Document Title: RCS007-Paramedic Education and Training Standard-V2		Page: 1 of 70
Document Owner: PD	Approved by: Council	<b>Approval Date:</b> 9 <sup>th</sup> December 2010

# **Version History**

Version	Date	Details
1	December 2006	New Standard
2	December 2010	Standard updated and approved by Council in December 2010

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# Role and Professional Responsibility of a Paramedic

Paramedics are skilled emergency medical care practitioners who are trained to and maintain a high standard of professional competence. The role of a paramedic includes assessing of the needs of a patient, making informed clinical decisions, planning and delivering appropriate interventions whilst monitoring a patient's condition. Compared to the next lower level on the PHECC register (EMT), a paramedic possesses a higher skill set in patient management and has authorisation to a greater range of medications. In addition, the concept of professional development becomes a more significant aspect of this grade.

A paramedic focuses on the delivery of immediate, often live-saving patient care in diverse settings primarily outside of the traditional hospital environment. A paramedic is the minimum practitioner level that is trained for transporting inter-facility patients who are defined as Acuity Levels "Acute Non Emergent Care", "Acute Emergent Care" and "Mobile Intensive" (Ref: *PHECC's Inter Facility Patient Transfer Standard*). Paramedics will also be dispatched in response to the full spectrum of patients defined as Clinical Status Category "Life threatening", "Serious not life threatening" and "Non serious or life threatening" (Ref: *PHECC's EMS Priority Dispatch Standard*). By performing their role a paramedic aims to prevent and reduce mortality and morbidity due to illness and injury.

A paramedic must have fulfilled the educational and training requirements as prescribed by the Pre-Hospital Emergency Care Council (PHECC) and hold the National Qualification in Emergency Medical Technology (NQEMT) at the level of competence of the paramedic level. This award is required for registration with PHECC at the paramedic division. These educational and training standards ensure that paramedics possess the knowledge, skills and attitudes in-line with the expectations of the public and the profession.

Paramedics are also required to maintain their name on a national professional register and are required to maintain a high standard of training by active participation in continuous professional competency programmes.

# **Learning Outcomes for the Paramedic Standard**

The standard is the expected competency of the student upon completion of a recognised course. A graduate, at the end of a recognised paramedic course, will be able to:

- 1. Provide the appropriate standard of patient care for Interfacility transfers and pre-hospital emergency care services.
- 2. Safely and appropriately access, retrieve and transport patients.
- 3. Adopt a professional approach to their practice.
- 4. Demonstrate a commitment to continuous professional competence.

A number of key domains arise from the course outcomes and are listed below. Note that these domains can cross over into more than one course outcome.

#### Learning Outcome 1

Provide the appropriate standard of patient care for interfacility transfers and pre-hospital emergency care services, including:

- 1. Recognition and assessment of both common life-threatening and common serious medical conditions.
- Selection of an appropriate patient management plan, application of appropriate interventions as required, and the correct monitoring of the patient according to PHECC clinical practice guidelines and scope of practice
- 3. Appropriate on-going maintenance of the patient record and utilisation of correct patient handover procedures.

#### Learning Outcome 2

Safely and appropriately access, retrieve and transport patients.

#### Learning Outcome 3

Adopt a professional approach to their practice by

- 1. Retaining a professional manner and method in the performance of their duties
- 2. Basing their professional practice on a solid foundation of both basic and clinical sciences.
- 3. Utilising best practice as prescribed by pre-hospital standard operational procedures and CPGs.

### Learning Outcome 4

Demonstrate a commitment to continuous professional competence.

- 1. Maintaining personal well-being and professional relationships with colleagues
- 2. Identify with the role of the paramedic

The learning objectives in the standard refer to the management of adults and paediatrics unless stated otherwise. The standard of care management for patients with general medical emergencies and trauma is outlined in PHECC clinical practice guidelines (CPGs) and includes medication administration where indicated. The CPGs may be accessed from the website of the PHECC <a href="www.phecc.ie">www.phecc.ie</a>.

# Framework for the Paramedic Standard

Framework for the paramedic Standard		
Learning Outcome (L)	Educational Domain (D)	Module(s)
Provide the appropriate standard of patient care for Interfacility transfers and pre-hospital emergency	Recognition and assessment of both common life-threatening and common serious medical conditions (L1D1)	Primary Survey     Secondary Survey
care services (L1)	Selection of an appropriate patient management plan, application of appropriate interventions as required, and the correct monitoring of the patient (L1D2)  Appropriate on-going maintenance of the patient record and utilisation of correct patient handover procedures (L1D3)	<ol> <li>Airway and ventilation</li> <li>Respiratory emergencies</li> <li>Cardiac First Response<sup>1</sup></li> <li>Cardiovascular emergencies</li> <li>Diabetic emergencies</li> <li>Allergies and anaphylaxis</li> <li>Poisoning and overdose</li> <li>Environmental emergencies</li> <li>Mental health and behavioural emergencies</li> <li>Altered level of consciousness and seizures</li> <li>Bleeding and shock</li> <li>Soft tissue injuries</li> <li>Musculoskeletal injuries</li> <li>Head and spinal injuries</li> <li>Pregnancy and pre-delivery emergencies</li> <li>Childbirth and neonatal resuscitation</li> <li>Paediatrics</li> <li>Health information management</li> <li>Communications</li> </ol>

 $<sup>^{\</sup>rm 1}$  The CFR Advanced level course is either a pre-requisite or co-requisite.

# Cont.....

Framework for the paramedic Standard			
Learning Outcome (L)	Educational Domain (D)	Module	e(s)
Safely and appropriately		1.	Basic patient care
access, retrieve and		2.	Scene assessment
transport patients (L2)		3.	Gaining access to the patient at
			scene
		4.	Ambulance operations
Adopt a professional	Retaining a professional	1.	Professional practice & medico-
approach to their practice	manner and method in the		legal issues concerning the
(L3)	performance of their duties		paramedic
	(L2D1)	2.	Patient safety and Quality
			assurance
	Basing their professional	1.	Clinical anatomy and physiology
	practice on a solid foundation	2.	Pharmacology
	of both basic and clinical sciences (L2D2)	3.	Infection prevention and control
	, ,	4.	Intravenous/intraosseous
			therapy
		5.	Intramuscular injection
	Utilising best practice as	1.	Radio communications
	prescribed by pre-hospital	2.	Hazardous Material Incident
	standard operational	3.	Major Emergency
	procedures and CPGs (L2D3)	4.	Civil disorder
		5.	Treat and refer
Demonstrate a commitment	Maintaining personal well-	1.	The well-being of the paramedic
to continuous professional	being and professional		
competence (L4)	relationships with colleagues		
	(L4D1)		
	Identify with the role of the	1.	Continuum of pre-hospital
	paramedic (L4D2)		emergency care
		2.	Manage personal work
			priorities and professional
			development
		3.	Interpersonal and team
		_	management skills
		4.	Mentorship

# **Learning Outcome 1 - Domain 1**

Provide the appropriate standard of	Recognition and assessment of both common
patient care for interfacility transfers	life-threatening and common serious medical
and pre-hospital emergency care	conditions
services	

# **Primary Survey**

At the completion of this module the student will be able to describe and demonstrate the elements of a primary survey for the medical and trauma patient while considering pre-arrival information and maintaining scene safety while initiating interventions essential to maintain life in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

### **Knowledge Objectives**

- 1. Identify the assessments made under the following as part of a Primary survey for a medical and trauma patient as appropriate:
  - Catastrophic haemorrhage
  - Airway
  - **c** spine
  - Breathing
  - Circulation
  - Disability
  - Exposure
- 2. Differentiate between a clear, partially obstructed and obstructed airway
- 3. State the reason for the maintenance of in line immobilisation following serious trauma
- 4. Differentiate between normal, abnormal, fast, slow and absent breathing rates and between shallow, laboured and noisy breathing
- 5. Differentiate between regular, irregular, fast and slow and absent pulse rates
- 6. Discuss the need for assessing the patient for external bleeding
- 7. Differentiate between normal, pale, flushed and cyanosed skin tones including temperature variations
- 8. Identify normal and abnormal capillary refill time
- 9. Outline the methods for assessing Disability or AVPU assessment
- 10. List the procedure for Exposure to check for obvious injuries or illness
- 11. Explain the need for consent prior to assessment and or care management
- 12. Outline the categories in a "Clinical Status" decision (on the PCR)
- 13. Explain the reasons for prioritising the patient for care and transportation
- 14. Outline the rationale for seeking Advanced Life Support

# 15. Explain the need for consent prior to assessment and or care management Attitudinal Objectives

At the completion of this section, the student will be able to:

- 1. Explain why basic life support airway and ventilation skills, take priority over most other emergency care skills
- 2. Value pre- arrival instructions
- 3. Discuss the importance of performing a primary survey
- 4. Recognise and respond appropriately to the feelings patients experience during assessment

### **Skills Objectives**

- 1. Demonstrate the appropriate patient assessments made as part of a Primary survey for a medical and trauma patient
- 2. Demonstrate obtaining consent from a patient prior to commencing emergency care
- 3. Following completion of a primary survey make a clinical status decision

# **Secondary Survey**

At the completion of this module the student will be able to describe and demonstrate the elements of a secondary survey for the medical and trauma patient while considering findings and initiating care management in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

#### **Knowledge Objectives**

- 1. Define clinical impression
- 2. Distinguish between a sign and symptom
- 3. Distinguish between chief complaint and clinical impression
- 4. Distinguish between a secondary survey for a medical and trauma patient
- 5. Differentiate between objective and subjective assessment
- 6. Collate a history based on the interview pneumonic SAMPLE: Signs & Symptoms, Allergies, Medication, Pertinent medical history, Last intake, Event
- 7. Collate a focused history based on the interview pneumonic OPQRST: **O**nset, **P**rovocation, **Q**uality, **R**egion/Referral/Recurrence/Relief, **S**everity and **T**ime
- 8. List the components of the detailed physical exam/ head to toe survey
- 9. Describe the methods for assessing circulation, sensation and movement (CSM)
- 10. Outline the precautions to take during and after searching the patient for identification and medical history clues
- 11. List the elements to be measured when obtaining a Glasgow coma score (GCS)
- 12. Outline the variables when calculating an early warning score
- 13. Outline the variables when calculating a revised trauma score (RTS)
- 14. Describe the areas included in the rapid trauma assessment and discuss what should be evaluated
- 15. Identify markers for acutely unwell and multi-system trauma patients
- 16. Outline the techniques of assessing a patients vital signs
- 17. State the normal ranges for adults, infants and children for
  - Pulse rate
  - Respiration rate
  - Temperature
  - Blood pressure
- 18. Explain the physiology of pain
- 19. Describe pain assessment for adults and children using the interview mnemonic PQRST (Provocation, Quality, Region, Referral, Recurrence, Relief, Severity and Time). The student should be able to employ the following pain quality descriptors:
  - a. Stabbing
  - b. Crushing
  - c. Acute
  - d. Chronic
  - e. Pulsating

