

Date: September 2010

To: Targeted audience

Re: Public consultation on PHECC's Draft 2011 Education and Training Standard

From: Michael Garry, Chair of the Accreditation committee

I would like to take this opportunity on behalf of the Pre-Hospital Emergency Care Council to request your time to respond to this public consultation on the next edition of PHECC's education and training standard 2011. I would also very much appreciate if you would circulate this information widely throughout your organisation.

Background

The current education and training standards (Edition 1) was approved by Council in April 2007. This standard has been the framework for upwards of 40 recognised institutions to deliver over 120 recognised pre-hospital emergency care courses and to make responder level awards. In 2008, Council commissioned an external educational review of the existing suite of clinical courses and the work by Dr. Hemal Thakore is acknowledged. Subsequently, every recognised course was re-examined to ensure consistency with the current edition of CPGs, other PHECC standards and the evolving scope of practice of practitioners and responders. *Emergency Care* is the title of the proposal for a new level responder course that aims to bridge the divide between cardiac first response and emergency first response courses.

Council rules have also been revisited and the purpose of this consultation is to identify if there is consensus that all the issues relating to the recognition of institutions and courses are comprehensively addressed.

How is the 2011 standard constructed?

The development of the standard is a major project necessitating in part a review of existing material, for other areas new material is proposed or remains a work in progress. There are 4 principal documents in the standard and each can be accessed by clicking on the hyperlinks below.

1. Draft Council rules for the recognition of institutions and courses
2. Draft PHECC's teaching faculty framework
3. Draft Recognition of prior learning
4. Draft Recognised courses:
 - cardiac first response
 - emergency care (will be added in due course)
 - emergency first response
 - EMC (call taker and dispatcher)
 - emergency medical technician
 - paramedic
 - advanced paramedic

Scope of consultation

During this public consultation a number of key stakeholders will be targeted and include:

1. Recognised institutions
2. PHECC working groups, Committees and Council
3. CPG approved organisations
4. Others: website and PHECC's newsletter
5. Other targeted individuals or organisations as appropriate

You are asked to submit your feedback in writing before the 29.10.2010 to

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Co Kildare or by email to pauline@phecc.ie

Many thanks to you for your greatly valued assistance; I look forward to receiving your submission. Please note that all submissions received are subject to the Freedom of Information and Data Protection Acts and a list of all persons who provided submissions may be published. Further copies of the standards are available on application to info@phecc.ie or phoning the office on 045-882042. The draft documents are also available from the home page on the PHECC's website www.phecc.ie.

What next?

During the consultation period, all the responses will be reviewed and the comments considered as part of the ongoing development of the standard. At the end of this designated period, the feedback will be compiled and discussed by the Accreditation Committee and Council in early December.

PHECC would like to clarify that recognition of institutions under a 2007 application will continue for a minimum period of 3 years. During the transition a number of institutions have or will have their 3 year period extended. In 2011 it is envisaged that institutions will reapply for course recognition on a phased basis. PHECC will work with individual institutions and endeavour to keep disruption to scheduled training courses to a minimum.



Education and Training Standards

Mindmap for information

Draft Council Rules for Recognition of Institutions and Courses

Draft Teaching Faculty Framework

Draft Recognition of Prior Learning Guidelines

2011 Education and Training Standards

1. Council Rules for the Recognition of Institutions and Courses

- Introduction
- Part I - Recognition of Institutions**
 - Recognition of institutions- general
 - Faculty
 - Educational awards
 - Assessments
 - The CQI Framework
- Part II - Recognition of Courses**
 - Recognition of courses- general
 - Recognition of CFR courses
 - Recognition of EC (+SC) courses
 - Recognition of EFR courses
 - Recognition of EMS Control course
 - Recognition of NQEMT courses
- Part III - NQEMT Internship**
 - The learning portfolio
 - Standard of clinical supervision
 - Continuous competence assessment
- Appendices

2. PHECC's Teaching Faculty Framework

- Background & rationale
- Routes to Instructor and Educational Awards
- Roles and responsibilities of instructors and tutors
- Instructor levels**
 - CFR
 - EC (+SC)
 - EFR
 - EMS Control
- Tutor levels**
 - Assistant Tutor
 - Tutor
 - Educator
 - Facilitator

3. Recognition of Prior Learning

- Definition
- Guiding Principles

4. Recognised Courses

- Driving
- CFR
- EFR
- Emergency Care (+SC)
- EMS Control
- EMT
- Paramedic
- Advanced Paramedic

5. Guidelines to assist making an application to PHECC for recognition

- Introduction
- Making an application for Recognition of Institution (Part I)
 - Application process and fees explained
 - Cards and Certificates
 - Assessments
 - Record management
 - The CQI Framework
- Making an application for Recognition of Courses (Part II) +
- Making an application for Internship (Part III) +
- Checklists for Part I, II and III
- Appendices
 - Core Faculty Templates

Council Rules for the Recognition of Institutions and Courses

(Draft 2nd Edition - Date 2010)

These Council rules (Insert date and Edition No.) supersede all previous rules outlined in the *2007 Education and Training Standards* and any subsequent Council amendments and updates regarding recognition of institutions and courses.

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Introduction

PHECC is an independent statutory body with responsibility for standards in education and training in the field of pre-hospital emergency care. PHECC's primary role is to protect the public. The statutory functions of Council shall be to recognise, in accordance with the rules made by Council,

- institutions providing education and training in pre-hospital emergency care and in pursuit of the award of NQEMT,
- the content of courses for such education and training,
- the standards of theoretical and practical knowledge required for qualifications in pre-hospital emergency care.

In the Strategic Plan, Council is committed to ensuring that recognised institutions and course content in First Response and Emergency Medical Technology reflect contemporary best practice and to ensuring that pre-hospital emergency care responders and practitioners achieve and maintain competency at the appropriate performance standard.

These Council rules are the framework to support the system of accreditation for institutions, known as recognised institutions and to empower these recognised institutions to provide one more recognised course. They are drafted and agreed by the Accreditation committee and considered by Council for approval at least every three years.

In a separate publication PHECC's *Recognition of Institution and Course Guidelines* (*insert date*), an institution will have access to additional support information to understand Council rules and apply for recognition of institution and course(s) using the application checklist.

The following table lists the titles of PHECC's education and training standards (recognised courses).

PHECC recognised courses	
1.	Driving (Emergency and Non-Emergency)
2.	Cardiac first response (CFR)
3.	Emergency Care + "Special Circumstances"
4.	Emergency first response (EFR)
5.	EMS Control (Call Taker and Dispatcher)
6.	Emergency medical technician
7.	Paramedic
8.	Advanced paramedic

In another publication *PHECC's Teaching Faculty Framework* (inset date) the standard of education leading to the awards of instructor and tutor is fully outlined. The titles of the instructor and tutor awards are:

1. CFR instructor
2. EFR instructor
3. EC instructor
4. EMS-Control instructor
5. Assistant tutor
6. Tutor
7. Educator
8. Facilitator

Definitions

In the Council rules, unless the context otherwise requires, the following expressions have the meanings as per the SI 109/2000 and 575/2004 assigned them-

1. "the Council" means the Pre-Hospital Emergency Care Council
2. "Recognised institution" means an institution recognised by the Council to provide pre-hospital emergency care education and training
3. "Recognised Course" means a course of education and training in pre-hospital emergency care, the content of which has been approved by the Council.
4. "Applicant institution" refers to an organisation preparing to or in the process of applying for recognition.

Part I-Recognition of Institutions

Recognition of institutions-General

Council rules in Part I outline in full the requirements for every applicant institution preparing an application and maintaining status as a recognised institution. Faculty and assessment requirements and PHECC's continuous quality improvement framework are explained in subsequent sections. The applicant institution must meet all requirements of Part I recognition of institution, to Council's satisfaction.

1. Council fees are applicable for an application to PHECC for recognition of institution.
2. A full written application is required for recognised of institution in Part I. There is one process for an application for recognition of institution. Note this differs from previous editions of Council rules when there were 2 distinct levels (responder and NQEMT).
3. Failure to adhere to the application checklist will result in the submission being returned.
4. By submitting an application the institution is obliged to comply with all council rules relevant for recognition of institution and course rules set out by Council in the Education and Training Standards.
5. The application for recognition of institution must be accompanied by a full written application for at least one recognised course. Note this differs from previous when the application for institution and course could be submitted separately.
6. Written policies in the following key areas are required:
 - Staff recruitment and development
 - Equality and access to training
 - Health, safety & welfare
 - Course development
 - Recognition of prior learning
 - Assessment & awards
 - Record management
7. Applications for recognition of institution will be considered by the Accreditation committee prior to presentation to the Council.
8. All information submitted will be considered and the Council reserves the right to make enquires with any organisation or person in pursuance with the application for institution recognition. This may include a site visit by PHECC prior to presenting the application at committee or Council. All relevant facilities and records must be made available.
9. The outcome of the application process will be decided by Council and may be one of the following:-
 - a) Full institution and course recognition for a period of no longer than 3 years.
 - b) Conditional institution and course recognition. The conditions will be specific and a timeframe set within which the recognised institution will be required to submit a

progress report on the implementation of any special conditions imposed.

Continued recognition of an institution is conditional on full compliance with any such conditions.

c) Non-approval.

