Peoria Area EMS System

EMT PARAMEDIC Training Program Clinical Instruction Plan:
CRITICAL CARE UNITS

I. PURPOSE

The purpose of the Critical Care rotation is to enable students to observe and participate in the clinical assessment and definitive interventions for critically ill or injured patients. This experience shall be facilitated by a designated preceptor. The EMT-P student can maximize the learning potential of this experience by (1) observing total patient care of critically ill and injured patients and (2) asking pertinent questions of the critical care team.

II. SCOPE OF PRACTICE

A student enrolled in an IDPH approved EMT-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. PROCEDURE FOR REPORTING TO UNIT

A. Report to the unit on the assigned day and time. Inform the charge nurse of your arrival and he or she will provide your preceptor assignment.

B. Report to the assigned Preceptor. Show the preceptor a copy of this instruction plan to remind them of your objectives, scope of practice, and the System's requests of them as an instructor.

C. Initiate the paperwork for the critical care clinical rotation.

D. Students shall listen to change of shift report with unit staff and receive area assignment.

IV. BEHAVIORAL OBJECTIVES: STUDENTS

During the Critical Care rotation the student will

E. perform patient assessments consistent with principles of an on-going assessment. At a minimum the patient assessment should include a review of all assigned patients' charts, taking vital signs, auscultating breath and heart sounds, calculating a Glasgow Coma Score, and performing a neuro assessment to include pupil size, shape, equality, and reactivity to light, and ECG analysis.

F. review selected patients' charts including their diagnostic workup, interventions, and responses to interventions.

G. assist in airway access using oral and nasopharyngeal airways, oral-pharyngeal and tracheal suctioning.

H. observe the care of patients with endotracheal, cricothyrotomy, or tracheostomy tubes in place and patients being maintained on ventilators.

I. administer oxygen via NC, NRM, or BVM. Observe care of patients on ventilators.

J. perform peripheral IV access and adjust fluid infusions as directed.

K. observe the care of a patient who requires hemodynamic monitoring.

L. monitor and interpret ECG rhythm strips and change monitor leads. Obtain and analyze **at least three** different cardiac rhythms as patient population permits.

M. assist in the care of a patient who requires transcutaneous pacing.

N. administer drugs approved for EMS via the PO, SL, IV, IVPB, IM, Subq, inhalation, and topical routes as directed.

O. assist in cases of cardiac arrest, including the performance of CPR, management of the airway, and defibrillation.

P. accompany patients to diagnostic tests, if patient availability permits

Q. observe the techniques of correct positioning to avoid complications, skin care, DVT prophylaxis, and restraint application.

R. establish rapport with patients, significant others, and unit staff.

S. **Students may not perform any skills that are outside of their scope of practice as defined by the DOT curriculum, Illinois EMS Act or Rules, and system SOPs.**

III. BEHAVIORAL OBJECTIVES: PRECEPTORS

During the EMT-P clinical rotation, the preceptor will

A. take the EMT-P student on a brief tour identifying the location of patient assessment areas, diagnostic/treatment supplies and/or equipment, staff lounge, utility rooms, waiting rooms, x-ray, etc. that will facilitate their adaptation to the unit.

B. give a brief unit orientation describing the routine patient flow patterns and the responsibilities usually assumed by nurses, physicians, and ancillary personnel.

C. review the clinical objectives with the EMT-P student and mutually determine the level of participation expected of them during the clinical assignment.

D. assist the student in gaining clinical expertise by encouraging patient contact whenever possible and offering educational coaching while the student observes and/or performs listed skills.

E. serve as a source of reference in answering specific questions posed by the student regarding unit policy, patient evaluation or treatment rendered.

F. resolve any potential conflict situations in favor of the patient's welfare and restrict the student's access to the unit until any incidents can be reviewed and investigated by the Course Coordinator.

G. **Specific content to review**

1. Pharmacology and pharmacodynamics including therapeutic actions, indications, contraindications, correct dosages, side effects and precautions for commonly used critical care drugs.