- f. Burning
- g. Dull
- h. Cramps
- 20. Explain how to measure pain on the pain analogue scale 0-10
- 21. Discuss referred pain with reference to mechanism, recognition and common sites of occurrence
- 22. Explain the value of performing a continuous assessment
- 23. Explain normal air entry and match breath sounds with lung conditions
- 24. Describe how to measure the patient expiratory peak flow rate using a peak flow meter

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the value of performing the baseline vitals and subsequent vital signs
- 2. Communicate in an appropriate professional and caring manner, during patient assessment, with patients as well as with family members and friends of the patient
- 3. Explain the need for team work when multidisciplinary pre-hospital emergency services are at an incident
- 4. Recognise that all patients have the capacity to make decisions until the contrary is demonstrated
- 5. Discuss the scale of examination necessary in a variety of situations

### **Skills Objectives**

- 1. Demonstrate assessing vital signs
- 2. Demonstrate questioning the patient to obtain a SAMPLE history
- 3. Demonstrate questioning the patient to obtain a OPQRST history
- 4. Demonstrate obtaining additional information from the family members or bystanders at the scene as appropriate
- 5. Demonstrate auscultation of air entry and interpretation of breath sounds
- 6. Demonstrate the measurement of an expiratory peak flow rate and compare the result with the expected value
- 7. Demonstrate assessment of a GCS
- 8. Demonstrate an early warning score calculation
- 9. Demonstrate the detailed physical exam/ head to toe survey including inspection, palpation and assessment of CSMs as appropriate for a trauma patient
- 10. Demonstrate the pre-hospital emergency assessment of the patient in pain using the pain analogue scale (0-10)
- 11. Demonstrate obtaining a blood glucose level using a glucometer
- 12. Demonstrate rapid assessment based on the mechanism of injury
- 13. Evaluate a patients capacity to make decisions

# **Learning Outcome 1 - Domain 2**

Provide the appropriate standard of	Selection of an appropriate patient management
patient care for interfacility transfers	plan, application of appropriate interventions, and
and pre-hospital emergency care	the correct monitoring of the patient according to
services	PHECC clinical practice guidelines and scope of
	practice

# Airway and Ventilation

At the completion of this module, the student will be able to establish and maintain a patient airway and be able to oxygenate and ventilate a pre-hospital patient in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

<u>Note</u> this module must be considered with the Airway and Ventilation module from the CFR Advanced level course.

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the pathophysiology of airway compromise
- 2. Describe the steps in head-tilt chin lift and jaw thrust
- 3. Describe how to measure and insert a nasopharyngeal (NPA) airway
- 4. List the indications and contraindications for use of an OPA, NPA or a supraglottic airway (SGA)
- 5. Describe the benefits and limitations of ventilating the patient with a bag valve mask (BVM)
- 6. Describe ventilating the patient with a BVM (one and two rescuers)
- 7. Explain the principles of safe operation for an oxygen delivery system
- 8. Outline the different techniques in oxygen administration using a simple face mask, a venturi mask and nasal cannula
- 9. Identify a tracheostomy and outline the particular airway patency requirements
- 10. Explain the indications for use, benefits and limitations of oxygen humidification
- 11. List the equipment required for endotracheal intubation
- 12. Explain the indications for use, benefits and limitations of end tidal CO<sub>2</sub> monitoring in a ventilation circuit
- 13. Explain the indications for use, benefits and limitations of pulse oxymetry

### **Attitudinal Objectives**

- 1. State the value of oxygen administration
- 2. Relate the mechanism of injury to opening the airway

3. Communicate effectively with patients with airway and breathing problems, as well as with family members and friends of the patient

# **Skills Objectives**

- 1. Demonstrate head-tilt chin lift and jaw thrust
- 2. Demonstrate the insertion of a nasopharyngeal airway
- 3. Demonstrate ventilating the patient with a BVM (one and two rescuers)
- 4. Demonstrate suctioning and ventilation of the patient with a tracheostomy
- 5. Demonstrate the safe preparation and operation of an oxygen delivery system
- 6. Demonstrate oxygen administration for a range of patient scenarios (adult, infant and child) using appropriate oxygen administration equipment including a pulse oximeter
- 7. Demonstrate the assembly and checks of endotracheal intubation equipment
- 8. Demonstrate assisting an Advanced Paramedic in ventilating an intubated patient

# **Respiratory Emergencies**

At the completion of this module, the student will be able to describe the relevant pathophysiology of respiratory disease and as a result be able to assess and manage the care of a pre-hospital patient with a respiratory emergency in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Define the terms Pulmonary Embolism, pulmonary oedema, Asthma, Pneumonia, Pleurisy, Cystic Fibrosis, Pneumothorax, Chronic Obstructive Pulmonary Disease; Bronchitis and Emphysema and list the history, signs and symptoms commonly associated with each condition
- 2. Discuss the term hypoxic drive and its relationship with Chronic Obstructive Pulmonary Disease
- 3. Describe the pre-hospital emergency assessment findings and care management for the patient with inadequate respirations
- 4. Describe the signs of respiratory depression secondary to known or suspected narcotic overdose
- 5. Differentiate between inadequate respirations and respiratory failure
- 6. List the signs of respiratory arrest

#### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the rationale for the feelings that patients with inadequate breathing may be experiencing
- 2. Communicate effectively with the patient and family members and friends

# **Skills Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with a respiratory arrest
- 2. Demonstrate the pre-hospital emergency assessment and care management for the patient with inadequate respirations

# **Cardiovascular Emergencies**

At the completion of this module, the student will be able to describe the relevant pathophysiology of cardiovascular disease and as a result be able to assess and manage the care of a pre-hospital patient with a cardiovascular emergency including stroke in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

### **Knowledge Objectives**

- 1. Define the terms: Hypertension, Palpitations, Aortic Aneurysm, Heart failure, Acute Coronary Syndrome; Myocardial infarction, Angina and list the history, signs and symptoms commonly associated with each condition
- 2. Define the terms Stroke , Transient Ischaemic Attack (TIA) and list the history, signs and symptoms commonly associated with each
- 3. Describe the pre-hospital emergency assessment findings and care management for the patient with a TIA and a stroke
- 4. Discuss the pre-hospital emergency assessment findings and care management for the patient with cardiac chest pain
- 5. Identify PQRST on a normal Electrocardiograph (ECG) rhythm strip
- 6. The characteristics, description and significance of the ECG waves, complexes, interval and segments
- 7. Identify the following rhythms from ECG Lead II: Normal Sinus Rhythm, Bradycardia, Tachycardia, Premature Ventricular Complexes, Ventricular Fibrillation, Ventricular Tachycardia, Asystole, Pulseless Electrical Activity
- 8. List the differential diagnosis for a patient with chest pain
- 9. Explain the importance of ST segment elevation and depression and identify the site of infarct reading an ECG
- 10. Define ST elevation myocardial infarct and non ST myocardial infarction in terms of a 12 lead ECG
- 11. Discuss the position of comfort for patients with various cardiac emergencies
- 12. Explain the importance of Advanced Life Support (ALS) for cardiovascular emergencies
- 13. Define the role of the paramedic in the chain of survival
- 14. Explain the importance of time critical transport to the appropriate medical facility for cardiovascular emergencies including stroke
- 15. Discuss the reasons for the acquisition of a 12 Lead ECG
- 16. Discuss the pre-hospital emergency care management for the patient with persistent ventricular fibrillation/ shockable rhythm with and without the assistance of Advanced Life Support (ALS)
- 17. Discuss the pre-hospital emergency care management for the patient with recurrent ventricular fibrillation/ shockable rhythm with and without the assistance of ALS
- 18. Discuss the pre-hospital emergency care management for the patient found in Asystole/PEA and with and without the assistance of ALS

- 19. Differentiate between the single rescuer and multi rescuer care with an AED
- 20. Discuss the importance of coordination between ALS trained practitioners, other practitioners and Responders using an AED
- 21. List the benefits of a mechanical assist CPR device
- 22. Discuss the indications, contraindications and benefits of active cooling in post resuscitation care
- 23. List the circumstances when a registered paramedic or advanced paramedic can discontinue resuscitation efforts including traumatic cardiac arrests
- 24. List the advanced cardiac medications that an AP can administer

#### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate a caring attitude towards the patient with cardiac chest pain who requests prehospital emergency care
- 2. Communicate with empathy with family members and friends of the patient during a cardiac event

### **Skills Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with cardiac chest pain
- 2. Demonstrate the pre-hospital emergency assessment and care management for the patient with a TIA and Stroke
- 3. Demonstrate correct positioning of electrodes and leads to monitor patient's ECG
- 4. Demonstrate the acquisition and transmission of a 12 Lead ECG
- 5. Given a 12 lead ECG, identify an STEMI and identify the location of the infarct
- 6. Demonstrate the ability to identify and interpret selected ECG Lead II readings: Normal Sinus Rhythm, Sinus Bradycardia, Sinus Tachycardia, Sinus Rhythm with Premature Ventricular Contractions, Ventricular Fibrillation, Ventricular Tachycardia, Asystole, and Sinus Rhythm with ST Elevation
- 7. Demonstrate the completion of the AED: Operator's Shift Checklist
- 8. Demonstrate the care management of the various cardiac arrest presentations with and without the assistance of ALS
- 9. Demonstrate the preparation of pre-filled syringe (mini-jet) cardiac medications
- 10. Demonstrate loading a patient in a cardiac arrest onto a trolley stretcher with minimum hands off time

# **Diabetic Emergencies**

At the completion of this module, the student will be able to describe the relevant pathophysiology of diabetic disease and as a result be able to assess and manage the care of a pre-hospital patient with a diabetic emergency in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Define the terms: diabetes mellitus: Type I and II, gestational diabetes, hyperglycaemia and hypoglycaemia and list the history, signs and symptoms commonly associated with each condition
- 2. Discuss the pre-hospital emergency assessment findings and care management for the patient with a glycaemic emergency both with and without an altered level of consciousness

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

1. Communicate effectively with the patient as well as with family members and friends of the patient

### **Skill Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with hypoglycaemia
- 2. Demonstrate the pre-hospital emergency assessment and care management for the patient with hyperglycaemia

