I/P student can maximize the learning potential of this experience by (1) performing as many intubation procedures as possible and (2) asking pertinent questions of the preceptor.

II. SCOPE OF PRACTICE
A student enrolled in an IDPH approved EMT-I/P program, while fulfilling the clinical training and in-field supervised experience requirements mandated for licensure or approval by the System and the Department, may perform prescribed procedures under the direct supervision of a physician licensed to practice medicine in all of its branches, a qualified registered professional nurse or a qualified EMT, only when authorized by the EMS Medical Director (EMS Act Section 3.55(d); EMS Rules Section 515.550 (d).

III. DIDACTIC PREPARATION:
Students have completed didactic lecture and demonstration/return demonstration labs covering the critical steps of intubation including the following:
A. Anatomy and physiology applied to intubation
B. Purpose and indications for intubation
C. Selection and preparation of equipment
1. Laryngoscope blades; straight and curved
2. ET tubes
3. Stylets
4. Esophageal Detector Devices (EDDs)
5. End tidal CO$_2$ detectors (EtCO$_2$)
6. Tube securing devices
7. Suction
D. Patient preparation/positioning/preoxygenation
E. Premedications, sedating medications, reversal agents
F. Intubation techniques
G. Confirming tube placement
H. Securing the tube
I. Ventilating through an ET tube
J. Complications of intubation
K. Monitoring patients during intubation attempts

ORIENTATION: The EMT I/P Student will attend a surgical orientation prior to scheduling their clinical date with the EMS Clinical Coordinator.

IV. PROCEDURE FOR REPORTING TO THE UNIT
A. Report to the main entrance waterfall on the assigned day and time to meet O.R. liaison. DO NOT GO TO O.R. UNLESS DIRECTED TO PRIOR BY DESIGNEE. Change into scrubs in the designated locker room and follow direction of liaison.

B. Liaison will escort you to the first room and prior to the patients arrival introduce you to the Anesthesiologist/CRNA. Liaison will make a copy of this instruction plan available to them.
if requested of your objectives, scope of practice, and the System’s requests of them as a preceptor.

C. Initiate the paperwork for the OR clinical rotation.

V. BEHAVIORAL OBJECTIVES: STUDENTS

During the OR rotation and before the end of the field internship, the student must demonstrate competency in the following:

A. Performing 5 live endotracheal intubations (Intermediate) / 5 live endotracheal intubations (Paramedic) under the direct supervision of an anesthetist, anesthesiologist or physician. In the hospital, this is dependent on the consent of the surgeon and the anesthesiologist.

B. Observing peripheral IV insertion as directed.

C. Observing/performing aseptic, oropharyngeal and tracheal suctioning as directed.

D. Maintaining the airway in unconscious patients using jaw and head position and airway adjuncts.

E. Observing/monitoring vital signs, including SpO2 and capnography readings, and ECG rhythms on operative patients.

VI. BEHAVIORAL OBJECTIVES: LIAISONS/PRECEPTOR

During the OR clinical rotation, the liaison/preceptor will:

A. Review the clinical objectives with the EMT-I/P student and mutually determine the level of participation expected of them during the clinical assignment.

B. Assist the student in gaining clinical expertise by facilitating approval for the student to perform an intubation from the anesthesiologist and surgeon.

C. Serve as a source of reference in answering specific questions posed by the student regarding intubation and/or surgical procedures.

D. Resolve any potential conflict situations in favor of the patient’s welfare and restrict the student’s activities until any incidents can be reviewed and investigated by the EMS Education Coordinator.

E. Report any unusual occurrences/situations to charge RN, head Anesthesiologist, and EMS coordinator.

VII. EVALUATIONS

A. The designated EMS Liaison or the anesthesiologist/crna may sign the Student Clinical Activity Record.

1. This form is important for documenting achievement of course objectives.

2. Note if an intervention was observed or performed and rate the skill level of each intervention performed.

3. Rate the student’s performance using the following rating scale. Please be objective and honest in your evaluations. If any skills are rated as “needs additional practice,” enter an explanation of your rationale in the comments section.

   a. X Observed activity only

   b. 4 Excellent/independently competent. Is able to perform the skill correctly with no coaching.
c. **3 Average.** Skill level meets entry level criteria. Can perform safely with minimal coaching.

d. **2 Unsatisfactory. Does not** Meet entry level criteria. Performs safely with direct supervision and moderate coaching.

e. **1 Needs additional practice.** Student could verbalize critical steps but skills are not at an entry level without supervision and coaching. Recommend additional clinical experience.

4. To be valid and accepted for credit, the liaison/preceptor must sign the form, noting date and times. Document the time a student entered or left the unit.