2. **ICU especially**: A & P of the respiratory system, pathophysiology and management of common respiratory problems:
    a. Respiratory depression and arrest,
    b. Obstructive airway disease; asthma, COPD
    c. Toxic inhalations and aspirations,
    d. Near drowning,
    e. Pulmonary edema; cardiogenic and non-cardiogenic,
    f. Hyperventilation syndrome,
    g. Pulmonary embolism,
    h. Thoracic trauma:
        (1) Rib fracture
        (2) Flail chest
        (3) Traumatic pneumothorax
        (4) Simple pneumothorax
        (5) Tension pneumothorax
        (6) Open pneumothorax
        (7) Hemothorax

3. **CCU especially**: A & P of cardiovascular system, pathophysiology, assessment, risk stratification, and management of cardiovascular problems including:

    a. acute coronary syndromes: angina to AMI,
    b. congestive heart failure/acute pulmonary edema,
    c. hypoperfusion states, shock,
    d. hypertensive states, and
    e. abdominal aortic aneurysms (AAA).

4. **Cardiac dysrhythmia interpretation for the following:**

    a. Sinus arrhythmia
    b. Sinus pause/arrest
    c. Sinus bradycardia
    d. Sinus/atrial tachycardia
    e. Supraventricular tachycardia
    f. Wandering atrial pacemaker
    g. Atrial fibrillation
    h. Atrial flutter
    i. Ventricular tachycardia
    j. Ventricular fibrillation
    k. Idioventricular rhythm
    l. Pulseless Electrical Activity (PEA)
    m. Asystole
    n. Conduction defects
        (1) Atrio-ventricular blocks:
            (a) 1°
            (b) 2° Mobitz I
            (c) 2° Mobitz II
            (d) 3°
        (2) Intraventricular conduction defects

    o. Ectopic beats:
        (1) Premature atrial contractions
        (2) Premature junctional contractions
        (3) Premature ventricular contractions

    p. Paced rhythms

5. **Techniques of management**

    a. Use of invasive and non-invasive airway adjuncts
    b. Suctioning
    c. Oxygen administration
    d. Use of non-invasive pressure support ventilation devices
    e. Tube thoracostomy and chest tube maintenance
    f. Cardioversion/defibrillation
    g. Drug therapy

6. The unit preceptor is encouraged to use the following educational methods: demonstration/return demonstration, verbal coaching, and question/answer opportunities.

IV. **EVALUATIONS**

A. Preceptors shall complete and sign the **Student Clinical Activity Record**.

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

2. Note if an intervention was observed 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.

Key:

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 skill level is not yet at an entry level of practice without supervision and coaching. Recommend additional clinical experience.

4. The form must be signed and dated by the preceptor with the times documented to be valid. Document the time a student entered or left the unit by using the 24 hour military clock. It will not be accepted for credit without these items completed.

5. After completion, return the form to the student. The only persons with access to these evaluations are the EMT-P student and the EMT-P Course Coordinator.

B. EMT-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.

V. **PROFESSIONAL BEHAVIOR AND DRESS**

A. Students shall wear their PAEMS uniform consisting of a navy-blue polo and System patches appropriately sewn, and dark slacks, and dark socks. No scrubs should be worn in the ICU/CCU to avoid role confusion with unit staff.

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

C. Hair must be neatly groomed. It should not rest on the collar. Students with shoulder length hair shall pull it back with barrettes or into a ponytail.

D. Students appearing in inappropriate attire shall be dismissed from the area and must reschedule the rotation based on unit availability.

E. Each student shall bring their own stethoscope and penlight to the clinical experience.

F. **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.

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. Students 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.

VI. **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 thirty 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 has already been accomplished, i.e., intubations, IV insertions etc., the student may be sent home and rescheduled at the course coordinator's convenience and unit 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 course coordinator based on unit availability. A student may delay graduating and not be eligible to take the state board exam if they do not finish the clinical component on time.

H. No student may leave a clinical unit 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 no continuing opportunity to provide patient care (OR).

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 manner. The ability to function as a dependable professional will be as important as knowledge in overall success as a paramedic.