Advanced Practice Paramedic Program Minimum Standard Objectives

The Global Emergency Medical Registry (GEMR) establishes minimum standard educational objectives for the registry levels. The following are the 2019 minimum educational objectives for an initial Advanced Practice Paramedic (APP) education program, the registry written examinations and psychomotor examinations are created from these objectives and sample scope of practice.

Please note that to enter an APP program, the student must be a current Paramedic, Nurse, Physician’s Assistant, or Physician.

Didactic Objectives
The participant will be able to:
1. Identify the components of a multi-team system that must work together effectively to ensure patient safety.
2. Identify a structured process by which information is clearly and accurately exchanged among team members.
3. Demonstrate the ability to maximize the activities of team members by ensuring that team actions are understood, changes in information are shared, and team members have the necessary resources.
4. Demonstrate the process of actively scanning and assessing situational elements to gain information or understanding, or to maintain awareness to support team functioning.
5. Demonstrate the ability to anticipate and support team member’s needs through accurate knowledge about their responsibilities and workload.
6. Complete emergency warning score (EWS) utilizing a standard EMS tool.
7. Interpret correctly cardiac, great vessels, abdominal content, and lung ultrasound findings related to the FAST, RUSH, CAUSE, FOCUS, and Lung ultrasound exams.
8. Interpret, respond, and apply principles of flight physiology to presented case studies in aeromedical evacuation.
9. Explain the considerations in caring for a patient in the aeromedical flight environment in unpressurized and pressurized aircraft.
10. Explain the considerations for caring for a patient in the maritime environment.
11. Explain the considerations for caring for a patient in the ground transport environment.
12. Describe the Resuscitation Triangle.
13. Interpret, respond, and apply principles of resuscitation to presented case studies in the online case study program.
14. Show the ability to interpret and respond to knowledge assessments presented in the online knowledge assessment process.
15. Demonstrate knowledge of standard laboratory values, including blood gases, chemistry, and enzyme screens.
17. Demonstrate knowledge of the principles of Extracorporeal Membrane Oxygenation (ECMO).
18. Demonstrate a knowledge of the principles of Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA).
19. Demonstrate a knowledge of the principles of emergency transfusion procedures.
20. Demonstrate a knowledge of the critical pathways to the assessment and management of Undifferentiated Shock.
21. Demonstrate a knowledge of the critical pathways to the assessment and management of the Difficult Airway.
22. Demonstrate a knowledge of the critical pathways to the assessment and management of the decompensating Ventilated Patient.
23. Demonstrate a knowledge of the critical pathways to the assessment and management of Fluid Management in resuscitation.
24. Demonstrate a knowledge of the critical pathways to the assessment and management of the cardiac arrest patient, utilizing the current research and the ILCOR guidelines for management.
25. Demonstrate a knowledge of the critical pathways to the assessment and management of the post cardiac arrest patient, utilizing the current ILCOR guidelines for management.
26. Demonstrate a knowledge of the critical pathways to the assessment and management of lethal arrhythmias.
27. Demonstrate a knowledge of the critical pathways to the assessment and management of the cardiogenic shock patient, utilizing the current ILCOR guidelines for management.
28. Demonstrate a knowledge of the critical pathways to the assessment and management of the cardiac tamponade patient, utilizing the current ILCOR guidelines for management.
29. Demonstrate a knowledge of the critical pathways to the assessment and management of aortic catastrophes.
30. Demonstrate a knowledge of the critical pathways to the assessment and management of severe sepsis and septic shock, utilizing the current research and ILCOR guidelines for management.
31. Demonstrate a knowledge of the critical pathways to the assessment and management of the decompensating morbidly obese patient, utilizing the current research and ILCOR guidelines for management.
32. Demonstrate a knowledge of the critical pathways to the assessment and management of the pulmonary hypertension patient, utilizing the current research and ILCOR guidelines for management.
33. Demonstrate a knowledge of the critical pathways to the assessment and management of left ventricular assist devices (LVAD), utilizing the current research and ILCOR guidelines for management.
34. Demonstrate a knowledge of the critical pathways to the assessment and management of the toxidrome patient, utilizing the current research and ILCOR guidelines for management.
35. Demonstrate a knowledge of the critical pathways to the assessment and management of the decompensating trauma patient, utilizing the current research and ILCOR guidelines for management.

36. Demonstrate a knowledge of the critical pathways to the assessment and management of intracerebral haemorrhage, utilizing the current research and ILCOR guidelines for management.

37. Demonstrate a knowledge of the critical pathways to the assessment and management of subarachnoid haemorrhage utilizing the current research and ILCOR guidelines for management.

38. Demonstrate a knowledge of the critical pathways to the assessment and management of severe sepsis and septic shock, utilizing the current research and ILCOR guidelines for management.

39. Demonstrate a knowledge of the critical pathways to the assessment and management of the decompensating anaphylaxis patient, utilizing the current research and ILCOR guidelines for management.

40. Demonstrate a knowledge of the critical pathways to the assessment and management of life threatening gynaecological and obstetric pathologies, utilizing the current research and ILCOR guidelines for management.

41. Demonstrate a knowledge of neonatal resuscitation, utilizing the current research and ILCOR guidelines for management.

42. Demonstrate a knowledge of pediatric resuscitation, utilizing the current research and ILCOR guidelines for management.

Practicum/Simulation Objectives

The participant will be able to:

1. Demonstrate the ability to observe clinical signs, recognize deterioration, manage deterioration in the critically ill patient

2. During simulation, interpret patient condition(s), respond to changes in physiology, and apply interventions; specifically, with the post cardiac arrest patient, the multi-system trauma patient, and the septic shock patient.