5. After completion, return the form to the EMT-I/P student. Access to these evaluations is limited to the Preceptor, the EMS Education Coordinator, the EMS Medical Director, the course coordinator and the student.

B. EMT-I/P Students shall complete the Unit/Preceptor evaluation form to critique the unit/preceptor and return it to the Course Coordinator on the next class day.

**VIII. PROFESSIONAL BEHAVIOR AND DRESS**

A. Students shall change into scrubs in the surgical locker room. They must strictly observe the host hospital’s guidelines relative to hand washing, shoe and hair covers, masks, and lab coats while out of the unit, etc.

1. All hair must be covered with caps while in the operating suite.

2. Covers are worn over shoes while in surgery. They are removed when leaving the unit.

3. Masks are worn at all times in the operating rooms whether surgery is in progress or not. A clean mask is worn for each case.

4. Students shall not walk outside the hospital area, or in any contaminated area/special precautions area without changing scrubs.

5. No jewelry other than wedding band and watch are worn in surgery. Medical tags are permitted if worn inside the scrub attire.

B. Students shall wear their student name badges at all times while in patient care areas.

C. Students appearing in inappropriate attire shall be dismissed for the day and must reschedule the rotation based on preceptor availability.

D. **Principles to preserve the aseptic environment**

1. Never touch or reach over a sterile field. Allow a very wide margin to avoid brushing against the sterile drapes.

2. Do not walk between two sterile fields. Remain on the perimeter of the sterile field.

3. Keep your hands above your waist while near any sterile field.

4. Do not touch or come near a “sterile” person’s front, hands, or arms up to the elbows. You may look over their shoulder from behind.

5. If you accidentally contaminate a sterile field, notify a nurse immediately so the area can be redraped.

E. **General rules of conduct**

1. During clinical rotations, students will be required to observe all rules, regulations, and policies imposed by the host hospital on its employees. All instances of inappropriate conduct or potential conflict must be immediately resolved in
favor of the patient and reported to the Course Coordinator as soon as possible. Call the EMS Education Coordinator.

2. A student may be required to do additional hours in a clinical site if the preceptor believes that he or she has not met objectives or if there is an insufficient patient population during the shift.

3. Students must refrain from smoking while on hospital premises.

4. Student should attempt to schedule their lunch and breaks so they coincide with their preceptor’s breaks. When leaving the unit at any time during the shift, the student must report off to their preceptor.

IX. ATTENDANCE POLICIES

A. If a student is unable to attend a clinical rotation as scheduled, they must call or page the Course Coordinator at least one hour before the anticipated absence.

B. If a student fails to come to a clinical unit as assigned and doesn’t call ahead of time to notify the Course Coordinator of his or her anticipated absence, the student will receive an unexcused absence for that day.

C. A student who, through personal error, goes to the wrong clinical unit on the wrong day or time will NOT be allowed to perform the clinical and will be instructed to leave the clinical area. The student will receive an unexcused absence for the day.

D. If a student arrives more than 15 minutes late to the clinical area without calling or paging the EMT-P Course Coordinator, the lateness will be noted as unexcused. If the unit activity the student was to engage in is already been accomplished, i.e., intubations, IV insertions etc., the student may be sent home and rescheduled based on unit/preceptor availability.

E. Highly unusual or extenuating circumstances occasionally occur, causing a student to be absent or late without opportunity to provide advance notice. We believe these situations to be rare. The acceptance of such unusual circumstances as adequate for an “excused absence” is the sole responsibility of the Course Coordinator.

F. Two unexcused absences and/or late arrivals will be interpreted as irresponsible behavior violating the course ethics policy and may be grounds for dismissal from the program. The attendance infraction will be evaluated by the EMS Education Coordinator and EMS MD.

G. Rescheduling of clinical rotations can only be done at the convenience of the Clinical Coordinator based on unit availability. A student may delay graduating and not be eligible to take the state approved licensing exam if they do not finish the clinical component on time.

H. No student may leave a clinical rotation before completing the assigned shift unless permission is granted by the Course Coordinator or they are dismissed by the preceptor as having completed all objectives and/or there is continuing opportunity to provide patient care (OR, IV).