# Allergies and Anaphylaxis

At the completion of this module, the student will be able to assess and administer care to a prehospital patient with an allergic response, including anaphylaxis, in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Outline the common antigens most frequently associated with anaphylaxis
- 2. Discuss the 4 types of allergic response
- 3. Describe the mechanisms of allergic response and the implications for airway management
- 4. Discuss the pre-hospital emergency assessment findings and care management for the patient with an allergic reaction
- 5. Discuss the pre-hospital emergency care assessment findings and care management for the patient with anaphylaxis
- 6. Discuss the relationship between the patient with a severe allergic reaction and airway management
- 7. Differentiate between those patients having a mild allergic reaction and those patients having a severe allergic reaction

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the rationale for the symptoms that a patient with an allergic reaction may be experiencing
- 2. Communicate effectively with the patient and family members and friends

#### **Skill Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with an allergic reaction
- 2. Demonstrate the pre-hospital emergency assessment and care management for the patient with anaphylaxis

# **Poisoning and Overdose**

At the completion of this module, the student will be able to assess and administer care to a poisoned or overdose pre-hospital patient, in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. List various ways poisons enter the body
- 2. Name the main types of poison
- 3. Describe the pre-hospital emergency assessment findings and care management for the patient with suspected poisoning
- 4. Establish the relationship between the patient suffering from poisoning or overdose and airway management
- 5. List the common products most frequently used for illicit drug abuse including solvents
- 6. Describe the signs and symptoms which may indicate illicit drug abuse
- 7. Explain why oxygen therapy is contra-indicated in Paraquat poisoning
- 8. Explain toxidromes and list the main categories
- 9. Given a set of sign and symptoms identify the appropriate toxidrome category

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the rationale for the symptoms that the patient with poisoning, overdose or deliberate self- harm may be experiencing
- 2. Communicate effectively with the patient and family members and friends

#### **Skill Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with suspected poisoning
- 2. Demonstrate the pre-hospital emergency assessment and care management for the patient suffering the effects of solvent abuse

# **Environmental Emergencies**

At the completion of this module, the student will be able to describe the relevant pathophysiology of environmental emergencies. In addition they will learn how to assess and administer care to a pre-hospital patient with adverse environmental exposure, in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Describe the process of temperature regulation in the body
- 2. Explain the pre-hospital emergency care assessment findings and care management for the patient exposed to cold
- 3. Explain the indications, contraindications and benefits of active warming
- 4. Explain the pre-hospital emergency care assessment findings and care management for the patient exposed to heat (heat stroke, heat exhaustion and sun stroke)
- 5. Describe the complications of drowning
- 6. Explain the pre-hospital emergency care assessment findings and care management for a submersion incident
- 7. Discuss the pre-hospital emergency care assessment findings and care management for the patient with bites and stings including the possibility of anaphylaxis
- 8. Explain the pre-hospital emergency care assessment findings and care management for the patient with decompression illness

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the rationale for the feelings that the patient with an environmental emergency may be experiencing
- 2. Communicate effectively with the patient and family members and friends

#### **Skill Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with exposure to cold
- 2. Demonstrate the pre-hospital emergency assessment and care management for the patient with exposure to heat (heat stroke, heat exhaustion and sun stroke)
- 3. Demonstrate the pre-hospital emergency assessment and care management for the submersion patient
- 4. Demonstrate the pre-hospital emergency assessment and care management for the patient with decompression illness
- 5. Demonstrate the pre-hospital emergency care assessment and care management for the patient with bites and stings

# Mental Health and Behavioural Emergencies

At the completion of this module, the student will be able to assess and manage the care of a prehospital patient with acute, severe behavioural problems in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

The student will be able to demonstrate effective and appropriate communication strategies, both towards the patient and with other colleagues, when dealing with patients with behavioural emergencies. The student will also be able to explain the relevant legislation impacting upon their professional practice.

#### Knowledge Objectives

At the completion of this section, the student will be able to:

- 1. Define the terms: deliberate self- harm, parasuicide and suicidal behaviour
- 2. Explain the spectrum of activities related to suicidal behaviour
- 3. Define a behavioural emergency
- 4. Define a mental health emergency
- 5. Describe the mental health issues that may arise in the older patient
- 6. List the factors that may contribute to a mental health/ behavioural emergency
- 7. Discuss legal considerations when managing mental health/ behavioural emergencies, the Mental Treatment Act 1945 and the Mental Health Act, 2001
- 8. Discuss the principles for assessing persons with a mental health/ behavioural emergency including mental health status
- 9. Identify communication strategies that can be utilised when attending to a mental health/behavioural emergency
- 10. Discuss the reasons for psychological crises
- 11. Describe the Irish Mental Health Services
- 12. Discuss mental health disorders with particular reference to how they may contribute to a mental health/ behavioural emergency
- 13. Discuss measures to be taken to ensure the safety of the patient, paramedic and others
- 14. Discuss how de-escalation techniques are used in the management of a behavioural disturbed person
- 15. The special consideration around capacity evaluation for the patient with behavioural/mental health disorder

#### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

1. Explain the rationale for learning how to modify behaviour toward the patient with a behavioural emergency

- 2. Explain the importance of the use of verbal and non-verbal communications skill, including interpersonal skills
- 3. Demonstrate the importance of recognising a person's emotional distress
- 4. Explain the rationale for the provisions of information to the receiving personnel, with particular regard to family, environmental and behavioural circumstances

# **Skill Objectives**

- 1. Demonstrate competence in the effective use of interpersonal communication skills
- 2. Demonstrate de-escalation skills and physical intervention skills to provide the best care and welfare as well as safety and security for all involved during a behavioural emergency
- 3. Demonstrate the pre-hospital emergency assessment and care management for the patient who has deliberately self-harmed
- 4. Demonstrate the pre-hospital management following a suicide death

# Altered level of Consciousness and Seizures

At the completion of this module, the student will be able to describe the relevant pathophysiology leading to altered levels of consciousness and seizure and as a result be able to assess and manage the care of a pre-hospital patient with such conditions in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Describe the following conditions: Parkinson's disease, Motor Neuron Disease, Multiple Sclerosis
- 2. Define the terms: Dysphagia and Dysphasia
- 3. Discuss the relationship between airway management and the patient with an altered level of consciousness or seizures
- 4. Discuss the medical causes of unconsciousness
- 5. State the causes of acute confusion
- 6. Describe the common causes and the clinical features of seizures
- 7. Describe the pre-hospital assessment findings and care management for the patient with a seizure, post seizure and in the postictal state

#### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate a caring professional attitude towards the patient who regains consciousness among strangers
- 2. Communicate effectively with the patient and the family members and friends

# **Skill Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with a seizure and post seizure
- 2. Demonstrate the pre-hospital emergency assessment and care management for the patient in a state of acute confusion
- 3. Demonstrate the pre-hospital emergency assessment and care management for the unconscious patient

# **Bleeding and Shock**

At the completion of this module, the student will be able to describe the relevant pathophysiology of bleeding and shock and as a result be able to assess and manage the care of a pre-hospital patient with bleeding and shock in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

### **Knowledge Objectives**

- 1. Explain the significance of the Golden Hour and the Platinum 10 minutes in terms of trauma care
- 2. Differentiate between arterial, venous and capillary bleeding
- 3. Describe the pre-hospital emergency assessment findings and care management for the patient with external haemorrhage (to include AV shunts)
- 4. Explain the rationale for tourniquet use in exceptional circumstances
- 5. Explain the relationship between airway management and the trauma patient
- 6. Establish the relationship between the mechanism of injury and internal haemorrhage
- 7. Describe the pre-hospital emergency assessment findings and care management for the patient with internal haemorrhage
- 8. Define shock and explain the different types include non-traumatic shock (e.g. meningococcal meningitis)
- 9. Explain the significance of a purpuric rash
- 10. Explain the classification of haemorrhage
- 11. Describe the physiological effects of various classifications of shock
- 12. Describe the manifestation of shock in relevant body systems
- 13. Describe in the correct sequence the body's response/reaction to uncontrolled blood loss, compensated and uncompensated
- 14. Describe the pre-hospital emergency assessment findings and care management for the patient with hypovolaemic shock
- 15. Explain the sense of urgency to transport patients that are bleeding and show signs of hypovolaemic shock
- 16. Outline the pre-hospital emergency assessment findings and care management for the patient with a penetrating chest injury
- 17. Outline the pre-hospital emergency assessment findings and care management for the patient with an open wound to the abdomen
- 18. Outline the pre-hospital emergency assessment findings and care management for the patient with an impaled object
- 19. List the chest injuries due to direct trauma that present with dyspnoea
- 20. List the functions of dressing and bandaging
- 21. Describe types of wounds and their complications

22. Explain the pre-hospital emergency assessment findings and care management for the patient experiencing acute abdominal pain

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the rationale for the symptoms that the patient with bleeding and shock may be experiencing
- 2. Communicate effectively with the patient and family members and friends

### **Skills Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with external bleeding
- 2. Demonstrate the pre-hospital emergency assessment and care management for the patient with internal bleeding
- 3. Demonstrate the pre-hospital emergency assessment and care management for the patient with hypovolaemic shock
- 4. Demonstrate the pre-hospital emergency assessment and care management for the patient with non traumatic shock
- 5. Demonstrate the pre-hospital emergency assessment and care management for the patient with an open chest wound
- 6. Demonstrate the pre-hospital emergency assessment and care management for the patient with an open abdominal wound
- 7. Demonstrate the pre-hospital emergency assessment and care management for the patient with an impaled object
- 8. Demonstrate the pre-hospital emergency assessment and care management for the patient with crush injuries
- 9. Demonstrate the pre-hospital emergency assessment and care management for the patient experiencing acute abdominal pain

# **Soft-Tissue Injuries**

At the completion of this module, the student will be able to list the major types of soft-tissue injury and be able to assess and manage the care of a pre-hospital patient with a soft-tissue injury in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. List the types of closed soft tissue injuries
- 2. Outline the pre-hospital emergency assessment findings and care management for the patient with a closed soft tissue injury
- 3. State the types of open soft tissue injuries
- 4. Outline the pre-hospital emergency assessment findings and care management for the patient with an open soft tissue injury
- 5. Identify sources of burns
- 6. Differentiate between superficial, partial thickness and full thickness burns
- 7. Explain the burn surface area calculation using Wallace's rule of nines
- 8. Outline the pre-hospital emergency assessment findings and care management of the patient with burns
- 9. Describe the pre-hospital emergency assessment findings and care management for the patient with eye injuries
- 10. Describe the pre-hospital emergency assessment findings and care management for the patient with an epistaxis
- 11. Describe the pre-hospital emergency assessment findings and care management for the patient with a genito-urinary presentation
- 12. Describe the pre-hospital emergency assessment findings and care management for the patient with avulsed teeth