10. When the 3-year period of institutional recognition has lapsed, a complete new application plus fee must be submitted. This period may however, be extended as the need arises.
11. Any significant changes to a recognised institution outside the framework approved by the Council shall be submitted in advance for consideration to PHECC. This includes significant organisational or governance changes that are relevant to its status as a recognised institution.
12. An applicant institution has the right to appeal a non-approval decision of the Accreditation committee to Council.
13. The Council wholly supports a distributed campus concept for pre-hospital emergency care training and welcomes innovative approaches.
14. Education and training facilities must be adequate to meet the teaching and learning needs of teaching staff and students.
15. The recognised institution must be committed to remaining dynamic and capable of responding to environmental changes.
16. Nominations may be sought from the recognised institution's faculty to participate as members of any Council committee or working group.
17. Recognised institutions wishing to use the PHECC logo should refer to the terms of usage outlined in the PHECC logo usage policy.
18. Council publishes a list of recognised institutions and contact details (including website links) on its website. Recognised institutions must keep their website information current; in particular sites advertising PHECC recognised courses.
19. In the event of the recognised institution engaging the services of a third party for course/training delivery, PHECC standards must be ensured and adhered to. Outsourced services remain the responsibility of the recognised institution.

Faculty rules

This section outlines Council rules regarding faculty requirements that are necessary when applying for recognition. Core faculty requirements are dependent on the selection of PHECC course(s) being considered. Standards for record management and responsibilities of individual faculty members are included.

20. The applicant institution must submit a list of names with copies of tutor/instructor certificates as relevant for every member of faculty nominated for approval.
21. Council requirements for core faculty¹ and course director are outlined on PHECC's Matrix of Faculties in [Appendix 1](#).
22. Other faculty can include visiting subject experts approved and monitored by the course director. These may include: tutors, educators, facilitators, assistant tutors, CFR and EFR instructor trainers, CFR and EFR instructors, registered advanced paramedics, paramedics, EMTs, nurses, doctors and others.
23. Faculty members may be nominated by more than one recognised institution.
24. Explicit consent must be sought and retained from each faculty member named, cognisant that this information will be in the public domain. Close liaison between faculty members and the recognised institution is recommended to facilitate administrative efficiency.
25. The recognised institution will maintain an up-to-date record of every member of its faculty including instructor trainers with corresponding evidence of appropriate education and experience.
26. The recognised institution may add or remove faculty members from their institution records at their own discretion. There is no requirement to inform PHECC.
27. Faculty lists are however, subject to inspection and specific faculty information may be sought by PHECC as a targeted information request, a component of annual maintenance/monitoring.
28. The responsibility to maintain valid instructor and/or tutor certification lies with every individual faculty member.
29. PHECC maintains a record of all faculties, approved on initial application and also those persons awarded subsequently with a PHECC educational award.
30. Recertification requirements for assistant tutor, tutor, educator and facilitator level awards are outlined in full on the current edition of *PHECC's Teaching Faculty Framework*.

¹ Core faculty is essential education staff listed by title (instructor or tutor) for every recognised course.

Educational awards

PHECC Educational awards are made at the level of assistant tutor, tutor, educator and facilitator. This section summarises the rules governing these awards. For more comprehensive information regarding the individual qualifications this section should be read in conjunction with *PHECC's Teaching faculty framework*.

31. All nominations for an educational award must be submitted to PHECC in writing by a recognised institution for approval.
32. The submission will include a recommendation from a facilitator who has verified the evidence of teaching education and experience.
33. PHECC will make Educational awards to suitably qualified individuals who have meet the standards outlined in *PHECC's Teaching faculty framework*.

Assessments

Council rules regarding assessments are outlined in full in the Council publications listed below.

34. Assessments at Responder levels will be carried out in accordance with the current edition of the *PHECC Responder Level Examination Handout for Recognised Institutions*.
35. NQEMT assessments will be carried out in accordance with the current Council NQEMT examination policy and current edition of the *NQEMT Examination Handbook*.

The Continuous Quality Improvement Framework

The continuous quality improvement (CQI) framework is the mechanism by which Council ensures the quality and standards of education of the recognised institutions. The annual monitoring process is a retrospective analysis by which PHECC determines whether a recognised institution continues to meet all Council rules against which it was originally assessed.

36. Every recognised institution will participate fully in the CQI framework. The 3 essential elements of Council's CQI framework are:

- Review of the Education and Training Standards. This is carried out by the executive and committees of Council following broad consultation
- Recognition of institutions and courses. This is carried out by the executive and committees of Council in accordance with Council rules and procedures for applicant and recognised institutions and courses.
- Annual maintenance/monitoring survey of recognised institutions and courses. This is carried out by the executive on behalf of Council.

37. The aim of the annual maintenance/monitoring survey is to evaluate the capacity and effectiveness of the recognised institution to maintain and improve the quality of recognised courses and to observe progress in areas previously noted for improvement.

38. The component methods of the annual maintenance/ monitoring survey may include:

- Review of the quality evaluation report (QER),
- Desktop analysis such as targeted information requests,
- Site visit(s).

39. The principal driver of continuous quality improvement is the recognised institutions own quality improvement systems. PHECC will evaluate this quality improvement systems by reviewing the quality evaluation report (QER) submitted annually.

40. The QER is a tool for the institution to self-examine its capacity to deliver recognised courses effectively while identifying good practices and areas needing improvement. Action on the areas needing improvement should be planned and documented on a quality improvement plan (QIPs). The QER template is available in [Appendix 2](#).

41. The recognised institution will submit to the office of PHECC, a *Course Activity Report* in July (for January-June inclusive) and in January (for July-December inclusive). This report will outline the number of joint recognised institution/PHECC awards made for responder level courses.

42. In the case of a site survey, all relevant facilities, personnel and records must be made available. Direct class observation or student interviews may occur. The Council will notify the recognised institution prior to any site visit.

Part II-Recognition of courses

Recognition of courses-General

Council rules in Part II outline in full the requirements for every applicant institution preparing an application and maintaining status for recognition of course(s). In subsequent sections, the particulars for each recognised course is detailed and includes information on specific faculty requirements, certification and entry criteria as relevant. The information supplied in Part II must assure Council that arrangements are in place to provide a quality course and assures the validity of the joint PHECC/recognised institution awards obtained by students.

1. Council fees are applicable for applications for recognition of course(s).
2. A full written application is required for every recognised course in Part II.
3. Failure to adhere to the application checklist will result in the submission being returned.
4. Written procedures to support the recognition of prior learning (RPL) policy (submitted in Part I) for every course is required.
5. Applications for recognition of courses will be considered by the Accreditation committee prior to presentation to the Council.
6. All information submitted will be considered and the Council reserves the right to make enquires with any organisation or person in pursuance with the application for course recognition. This may include a site visit by PHECC prior to presenting the application at committee or Council. All relevant facilities and records must be made available.
7. The outcome of the application process will be decided by Council and may be one of the following:-
 - a) Full course recognition for a period of no longer than 3 years.
 - b) Conditional course recognition. The conditions will be specific and a timeframe set within which the recognised institution will be required to submit a progress report on the implementation of any special conditions imposed. Continued recognition of an institution is conditional on full compliance with any such conditions.
 - c) Non-approval.
8. When the 3-year period of course recognition has lapsed, a complete new application plus fee must be submitted. This period may however, be extended as the need arises.
9. Any significant changes which the recognised institution deems necessary outside the course recognition framework approved by Council shall be submitted in advance for consideration to PHECC.
10. An applicant/recognised institution have the right to appeal a non-approval decision of the Accreditation committee to Council.

11. The durations of recognised courses are recommended in Appendix 3, the institution can exceed them.
12. Recognised course(s) can be delivered on a full time or part-time/modular basis.
13. The course design will balance theory and practice to achieve the learning outcomes (course and domain specific) and competencies specified by the relevant Education and Training Standard.
14. The course design will utilise a range of teaching/learning strategies providing a balance between lectures, tutorials, workshops, small group interactions, demonstrations, practical and self- directed learning including electronic learning approaches.
15. The course design will promote a commitment to self-directed and lifelong learning and must be dynamic to reflect ongoing changes in pre-hospital emergency care delivery and changes in PHECC clinical practice guidelines (CPGs).
16. The requirements for students' attendance, continuing progression and successful completion or successful/unsuccessful criteria for each phase of training (as appropriate) will be explicit and available in writing to students prior to course commencement.
17. Details of how a student will compensate for any period of interruption/ absence during each phase of the recognised course will be explicit and available in writing.

Recognition of CFR courses

In addition to general course rules these cardiac first response (CFR) course specific rules apply to an application for approval to deliver the CFR course and to make joint PHECC/recognised institution awards in CFR and CFR instructor. In this edition, there is only one standard of CFR; this differs from the 2007 edition of CFR when there was two distinct levels responder and practitioner.

