



Global Cognitive and Psychomotor Skills Clinical Objectives

1. **Occupational Health and Safety:** Displaying safety consciousness with patients, self, other personnel, equipment; compliance with infection control principles, including appropriate use of standard precautions and aseptic technique; using proper body mechanics when handling patients and equipment; demonstrating understanding of psychological hazards of emergency/critical care environments of techniques for stress recognition and management.
2. **Psychomotor Skills:**
 - a. Vascular access- Demonstrating ability to safely and effectively access the venous circulation of patients from all age groups.
 - b. Medication administration- Demonstrating ability to safely and effectively give medications by the intravenous push, intravenous continuous infusion, intramuscular, subcutaneous, and nebulized routes.
 - c. Bag-Mask ventilation- Demonstrating the ability to safely and effectively ventilate unintubated patients from all age groups.
 - d. Endotracheal intubation- Demonstrating the ability to safely and effectively perform endotracheal intubation.
 - e. ECG acquisition and interpretation- Demonstrating the ability to safely and effectively acquire and interpret both a monitoring lead and 12-lead ECG
3. **Patient Assessment and Management:** Demonstrating the ability to perform a comprehensive assessment (including initial assessment, history, and physical exam), develop a differential diagnosis, formulate, and implement a treatment plan demonstrating a knowledge base and professional judgment required to care for patients.
4. **Record Keeping and Communications:**
 - a. Written- Documenting patient information, observations, and occurrences accurately, completely, concisely, and legibly.
 - b. Verbal- Communicating pertinent patient information understandably, completely, concisely, and accurately.
5. **Call Management:** Demonstrating ability to serve as team leader and safely and effectively direct the pre-hospital response to a variety of calls.



Global Cognitive and Psychomotor Skills Clinical Objectives: EMT STUDENTS

1. **Occupational Health and Safety:** Displaying safety consciousness with patients, self, other personnel, equipment; compliance with infection control principles, including appropriate use of standard precautions and aseptic technique; using proper body mechanics when handling patients and equipment; demonstrating understanding of psychological hazards of emergency/critical care environments of techniques for stress recognition and management.
2. **Psychomotor Skills:**
 - a. Vascular access- Demonstrating ability to safely and effectively access the venous circulation of patients from all age groups.
 - b. Medication administration- Demonstrating ability to safely and effectively give medications by the intravenous push, intravenous continuous infusion, intramuscular, subcutaneous, and nebulized routes.
 - c. Bag-Mask ventilation- Demonstrating the ability to safely and effectively ventilate unintubated patients from all age groups.
 - d. Endotracheal intubation- Demonstrating the ability to safely and effectively perform endotracheal intubation using PtL or Combitube device.
3. **Patient Assessment and Management:** Demonstrating the ability to perform a comprehensive assessment (including initial assessment, history, and physical exam), develop a differential diagnosis, formulate, and implement a treatment plan demonstrating a knowledge base and professional judgment required to care for patients.
4. **Record Keeping and Communications:**
 - e. Written- Documenting patient information, observations, and occurrences accurately, completely, concisely, and legibly.
 - f. Verbal- Communicating pertinent patient information understandably, completely, concisely, and accurately.
5. **Call Management:** Demonstrating ability to serve as team leader and safely and effectively direct the pre-hospital response to a variety of calls.



Emergency Department Clinical Goals and Objectives

In addition to the Global Clinical Objectives, certain clinical experiences are best suited to the attainment of specific knowledge and skills. In this context, *Goals* are defined as competencies that the faculty feel would benefit the student if presented with the opportunity to experience them. *Objectives* are competencies that the student will be expected to obtain.

Purpose: The purpose of this rotation is to prepare students to assess and manage patients at the level of a paramedic as well as to continue their accumulation of patient care experience and knowledge of EMS and its role in the health care system.

Goals: It is the goal of the emergency department rotations to expose students to as many patient assessment/management experiences as possible with an emphasis on developing proficiency in performing the technical skills taught during the first semester. These experiences may include, but are not limited to:

1. Insertion of nasogastric tubes.
2. Administration of medications via an infusion pump.
3. Administration of RSI protocol medications followed by intubation.
4. Oral and nasal intubation.
5. Exposure and assistance with other procedures not commonly performed in the prehospital setting such as:
 - a. Placement of central venous lines
 - b. Placement of arterial lines
 - c. Endoscopic procedures
 - d. Neurological assessments
 - e. Hemodynamic monitoring
 - f. Urinary catheterization
6. Assisting in cases of cardiac arrest as directed. Students may perform electrical arrhythmia therapy.