#### **Attitudinal Objectives**

- 1. Demonstrate effective management of the patient with a soft tissue injury who has requested pre-hospital emergency care
- 2. Communicate effectively with the patient and family members and friends

# **Skills Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with closed soft tissue injuries
- 2. Demonstrate the pre-hospital emergency assessment and care management for the patient with open soft tissue injuries
- 3. Demonstrate the pre-hospital emergency assessment and care management for the patient with burns
- 4. Demonstrate the pre-hospital emergency assessment and care management for the patient with eye injuries
- 5. Demonstrate the pre-hospital emergency assessment and care management for the patient with an epistaxis
- 6. Demonstrate the pre-hospital emergency assessment and care management for the patient with a genito-urinary presentation
- 7. Demonstrate the pre-hospital emergency assessment and care management for the patient with avulsed teeth

# Musculoskeletal Injuries

At the completion of this module, the student will be able to list the major types of musculoskeletal injury and be able to assess and manage the care of a pre-hospital patient with a musculoskeletal injury in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Differentiate between an open and a closed painful, swollen, deformed extremity
- 2. State the reasons for splinting an injured limb
- 3. List the benefits of using a splinting device on upper limbs
- 4. List the general rules of and complications of splinting
- 5. Describe the pre-hospital emergency assessment findings and care management for the patient with a limb fracture
- 6. Explain how to manual stabilise a fractured limb
- 7. Outline the rationale for attempting to realign a fractured limb
- 8. Define the terms: fracture, dislocation, sprain and strain and list the history, signs and symptoms commonly associated with each
- 9. List the types of fracture and causes of each
- 10. Explain the rationale for splinting at the scene versus treat and transport
- 11. Outline the pre-hospital emergency assessment findings and care management for the patient with a traumatic amputation
- 12. List the potential complications associated with pelvic injuries
- 13. Outline the pre-hospital emergency assessment findings and care management for the patient with crush injuries

#### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate effective management for the patient with a musculoskeletal injury who has requested pre-hospital emergency care
- 2. Communicate effectively with the patient and family members and friends

#### **Skills Objectives**

- 1. Demonstrate the pre-hospital emergency assessment and care management for the patient with a painful, swollen, deformed extremity
- 2. Demonstrate the use of approved immobilisation/splinting devices<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Approved devices as per the PHECC CPGs.

- 3. Demonstrate the pre-hospital emergency assessment and care management for the patient with a traumatic amputation
- 4. Demonstrate the pre-hospital emergency care of an amputated part
- 5. Demonstrate the pre-hospital emergency assessment and care management for the patient with pelvic injuries
- 6. Demonstrate the pre-hospital emergency assessment and care management for the patient with crush injuries

# **Head and Spinal Injuries**

At the completion of this module, the student will be able to assess and manage the care of a prehospital patient with a head and or suspected spinal injury in accordance with the appropriate CPG(s) and scope of practice for a paramedic. In particular, the student will be able to demonstrate the specific procedures for safe extrication, protection and transport of a patient with a head and or suspected spinal injury.

### **Knowledge Objectives**

- 1. Relate the mechanism of injury to potential injuries of the head and spine
- 2. Describe the implications of not managing potential spinal injuries
- 3. Outline the trauma indicators for a decision not to immobilise the spine
- 4. Explain the rationale for immobilisation of the entire spine when a spinal injury is suspected
- 5. Describe how to manually stabilise the cervical spine
- 6. Discuss indications for sizing and applying a cervical collar
- 7. Describe a method for sizing a cervical collar
- 8. Describe how to log roll the patient with a suspected spinal injury
- 9. Describe how to secure the patient to a long spine board
- 10. List the indicators for using a vest type extrication device
- 11. Explain the rationale for utilising a vest type extrication device when moving the patient from a sitting to a supine position
- 12. Describe how to immobilise the patient using a vest type extrication device
- 13. Explain the reasons for removal of a helmet following trauma
- 14. Describe the unique characteristics of sports helmets
- 15. Explain the preferred methods to remove a helmet
- 16. Outline the pre-hospital emergency assessment findings and care management for the patient with a suspected spinal injury
- 17. Describe the history, signs and symptoms of primary and secondary brain injury
- 18. List the complications of head injuries
- 19. Outline the pre-hospital emergency assessment findings and care management for the patient with a head injury
- 20. Outline the pre-hospital emergency assessment findings and care management for the patient with maxillo-facial injuries
- 21. State the signs and symptoms of neurogenic shock
- 22. The principles underlying the PHECC CPG spinal immobilisation decision tree
- 23. Describe the assessment for concussion using 'Maddocks' questions

#### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate effective management of the patient with an injury to the head and spine who requires pre-hospital emergency care
- 2. Communicate effectively with the patient and family members and friends

#### **Skills Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate the use of approved immobilisation/ extrication/ lifting devices<sup>3</sup>
- 2. Demonstrate helmet removal
- 3. Demonstrate the pre-hospital emergency assessment and care management for the patient with suspected spinal injuries
- 4. Demonstrate the pre-hospital emergency assessment and care management for the patient with head injuries
- 5. Demonstrate the pre-hospital emergency assessment and care management for the patient with maxillo-facial injuries
- 6. Demonstrate appropriate techniques to apply the spinal injury decision tree
- 7. Demonstrate the pre-hospital emergency assessment and care management for the patient with concussion

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<sup>&</sup>lt;sup>3</sup> Approved devices as per the PHECC CPGs

# **Pregnancy and Pre-Delivery Emergencies**

At the completion of this module, the student will be able to describe the physiology of pregnancy. The student will, as a result, be able to assess and mange the care to a pregnant woman for both pregnancy and non-pregnancy related illness and for pre-delivery emergency care in an out-of-hospital setting in accordance with appropriate CPG(s) and policy/protocols.

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the physiology of a normal pregnancy
- 2. Outline the landmark time frames during pregnancy
- 3. Define the terms: foetus, placenta, umbilical cord, amniotic sac and perineum
- 4. Describe the assessment of a pregnant patient who requires pre-hospital emergency care for something other than pregnancy related condition
- 5. List the common medical conditions that mimic labour
- 6. Assess pain levels using PQRST to ad a differential diagnosis
- 7. Describe the special considerations for a pregnant patient in cardiac arrest
- 8. Outline the psychological care of a pregnant patient
- Outline the pre-hospital emergency care assessment findings and care management for the predelivery emergencies: ante-partum haemorrhage, ectopic pregnancy, pre-eclampsia and eclampsia

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the rationale for attending to the feelings of the patient requesting pre-hospital emergency care during pregnancy
- 2. Communicate effectively with patients with pre-delivery emergencies

#### Skills Objectives

- 1. Demonstrate the assessment and care management for the pregnant patient who has requested pre-hospital emergency care for a pregnancy related condition
- 2. Demonstrate the special considerations when assessing and caring for the pregnant patient who has requested pre-hospital emergency care for a non pregnancy related condition

# **Childbirth and Neonatal Resuscitation**

At the completion of this module, the student will be able to assess manage the care of a pregnant woman during labour and delivery and also be able to perform neonatal resuscitation in an out-of-hospital setting, in accordance with appropriate CPG(s).

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. State the indications of an imminent delivery
- 2. Describe the three stages of labour
- 3. Describe the assessment of the woman in labour including taking a SAMPLE history
- 4. Explain the pre-hospital emergency care preparation of the mother pre-delivery
- 5. Describe the pre-hospital emergency care management of each stage of labour
- 6. List the steps to assist with the delivery
- 7. Describe the care of the baby as the head appears
- 8. Describe how and when to cut the umbilical cord
- 9. Discuss the pre-hospital emergency care delivery of the placenta
- 10. Outline the pre-hospital emergency care management for the mother post-delivery
- 11. Describe the pre-hospital emergency care management for the following abnormal deliveries: cord complications, limb presentation, breech birth
- 12. List the special considerations for multiple births and a preterm birth
- 13. Explain the significance of the presence of meconium
- 14. Define post-partum haemorrhage
- 15. Outline the pre-hospital emergency assessment findings and care management for the mother with post-partum haemorrhage
- 16. Explain the indications for performing external massage of the uterus
- 17. Describe the pre-hospital emergency care assessment findings and care management for the newly born including those requiring resuscitation
- 18. Explain the implications of treating two patients (mother and baby)

#### **Attitudinal Objectives**

- 1. Explain the rationale for attending to the feelings of the patient in need of pre-hospital emergency care during childbirth
- 2. Demonstrate a caring professional attitude towards patients during childbirth who request prehospital emergency care services
- 3. Communicate effectively with mothers during delivery as well as with family members and friends of the patient

# **Skills Objectives**

- 1. Demonstrate the pre-hospital emergency care management for the mother and child during each stage of the normal delivery
- 2. Demonstrate the pre-hospital emergency assessment and care management for the following abnormal deliveries: cord complications, limb presentation and breech birth
- 3. Demonstrate the pre-hospital emergency care management for the mother post-delivery care
- 4. Demonstrate the pre-hospital emergency assessment and care management for the mother with post-partum haemorrhage
- 5. Demonstrate the care of the newly born including those requiring resuscitation

# **Paediatrics**

At the completion of this module, the student will be able to identify common paediatric emergencies and as a result be able to assess and manage the care of a pre-hospital paediatric patient in an out-of-hospital setting in accordance with CPG(s).