18. There is no minimum age for entry to a CFR course; however, an individual will be mature enough to comprehend the knowledge, skills and implications associated with defibrillation and have a maturity to complete assessment to receive certification.
19. The CFR Instructor student ratio is recommended as 1:6/8. The ratio of 1 manikin per 3/4 course participants is recommended. Note the 2011 CFR DVD will accommodate 1:6 (instructor student) and 1:3 (manikin student) ratios. The DVD will run x 2/3 loops for practice and test stations; additional course participants will therefore extend the overall course duration.
20. Certification in CFR lapses after two years. The full CFR course must be repeated in order to achieve new certification in CFR.
21. Award of joint PHECC/recognised institution CFR cards/certificates to successful course participants by the recognised institution is mandatory.
22. In order to maintain a readiness to perform CPR and AED interventions effectively, the standard interval accepted for CFR *refresher training* is one year after the initial certification. However, as the retention of skills in CPR and use of the AED are known to rapidly diminish, it is recommended that CFR refresher training occurs as frequently as possible. A CFR certificate remains valid for 2 years even if a person has not undertaken refresher training.
23. CFR refresher training is not standardised and there is no requirement for it to be led by a CFR Instructor, however, it can take the form of a practical skill session and may include a review of the following:
 - indications for AED use and safety measures
 - indications for aspirin administration
 - learning points arising from the group's experiences of CPR and AED use, aspirin administration and CFR's interaction with patients; and
 - a scenario-based assessment of an unresponsive simulated patient and delivery of one shock.

Who teaches CFR courses?

24. The core faculty requirement for a CFR course is a CFR Instructor.
25. The course director requirement for a CFR course is a CFR Instructor.

CFR instructor standard

26. The pre-requisite for entry on the first CFR Instructor course is that an individual is certified in CFR.
27. An occupational first aid (OFA) course delivered after the 1st June 2008 incorporates PHECC's CFR course; no PHECC CFR card/certificates will be issued. A recognised institution may accept an OFA Certificate awarded after the 1st June 2008 as meeting the pre-requisite criterion of CFR certificate for entry to a CFR instructor course.
28. A recognised institution may include the full or elements of the CFR course at the beginning of the CFR Instructor course to ensure that participants have proficient skills and knowledge in CFR.
29. The recommended minimum age for entry to a CFR instructor course is 18.
30. The recommended ratio of CFR instructor trainers to students is 1:6/8 with and manikin to student ratio of 1:4.
31. Following attendance and successful completion of the 2-day CFR instructor course every student must undergo a period of teaching practice and evaluation.
32. CFR teaching practice will be to observe on one CFR course, assist an instructor on a second and be evaluated on a third by a CFR instructor trainer (or equivalent). This period of teaching and evaluation will be carried out by a recognised institution.
33. The CFR instructor evaluation will be carried out using a standard CFR instructor evaluation form designed by the recognised institution for the purpose. These forms are subject to inspection by PHECC.
34. Persons who successfully complete the CFR instructor course including CFR instructor evaluation will be certified as a CFR instructor.
35. It is no longer necessary for CFR instructors to maintain certification as a CFR provider.
Note this differs from the previous edition of Council rules.
36. CFR Instructor certification is valid for 2 years. It is the responsibility of every CFR instructor to recertify before their certificate lapses. The recognised institution may allow a short grace period but will be restricted to extenuating circumstances and considered on a case by case basis.

37. It is expected that CFR instructors who are faculty members will renew their instructor certificate with their recognised institution. Such faculty members will have to demonstrate the following to the satisfaction of the recognised institution.
- a) Evidence of a balance of CFR/OFA/IHF course delivery; a minimum 4 courses in the preceding 2 years,
 - b) CFR provider skills,
 - c) CFR instructor skills and
 - d) Have completed any update sessions if applicable following new ILCOR guidelines or new CPGs relevant at CFR level.
38. Council acknowledges that sole traders will have to attend a CFR instructor renewal course at a recognised institution. Such courses should be designed according to the identification of training needs (ITN) of the individuals. But in general, course participants will have to demonstrate the following to the satisfaction of the recognised institution.
- a) Evidence of a balance of CFR/OFA/IHF course delivery; a minimum 4 courses in the preceding 2 years,
 - b) CFR provider skills,
 - c) CFR instructor skills and
 - d) Have completed any update sessions if applicable following new ILCOR guidelines or new CPGs relevant at CFR level.
39. Evaluation of CFR provider and instructor skills for CFR instructors will be undertaken by a CFR instructor trainer or equivalent at a recognised institution using their standard CFR provider and Instructor evaluation form.
40. Award of joint PHECC/recognised institution CFR instructor cards/certificates by the recognised institution is mandatory.

Who teaches CFR instructor courses?

41. Faculty required to teach and renew CFR instructors are assistant tutors/tutors or suitably qualified faculty having demonstrated to the recognised institution appropriate education and experience.
42. There is no PHECC award for such individuals known as CFR instructor trainers. The recognised institution must designate and maintain a record of CFR instructor trainers including evidence of appropriate education and experience. All faculty lists are subject to inspection by PHECC.
43. CFR instructor trainers must maintain certification in CFR at instructor level.
44. CFR instructor trainers are also required to demonstrate by employment or association an ability to keep current with best practice including ILCOR guidelines and PHECC CPGs.

Recognition of EC + “SC” courses

<< work in progress>> will include who teaches EC +SC courses

Recognition of EFR courses

In addition to general course rules these emergency first response (EFR) course specific rules apply to an application for approval to deliver the EFR course and to make joint PHECC/recognised institution awards in EFR and EFR instructor.

45. The recommended age for entry to an EFR course is 18.
46. Successful completion of a CFR course within one calendar year of commencing the EFR course is a pre-requisite entry criterion.
47. The ratio on an EFR course must not exceed 6/8 students per instructor in a syndicate (or practical skills sessions).
48. An Occupational First Aid (OFA) course delivered after the 1st June 2008 incorporates the PHECC CFR provider course; no CFR card/certificates will be issued. A recognised institution may accept an OFA Certificate awarded after the 1st June 2008 as meeting the pre-requisite criterion of CFR provider certificate for entry to an EFR course.
49. Recertification in EFR is required every 3 years. In addition, it is also necessary to keep certification in CFR.
50. An EFR provider must recertify over 2 days/12 hours. EFR recertification should be designed according to the identification of training needs (ITN) of the individuals. Nonetheless, recertification should include:
 - Verification of CFR certification
 - Skills practice and a scenario based skills assessment
 - Provision of clinical updates as necessary i.e. PHECC CPGs at EFR level.
 - EFR theory exam.
51. Award of joint PHECC/recognised institution EFR provider cards/certificates by the recognised institution to successful course participants is mandatory.

Who teaches EFR courses?

52. The core faculty requirement for an EFR course is an EFR instructor.
53. The course director requirement for an EFR course is an EFR instructor.
54. Faculty on EFR courses include visiting subject experts approved and monitored by the EFR course director and may include
 - Assistant tutors and tutors
 - Registered EMTs, paramedics, advanced paramedics, nurses, midwives and doctors
 - CFR instructors
 - Others.

55. Assistant tutors/tutors (also educators and facilitators) are concurrently permitted to teach EFR courses. There is no requirement for EFR instructor certification at this level.

EFR Instructor Standard

56. Access to an EFR instructor course is restricted to PHECC registered practitioners EMTs, paramedics and advanced paramedics. Furthermore, award of EFR instructor cards/certificates as per the recognised institution's recognition of prior learning policy is restricted to PHECC registered practitioners.

57. There is no requirement therefore, for an EFR instructor to certify or recertify as an EFR provider while currency on the PHECC register is maintained.

58. The pre-requisite for entry on the EFR instructor courses is certification at CFR instructor level. This CFR instructor certification must be maintained.

59. PHECC registrants who successfully complete the EFR Instructor 3-day course and assessment may be certified as an EFR instructor by a recognised institution.

60. EFR instructor certification is valid for 3 years.

61. Recertification for EFR instructors should be designed according to the identification of training needs (ITN) of the individuals and should include:

- i. Verification of current PHECC registration
- ii. Verification of evidence of EFR course delivery (minimum 4 courses in preceding 2 years) or equivalent course delivery
- iii. Verification of current CFR instructor certification
- iv. Provision of clinical updates necessary i.e. PHECC CPGs relevant at EFR level
- v. Scenario based skills assessment.

62. Award of joint PHECC/recognised institution EFR instructor cards/certificates by the recognised institution is mandatory.

Who teaches EFR instructor courses?

63. Faculty required to train and recertify EFR instructors are assistant tutors/tutors or suitably qualified faculty having demonstrated to the recognised institution appropriate education and experience.
64. There is no PHECC award for such individuals known as EFR instructor trainers. The recognised institution must designate and maintain a record of EFR instructor trainers including evidence of appropriate education and experience. All faculty lists are subject to inspection by PHECC.
65. EFR instructor trainers are required to demonstrate by employment or association an ability to keep current with best practice including ILCOR guidelines and PHECC CPGs.

Recognition of EMS Control courses

In addition to general course rules these EMS Control course specific rules apply to an application for approval to deliver the EMS Control course and make joint PHECC/recognised institution awards in EMS Control at 3 levels of call taker, dispatcher and Instructor.