Objectives: At a minimum, students will be expected to accomplish the following objectives during each Emergency Department rotation:

1. Perform at least 3 patient assessments, including recent and past medical history and physical exam. The assessment should include taking and recording vital signs and a review of all systems.
2. Document at least 3 patient assessments to include the pathophysiology of diagnosis, mechanism of action of any medications given, and a SOAP style report.
3. Interact with patients and their families. Observe behavioral reactions to injury/illness.
4. Operate oxygen administration equipment and given oxygen as many times as possible.
5. Administer medications as many times as possible.
6. Record mechanism of action, dosage, route of administration and indications for any medications given.
7. Establish IV access as many times as possible.
8. Draw and prepare blood samples for laboratory studies as many times as possible.



Coronary Care Unit Clinical Goals and Objectives

In addition to the Global Clinical Objectives, certain clinical experiences are best suited to the attainment of specific knowledge and skills. In this context, *Goals* are defined as competencies that the faculty feels would benefit the student if presented with the opportunity to experience them. *Objectives* are competencies that the student will be expected to obtain.

Purpose: The purpose of this rotation is expose students to a variety of critically ill and injured patients and to allow them to practice their assessment skills. Although students may perform technical skills as requested, they should focus on each patient's diagnosis, key assessment findings, and treatment plans.

Goals: it is the goal of the coronary care unit rotations to expose students to as many patient assessment/management experiences as possible. These experiences may include, but are not limited to:

1. Reviewing all charts.
2. Operating oxygen administration equipment and giving oxygen.
3. Performing peripheral IV insertion.
4. After observation and instruction, drawing blood samples via venipuncture of existing IV lines.
5. Inserting oral and/or nasogastric tubes.
6. Assisting in ambulating patients from bed to chair, lifting and turning patients.
7. Assisting in cases of cardiac arrest as directed including performing CPR, managing the airway, endotracheal intubation, and electrical and pharmacological arrhythmia therapy.
8. Evaluating results of laboratory tests, and correlating results with patient management.
9. Reviewing operation of mechanical ventilator equipment, noting various settings.
10. Maintaining airway in unconscious patients using manipulation, positioning, oral airways, and suctioning.
11. Performing aseptic endotracheal suctioning.
12. Observing and assisting in setting up and maintaining IV infusion pumps.
13. Exposure to critical care diagnostic procedures.
14. Exposure to long term treatment plans and care of patients with multiple organ system failure.
15. Treatment modalities not normally utilized in prehospital medicine.

Objectives: At a minimum, students will be expected to accomplish the following objectives during each Coronary Care Unit rotation:

1. Perform at least 3 patient assessments, including recent and past medical history and physical exam. The assessment should include taking and recording vital signs, a review of all systems, and notation of all IV tubes, drains, and invasive hemodynamic monitoring.
2. Document at least 3 patient assessments to include the pathophysiology of diagnosis, mechanism of action of any medications given, and a SOAP style report.
3. Prepare and administer medications as directed by assigned preceptor.
4. Observe and identify effects of pharmacological agents administered.
5. Evaluate and interpret ECGs, including 12-lead ECGs.
6. Observe complications of acute myocardial infarction, coronary artery disease, and coronary catheterizations.
7. Observe electrophysiology studies and procedures.
8. Discuss assigned preceptor mechanisms producing arrhythmias.
9. Correlate arrhythmias observed with clinical effects.



Intensive Care Unit Clinical Goals and Objectives

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Purpose: The purpose of this rotation is expose students to a variety of critically ill and injured patients and to allow them to practice their assessment skills. Although students may perform technical skills as requested, they should focus on each patient's diagnosis, key assessment findings, and treatment plans.

Goals: it is the goal of the intensive care unit rotations to expose students to as many patient assessment/management experiences as possible. These experiences may include, but are not limited to:

1. Reviewing all charts.
2. Operating oxygen administration equipment and giving oxygen.
3. Performing peripheral IV insertion.
4. After observation and instruction, drawing blood samples via venipuncture or existing IV lines.
5. Inserting oral and/or nasogastric tubes.
6. Assisting in ambulating patients from bed to chair, lifting and turning patients.
7. Assisting in cases of cardiac arrest as directed including performing CPR, managing the airway, endotracheal intubation, and electrical and pharmacological arrhythmia therapy.
8. Evaluating results of laboratory test, and correlating results with patient management.
9. Reviewing operation of mechanical ventilator equipment, noting various settings.
10. Maintaining airway in unconscious patients using manipulation, positioning, oral airways, and suctioning.
11. Performing aseptic endotracheal suctioning.
12. Observing and assisting in setting up and maintaining IV infusion pumps.
13. Exposure to critical care diagnostic procedures.
14. Exposure to long term treatment plans and care of patients with multiple organ system failure.
15. Treatment modalities not normally utilized in prehospital medicine.