I. The policies concerning clinical time are very specific and will be consistently enforced throughout the various program locations. It is important that students handle clinical responsibility in a professional way. The ability to function in
a professional and dependable manner will be as important as knowledge in overall success as an EMT I/P.
OSFNIEMS SURGICAL INTUBATION REVIEW FORM

Student: ___________________________ Level: □ EMT-P Student □ CCEMT-P/Flight RN
Date: _______________________ Evaluator: __________________

Pre-Intubation Procedure/Skill Evaluation

<table>
<thead>
<tr>
<th><strong>Review of Conditions</strong></th>
<th>The candidate should perform this skill on a simulated patient in the supine position under existing indoor, ambulance, or outdoor lighting, temperature, and weather conditions. Total time of ventilation interruption should not exceed 30 seconds.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indications</strong></td>
<td>Patients in respiratory failure or respiratory arrest, patients with an altered level of consciousness and an inability to protect their own airway, and patients in cardiopulmonary arrest</td>
</tr>
<tr>
<td><strong>Red Flags</strong></td>
<td>Consider intubation as a tool for airway management, NOT AS A GOAL. Esophageal placement can be fatal if unrecognized!!</td>
</tr>
</tbody>
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**Evaluate anatomy for intubation approach**
- Limited rotation and neck extension can limit access to airway
- Receding chin can place glottic opening high and anterior to laryngoscopic view
- Trismus or unusually narrow mouth opening can interfere with laryngoscope entry
- Unusually a short, squat neck places the glottic opening anteriorly
- Abscess or other internal swelling can block passage or view
- Extend patient’s tongue to view posterior oropharynx.
- Reduced or absent view of posterior oropharynx can indicate difficulty in visualizing glottic opening

**Decide if any modification to intubation approach may be necessary**
- Can include one or more of the following:
  - Continued bag-mask ventilation
  - Alternative airway device (dual lumen airway, laryngeal mask airway, King Airway, Combitube, etc.)
  - Modified laryngoscopy procedure (body position, ET Introducer, Video Laryngoscopy, etc.)
  - Needle or surgical cricothyroidotomy

**Prepare equipment**
- **Endotracheal tube**
  - Select proper endotracheal tube size
    - **Adult**: 7.0 – 7.5 mm for an average female, 8.0 – 8.5 mm for an average male
    - **Pediatric**: Use length-based tape to determine appropriate size, or one of the following formulas if length-based tape is not available:
      - Peds uncuffed: \((\text{Age in years}/3) + 4\)
      - Peds cuffed: \((\text{Age in years}/4) + 4\)
  - For both, have additional sizes immediately available
  - Open sterile package at proximal end of endotracheal tube
  - Attach 10 – 12 cc syringe to pilot balloon and inflate cuff
  - Squeeze distal obturator cuff to determine if it holds air
  - Deflate cuff (completely); keep syringe attached
  - If needed, insert stylette into proximal end of endotracheal tube
  - Confirm that distal tip of stylette does not extend past distal end of tube
- **Laryngoscope**
Select straight or curved blade

Adult: Generally a size 3 or 4 curved blade / size 2 or 3 straight blade

Pediatric: Use length-based tape (Broselow) to determine blade size

Attach blade to handle and turn on light

Confirm that the bulb is “tight, white, and bright”

Check Suction

Have suction immediately available

**Perform procedure**

Place head, neck, and torso into proper position

Adult: Place head and neck into sniffing position, padding occiput if needed

Pediatric: Use padding under shoulder blades to elevate them. Results in head being in a neutral or slightly extended position

If cervical spine injury suspected, have assistant maintain manual stabilization

Discontinue ventilations and remove BLS airway adjunct

Open mouth with cross finger technique if needed

Suction if necessary

With laryngoscope handle in left hand, insert blade into right side of mouth until the tip of the blade is at the base of the tongue

Advance blade toward base of tongue and lift anteriorly to expose epiglottis

Tip of curved blade comes to rest in vallecula

Tip of straight blade lifts tip of epiglottis directly

Visualize and identify epiglottis, glottic opening, arytenoid cartilage, and vocal cords

Insert ET tube in right side of mouth and advance toward midline

Observe distal tip pass through glottic opening

Advance ET tube until tube marker is at vocal cords

Withdraw laryngoscope and close blade against handle, setting it aside

Secure tube against upper teeth with fingers of right hand

Inflate pilot balloon with syringe until firm, using left hand

Detach syringe from cuff

Note depth of tube at teeth

Remove stylette with left hand

Attach bag

If using esophageal detector device to confirm ET tube placement, utilize before attaching bag

Begin ventilating patient

Total time of ventilation interruption should not exceed 30 seconds

Confirm endotracheal tube placement

Use at least two methods of confirmation / Capnography, positube, end-tidal.

If endotracheal tube not correctly placed, deflate cuff, withdraw tube, and ventilate patient with bag mask and OPA

Secure endotracheal tube

Use commercial device according to manufacturer’s directions

Reconfirm tube placement

Frequently reassess tube placement during patient encounter

Apply cervical collar as an additional means of preventing ET tube from being dislodged and /or cervical spine immobilization

**INSTRUCTOR SIGNATURE: _______________________ STUDENT SIGNATURE:________________**