66. The recommended age for entry to an EMS Control course is 17/18.
67. New entrants to the EMS Control course(s) will have at least leaving certificate or equivalent.
68. A degree of competence in computer/keyboard & mouse skills is a pre-requisite entry criterion to the EMS Control course. The recognised institution can determine the required standard and assess applicants' competence during the application process accordingly.
69. Manual handling and visual display unit/display screen equipment training courses will be completed as co-requisites to the EMS Control courses.
70. The CFR course is to be completed as co-requisite to the EMS Control course.
71. A recognised institution's recognition of prior learning (RPL) policy must express the intent to permit existing Control personnel apply for RPL. Written procedures must unambiguously support policy; while informing and enabling RPL to take place.
72. Acknowledging the variety of training in Control provided in Ireland to date, 3 possible outcomes routes of RPL are recognised by Council for existing Control personnel:
 - a) No additional training (Upskilling) required and individuals are eligible for award of the joint PHECC/recognised institution certificate at the appropriate level (call taker and/or dispatcher).
 - b) Additional training (Upskilling) is required prior to the award of the joint PHECC/recognised institution certificate at the appropriate level (call taker and/or dispatcher).
 - c) Additional training (Upskilling) plus assessment is required prior to the award of the joint PHECC/recognised institution certificate at the appropriate level (call taker and/or dispatcher).
73. There are 2 distinct awards at EMS Control call taker and dispatcher levels, and Council acknowledges that some individuals may be eligible for both.
74. Maintaining and updating EMS Control competencies will be 2 days every 2 years. This recertification is in addition to CFR certification requirements.
75. Award of joint PHECC/recognised institution EMS Control call taker and or dispatcher cards/certificates by the recognised institution is mandatory.

Supervised work placements

76. An applicant institution must submit a list of all supervised work placements for EMS Control students for approval. For every location submitted the following is required:
- a) Details of formal agreements in place to secure high quality learning experience. Acceptable evidence is letters of agreement.
 - b) A comprehensive set of learning outcomes must be prepared and submitted for approval. The learning outcomes should be appropriate and specific to the learning environment and must be role specific.
 - c) Evidence of adequate EMS Control supervisors for every site. The role of the site supervisor is to assist with the creation of suitable learning environments to assist the student achieve experience and competence in EMS Control.
 - d) Evidence of a mentorship programme and trained mentors on site.
77. Mentoring² of EMS Control students is paramount and must be undertaken by other qualified EMS Control personnel. Mentors will have completed mentorship training to enable them to assist, support and guide others.
78. During the work placements a new entrant EMS Control student must work alongside a qualified member of Control staff.
79. Oversight from members of the recognised institution faculty is also required during placements. Their role is to monitor and quality assure the placements while providing additional educational support and mentorship.
80. It is recommended that 2 days of the period of supervised work placements of the call taker course are dedicated to suitable off-site learning environments for observer experience.
81. It is recommended that 4 days of the period of supervised work placements of the dispatcher course are dedicated to suitable off-site learning environments for observer experience.
82. Off site learning environments for observer experience may include: emergency or non emergency ambulance, Garda Control, Fire Control, Coast Guard Co-ordination centre, and others.

² Mentoring is defined by PHECC as the formal passing on or transfer of knowledge, skills and expertise through appropriate goals, objectives and activities from mentor to mentee.

Who teaches EMS Control courses?

83. The core faculty requirement for an EMS Control course is an EMS Control instructor (call taker and/or dispatcher levels).
84. The course director requirement for an EMS Control course at call taker and/or dispatcher levels is an EMS Control instructor (call taker and/or dispatcher level as relevant).
85. Faculty on EMS Control courses include visiting subject experts approved and monitored by the course director and may include:
 - Assistant tutors and tutors (with relevant EMS Control experience and expertise)
 - Registered EMTs, paramedics, advanced paramedics, nurses and doctors
 - CFR instructors
 - Others.
86. Acknowledging the variety of training and qualifications in Control provided in Ireland to date, Council recommends that recognition of prior learning is extended to existing eligible Control instructors.
87. A person eligible for consideration for the EMS-Control instructor award will be a holder of the joint PHECC/recognised institution award in EMS Control call taker and/or dispatcher and has also completed an instructional methods (IM) course of at least 2 weeks in duration.
88. The IM course will be analogous to that for the assistant tutor course.
89. There are 2 distinct awards at EMS Control instructor; call taker and dispatcher levels, and it is acknowledged that some individuals may be eligible for both.
90. Award of joint PHECC/recognised institution cards/certificates for EMS Control instructor at call taker and/or dispatcher levels by the recognised institution is mandatory.

Recognition of NQEMT courses

In addition to general course rules these NQEMT specific rules apply to an application for approval to provide National qualification in emergency medical technology (NQEMT) courses leading to award of NQEMT EMT, paramedic and advanced paramedic. The NQEMT awards are required for registration with PHECC. These academic awards ensures that the practitioner has fulfilled the educational and training requirements as prescribed by PHECC, thereby, possessing the knowledge, skills and attitudes in-line with the expectations of the public and the profession

91. The recognised institution will have an association/affiliation with an Irish tertiary medical or nursing school.
92. Details of the association/affiliation that exist will be made explicit and a joint working committee which includes representation from both institutions will operate and manage courses delivery.
93. Evidence of the association/affiliation such as a copy of the memorandum of understanding between the two institutions will be sought.
94. A medical advisor is required whose responsibilities are but should not be limited to:
 - a) Oversight of the medical education content of the courses on offer ensuring that the curriculum conforms to PHECC education and training standards and CPGs,
 - b) Active participation in the evaluation of courses,
 - c) Input in the recruitment and selection of faculty,
 - d) Attendance on PHECC's Medical Advisory Group on request.
95. The commencement of each NQEMT course will be notified to PHECC. This notification will list the required faculty.
96. Access to library facilities available including remote access to on-line journals etc. computer and internet facilities will be available to students and staff.

EMT

97. The core faculty requirement for an institution delivering an EMT course is 4 tutors including 1 educator and a medical advisor.
98. An assistant tutor shall act as the course director responsible for the administration and management of EMT courses.
99. The recommended age for entry to an EMT course is **17/18**.
Successful completion of the CFR course is a pre or co-requisite of the EMT course.

Paramedic

100. The core faculty requirement for an institution delivering paramedic course is 4 full-time tutors including 1 educator, 1 facilitator and a medical advisor.
101. An educator shall act as the course director responsible for the administration and management of a paramedic course.
102. The recommended age for entry to a paramedic course is 17/~~18~~.
103. For the paramedic course persons at entry level should be educated to the leaving certificate standard (or equivalent). A leaving certificate from the established or vocational programme with a pass in at least six subjects is required. The leaving certificate applied programme is not acceptable. Equivalency, allows for entry by students with European and International qualifications.
104. Successful completion of the CFR course is a pre or co-requisite of the paramedic course.

Advanced paramedic

105. The core faculty requirement for an institution delivering an advanced paramedic course is 4 full-time tutors including 1 educator, 1 facilitator and a medical advisor.
106. An educator shall act as the course director responsible for the administration and management of an advanced paramedic course.
107. For entry to the advanced paramedic course it is recommended that persons are registered paramedics in Ireland or in their home member state for a period of 3 years.
108. For the advanced paramedic course persons at entry level should be educated to the leaving certificate standard (or equivalent). A leaving certificate from the established or vocational programme with a pass in at least six subjects is required. The leaving certificate applied programme is not acceptable. Equivalency, allows for entry by students with European and International qualifications.

Part III-NQEMT Internship

Undergraduate/postgraduate Internship

Council rules in Part III outline the standards for internships and is relevant for course applications at NQEMT level only. In this part Council standards for clinical supervision and mentorship, student support and the learning portfolio are outlined. The information supplied in Part III must satisfy Council that arrangements are in place to provide for a quality undergraduate/postgraduate internship. The term “intern” is used in this section to include individuals undertaking periods of NQEMT undergraduate and postgraduate internship unless specified otherwise. This section begins with an explanation to distinguish the undergraduate and postgraduate periods.

Undergraduate Internship

Undergraduate internship is a period of training that applies to student EMTs, paramedic and advanced paramedics who are known as undergraduate interns (UIs) during this period. The purpose of the undergraduate internship is to facilitate and empower interns to observe and acquire actual patient care experience. During this period the interns will integrate the theory and clinical skills learned during the theoretical instruction with the reality of patient care (incorporating the 24-hour cycle). It provides interns with opportunities to take observer and provide clinical care under direct supervision and receive feedback on their clinical practice.

Postgraduate Internship

Postgraduate internship is the final period of training that applies to paramedic and advanced paramedics who are known as postgraduate interns (PIs) during this period. The purpose of the one-year postgraduate internship is to facilitate a period of adaptation where the PIs will consolidate clinical knowledge and competence as pre-hospital emergency care practitioners. During the period the PI will participate in continuous competence assessment that will determine his/her suitability to have their name entered for full registration on the PHECC Register.

1. The applicant institution must submit a list of all undergraduate/postgraduate internship sites for approval. For every site submitted the following is required:
 - a) Details of formal agreements being in place to secure high-quality learning experiences for interns. Acceptable evidence is letters of agreement.
 - b) A comprehensive set of learning outcomes must be prepared and submitted for approval. The learning outcomes should be appropriate and specific to the learning environment and should facilitate applying clinical judgement. The practice of ticking boxes on a list of technical tasks should be avoided.
 - c) Evidence of adequate number of clinical supervisors for every site. The role of the clinical supervisor is to assist with the creation of suitable learning environments with opportunities for the achievement of competence in clinical practice.

Acceptable professional qualifications of clinical supervisors are: registered practitioners, assistant tutors, tutors, registered nurses/midwives and registered medical practitioners as appropriate.