Objectives: At a minimum, students will be expected to accomplish the following objectives during each Intensive Care Unit rotation:

1. Perform at least 3 patient assessments, including recent and past medical history and physical exam. The assessment should include taking and recording vital signs, a review of all systems, and notation of all IV tubes, drains, and invasive hemodynamic monitoring.
2. Document at least 3 patient assessments to include the pathophysiology of diagnosis, mechanism of action of any medications given, and a SOAP style report.
3. Prepare and administer medications as directed by assigned preceptor.
4. Observe and identify effects of pharmacological agents administered.
5. Evaluate and interpret ECGs.
6. Observe complications of complex multiple system injury or illness, including ARDS, renal failure, hepatic failure, DIC, and multiple organ systems failure.



Labor and Delivery Clinical Goals and Objectives

In addition to the Global Clinical Objectives, certain clinical experiences are best suited to the attainment of specific knowledge and skills. In this context, *Goals* are defined as competencies that the faculty feels would benefit the student if presented with the opportunity to experience them. *Objectives* are competencies that the student will be expected to obtain.

Purpose: The purpose of this rotation is to give students an opportunity to observe and assist with normal and abnormal deliveries as well as practice assessing the pregnant patient and newborn infant.

Goals: It is the goal of the labor and delivery unit rotations to expose students to a many patient assessment/management experiences as possible. These experiences may include, but are not limited to:

1. Observe and assist abnormal deliveries including breech delivery, prolapsed cord, shoulder dystocia, and limb presentation.
2. Observe, assist in, and review management of patients with pregnancy induced hypertension, placenta previa, placental abruption, fetal distress, ruptured/leaking amniotic membranes, premature labor, and precipitous delivery.
3. Observe delivery via cesarean section.
4. Observe and assist with evaluation of dilation and effacement.
5. Observe administration of epidural or subdural anesthesia.
6. Observation and assistance of fundal massage after delivery.
7. Observe and assist with medication administration including magnesium sulfate and pitocin.
8. Observe assessment and management of postpartum complications including perineal injury, retained placenta, and prolapsed cord.
9. Observe and assist with neonatal resuscitation.
10. Observe and assist with management of meconium aspiration.

Objectives: At a minimum, students will be expected to accomplish the following objectives during each Labor and Delivery rotation:

1. Assess pregnant patients to include determining gravidity and parity, estimating length of gestation by measuring fundal height, determining EDC, identifying stage of labor, measuring contraction frequency and length, and recognizing imminent delivery.
2. Document at least 3 patient assessments to include the pathophysiology of the diagnosis, mechanism of action of drugs given, and a SOAP style report.
3. Identification of the 3 stages of labor.
4. Observe and assist with normal vaginal deliveries.
5. Evaluation of neonate by determination of APGAR score.
6. Observe and assist with routine care of newborn including evaluation of airway and ventilation, suctioning, oxygen administration, clamping/cutting umbilical cord, and temperature control.
7. Inspect placenta.
8. Inspect umbilical cord and attempt to identify artery and veins.



Operating Room Clinical Goals and Objectives

In addition to the Global Clinical Objectives, certain clinical experiences are best suited to the attainment of specific knowledge and skills. In this context, *Goals* are defined as competencies that the faculty feels would benefit the student if presented with the opportunity to experience them. *Objectives* are competencies that the student will be expected to obtain.

Purpose: The purpose of this rotation is to give students an opportunity to practice airway management procedures, especially bag-valve-mask ventilation and endotracheal intubation. While students will be exposed to surgical procedures during this rotation and have the opportunity to learn about those procedures, the primary purpose of this rotation is airway management. Student should concentrate their time on mastering these tasks.

Goals: it is the goal of the operating room rotations to expose students to as many patient assessment/management experiences as possible. These experiences may include, but are not limited to:

1. Administration of RSI protocol medications.
2. Monitoring patients, including blood pressure, pulse, respirations, level of consciousness, arterial oxygen saturation, and end-tidal carbon dioxide detection.
3. Operating oxygen administration equipment and giving oxygen.
4. Assisting in the operation of mechanical ventilatory support.
5. Preparing and giving medications as directed by assigned preceptor.
6. Observing effects of medications given.