3. Communicate effectively during drills and transport with all stakeholders in the transport process.

4. Demonstrate an awareness of the importance of situational awareness, advanced decision-making skills and human factors in emergency medicine.

5. Assess the probable cause of a critical event using critical thinking

6. Develop an advanced practice approach to the patient's condition when presented with real or simulated patients.

7. Demonstrate competence at integration of multiple advanced skills and assessments with a patient in a state of physiologic exhaustion during simulation, and demonstrate planning and actions taken to mitigate pre/post procedure adverse effects and risks.

8. Provide optimal airway management for the crashing patient in the emergency medicine environment.
9. Demonstrate the ability to identify and mitigate time, anatomy, and physiologic influences on the patient nearing physiologic exhaustion in the trauma and medical etiologies.

10. Demonstrate the ability to care for a complex trauma or medical patient during a 60-minute period in the real world or simulation environment.

11. Demonstrate the ability to correctly perform cardiac, great vessels, abdominal content, and lung ultrasound in the FAST, RUSH, CAUSE, and Lung ultrasound exams.

12. Demonstrate the ability to perform moderate sedation (“conscious sedation”) per the definition of General Anesthesia Levels and Levels of Sedation/Analgesia from the American Society of Anesthesiologists.

13. Demonstrate the ability to perform deep sedation per the definition of General Anesthesia Levels and Levels of Sedation/Analgesia from the American Society of Anesthesiologists.

14. Demonstrate the ability to perform general anesthesia per the definition of General Anesthesia Levels and Levels of Sedation/Analgesia from the American Society of Anesthesiologists.

15. Demonstrate the ability to manage the complex and difficult airway.

16. Demonstrate the ability to perform endotracheal intubation with direct laryngoscopy and first pass success.

17. Demonstrate the ability to perform endotracheal intubation with direct laryngoscopy in the emesis patient.

18. Demonstrate the ability to perform endotracheal intubation with video laryngoscopy and first pass success.

19. Demonstrate the ability to perform endotracheal intubation with bronchoscopy and first pass success.

20. Demonstrate the ability to perform endotracheal intubation with guide wire technique.

21. Demonstrate the ability to successfully place a supraglottic airway (SGA).

22. Demonstrate the ability to perform surgical cricothyrotomy.

23. Demonstrate the ability to perform endotracheal intubation with rapid sequence induction algorithm.

24. Demonstrate the ability to perform tracheal foreign body airway obstruction.

25. Demonstrate the ability to perform needle chest decompression.

26. Demonstrate the ability to perform simple thoracotomy (fingertip thoracotomy).

27. Demonstrate the ability to perform chest tube insertion.

28. Demonstrate the ability to perform pericardiocentesis with ultrasound guidance.

29. Demonstrate the ability to perform ultrasound guided deep vein cannulation.

30. Demonstrate the ability to perform intraosseous (IO) needle placement.

31. Demonstrate the ability to perform skull trephination under online guidance.

32. Demonstrate the ability to utilize raney scalp clips.

33. Demonstrate the ability to perform pelvic fracture immobilization.

34. Demonstrate the ability to perform suprapubic cystostomy.

35. Demonstrate the ability to utilize the NEXUS (National Emergency X-Ray Utilization Study) and the Canadian C-Spine Rule criteria.

36. Demonstrate the ability to perform basic lateral cervical spine x-ray interpretation.
37. Demonstrate the ability to identify a normal brain CT interpretation.
38. Demonstrate the ability to perform ultrasound guided regional nerve blocks.
39. Demonstrate the ability to perform surgical decompression of oral and subcutaneous lesions when the lesion is interfering with an intervention or presents a life threat.
40. Demonstrate the ability to place REBOA under ultrasound guidance.
41. Demonstrate the ability to perform ECMO cannulation under ultrasound guidance with Seldinger technique.

Clinical and Field Placement Objectives
The participant will be able to:
1. Participants will be able to demonstrate competence at the APP level with integration of the course foundations through observation and clinical practice under the oversight of a Specialist Emergency Medicine Physician in a Hospital Emergency Department resuscitation and critical care areas, during an 80 hour clinical placement.
2. Participants will be able to demonstrate competence at the APP level with critical care patients during a clinical placement under the oversight of a Specialist Critical Care Physician in a Hospital Intensive Care Unit, during an 80 hour clinical placement.
3. Participants will be able to demonstrate competence at the APP level with airway management and anesthesia patients during a clinical placement under the oversight of a Specialist Anesthesia Physician in a Hospital Anesthesia Department, during an 80 hour clinical placement.
4. Participants will be able to demonstrate competence at the APP level with pediatric patients during a clinical placement under the oversight of a Specialist Pediatric Physician in a Hospital Pediatric Care Unit, during an 80 hour clinical placement.
5. Participants will be able to demonstrate competence at the APP level with neurological patients during a clinical placement under the oversight of a Specialist Neurologist Physician in a Hospital setting, during an 80 hour clinical placement.
6. Participants will be scheduled with APP instructor staff for response duty in the EMS system when not on clinical placements to begin experiential learning in the APP role.

Clinical Internship Objective:
The participant will be able to:
1. Participants will be able to demonstrate competence at the APP level with integration of the course foundations through practice in the EMS critical patient response environment under the supervision of specialist physicians and/or APP FTO educators during a 600 hour clinical internship.