- d) Evidence of a mentoring programme and availability of mentors.
2. Mentoring³ of interns is paramount and must be undertaken by registered pre-hospital emergency care practitioners. Mentors will have completed mentorship training to enable them to assist, support and guide others.
 3. Council considers approval of undergraduate/postgraduate internship on a site-by-site basis. Approval is subject to evidence of anticipated (prospective) and actual (retrospective) exposure and role specification of the interns in the proposed workplace. This evidence must be included in the application for consideration.
 4. Council welcomes variation and options for undergraduate/postgraduate internship sites. This enables rotation of interns through multiple sites over the course of his/her Internship to ensure learning outcomes are achieved. In some instances this may necessitate a longer undergraduate/postgraduate internship period.
 5. Undergraduate/postgraduate internship sites may include emergency and non-emergency ambulance placements, acute hospital services (emergency department, maternity services, coronary and intensive care units, theatre, etc), fire and rescue services, primary care facilities, sporting and other events as appropriate.
 6. The recognised institution may at any time after initial application submit a list of any additional sites subject to the same conditions as above for approval.
 7. PHECC maintains a record of all undergraduate/postgraduate internship sites approved on initial application and any subsequent submissions.
 8. The course director will have ultimate responsibility for ensuring that interns are receiving adequate mentoring and clinical supervision during internship.
 9. Ongoing monitoring and review of chosen sites must be undertaken by the recognised institution. The monitoring should include an evaluation of the sites for adequacy of skill opportunities and clinical supervision for the interns. This evaluation must be reported on in the annual quality evaluation report submitted to PHECC as part of the continuous quality improvement framework.

³ Mentoring is defined by PHECC as the formal passing on or transfer of knowledge, skills and expertise through appropriate goals, objectives and activities from mentor to mentee.

The Learning Portfolio

The learning portfolio is a tool to support practitioners commit to and engage in lifelong learning after qualification and registration has been achieved. Gathering evidence of patient experiences during internship is a critical factor of the learning process and must be facilitated by the recognised institution. Council requires that every intern will start using their learning portfolio during undergraduate internship and that they continue using it to maintain evidence of their continuing professional development/ competence assurance for PHECC registration.

10. The learning portfolio, which may include a log book, must be maintained by the intern with guidance from tutors and clinical supervisors during undergraduate/postgraduate internship to ensure that learning outcomes identified by the recognised institution are achieved.
11. Council accepts there will be variation in the types or formats of learning portfolios available, however the following core principles must be adhered to:
 - a) The learning outcomes for each component of the undergraduate/postgraduate internship are explicit.
 - b) The design used is either hardcopy or electronic and is user friendly and student centred.
 - c) The portfolio should record the knowledge applied to clinical cases and the rationale for actions.
 - d) The portfolio should allow for positive feedback and areas for improvement.
 - e) Requirements of patient privacy and confidentiality are fully complied with.
 - f) The learning portfolios will be available for inspection by PHECC.

Standards of Clinical Supervision

These standards of clinical supervision are applicable during undergraduate and postgraduate internship for all clinical placements ranging from in-hospital to community and ambulance service placements.

Emergency Technician

Undergraduate Internship -EMT

An EMT intern will work alongside other registered EMTs, paramedics or advanced paramedics on ambulance service placements and with a range of healthcare professional while on other clinical placements. EMT interns are not on the register during this period and their scope of practice is restricted to being a clinical observer.

Paramedic

Undergraduate paramedic internship

Paramedic undergraduate internship is divided into supernumerary and rostered periods. An intern's scope of practice is restricted during this period. Clinical supervision is provided by registered paramedics or advanced paramedics or other healthcare professional appropriate to the clinical placement site.

Postgraduate paramedic internship

The clinical supervision requirement during postgraduate internship is the support and oversight from the recognised institution's tutors. A paramedic postgraduate intern can provide clinical care in keeping with his scope of practice (paramedic CPGs) and in accordance with the approval status of the CPG organisation for which he is employed or volunteering. There are no restrictions on the intern's scope of practice during this period. Consequently, the postgraduate intern can provide clinical care and supervision while working alongside other paramedic undergraduate and postgraduate interns as well as EMTs.

Advanced paramedic (AP)

Undergraduate AP internship

The period of undergraduate internship in pre-hospital emergency care settings, for example in a rapid response vehicles or ambulances, is to be divided into three periods of

- i) **direct supervision**- provided by faculty on the AP course (an AP Tutor or a Medical Practitioner) who provide direct clinical supervision of the care provided in response to an incident.
- ii) **indirect supervision**- mobile phone or person support provided by faculty before and during every incident and case discussion occurring after each incident.
- iii) **remote supervision**- mobile phone or person support provided by faculty before and during every incident and one case discussion occurring at the end of a shift as a minimum.

Postgraduate AP internship

The clinical supervision requirement during postgraduate internship is the support and oversight from the recognised institution's tutors. An advanced paramedic postgraduate intern can provide clinical care in keeping with his scope of practice (AP CPG s) and in accordance with the approval status of the CPG organisation for which he is working or volunteering. Consequently, the postgraduate advanced paramedic intern can provide clinical care and supervision while working alongside other paramedic and advanced paramedic undergraduate and postgraduate interns as well as EMTs.

Continuous Competence Assessment – Postgraduate interns

During the year of internship, the recognised institution will carry out competency-based assessment for every postgraduate intern (paramedic and advanced paramedic). The purpose of the assessment is to ensure that the practitioner is equipped with the knowledge attitude and skills necessary to practise as a competent professional pre-hospital emergency care practitioner.

Continuous competence assessment entails an evaluation of interns in the 3 domains of

- I. Professional practice
- II. Organisation and management of care
- III. Professional development.

1. The recognised institution will recommend the names of paramedic and advanced paramedic postgraduate interns for full registration on the appropriate division on the PHECC register when they are fully satisfied with their clinical competence based on evidence from their learning portfolios and continuous competence assessment following the year-long postgraduate internship.
2. The one year period of internship can be extended for an individual who requires remediation and additional support during this period. Such an extension is subject to an application to the Registrar who can issue an extension to the intern licence.
3. The PHECC template for continuous competency assessment is outlined in full in [Appendix 4](#). Additional elements may be added by the recognised institution, however, the template must be returned completed (hardcopy or electronic) to PHECC for every intern.
4. The format of the assessments may include review of completed PCRs, review of the learning portfolios and ride alongs to observe practice. The schedule to be arranged by the recognised institution will be as follows:
 - 1) Initial assessment at 3-4 months or earlier at the request of the intern,
 - 2) Intermediate assessment at 7-8 months,
 - 3) Final assessment at 11- 12 months.
5. Postgraduate interns must co-operate fully with the continuous competency assessment in order to progress to full registration status with PHECC. During the year, interns are required to
 - 1) submit a series of case studies/case reviews to their recognised institution for assessment and feedback.
 - 2) develop and use the learning portfolio.
 - 3) participate in the competence assessment procedure auspiced by the recognised institution.

Appendices

Appendix 1	Matrix of Faculties.....
Appendix 2	Quality evaluation report (QER) Template.....
Appendix 3	Minimum duration of courses
Appendix 4	Continuous Competence Assessment Template.....

Appendix 1: Matrix of Faculties

Recognised Course	Core faculty requirements for an institution	Recognised Course Director	Possible other faculty and visiting subject experts
Advanced Paramedic (AP)	4 full-time tutors including 1 educator and 1 facilitator plus a medical advisor	educator	Tutors, educators, facilitators, assistant tutors as well as CFR and EFR instructor trainers CFR and EFR instructors Registered advanced paramedics, paramedics, EMTs, nurses, midwives, doctors and others
Paramedic (P)	4 full-time tutors including 1 educator and 1 facilitator plus a medical advisor	educator	As above
Emergency Medical Technician (EMT)	4 tutors including 1 educator plus a medical advisor	assistant tutor	As above
EMS Control (Call taker and dispatcher)	4 full-time tutors including 1 educator and 1 facilitator plus a medical advisor	EMS Control instructor	As above
Emergency Care (+ SC)	EC instructor	EC instructor	As above
EFR Provider	EFR instructor	EFR instructor	As above
EFR Instructor	tutor or assistant tutor or EFR instructor trainer	tutor or assistant tutor or EFR instructor trainer	As above
CFR Provider	CFR instructor	CFR instructor	As above
CFR Instructor	tutor or assistant tutor or CFR instructor trainer	tutor or assistant tutor or CFR instructor trainer	As above
Driving (emergency and non-emergency)	Driving instructor	Driving instructor	N/A

Appendix 2- The QER Template

The Quality Evaluation Report (QER)

Recognised Institution (RI): Insert name
Recognised Course(s): List

Date of self evaluation: Insert date
Assessor(s): List name(s) and Title(s)

Summary: Briefly describe how the self evaluation was carried out and what sources of information were used