Objectives: At a minimum, students will be expected to accomplish the following objectives during each operating room rotation:

Appropriately manage the patient's airway before, during, and after anesthesia to include:

1. Proper positioning of the head and shoulders.
2. Formation of an effective seal with a bag-valve-mask
3. Effective ventilation with a manual ventilation device and mask.
4. Effective intubation of all ages and conditions of patients.
5. Appropriate assessment of tube placement.
6. Effective ventilation with a manual ventilation device and ET tube.



Pediatric Emergency Department Clinical Goals and Objectives

In addition to the Global Clinical Objectives, certain clinical experiences are best suited to the attainment of specific knowledge and skills. In this context, *Goals* are defined as competencies that the faculty feels would benefit the student if presented with the opportunity to experience them. *Objectives* are competencies that the student will be expected to obtain.

Purpose: The purpose of this rotation is to give students an opportunity to assess pediatric patients under the supervision of a staff pediatrician, physician assistant or pediatric nurse practitioner and/or pediatric nurse.

Goal: It is the goal of the pediatric clinic rotation is to expose students to as many experiences as possible involving assessment of common injuries and illnesses in pediatric patients.

Objectives: Students will be precepted by a staff pediatrician, physician assistant, or pediatric nurse practitioner. They will be expected to:

1. Accompany the preceptor on all patient contacts and reports.
2. Observe and assist assessment and management of each patient under the direct supervision of staff personnel.
3. Discuss each patient's condition with the preceptor and document the following:
 - a. Pathophysiology
 - b. Common signs and symptoms
 - c. Common treatment plans
 - d. Prognosis
4. Document at least 5 patient contacts using SOAP method to include:
 - a. Age and gender
 - b. Presenting problem or chief complaint
 - c. Past medical history
 - d. Assessment findings
 - e. Treatment plan



Pediatric Intensive Care Unit Clinical Goals and Objectives

In addition to the Global Clinical Objectives, certain clinical experiences are best suited to the attainment of specific knowledge and skills. In this context, *Goals* are defined as competencies that the faculty feels would benefit the student if presented with the opportunity to experience them. *Objectives* are competencies that the student will be expected to obtain.

Purpose: The purpose of this rotation is to expose students to a variety of critically ill and injured patients and to allow them to practice their assessment skills. Although students may perform technical skills as requested, they should focus on each patient's diagnosis, key assessment finding, and treatment plans.

Goals: It is the goal of the Pediatric Intensive Care Unit rotations to expose students to as many patient assessment/management experiences as possible. These experiences may include, but are not limited to:

1. Assess and manage pediatric patients with common illnesses found in the critical care setting, including acute asthma, meningitis, croup, epiglottitis, bronchiolitis, and sepsis.
2. After observation and instruction, draw blood samples via venipuncture or existing IV lines.
3. Demonstrate knowledge of equipment, procedures, and sites for vascular access in children.
4. Performing peripheral IV insertion.
5. Preparing and administering medications as directed;
6. Observing effects of medications administered.
7. Inserting oro- and/or nasogastric tubes.
8. Acquire and interpret ECG rhythms.
9. Assisting in ambulating patients from bed to chair, lifting and turning patients, and with activities of daily living.
10. Assisting in cases of cardiac arrest as directed including performing CPR, managing the airway, endotracheal intubation, and electrical and pharmacological arrhythmia therapy.
11. Evaluating results of laboratory tests, and correlating results with patient management.
12. Reviewing operation of mechanical ventilator equipment, noting various settings.
13. Maintaining airway in unconscious patients using manipulation, positioning, oral airways, and suctioning
14. Performing aseptic endotracheal suctioning.
15. Observing and assisting in setting up and maintaining IV infusion pumps.
16. Exposure to critical care diagnostic procedures.
17. Exposure to long term treatment plans and care of patients with multiple organ system failure.
18. Treatment modalities not normally utilized in prehospital medicine.

Objectives: At a minimum, students will be expected to accomplish the following objectives during each Pediatric Intensive Care Unit rotation:

1. Perform at least 3 Patient assessments, including recent and past medical history and physical exam. The assessment should include a rapid initial evaluation of respiratory effort, heart rate, and status of hydration and perfusion; taking and recording vital signs, a review of all systems, and notation of all IV tubes, drains, and invasive hemodynamic monitoring.
2. Document at least 3 patient assessments it include the pathophysiology of diagnosis, mechanism of action of any medications given, and a SOAP style report.
3. Observe age-specific reactions to injury/illness and responses to health care personnel.
4. Observe age-specific Parent-child interactions.
5. Demonstrate appropriate age-specific approaches to elicit and keep child's cooperation.
6. As available, observe and assist in the care of patients with tracheotomy tubes, central venous lines, gastrostomy tubes or gastric feeding tubes, or ventriculoperitoneal shunts.
7. Discuss with preceptor common problems with devices used in the care of children with special health care needs and procedures for managing these problems.
8. Observe patient reactions to injury/illness and responses to health care personnel.
9. Observe parent-child interactions.
10. Demonstrate appropriate approaches to elicit and keep child's cooperation.