#### **Knowledge Objectives**

- 1. Identify the growth and developmental characteristics for the following age groups:
  - Infants
  - Toddlers
  - Pre-school
  - School age
  - Adolescent
- 2. Outline the pre-hospital emergency assessment of each of the above age groups
- 3. Differentiate between the injury patterns in infants and children from the group
- 4. Outline the elements of the Paediatric Assessment Triangle
- 5. List the signs and symptoms of measles, chicken pox and meningitis
- 6. Explain the significance of a purpuric rash
- 7. List the signs and symptoms of croup, stridor, pertussis, epiglottitis, asthma and inadequate respirations, respiratory failure in infants and children
- 8. Differentiate between upper and lower airway obstruction in the infant and child
- 9. Differentiate between upper and lower airway disease in the infant and child
- 10. Outline the pre-hospital emergency assessment findings and care management for the infant and child with inadequate respirations and respiratory arrest
- 11. Describe the pre-hospital emergency assessment findings and care management for the infant and child with hypovolaemic and septic shock
- 12. Describe the pre-hospital emergency assessment findings and care management for the infant and child with a pyrexia
- 13. State the primary causes of cardiac arrest in infants and children
- 14. List common causes of seizures in infants and children
- 15. Describe the pre-hospital emergency assessment findings and care management for the infant and child with seizures
- 16. Describe the pre-hospital emergency assessment findings and care management for the infant and child with known or suspected poisoning
- 17. Describe the pre-hospital emergency assessment findings and care management for the infant and child with an allergic reaction and anaphylaxis
- 18. Discuss the pre-hospital emergency assessment findings and care management for the infant and child with trauma including burns management, external haemorrhage and spinal immobilisation

- 19. Describe the pre-hospital emergency assessment findings and care management for the infant and child with a glycaemic emergency
- 20. List the indicators of possible child abuse or neglect
- 21. Describe the medico-legal responsibilities in suspected child abuse
- 22. Recognise the need for Critical Incident Stress support following a serious illness or injury to an infant or child
- 23. Outline the pre-hospital emergency assessment findings and care management for the paediatric patient with pain including use of the Wong Baker Faces Pain Rating Scale
- 24. Discuss relevant aspects of Sudden Infant Death Syndrome (SIDS)
- 25. Discuss the benefits and limitations of weight calculation using the Broselow tape

#### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Relate to the feelings of the family when dealing with an ill or injured infant or child
- 2. Accept and manage the practitioner's own emotional response when caring for infants or children
- 3. Display a caring attitude towards the infants and children with illness or injury who require prehospital emergency services
- 4. Communicate effectively with infants and children will an illness or injury, as well as with family members and friends of the patient

#### **Skills Objectives**

- 1. Demonstrate the pre-hospital emergency assessment of the infant and child
- 2. Demonstrate the pre-hospital emergency assessment and care management for the infant and child with respiratory distress and respiratory arrest
- 3. Demonstrate the pre-hospital emergency assessment and care management for the infant and child with hypovolaemic or septic shock
- 4. Demonstrate the pre-hospital emergency assessment and care management for the infant and child with a pyrexia
- 5. Demonstrate the pre-hospital emergency assessment and care management for the infant and child with seizures
- 6. Demonstrate the pre-hospital emergency assessment and care management for the infant and child with a known or suspected poisoning
- 7. Demonstrate the pre-hospital emergency assessment and care management for the infant and child with an allergic reaction and anaphylaxis

- 8. Demonstrate the pre-hospital emergency assessment and care management for the infant and child with trauma
- 9. Demonstrate the pre-hospital emergency assessment and care management for the infant and child with hypoglycaemia
- 10. Demonstrate the pre-hospital emergency assessment and care management for the infant and child who is suspected as suffering from abuse or neglect
- 11. Calculate the weight of an infant and child using the Broselow tape

# **Learning Outcome 1 - Domain 3**

Provide the appropriate standard of	Appropriate on-going maintenance of the
patient care for interfacility transfers	patient record and utilisation of correct
and pre-hospital emergency care	patient handover procedures
services	

# **Health Information Management**

At the completion of this module, the student will be able to discuss the impact of the Health Information Standard in relation to their professional practice. In addition the student will be able to include all the required information on a patient care report (PCR) in accordance with the PHECC Records Management Guidelines and the Patient Care Report Guidebook.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. How accurate and timely information is central to a safe and efficient health care
- 2. How a completed patient care report is an integral part of pre-hospital emergency care
- 3. The standards of documentation completion
- 4. The information required to complete each section of the PCR and the format for entry of the information
- 5. How the PCR contributes to future national planning of pre-hospital services
- 6. The legal aspects of the PCR
- 7. Access rights of the patient to the PCR

## **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. The rationale for appropriately capturing patient information
- 2. The importance of records management in order to promote best practice
- 3. How the PCR contributes to healthcare quality improvement and clinical audit.
- 4. The importance of relevant legislation with regard to patient documentation

## **Skills Objectives**

- 1. Collecting, analysing and organising information to complete a PCR for a given patient scenario
- 2. The practices for storage of, retention of and access to the PCR in paper and electronic format
- 3. Examining their own clinical practice using completed PCRs

## **Communication**

At the completion of this module, the student will be able to demonstrate the use of effective and appropriate communication skills in their professional practice.

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Describe the golden rules of patient interaction (ref- Emergency Care and Transportation of the sick and injured By AAOS; 9th Edition)
- 2. Describe how to adapt verbal and non-verbal communication for visually impaired patients
- 3. Describe the principal barriers to effective patient and team communication
- 4. State the personal qualities that make an effective therapeutic communicator
- 5. Define each of the elements of the communication process
- 6. Define the term communication and describe each of the three types of communication
- 7. Describe how to adapt communication for auditory impaired patients
- 8. Describe the visual and auditory phenomena concerning perception and interpretation of communications
- 9. State the importance and techniques of active listening to maximise therapeutic communication
- 10. Differentiate between open and closed questions and outline how each may be used effectively during history taking

### **Attitudinal Objectives**

- 1. Show a caring professional attitude when communicating with a simulated patient, next of kin and bystanders
- 2. Demonstrate appropriate non-verbal communication to convey a caring attitude
- 3. Demonstrate confidence and professionalism in gaining cooperation from others
- 4. Demonstrate a professional non-judgemental attitude and demeanour throughout the communication process
- 5. Value the patient's negative responses and provide clear, unbiased, equable information for informed decision making to take place
- 6. Demonstrate a courteous approach toward the patient, their family and bystanders, to encourage critical information to be passed multi-directionally
- 7. Demonstrate a balanced approach to defuse tension and support appropriate communication techniques and rapport

### **Skills Objectives**

- 1. Demonstrate the use of open questioning technique and obtain important and relevant clinical information
- 2. Demonstrate effective communication with non-English speaking patients
- 3. Demonstrate a sequential and systematic verbal report of patient information both vertically and horizontally to ensure safe practice and maintain efficiency and continuity of care
- 4. Demonstrate application of each communication skill throughout a range of patient age categories
- 5. Using the principles of the feedback loop, demonstrate measurement and accurate interpretation of communication results, against a prescribed act, for each of the three types of communication
- 6. Demonstrate a level of assertiveness that maintains professional management of the situation, whilst ensuring the principles of "Team" are maintained

# **Learning Outcome 2 - Domain 1**

Safely and appropriately access, retrieve and transport patients

## **Basic Patient Care**

At the completion of this module, the student will be able to describe the principles of transporting patients and maintaining care for patients whilst in transit in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Outline the special considerations for a long distance journey
- 2. Outline the special considerations for transporting out-patients
- 3. List and discuss several normal changes in old age which may impact on patient care during transport
- 4. Outline the common medical conditions in the elderly
- 5. Discuss common injury patterns in the elderly
- 6. Describe the effects of reduced mobility on the older patient
- 7. Outline indicators of suspected elder abuse
- 8. Outline the special considerations for transporting infants in incubators
- 9. Outline the special considerations for transporting the elderly, mentally and physically challenged population in relation to their needs

# **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Understand the communication needs of the elderly
- 2. Explain the need to maintain patient mobility as far as possible
- 3. Explain the importance of encouraging a patient's independence
- 4. Demonstrate the importance of working as a team when lifting and moving patients

# **Skills Objective**

- 1. Demonstrate attending to patient toilet and hygiene requirements during a patient transport
- 2. Demonstrate a familiarity with common portable devices used in connection with the transportation of patients. This list may include infusion pumps, home nebulisers and oxygen, B/P monitors, artificial limbs, walking aids etc.

- 3. Demonstrate assisting a patient with impaired mobility to ascend and descend steps
- 4. Demonstrate, using the principles of lifting, patient lifts, carries and drags appropriate to prehospital emergency care practice
- 5. Demonstrate both pushing and pulling an object using safety guidelines
- 6. Demonstrate, while working in a team, the transfer, securing and transport of a patient onto each of the approved carrying/ lifting devices<sup>4</sup>, using the principles of lifting in the pre-hospital emergency care environment
- 7. Demonstrate loading and unloading a vehicle using an ambulance trolley stretcher
- 8. Demonstrate loading a vehicle using an ambulance chair
- 9. Demonstrate approved nursing positions on an ambulance trolley stretcher<sup>5</sup>
- 10. Demonstrate age appropriate moving and handling techniques

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<sup>&</sup>lt;sup>4</sup> Approved devices as per the PHECC CPGs.

<sup>&</sup>lt;sup>5</sup> Approved nursing positions as per the PHECC CPGs.

## Scene Assessment

At the completion of this module, the student will be able to safely assess the scene of an incident and take appropriate measures to protect themselves, their colleagues and the patient.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Discuss the components of scene assessment
- 2. Describe common hazards found at the scene of a trauma and a medical patient
- 3. List the determinants of scene safety
- 4. Discuss the role and responsibilities of the paramedic with regard to the safety of others at the scene of an incident including the patient, emergency crew and bystanders
- 5. Define: hazards, potential hazards, risk and risk management
- 6. Describe the risk management principles of hazard identification, assessment of risk, hierarchy of control and documentation of findings
- 7. Discuss common mechanisms of injury/nature of illness and how this may impact upon their management at the scene
- 8. Discuss the reasons for identifying the total number of patients at the scene
- 9. Explain the reasons for identifying the need for additional help or assistance
- 10. Explain the rationale for crew members to evaluate scene safety prior to entering
- 11. Explain how patient situations affect the evaluation of mechanism of injury or nature of illness
- 12. Explain how information from the scene contributes to injury prediction and the role of the paramedic in reporting observations

## **Attitudinal Objectives**

At the completion of this section, the student will be able to:

1. Explain the meaning of team work when multidisciplinary pre-hospital emergency services are at an incident

# Skills Objectives

At the completion of this section, the student will be able to:

1. Demonstrate the assessment of an accident / pre-hospital scene for scene safety and identify potential hazards, risks and controls

# Gaining Access to the Patient at the Scene

At the completion of this module, the student will be able to demonstrate the safe extrication of a patient from an accident scene in accordance with the appropriate established protocols.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Describe the purpose of extrication
- 2. Identify the patient who will require rapid extrication
- 3. Explain the rationale for utilising rapid extrication approaches only when they indeed will make the difference between life and death
- 4. Discuss the role of the paramedic in extrication
- 5. List the Personal Protective Equipment (PPE) required for paramedics during extrication
- 6. Define the fundamental components of extrication
- 7. State the steps that should be taken to protect the patient during extrication
- 8. List the steps in rapid extrication
- 9. Evaluate various methods of gaining access to the patient
- 10. Differentiate between simple and complex access

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

1. Participate as part of a team to ensure a safe and efficient extrication

## **Skills Objectives**

At the completion of this section, the student will be able to:

- 1. In a simulated light rescue scenario demonstrate the use of approved rescue equipment<sup>6</sup>
- 2. Demonstrate the extrication of a simulated patient from a car

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<sup>&</sup>lt;sup>6</sup> Approved rescue equipment as per the PHECC CPGs

# **Ambulance Operations**

At the completion of this module, the student will be able to outline the relevant procedures involved in preparation, despatch and transit both to and from an incident.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. List the functions of a Command & Control Centre
- 2. State the role and responsibility of the EMC (Call taker and dispatcher)
- 3. State the benefits of pre-arrival instructions
- 4. List the functions of a Medical Priority Dispatch System (MPDS)
- 5. List the categories of equipment for emergency ambulances and state at least one use for each category at an incident
- 6. List the time phases of an ambulance call in response to an incident
- 7. Describe the considerations that should be given to a request for a Garda escort for an ambulance
- 8. Explain the PHECC EMS Priority Dispatch classifications and discuss the appropriate response to each one
- 9. Outline the considerations when deciding on the appropriate receiving healthcare facility
- 10. Outline the special considerations for a long distance journey
- 11. Outline the special considerations for transporting out-patients
- 12. Outline the special considerations for mentally and physically challenged population in relation to their needs
- 13. Outline the steps necessary to find an address on a map

## **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the rationale for having the ambulance prepared for response
- 2. Discuss the "symptom iceberg" and understand why people frequently wait for significant time prior to calling for help

## **Skills Objectives**

At the completion of this section, the student will be able to:

1. Given a location/ patients address indicate the coordinates on a map

# **Learning Outcome 3 – Domain 1**

Adopt a professional approach to their	Retaining a professional manner and method
practice	in the performance of their duties

# **Professional Practice & Medico-Legal Issues Concerning the Paramedic**

At the completion of this module, the student will be able to outline their professional code of practice and ethics and describe the ethical and legal framework in relation to patient care.

### **Knowledge Objectives**

- 1. Outline the pertinent sections of current relevant legislation, highlighting their impact on a paramedic's professional practice.
- 2. Explain the professional duties of being a registered pre-hospital emergency care practitioner
- 3. Describe how the PHECC CPGs define a paramedic's scope of practice
- 4. Discuss the PHECC Code of professional conduct and ethics of pre-hospital emergency care practitioners.
- 5. Explain the principles underlying PHECC's Fitness to Practice.
- 6. List the four principles of healthcare ethics.
- 7. Explain the PHECC registered practitioner's duty of care to patients and the public.
- 8. Define abandonment, negligence and battery and their implications for the paramedic.
- 9. Define informed and implied consent and discuss the methods of obtaining consent.
- 10. Discuss the legal and ethical position concerning obtaining consent from children and adolescents.
- 11. Discuss the responsibilities of the paramedic in cases of patient refusal of treatment and or transport.
- 12. Compare the paramedic's role with other registered practitioners and other non ambulance personnel at the scene of an incident
- 13. Explain the importance, necessity and legality of patient confidentiality.
- 14. Discuss the grounds for sharing patients' health information with other health professionals.
- 15. Discuss disclosure of patients' health records for purposes of litigation.
- 16. List the actions that a paramedic should take to assist in the preservation of a crime scene.
- 17. State the emergency care conditions that require notification of the Gardaí.
- 18. State the procedure following a death in a public place or in the home.
- 19. Outline the procedure authorising forcible entry into private premises.
- 20. Outline the precautions to take during and after searching the patient for identification.
- 21. Explain the principles of access, equity and equality in healthcare.

# **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain why it is inappropriate to judge the patient based on a cultural, gender, age or socioeconomic model and to vary the standard of care rendered as a result of that judgement.
- 2. Exhibit the professional responsibilities of a paramedic in accordance with the standards of the PHECC Register.

### **Skills Objectives**

At the completion of this section, the student will be able to:

1. Demonstrate appropriate verbal communication to satisfy medico-legal consent criteria when seeking consent from a patient for treatment

# **Patient Safety and Quality Assurance**

At the completion of this module, the student will be able to examine their practice and their practice environment in terms of improving the quality of clinical care.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Discuss situations associated with an increased risk of error
  - Unfamiliar with the task
  - Inexperience
  - Shortage of time
  - Inadequate checking
  - Poor procedures
- 2. Discuss individual factors that predispose to errors
  - Limited memory capacity
  - Fatigue
  - Stress, hunger, illness
  - Language and cultural factors
  - Hazardous attitudes
- 3. Outline the harm caused by healthcare errors and systems failures
- 4. Outline the clinical audit cycle

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Participate in adverse events investigations
- 2. Communicate openly when things go wrong

### **Skills Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate engagement in incident reporting (organisation specific)
- 2. Write the objectives for a small scale audit project

### References:

- 1. Department of Health and Children, Building a Culture of Patient safety, 2007 (Available from <a href="http://www.dohc.ie/publications/building culture patient safety.html">http://www.dohc.ie/publications/building culture patient safety.html</a>; accessed October 2010).
- 2. World Health Organisation, Patient safety curriculum Guide for Medical schools, 2009 (Available from <a href="http://www.who.int/patientsafety/education/en/">http://www.who.int/patientsafety/education/en/</a>; accessed October 2010).

# Learning Outcome 3 - Domain 2

Adopt a professional approach to	Basing their professional practice on a solid
practice their practice	foundation of both basic and clinical sciences

# **Clinical Anatomy and Physiology**

At the completion of this module the student will be able to outline the structure and function of the body.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

### The cells, tissues and organisation of life

- 1. Describe the structure and functions of the cell
- 2. Describe the structure and function of epithelial, connective, muscle and nervous tissue
- 3. Outline the structure and function of mucous, serous and synovial membranes

### The respiratory system

- 1. Describe the position and structure of the anatomical parts or organs of the respiratory system
- 2. Relate the structure of the parts or organs to the functions of the respiratory system
- 3. Outline the physiology of breathing, differentiating between external and internal respiration using the concept of gas diffusion
- 4. Explain the pulmonary and systemic gaseous exchange
- 5. Define and state the normal respiratory values of:
  - Tidal volume
  - Residual volume
  - Vital capacity
  - Total lung capacity
  - · Respiratory rate
  - Minute volume
- 6. Outline the mechanism of breathing
- 7. Describe the pulmonary blood and nerve supply

### The cardiovascular system

- 1. Describe the structure and functions of arteries, veins and capillaries
- 2. Discuss vasodilatation and vasoconstriction of blood vessels
- 3. Describe the structure of the heart and its position within the thorax
- 4. Describe the coronary circulation
- 5. Outline the circulation of blood through the heart and major blood vessels of the body

- 6. Describe the electrical conducting system of the heart
- 7. Describe the cardiac cycle
- 8. List the factors affecting cardiac output in relation to stroke volume, and heart rate
- 9. Define pulse, blood pressure and the factors affecting variations in blood pressure and pulse
- 10. Outline the pulmonary circulation, the systemic circulation and the portal circulation

### The musculoskeletal system

- 1. On a diagram indicate the position of internal organs in relation to surface anatomy
- 2. Name the main muscles in the face and neck, back, abdominal wall, pelvic floor and limbs
- 3. Outline the main functions of muscles in the face and neck, back, abdominal wall, pelvic floor and limbs
- 4. List 5 types of bone and give examples of each
- 5. List the functions of bone
- 6. Identify the bones of the skull
- 7. Describe the structure of the vertebral column
- 8. Explain the movements of the vertebral column
- 9. Identify the bones that form the thoracic cage
- 10. Identify the bones of the appendicular skeleton
- 11. List the types of joints and give examples of each
- 12. Describe the structure and movement of the shoulder, elbow, wrist, hip, knee and ankle joints
- 13. Describe the functions of muscles, ligaments and tendons

### The digestive system

- 1. Describe the position and structure of the anatomical parts or organs of the digestive system
- 2. Outline the blood and nerve supply to the digestive system
- 3. Define peristalsis
- 4. Describe the digestive functions of the stomach
- 5. Describe the digestive functions of the small intestine, liver and pancreas

## The endocrine system

- 1. List the major endocrine glands of the body and identify the hormones associated with each
- 2. Describe the actions of insulin and glucagon

### The blood

- 1. Describe the structure, function and formation of red and white blood cells
- 2. Outline the role of platelets in clotting
- 3. Outline the chemical composition of blood
- 4. State the functions of blood

## The skin

- 1. Describe the structure of the skin
- 2. List the functions of skin

### The special senses

- 1. Describe the gross structure of the eye
- 2. Describe the gross structure of the ear
- 3. Describe the physiology of sight
- 4. Describe the physiology of hearing

### The nervous system

- 1. Discuss the basic structure of a neuron
- 2. Differentiate between the central, peripheral and autonomic nervous systems
- 3. State the functions of sensory and motor nerves
- 4. Describe the structure of the meninges
- 5. Outline the flow of cerebrospinal fluid (CSF) in the brain and spinal cord
- 6. List the functions of CSF
- 7. Describe the blood supply to and from the brain
- 8. Describe the position of the cerebrum
- 9. Describe the position of the cerebellum
- 10. Outline the main functions of the cerebrum
- 11. Outline the main functions of the cerebellum
- 12. List the 5 parts of the brain stem
- 13. Outline the position and function of the midbrain, pons, medulla oblongata and reticular activating system
- 14. Describe the gross structure of the spinal cord
- 15. Differentiate between white and grey matter
- 16. State the functions of the motor and sensory nerve tracts in the spinal cord
- 17. Explain the events of a simple reflex arc
- 18. List the origins of the paired spinal nerves
- 19. List the areas innervated by the thoracic nerves
- 20. Differentiate between the sympathetic and parasympathetic nervous system
- 21. Compare and contrast the effects of stimulation of the sympathetic and parasympathetic nervous systems on body systems
- 22. State the origin and innervation of the phrenic nerve

## The urinary system

- 1. Describe the position and structure of the anatomical parts or organs of the urinary system
- 2. Describe the blood and nerve supply to the urinary system
- 3. Explain the role of kidneys in blood pressure control

### The female reproductive system

- 1. On a diagram, label the parts of the female reproductive system
- 2. Explain the position, structure and function of the vagina, uterus and
- 3. Fallopian tubes