1.0	Mechanism for Quality Improvement
Questions and Recognised Institution's (RI) response or comments:	
1.1	<p>What mechanism is there in place, or in development, to address quality improvement and other PHECC recognition issues as they arise? E.g. quality improvement plans (QIPs)</p> <hr/> <p>Insert response or comment here</p>
1.2	<p>What action has the RI taken on issues/areas for improvement listed by PHECC in previous correspondence or noted by self on previous QIPs? (Answer only if applicable)</p> <hr/> <p>Insert response or comment here</p>
1.3	<p>What methods are used to evaluate recognised course(s)? What provision is made for student feedback? How are findings considered?</p> <hr/> <p>Insert response or comment here</p>
1.4	<p>Explain how lesson plans and associated materials are revised to ensure quality and accordance with the relevant PHECC standard of education and CPGs as appropriate?</p> <hr/> <p>Insert response or comment here</p>
1.5	<p>Outline how PHECC assessment requirements have been adhered to? (A response for every recognised course, as applicable, is required)</p> <hr/> <p>Insert response or comment here</p>
1.6	<p>Give an account of how PHECC instructors are maintaining certification as relevant? How are they keeping current with PHECC CPGs?</p> <hr/> <p>Insert response or comment here</p>
1.7	<p>Is there a clear recognition of prior learning policy and procedure for every recognised course?</p> <hr/> <p>Insert response or comment here</p>
Additional questions for NQEMT courses:	
1.8	<p>Outline how the course development policy is supported by written procedures to enable planning, organising and evaluation of NQEMT courses?</p> <hr/> <p>Insert response or comment here</p>
1.9	<p>Is monitoring of 10% of session delivery of every recognised course being achieved?</p> <hr/> <p>Insert response or comment here</p>
1.10	<p>Is there an active process to manage assistant tutor, tutor, educator and facilitator development including provision for practice rotation for maintaining PHECC registration?</p> <hr/> <p>Insert response or comment here</p>

1.0	Mechanism for Quality Improvement
Questions and Recognised Institution's (RI) response or comments:	
1.11	Are assistant tutors, tutors, educators and facilitators achieving post-qualification requirements? <hr/> Insert response or comment here
1.12	How are approved undergrad/Internship sites (healthcare sites, ambulance service and others) being monitored and how are issues resolved? <hr/> Insert response or comment here

2.0	Record Management System
Questions and Recognised Institution's response or comments:	
2.1	How are teaching faculty records maintained and updated? This applies to instructors and tutors as relevant. <hr/> Insert response or comment here
2.2	How are student assessment and certification records maintained? <hr/> Insert response or comment here
2.3	What mechanism is in place to notify PHECC (twice a year) regarding the number of certificates/cards awarded following successful completion of recognised courses? <hr/> Insert response or comment here
Additional questions for NQEMT courses	
2.4	<i>(Applicable for Paramedic and Advanced Paramedic courses only)</i> Give an account of how students' progress records are maintained throughout an NQEMT course. <hr/> Insert response or comment here

3.0 Student Support	
Questions and Recognised Institution's response or comments:	
3.1	Are prospective students adequately informed about recognised courses prior to starting? _____
	Insert response or comment here
3.2	Are entry criteria for recognised courses clear and available in writing? _____
	Insert response or comment here
3.3	What level of support is available for students during the course? _____
	Insert response or comment here
Additional questions for NQEMT courses	
3.4	Are students given written information regarding attendance requirements, continued progression and successful completion of the course(s)? _____
	Insert response or comment here
3.5	How are student-tutor tutorials being monitored and what remedial action is taken where needed? _____
	Insert response or comment here
3.6	What level of clinical support is available for students during undergraduate/postgraduate Internship? (healthcare sites, ambulance service and others). _____
	Insert response or comment here
3.7	What initial and ongoing support are students receiving to develop their learning portfolio? _____
	Insert response or comment here
3.8	<i>(Applicable for Paramedic and Advanced Paramedic courses only)</i> Outline how PHECC's competence assessment pro forma is being used and indicate if a copy is retained by the student in their learning portfolio? _____
	Insert response or comment here

Appendix 3- Minimum duration of courses

The responder level course durations are considered minimum and should be used as a guide. The recognised institution must be satisfied that the required learning outcomes have been achieved and that the students are adequately prepared for assessment and eligible for award of joint PHECC/recognised institution certification at the appropriate level. The times outlined here assume 6 hours per day or 30 hours per week.

Responder level courses

Driving	Minimum time required
Driving standard (Non-Emergency)	18 hours/3 days
Driving standard (Emergency)	90 hours/3 weeks

CFR	Minimum time required
Cardiac First Response	4 hours
Cardiac First Response (Instructor)	12 hours/2 days

EFR	Minimum time required
Emergency First Response (Provider)	30 hours/5 days
Emergency First Response (Instructor)	18 hours/3 days

EC	Minimum time required
Emergency Care + Special Circumstances (SC) (Provider)	?
Emergency Care + SC (Instructor)	?

EMS Control	Minimum time required
EMS Control (Call Taker)	120 hours/4 weeks didactic and 3 weeks supervised work placements
EMS Control (Dispatcher)	60 hours/2 weeks didactic and 3 weeks supervised work placements

Practitioner level Courses

The practitioner level course durations are considered minimum and should be used to guide. The recognised institution must be satisfied that the required learning outcomes have been achieved and that the students are adequately prepared for assessment and eligible for award of NQEMT at the appropriate level. The times outlined here assume 6 hours per day or 30 hours per week. Undergraduate/postgraduate internship is assumed to be 39 hours per week.

EMT	Minimum time required
Theoretical Instruction	120 hours/4 weeks
Internship	39 hours/1 week
Total	XXX
Driving	PHECC Standard

Paramedic	Minimum time required
Theoretical Instruction	300 hours/ 10 weeks
Undergraduate Internship – supernumerary	156 hours/4 weeks on an emergency ambulance
Undergraduate Internship – supernumerary	78 hours/2 weeks in acute healthcare services (hospital placements)
Undergraduate Internship	468/12 weeks in healthcare services (site specific to every Recognised Institution)
Internship	1 year (site specific to every recognised institution)
Total	XXX
Driving	PHECC Standard

Advanced Paramedic	Minimum time required
Distance learning	240 hours. Note that 12 hours per week implies 20 weeks, however there is no restriction on the period of self-directed distance learning.
Theoretical Instruction	180 hours/6 weeks
Undergraduate Internship – Supernumerary in acute healthcare services	234 hours/6 weeks

Undergraduate Internship – Rostered	
(i) Direct supervision	234 hours/6 weeks divided between (i) (ii) and (iii)
(ii) Indirect supervision	
(iii) Remote supervision	
Internship	1 year (site specific to every recognised institution)
Total	XXX

Appendix 4- Continuous Competence Assessment Template

All fields will be completed for paramedics and advanced paramedics unless otherwise stated.

Area of competence	Performance criteria	Initial assessment		Intermediate assessment		Final assessment	
		Progressing	Not Progressing	Progressing	Not Progressing	Competent	Not Competent
Professional practice	Upholds and maintains a duty of care to patients and the public						
	Seeks consent of patients						
	Maintains high standards of professional accountability						
	Has a responsible attitude to the importance of confidentiality						

Area of competence	Performance criteria	Initial assessment		Intermediate assessment		Final assessment	
		Progressing	Not Progressing	Progressing	Not Progressing	Competent	Not Competent
Organisation and management of care	Demonstrates the ability to work as a team member						
	Demonstrates the ability to co-ordinate care to optimise the quality of care available to patients						
	Determines the priorities for quality patient care based on needs assessment and transport decisions						
	Utilises the Clinical Practice Guidelines as the foundation for patient care						
	Demonstrates the ability to maintain accurate and current Patient Care Reports						
* For AP only	Demonstrates the ability to provide clinical leadership						

Area of competence	Performance criteria	Initial assessment		Intermediate assessment		Final assessment	
		Progressing	Not Progressing	Progressing	Not Progressing	Competent	Not Competent
Professional development	Contributes to the learning experiences of peers and colleagues through support and teaching						
	Avails of opportunities to increase own knowledge and skills						
	Has a positive attitude towards clinical direction and supervision						

Initial assessment	
Date:	Location
Remediation required	
Signed Tutor	Signed Intern

Intermediate assessment	
Date:	Location
Remediation required	
Signed Tutor	Signed Intern

Final assessment	
Date:	Location
Remediation required	
Signed Tutor	Signed Intern

PHECC's Teaching faculty framework for pre-hospital emergency care education and training

(Draft 1st Edition - **Date** 2010)

This *PHECC Teaching faculty framework* (**Insert date and Edition No.**) supersedes all previous Council rules outlined in the 2007 Education and Training Standards and any subsequent Council amendments and updates regarding PHECC instructors and tutors (previously known as the PHECC tutor framework).

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Background

PHECC is an independent statutory body with responsibility for standards, education and training in pre-hospital emergency care in Ireland. Its statutory functions relating to pre-hospital education and training are to:

- Set and review standards
- Recognise training institutions
- Approve courses
- Set examinations
- Certify successful candidates

In order to support and implement the PHECC Education & Training Standards, a structured framework for instructors and tutors is required. In this document the term instructor will be used to include cardiac first response, emergency care, emergency first response and EMS-Control instructors. Similarly the term tutor will be used to refer to tutors, assistant tutors, educators and facilitators. This framework builds substantially on the tutor framework published previously in the 2007 PHECC Education and Training Standards.

Rationale for the Teaching Faculty Framework

For pre-hospital education and training

This framework maps out a coherent approach to the qualification of instructors and tutors and also gives recognition to existing qualified instructors and tutors as well as providing information to those considering undertaking the PHECC teaching qualifications. Similarly, this teaching faculty framework will ensure consistency of faculty across all PHECC recognised institutions.

To maintain consistency and continuity of the PHECC standards, instructors and tutors must meet specific criteria that can be objectively measured and assessed. This framework identifies the competencies required for every level of instructor and tutor. Its implementation will set in place a dynamic, well-defined model to support the training requirements of PHECC instructor qualifications and the professional career development of tutors.