Respiratory Therapy Clinical Goals and Objectives

In addition to the Global Clinical Objectives, certain clinical experiences are best suited to the attainment of specific knowledge and skills. In this context, *Goals* are defined as competencies that the faculty feels would benefit the student if presented with the opportunity to experience them. *Objectives* are competencies that the student will be expected to obtain.

Purpose: The purpose of this rotation is to give students access to a large number of patients with respiratory diseases. Students are expected to take advantage of this opportunity to on development of assessment skills for respiratory patients.

Goals: It is the goal of the respiratory therapy rotations to expose students to as many patient assessment/management experiences as possible. These experiences may include, but are not limited to:

1. Operate oxygen delivery equipment and give oxygen.
2. Observe and assist with chest percussion.
3. Observe and assist with the monitoring and care of patients on mechanical ventilators.
4. Discuss with the preceptor types of ventilator systems in use on patients, including; mode, control settings, use of PEEP and CPAP, and appropriate responses to alarms.
5. Observe and assist in routine maintenance care of patients with tracheotomies.
6. Observe and assist with acquisition of arterial blood gas samples.
7. Observe lab values with special attention to PO₂, PCO₂, and CO₂ monitors, and peak flow measurement.
8. Observe and discuss with preceptor use of pulse oximeters, end tidal CO₂ monitors, and peak flow measurement.
9. Correlate lab values with patient condition and treatment plans.
10. Administer medications via small volume nebulizer.
11. Observe and assist with the use of pharmacologic agents used in the care of respiratory diseases.
12. Perform sterile endotracheal sanctioning to include auscultation of breath sounds before and after procedure.
13. Observe signs, symptoms, and care of patients with common respiratory diseases found in the prehospital setting, including: emphysema, chronic bronchitis, asthma, cardiogenic pulmonary edema, non-cardiogenic edema, and pneumonia.

Objectives: At a minimum, students will be expected to accomplish the following objectives during each respiratory therapy rotation:

1. Listen to and identify chest sounds to include rales, rhonchi, wheezes, and diminished breath sounds on every patient assessed.
2. Document at least 3 patient assessments to include the pathophysiology of the diagnosis, mechanism of action of any medications given, and a SOAP style report.



Vanderbilt LifeFlight Clinical Goals and Objectives

In addition to the Global Clinical Objectives, certain clinical experiences are best suited to the attainment of specific knowledge and skills. In this context, *Goals* are defined as competencies that the faculty feel would benefit the student if presented with the opportunity to experience them. *Objectives* are competencies that the student will be expected to obtain.

Purpose: The purpose of this rotation is expose students to a variety of critically ill and injured patients and to allow them to practice their assessment skills. Although students may perform technical skills as requested, they should focus primarily on helicopter safety and the diagnosis, key assessment findings, and care of each patient.

Goals: It is the goal of the air medical rotations to expose students to as many patient assessment/management experiences as possible. The students should focus on helicopter safety as their primary goal, but when provided the opportunity as seen fit by the flight crew, students may assist with or perform advanced skills at the paramedic level while supervised and directed by a flight nurse. These skills may include, but are not limited to:

9. Establishing IV lines
10. Review of laboratory and/or radiology reports on inter-facility transports
11. Interaction with family members when appropriate
12. Endotracheal Intubation
13. Chest Decompression, Chest tubes
14. Airway management and ventilatory support
15. Administration of medications
16. Documentation of patient assessment and treatment

Objectives: During air medical rotations, it is possible that the student will have limited patient contacts. Therefore, it is the objective of this rotation to spend time discussing a variety of topics with the flight crew to obtain knowledge in their area of expertise. These topics may include, but are not limited to:

7. Helicopter Safety
8. Flight Criteria
9. Landing Zone (Procedures, Safety, Roles of LZ Officers)
10. The roles and responsibilities of the Primary Nurse and Secondary Nurse
11. Protocols (differences between ground transport protocols and air transport protocols)
12. Medications (differences between those on ground transport units vs. air transport units)
13. Delivery of bedside reports
14. Reports
 - a. Students will document patient assessment and treatment for each patient interaction and review this documentation with the flight crew
 - b. Students will receive a 48 hour follow-up on each patient and submit a written report to EMS Education faculty for review