# **Attitudinal Objectives**

No attitudinal objectives identified

# **Skills Objectives**

No skills objectives identified

# **Pharmacology**

At the completion of this module, the student will be able to safely administer the appropriate medication for paramedics and correctly monitor medicated patients in accordance with established protocols/policy.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Define the terms pharmacokinetics and pharmacodynamics
- 2. Explain the process of drug absorption
- 3. Explain the factors that may influence drug absorption, distribution and elimination
- 4. List the medications which the paramedic may administer including special authorisation<sup>7</sup>
- 5. Outline the pharmacology of all paramedic medications as per the PHECC medication formulary
- 6. List the dose, route of administration, indications, contra-indications and side effects of the approved medications for use by paramedics
- 7. Discuss the paediatric weight calculation formula included in the PHECC medication formulary
- 8. Differentiate between trade and generic medication names
- 9. Differentiate between the dose in weight and the volume of a solution to administer
- 10. List the medications that are weight based and age based for doses
- 11. List the formula to calculate a paediatric weight from known age
- 12. List the pre-administration checks to follow when administering medication
- 13. Explain the importance of establishing if the patient has any medication allergies or is taking complementary therapies e.g. homeopathy
- 14. Explain the dangers associated with inappropriate administration of medication
- 15. List the '6 rights' of medication administration
- 16. Outline the legal framework and system of best practice that empowers Paramedics to administer medications

### **Attitudinal Objectives**

- 1. Explain the rationale for the administration of medication
- 2. Explain the rationale for near miss incident or medication error reporting

<sup>&</sup>lt;sup>7</sup> Approved medication as per the PHECC CPGs

# **Skills Objectives**

- 1. Demonstrate the pre-administration checks to be undertaken prior to medication administration
- 2. Calculate age related doses and the volume of a specific solution for paediatric patients
- 3. Demonstrate the administration of all approved medication for paramedic use
- 4. Demonstrate the documentation of medication administration on the Patient Care Report
- 5. Demonstrate the assessment and documentation of the patient's response to medication

# **Infection Prevention and Control**

At the completion of this module, the student will be able to demonstrate the principles of infection prevention and control whilst carrying out their professional duties in accordance with established policy/ protocols

# **Knowledge Objectives**

- 1. Define the terms: chain of infection, source/ routes of infection, means of transmission, susceptible host, contacts, fomites, vector, incubation period, quarantine, endemic, epidemic and pandemic
- 2. Define the terms: pathogens, causative agent, local infection, systemic infection and nosocomial infection
- 3. List the source/ routes of transmission
- 4. Outline standard infection control measures and how they protect people
- 5. Outline transmission based precautions
- 6. List ambulance equipment that is designated single use only
- 7. List ambulance equipment that must be cleaned, disinfected and sterilised
- 8. Describe the steps the paramedic should take for personal protection from airborne and blood borne pathogens
- 9. List the personal protective equipment necessary for each of the following situations:
  - a. Exposure to blood borne pathogens
  - b. Exposure to airborne pathogens
  - c. Exposure to biological agents
  - d. Exposure to ectoparasites
  - e. Exposure to antibiotic resistant bacteria (e.g. Methicillin Resistant Staphylococcus Aureus (MRSA))
- 10. Describe the safe use and disposal of sharps
- 11. Describe the safe use and disposal of safety engineered sharps/needle-less systems
- 12. List the steps to be taken in the event of an inoculation injury; percutaneous and mucocutaneous types
- 13. List the steps of spills management for blood and body fluids
- 14. Distinguish between healthcare risk and non-healthcare risk waste
- 15. List the steps to manage linen soiled with blood or body fluids
- 16. Distinguish between the terms cleaning, disinfecting and sterilising

- 17. Distinguish between the different cleaning agents and their application
- 18. Describe how to clean and disinfect an ambulance and ambulance equipment following patient care
- 19. State the importance of vaccinations in protecting personal health
- 20. State the role of post exposure prophylaxis and the time frame required.

## **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate a professional caring attitude towards patients irrespective of infective status
- 2. Communicate in an appropriate professional manner with other healthcare professional when transferring care of the patient with a known infectious condition
- 3. Adopt standard infection control precautions as fundamental to patient care

### **Skills Objectives**

- 1. Demonstrate effective hand washing technique
- 2. Demonstrate glove use and disposal
- 3. Demonstrate the management of spills for blood or body fluids
- 4. Demonstrate how to manage an inoculation injury, percutaneous and mucocutaneous types
- 5. Demonstrate standard and transmission based infection control precautions
- 6. Demonstrate the disposal of healthcare risk and non-healthcare risk waste including sharps and soiled linen
- 7. Demonstrate the cleaning and disinfection of an ambulance and ambulance equipment

# **Intravenous/Intraosseous Therapy**

At the completion of this module, the student will be able to assist with the administration and correctly monitor intravenous and intraosseous therapy on a patient in an out-of-hospital setting as per authorisation on CPGs.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Describe the physiology of body fluids
- 2. Outline the general indications of intravenous/intraosseous fluid therapy
- 3. List the equipment required and the procedure involved with insertion of the intravenous cannula and the intraosseous access
- 4. List the equipment required to set up for intravenous/intraosseous fluid administration
- 5. Describe the pre-hospital considerations that may impact on fluid administration during transport and outline basic remedial actions
- 6. List the common complications of intravenous/ intraosseous therapy outline basic remedial actions
- 7. Describe the application of an intermittent vascular access cap (bung)
- 8. List the special considerations for vascular access in the trauma patient
- 9. List special considerations for vascular access in the paediatric patient
- 10. List the sign and symptoms of fluid overload
- 11. Explain the benefits of low volume resuscitation for trauma patients other than head injuries

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate a professional caring attitude for the patient who requires a cannula or an intravenous infusion
- 2. Appreciate the apprehension patients experience about receiving an injection

#### Skills Objectives

- 1. Demonstrate the maintenance of a fluid regime including the correction of some basic administration complications
- 2. Identify an intravenous cannula that has tissued
- 3. Demonstrate commencing a fluid regime including setting the giving set's flow rate for the infusion and securing the giving set
- 4. Demonstrate the discontinuation of a fluid regime including application of a bung
- 5. Demonstrate securing a intravenous cannula and an intraosseous access

# **Intramuscular Injection**

At the completion of this module, the student will be able to correctly and safely administer an intramuscular injection to a patient in an out-of-hospital setting.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Identify the preferred sites for intramuscular injection
- 2. List the maximum volume that should be injected in each site
- 3. Outline the general indications of intramuscular medication administration
- 4. List the equipment required and describe the procedure of drawing up medication from both glass and plastic ampoules
- 5. List the common complications of intramuscular injection as well as some basic preventative steps
- 6. List the special considerations for intramuscular injections for the paediatric patient

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate a caring professional for the patient who requires an intramuscular injection
- 2. Appreciate the apprehension that some patients experience about receiving an injection

### **Skills Objectives**

- 1. Demonstrate the preparation of an intramuscular injection from liquid and powder medications
- 2. Demonstrate the administration of an intramuscular injection

# **Learning Outcome 3 - Domain 3**

Adopt a professional approach to	Utilising best practice as prescribed by
practice their practice	standard pre-hospital emergency care
	operational procedures and CPGs

# **Radio Communications**

At the completion of this module, the student will be able to correctly operate a radio communication device in accordance with established protocols.

# **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Differentiate between radio and telephone communications
- 2. Differentiate between VHF and UHF
- 3. Describe the components of a typical ambulance service radio net
- 4. Identify factors that lead to poor radio transmission
- 5. Identify the importance of radio call signs to ensure effective radio communication
- 6. List the mandatory radio calls required when responding to an incident:
  - Mobile to scene
  - Arrival at scene
  - Depart scene
  - At destination (hospital)
  - Clear at destination
  - Arrive at station
- 7. List the phonetic alphabet
- 8. List and explain the acceptable radio shorthand words
- 9. List the principles of good voice procedure when transmitting a radio message
- 10. List the steps required for transmitting a long radio message
- 11. List the components of an ASHICE message (Age, Sex, History, Incident, Clinical impression & Estimated time of arrival; ASHICE)

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

1. Explain the rationale for completing a radio check at the commencement of duty

# **Skills Objectives**

- 1. Operate a mobile radio set
- 2. Operate a hand held radio set
- 3. Demonstrate an organised, concise radio transmission
- 4. Demonstrate a radio transmission utilising the phonetic alphabet
- 5. Demonstrate a radio transmission of a long message
- 6. Demonstrate a radio report on a simulated patient using ASHICE

# **Hazardous Material Incident**

At the completion of this module, the student will be able to demonstrate a safe approach, in accordance with established protocols, when dealing with a hazardous material incident.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Outline the paramedics role during an incident involving hazardous materials
- 2. List the safety precautions required to ensure paramedic and crew safety at a hazardous materials incident
- 3. Explain the methods for preventing contamination of self, equipment and facilities
- 4. List the safety precautions required to ensure the safety of bystanders at a hazardous materials incident
- 5. List the nine classes of hazardous materials
- 6. Identify the component parts of an ADR hazard warning panel
- 7. Identify the component parts of a Hazchem warning panel
- 8. Identify the dangers associated with complacency when dealing with hazardous chemicals
- 9. Outline the importance of decontamination of patients prior to transport

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the role and responsibility of the Gardaí and Fire Service in ensuring scene safety and access to patients
- 2. Support a patient physically and emotionally through a decontamination process

# **Skills Objectives**

- 1. Identify the UN number and the type of hazard involved, given a hazardous warning panel
- 2. Given a scenario with a potential hazardous exposure, the student will demonstrate the use of appropriate personal protective equipment
- 3. At the completion of the scenario, the student will demonstrate the proper removal and disposal of the protective garments

# **Major Emergency**

At the completion of this module, the student will be able to perform their duties as a paramedic effectively in conjunction with other relevant services at a major emergency incident.

#### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Define Major Emergency<sup>8</sup> and identify the factors to be considered before one is declared
- 2. Discuss Major Emergency in relation to: Natural, Manmade, Simple, Compound, Compensated and Uncompensated incidents
- 3. List the roles of the Health Service Executive during a Major Emergency
- 4. List the roles of the Local Authority/ Fire Services during a Major Emergency
- 5. List the roles of An Garda Síochána during a Major Emergency
- 6. Describe how the three Services, Health Service Executive, Local Authority/ Fire Services and An Garda Síochána operate under separate vertical command structures and liaise with each other at the operational, tactical and strategic areas during a Major Emergency
- 7. Describe the Strategic, Tactical and Operational levels in relation to Major Emergencies
- 8. Outline the Health Service Executive command structure in relation to Strategic, Tactical and Operational levels
- 9. Discuss the seven key principles for a Major Emergency structured response: Command, Safety, Communications, Assessment, Triage, Treatment & Transport
- 10. Define triage in relation to a multiple casualty incident
- 11. List the components of triage sieve and state where on a Major Emergency site it is carried out
- 12. List the components of triage sort and state where on a Major Emergency site it is carried out
- 13. Sketch a schematic diagram of the patient through flow at a Major Emergency site identifying Operational and Tactical areas
- 14. List the roles of the first practitioners on scene at a Major Emergency differentiating between the communications and command roles
- 15. Identify the tabard worn by the Controller of Operations for each of the three principal response agencies
- 16. Differentiate between local, regional and national co-ordination for major emergencies
- 17. Discuss the concept of the lead agency
- 18. Identify the roles of the medical incident officer

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<sup>&</sup>lt;sup>8</sup> Major Emergency management as per PHECC CPGs

# **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the concept of the most (help) for the most (patients)
- 2. Use the protocol and procedures in the "Framework for Major Emergency Management" document during a Major Emergency

### **Skills Objectives**

- 1. Given a scenario of a Major Emergency compose a METHANE message
- 2. Given a simulated patient perform a triage sieve and label correctly
- 3. Given a simulated patient perform a triage sort and label correctly
- 4. Review the Major Emergency Plan from the student paramedic's local area
- 5. Given a scenario and location map, identify a location for
  - Casualty collection station
  - Ambulance parking point

# Civil Disorder

At the completion of this module, the student will be able to perform their duties as a paramedic effectively in conjunction with other relevant services during civil disorder.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Identify the fundamental role of the Ambulance Service during civil disorder
- 2. List three types of civil disorder and explain the challenges posed for pre-hospital emergency care providers for each type
- 3. Outline why ambulance staff should be deployed behind Garda lines during civil disorder
- 4. Identify the safe procedure for parking and preparedness of ambulances during civil disorder
- 5. Outline the importance of Personal Protective Equipment (PPE) during civil disorder

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

1. Explain the importance of neutrality for paramedics during a civil disorder

### **Skills Objectives**

At the completion of this section, the student will be able to:

1. Demonstrate in pairs the use of carrying sheet to rapidly evacuate the patient in a simulated civil disorder

# **Treat and Refer**

At the completion of this module, the student will be able to assess and make a sound clinical decision about patients who can be safely and reliably referred to another healthcare professional or self care with advice without transport to an emergency department being initiated.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Discuss treat and referral procedures for patients as per PHECC CPGs
- 2. Discuss the clinical pathway decision algorithm
- 3. List the principles of PHECC's treat and referral policy
- 4. List the clinical pathway decisions available to Practitioners
- 5. List the generic patient exclusion criteria prohibiting access to the treat and referral clinical pathways
- 6. List the elements of the written aftercare instructions for referred patients
- 7. List the components of the Healthcare Professionals feedback form that require completion by the pre-hospital emergency care Practitioner

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

1. Identify the value added for the low acuity patient following the introduction of treat & referral clinical pathways

## **Skills Objectives**

- 1. Following an assessment of a simulated patient, identify an appropriate treat and referral clinical pathway
- 2. Discuss the written after care instructions with a simulated patient following a decision to implement a treat & referral clinical pathway and determine their understanding of the instructions
- 3. Complete a Healthcare Professionals feedback form for a simulated patient following a decision to implement a treat & referral clinical pathway

# Learning Outcome 4 - Domain 1

Demonstrate a commitment to	Maintaining personal well-being and
continuous professional competence	professional relationships with colleagues

# The Well-Being of the Paramedic

At the completion of this module, the student will explain and demonstrate the importance of maintaining well-being, in particular manage a balance in personal lifestyle and stress-management

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. List the main responsibilities of the employer under Health and Safety Legislation
- 2. List the main responsibilities of the employee under Health and Safety Legislation
- 3. Explain the importance of emotional/ psychological wellbeing in a work context
- 4. Outline the importance of personal hygiene and physical fitness
- 5. List the ways in which people are affected by stress/ pressure
- 6. List commonly occurring work stressors in pre-hospital emergency services
- 7. Describe basic self-care procedures to help reduce/ alleviate stress
- 8. Describe the possible ways in which people are affected by exposure to critical incident/ traumatic stress
- 9. List the possible impact on the paramedic when faced with trauma, illness, death and dying
- 10. List the signs and symptoms of critical incident stress
- 11. Describe the role and operation of a critical incident stress management system
- 12. Outline the possible way in which a paramedic's family may be affected by his/her stress levels
- 13. Discuss the psychological impact of critical incidents/ trauma/ loss on bystanders or next of kin
- 14. Outline the steps in the paramedics approach to a bystander or next of kin confronted with trauma, illness, death and dying

#### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the importance of being an advocate for the safety of self and others
- 2. Explain the importance of understanding the response to trauma, illness, death and dying and communicating effectively with the patient's family
- 3. Utilise the service's information material/ standard operating procedures for critical incident stress management

### **Skills Objectives**

No skills objectives defined

# Learning Outcome 4 - Domain 2

Demonstrate a commitment to	Identify with the role of the paramedic
continuous professional competency	

# **Continuum of Pre-Hospital Emergency Care**

At the completion of this module, the student will be able describe the major components of the Irish healthcare system and be able to explain the role and responsibilities of a paramedic within this system.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Outline the services which make up the continuum of pre-hospital care
- 2. Differentiate the role and responsibility of the paramedic in this continuum of care as distinct from other pre-hospital care practitioners/responders
- 3. Define medical advice/direction and discuss how it is used to enhance patient care in the prehospital setting
- 4. Outline the structures of the Health Service Executive
- 5. Outline the structures of the National Ambulance Service
- 6. List the role and functions of the Pre-Hospital Emergency Care Council
- 7. List the various methods used to access pre-hospital emergency care
- 8. State the impact of Ireland's increasing population on health demographics
- 9. Outline how the current mortality and morbidity figures for the state will impact on the role of the pre-hospital emergency care practitioner

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Explain the rationale for maintaining a professional appearance when on duty or when responding to calls
- 2. Value a commitment to access, equity and equality principles of healthcare

## **Skills Objective**

No skills objectives identified

# **Manage Personal Work Priorities and Professional Development**

At the completion of this module, the student will be able to assemble their own personal development plans to assist with continuous professional competency requirements.

#### Knowledge Objectives

At the completion of this section, the student will be able to:

- 1. Discuss the continuous professional competency (CPC) requirements of maintaining registration with PHECC
- 2. Define scope of practice and explain PHECC's role in setting the limits of professional practice
- 3. State the advantages of developing a structured personal development plan (PDP) that records all aspects of learning and development
- 4. Identify own CPC needs
- 5. Describe how to evaluate the CPC process from an individual perspective
- 6. State how PDP's assist to develop and enhance knowledge, understanding and ability in specific clinical and professional skill areas and techniques
- 7. State how other professionals can assist students to focus and assess their knowledge, skills and attitudes
- 8. State how PDP's and "SMART objectives" assist professionals to discover new learning opportunities
- 9. State the principles of constructive feedback and how it provides for personal growth
- 10. State the reasons that motivation is an absolute requirement for learning and how recognition of learning and development, benefits the individual, group and organisation

## **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Actively participate and support research that will underpin future clinical practice and clinical effectiveness, using evidence to support best practice initiatives
- 2. Understand the knowledge and practice competently the clinical practice guidelines of PHECC

## **Skills Objectives**

- 1. Design a learning portfolio to plan, analyse, reflect and record evidence of continuous professional competency
- 2. Design a PDP, using SMART objectives to schedule and record continuous professional competency and future intentions

# **Interpersonal and Team Management Skills**

At the end of this module, the student will be able to demonstrate the skills necessary to effectively work with others as part of a team.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. State what effects and impacts relationships can have on organisational development
- 2. Differentiate between a team and a group
- 3. State how effective leadership behaviours can optimise productivity
- 4. State how attitudes can reduce morale and motivation
- 5. Describe how people centred approaches improve individual and organisational productivity
- 6. Define synergy and provide contextualised workplace examples
- 7. Describe how workplace behaviour influences other people's behaviours
- 8. Describe how resistance and conflict can be reduced in a working environment

### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate motivation and enthusiasm within a short presentation
- 2. Demonstrate a caring professional attitude to people who do not support your viewpoint without compromising your professional, ethical, legal or moral position
- 3. Demonstrate the attributes of a professional role model toward other members of the profession, other professionals and other interested parties
- 4. Respect and value the roles and contributions of all members of the team
- 5. Gain confidence in reflecting upon your contributions to patient care and team working
- 6. Demonstrate and value a professional understanding and attitude towards other multiprofessional groups and support staff

### **Skills Objectives**

- 1. Design a force field analysis that provides information and functionality to quantify an intended course of action
- 2. Using a force field analysis deliver a short presentation to influence a group toward a rational decision
- 3. Demonstrate application of communication skills that encourage support and enthusiasm from team members
- 4. Demonstrate communication skills that support a team objective
- 5. Work effectively and efficiently within multi-professional teams

# **Mentorship**

At the completion of this module, the student will be able to act as an effective adviser to colleagues in the further development of their professional practice.

### **Knowledge Objectives**

At the completion of this section, the student will be able to:

- 1. Describe the roles and responsibilities of the mentor
- 2. Describe the student's responsibilities toward the mentorship process
- 3. Differentiate between the educational roles of tutor, assessor and mentor
- 4. Describe the type of environment that would be conducive to mentoring a student
- 5. Describe the questioning techniques that are used to probe
- 6. State the activities required to set the mentorship agenda and monitoring progress
- 7. Describe problem definition and resolution
- 8. Describe the support network
- 9. Describe the issues and problems of confidentiality and how they should be dealt with in an appropriate professional manner

#### **Attitudinal Objectives**

At the completion of this section, the student will be able to:

- 1. Demonstrate active listening
- 2. Demonstrate probing open questioning
- 3. Demonstrate appropriate interpersonal skills to encourage learning and development
- 4. Demonstrate an appropriate professional caring manner
- 5. Interact with the student/peer to encourage open communication and learning
- 6. Demonstrate motivation toward the process
- 7. Demonstrate assertiveness without aggression
- 8. Demonstrate and facilitate understanding and enthusiasm
- 9. Enhance the student's motivation through supportive behaviours
- 10. Provide constructive and positive feedback

## **Skills Objectives**

- 1. Prepare the agenda for a mentoring assignment
- 2. Prepare all documentation
- 3. Demonstrate assessment and evaluation to promote learning
- 4. Identify needs of student
- 5. Demonstrate the mentoring process
- 6. Demonstrate appropriate questioning techniques
- 7. Demonstrate assistance in problem definition
- 8. Demonstrate facilitation of problem solving
- 9. Monitor student progress and provide positive, constructive feedback