Routes to PHECC Instructor and Educational awards

The following table lists the titles of PHECC's instructor and educational awards.

PHECC instructor and educational award titles	
1.	Cardiac first response (CFR)instructor
2.	Emergency Care +“Special Circumstances” instructor
3.	Emergency first response (EFR) instructor
4.	EMS Control instructor
5.	Assistant tutor
6.	Tutor
7.	Educator
8.	Facilitator

Individuals wishing to become PHECC instructors or tutors have two options:

1. Undergo the training and certification requirements as per the individual instructor / tutor standards.
2. Apply to a recognised institution for recognition of prior learning and award.

Note: Recognised institutions are empowered by PHECC to independently award joint PHECC/ institution instructor awards. However, PHECC alone make educational awards at the level of assistant tutor, tutor, educator and facilitator to suitably qualified persons based on a recommendation made by facilitator on behalf of a recognised institution.

Roles and Responsibilities of PHECC Instructors

A cardiac first response (CFR) instructor has the necessary knowledge and skills to deliver a PHECC CFR course and to assess and award course participants.

An emergency care (EC) instructor has the necessary knowledge and skills to design, deliver and evaluate the PHECC EC course(s) and to assess and award course participants.

An emergency first response (EFR) instructor is a PHECC registered practitioner with the necessary knowledge and skills to design, deliver and evaluate the PHECC EFR course and to assess and award course participants.

An EMS-control instructor has the necessary knowledge and skills to design, deliver and evaluate the PHECC EMS-control (call taker & dispatcher) courses and to assess and award course participants.

Note: PHECC Instructor awards are jointly made by PHECC and a Recognised Institution

Roles and Responsibilities of PHECC Tutors (Educational awards)

An assistant tutor is recognised by PHECC as having the necessary knowledge and skills to assist with the delivery and evaluation of an NQEMT –EMT course; for which he can also act as course director. An assistant tutor may also contribute to the delivery of other NQEMT courses, responder level courses and in-service training such as current CPGs and other refresher training.

A tutor is recognised by PHECC as being the principle provider of education and training for all responder and NQEMT level courses. A tutor has the necessary knowledge and skills to design, deliver assess and evaluate all NQEMT courses and provide upskilling training for new editions of CPGs.

An educator is an experienced tutor with additional project management skills to act as a course director on paramedic and advanced paramedic courses. Their key role is supervision, assessment and mentoring of student assistant tutor and tutors while assisting in the quality improvement of all PHECC recognised courses.

A facilitator has at least 5 years experience as a tutor/educator. This key role involves ongoing education and development of assistant tutors, tutors and educators through their development and post-qualification periods. The facilitator will in addition ensure quality improvement is applied to all aspects of *PHECC's Teaching faculty framework* including verifying evidence of nominees for PHECC Educational awards.

Note: PHECC Educational awards are made by PHECC.

CFR instructor standard

<<Work in progress >>

EC instructor standard

<<Work in progress >>

EFR instructor standard

<<Work in progress >>

EMS-control instructor standard

<<Work in progress >>

Assistant tutor Standard

It is recommended that a practitioner has at least two years clinical experience on the PHECC Register prior to entering the teaching faculty framework at the level of assistant tutor.

The PHECC assistant tutor award is made to those who have acquired the body of knowledge, skills and attitudes of the assistant tutor standard whether by RPL or new-entrant training. A PHECC educational award certifies that an individual is competent in the learning outcomes from the academic course and the period(s) of supervised teaching practice. The assistant tutor award combines the learning outcomes of the instructional methods (IM) course incorporating the period of supervised teaching practice.

Instructional Methods course

A student Assistant Tutor at the end of the didactic component of an Instructional Methods (IM) course (recommended to be at least 60 hours/2 weeks) will be able to:

1. Incorporate the principles and conditions of learning into all teaching practice
 - Miller's 6 conditions of learning
 - Eurich's 5 principles of learning
 - Accommodating student/candidate learning styles
 - Apply adult education techniques appropriately
2. Use motivational techniques to enhance the learning process e.g.
 - Maslow's hierarchy of human needs
 - Herzberg's motivational hygiene theory
 - Vroom's expectancy theory
 - McGregor's theory X - Y
3. Identify the training and development needs of individuals and groups, set against required performance and competence standards
 - Defining training needs
 - Using Gilbert's formula
 - Identify where ITN information may be obtained
 - Measure performance deficiency
 - Recognise inaccuracies in ITN
 - Training needs assessment
 - Methods of overcoming performance deficiencies
 - Birkbeck's model of occupational psychology
4. Develop task analysis to focus the training/learning process using:-
 - Conceptual processes and mind maps
 - Hierarchical task analysis
 - Boydel charts
 - Rule sets
5. Design and plan training sessions:-
 - 5.1 Learning objectives
 - Writing learning objectives in the three domains of cognitive, psychomotor and affective (knowledge, skills and attitude)

- Each objective to specify performance, condition and standard
- Writing sub-objectives as enabling steps toward the overall competencies
- Recognising the common pitfalls in writing objectives

5.2 Lesson Planning

- Definition of a lesson plan
- Aims of the plan
- Writing a lesson plan that contains all the required information for session delivery
- Using the lesson plan during teaching practice

5.3 Pre-Course/Session Organisation

- Student/candidate informational requirements
- Tutor/instructor/other visiting subject expert considerations
- The training environment
- Equipment and resources
- Reference material
- Research issues
- Student/candidate welfare
- Documentation issues – test papers, tutorial records etc

5.4 Delivery of Training

- Application of motivational theories
- Application of educational theories
- Application of icebreaking techniques
- Presentation skills
- Teaching methodology (student v tutor centred)
- Strategies and tactics in teaching
- Appropriateness of different methods
- Student/candidate empathy issues
- Communication skills
- Mannerisms and potential distractions
- Groups and teams (dynamics and interaction)
- Managing learning difficulties
- Preparation and selection of teaching aids (audio-visual)
- Classroom skills
- Health and safety issues
- Preparation and use of equipment
- IT within the classroom environment
- Handouts and back-up material
- Timing
- The management of learning

5.5 Assessment and Evaluation

- Definition of assessment and evaluation
- Objective measurement of learning
- Types of assessment
- Preparation of assessments
- Analysing and interpretation of evidence
- Linking assessment with learning
- Validation requirements
- Feedback
- Types of tutorials

- Preparation and structure of tutorials
- Management of a student tutorial
- The four levels of evaluation and assessment
- PHECC's examination requirements
- Writing student reports
- Writing generic reports
- NQEMT examination process

Supervised teaching practice and assessment

Following successful completion of the IM course, the student assistant tutor will undergo <<8 weeks>> of supervised teaching practice and assessment.

Evidence of the satisfactory completion of the criteria 1-5 below is required. It is recommended that such evidence is retained by the student assistant tutors in their education portfolio.

1. The development experience must cover cognitive psychomotor and affective sessions on the course. Each session delivered is required to be critiqued by a qualified tutor using a standard observation template or similar developed by the recognised institution for this purpose.
2. During this period the student assistant tutor must also demonstrate management of a syndicate, planning and managing scenarios, setting assessments, conducting tutorials and writing student reports.
3. Each student assistant tutor will need to have cognisance of, and be able to, demonstrate competence in the subject matter of the NQEMT and responder level PHECC standards at and below the level at which they intend to tutor.
4. Assessment on teaching practice will be conducted by a qualified tutor and verified by an educator who is required to observe at least 10% of the student assistant tutor's teaching practice.
5. An application is prepared and submitted to PHECC from the head of a recognised institution (or a facilitator) and/or accompanied by a written recommendation from a facilitator that verifies the evidence that the student assistant tutor has achieved the learning outcomes and is competent.

Assistant tutor professional development requirements and recertification

<< work in progress >>

Tutor Standard

It is recommended that a practitioner has at least three years clinical experience on the PHECC Register prior to entering the teaching faculty framework at the level of tutor.

The PHECC tutor award is made to those who have acquired the body of knowledge, skills and attitudes of the tutor standard whether by RPL or new-entrant training. A PHECC educational award certifies that an individual is competent in the learning outcomes from the academic course and the period(s) of supervised teaching practice. The tutor award combines the learning outcomes of the tutor qualifying (TQ) course incorporating the period of supervised consolidation practice.

Tutor qualifying course

This additional training primarily reinforces and enhances the knowledge, skills and attitudes developed on the IM course (completed for an assistant tutor award) and the subsequent period of supervised teaching practice. It is recommended that the didactic component of the TQ course is at least 60 hours/ 2 weeks.

A number of key domains of competence for the role of tutor arise from the learning outcomes of the tutor qualifying course:

1. Identify the training needs (ITN) of the students using a range of techniques.
2. Design training to meet the needs identified using the three preparatory documents:
 - Concept/mind map
 - Task analysis and rule sets (where appropriate)
 - Lesson plans
3. Deliver training using appropriate methodology and interpersonal skills and using a range of teaching strategies and methodologies including
 - Lesson
 - Presentation
 - Discussion
 - Demonstration
 - Group work
 - Practical workshops
 - Scenarios
 - Research
 - Problem solving
4. Deliver training using each of the three objective domains
 - Cognitive (Knowledge) Sessions
 - Psychomotor (Skills) Sessions
 - Affective (Attitude) Sessions
5. Objectively assess and evaluate the learning of each student. Each student tutor will demonstrate competence in a range of methods and must demonstrate competence in design, management and objectivity of measuring and valuing learning.

Supervised consolidation practice and assessment

The student Tutor will undergo <<8 weeks>> of supervised consolidation practice and assessment.

Evidence of the satisfactory completion of the criteria 1-5 below is required. It is recommended that such evidence is retained by the student tutor in their education portfolio.

1. The development experience must cover cognitive psychomotor and affective sessions on the course. Each session delivered is required to be critiqued by a qualified tutor using a standard observation template or similar developed by the recognised institution for this purpose.
2. During this period the student tutor must also demonstrate management of a syndicate, planning and managing scenarios, setting assessments, conducting tutorials and writing student reports.
3. Each student tutor will need to have cognisance of, and be able to, demonstrate competence in the subject matter of the NQEMT and responder level PHECC standards at and below the level at which they intend to tutor.
4. An educator is required to assess the competence of every student tutor against the standards required to qualify for the PHECC tutor award. The domains of competence (listed in 1-5 above) are the basis of assessment.
5. An application is prepared and submitted to PHECC from the head of a recognised institution (or a facilitator) and/or accompanied by a written recommendation from a facilitator that verifies the evidence that the student tutor has achieved the learning outcomes and is competent.

Tutor professional development requirements and recertification

<< work in progress>>.

Educator Standard

The **PHECC educator award** is made to those who have acquired the body of knowledge, skills and attitudes of the educator standard whether by RPL or new-entrant training. A PHECC educational award certifies that an individual is competent in the learning outcomes from the academic course and the period(s) of supervised teaching practice. The educator award combines the learning outcomes of the educator course incorporating the period of supervised consolidation practice.

Educator course

This additional training primarily reinforces and enhances the knowledge, skills and attitudes developed in the tutor standard and the subsequent 2-year period (minimum) of teaching practice.

A student educator at the end of the didactic component of an educator course (recommended to be at least 60 hours/2 weeks) will be able to apply a number of management, educational and motivational theories to support pre-hospital emergency care education and training ensuring that both the quality and quantity of training is targeted appropriately and consistently. The educator course should include education on mentorship and coaching, reflective practice with an emphasis on team work.

A number of key domains of competence for the role of the Educator arise from the learning outcomes of the educator course:

1. **Develop the course sessions/presentations** ensuring it meets the criteria specified by PHECC for that particular recognised course.
2. **Manage course-critical equipment/material** to ensure appropriate availability during each of the learning situations.
3. **Evaluate all lesson plans** to ensure both quality and objectivity of teaching sessions.
4. **Develop reflective practice** with tutors/faculty to ensure consistency across the programme.
5. **Monitor (at least 10%) session delivery** to evaluate teaching delivery and consistency focused on prescribed learning outcomes.
6. **Oversee student-tutor tutorials** and instigate remedial action where required.
7. **Evaluate and quantify the course standards** through ongoing monitoring, feedback analysis and student/tutor critiques.
8. **Mentor and coach tutors** to maintain their motivation and professional development, and contribute to their performance review.
9. **Write the course report** at the end of courses and support tutors through the writing of student individual reports covering all areas of the training cycle.
10. **Identify legal requirements** relevant to the training process and manage each element to ensure compliance and minimal risk exists.
11. **Produce financial reports** relevant to agreed expenditure areas.
12. **Develop and maintain a constructive relationship** between the course and the PHECC office and contribute to the required reports for maintenance/monitoring such as the annual quality evaluation report (QER).
13. **Contribute to the monitoring of undergraduate/postgraduate internship sites** both healthcare and ambulance services as appropriate.
14. **Identify and complete administrative forms** specified by PHECC for each course.
15. **Develop project management techniques** to enable planning, organising, controlling and completion of an approved course.

Supervised consolidation practice and assessment

The student educator will undergo a period of supervised consolidation practice and assessment supported by a facilitator acting as a mentor. The student educator will assume the role of a course director during this period. The duration of this period should be based on every individual's ITN as determined by the facilitator.

Evidence of the satisfactory completion of the criteria 1-2 below is required. It is recommended that such evidence is retained in the student educator's education portfolio.

1. A facilitator is required to assess the competence of every student educator against the standards required to qualify for the PHECC educator award. The domains of competence (listed 1-15 above) are the basis of assessment.
2. An application is prepared and submitted to PHECC from the head of a recognised institution (or a Facilitator) and/or accompanied by a written recommendation from a facilitator that verifies the evidence that the student educator has achieved the learning outcomes and is competent.

Educator professional development requirements and recertification

<< work in progress >>

Facilitator Standard

The PHECC facilitator award is made to those who have acquired the body of knowledge, skills and attitudes of the facilitator standard whether by RPL or new entrant training. A PHECC educational award certifies that an individual is competent in the learning outcomes from the academic course and the period(s) of supervised teaching practice. The facilitator award combines the learning outcomes of the facilitator course plus the supervised consolidation practice period.

Facilitator course

This additional training primarily reinforces the process of facilitation in education. The pre-requisite entry criterion is to be an experienced tutor/educator with over 5 years teaching practice.

A student facilitator at the end of the didactic component of a facilitators course (recommended to be at least 2 weeks) will be able to apply a number of interpersonal, educational and motivational theories to support pre-hospital emergency care education and training for instructors and tutors in development, ensuring that both the quality and quantity of faculty training is targeted appropriately and consistently.

A Facilitator course should incorporate the following key domains:

1. Active, effective listening
2. Encourage open communication
3. Feedback skills
4. Recognition of students learning difficulties and identify options for resolutions to be found
5. Questioning (as opposed to telling) skills
 - asking questions that will lead to insight
 - asking open questions
 - asking provocative questions
 - using problems, questions, tools and other means to enhance learning
 - not providing all answers to the student.
6. Clarify experiences for additional insights
7. Create appropriate environments to promote learning
8. Developing and managing focused discussions
9. Adopting a non-judgmental approach
10. Listen for understanding and context
11. Maximise gaining of knowledge and skill in the time available
12. Observation skills
 - group dynamics
 - identifying patterns in group interaction
 - recognising group norms
 - identifying covert issues
 - organisation skills
 - recognising opportunities and actualities of learning.
13. Pacing skills – ability to change the level of the discussion at the appropriate time (from brainstorming to evaluation to decision to action planning, or from thinking to feeling)
14. Demonstrate various innovative presentation methods and skills
15. Demonstrate problem-solving processes and skills
16. Extract positive outcomes from difficult situations
17. Observe individuals and their interaction within groups and know when to become involved

18. Resume/restart and re-energise group activities
19. Steer the group in a positive direction
20. Summarisation skills (succinct, accurate, non-judgmental)
21. Manage the different strengths and weaknesses of students
22. Demonstrate objective report writing skills
23. Demonstrate cognitive and interpersonal skills in managing tutorials that add value to the learning process.
24. Demonstrate skills in both mentoring and coaching candidates
25. Demonstrate qualitative and quantitative methods of research.

Supervised consolidation practice and assessment

The student facilitator will undergo a period of supervised consolidation practice and assessment. The requisite genres of course the student facilitator will deliver are IM courses, tutor qualifying courses or equivalent and supported by a facilitator acting as a mentor. The duration of this period should be based on every individual's ITN as determined by the qualified facilitator.

Evidence of the satisfactory completion of the criteria 1-4 below is required. It is recommended that such evidence is retained in the student facilitator's education portfolio.

1. A Facilitator is required to assess the competence of every student facilitator against the standards required to qualify for the PHECC facilitator award. The domains of competence (listed 1-25 above) are the basis of assessment for the facilitator assessment.
2. Student facilitators will also have to demonstrate having the correct aptitude to develop students using appropriate facilitation techniques.
3. Each student facilitator will need to have cognisance of, and be able to, demonstrate competence in all areas of the training cycle at a level appropriate to teach each of the instructor and tutor/educator subject areas.
4. The student facilitator will be required to complete a thesis on an educational theme (minimum 5000 word count).
5. An application is prepared and submitted to PHECC from the head of a recognised institution (or a facilitator) and/or accompanied by a written recommendation from a facilitator that verifies the evidence that the student facilitator has achieved the learning outcomes and is competent.

Facilitator professional development requirements and recertification

<< work in progress

Recognition of prior learning for pre-hospital emergency care education and training – A guide

(Draft 1st Edition - **Date** 2010)

This recognition of prior learning guide (**Insert date and Edition No.**) supersedes all previous Council rules outlined in the 2007 Education and Training Standards and any subsequent Council amendments and updates regarding RPL.

Recognition of Prior Learning - a definition

Recognition of prior learning (RPL) is a broad term and is described by PHECC as *prior learning, formal and informal, that is given status by having it acknowledged, assessed or certified*. The objective of RPL is to determine whether or not an individual has acquired the body of knowledge in respect of entry criteria and outcomes/competencies to be achieved when compared to a particular PHECC education and training standard.

Recognition of Prior Learning - guiding principles

These principles will guide and empower PHECC recognised institutions extend the recognition of prior learning (RPL) process to suitable individuals; and likewise these principles will assist individuals understand how the process of RPL works and the circumstances when it may be used.

1. In general RPL is applied for:
 - Entry to PHECC recognised courses
 - Exemptions from some course requirements
 - Eligibility for an award
2. The process of RPL is an acknowledgment of an individual's current skills and knowledge acquired through previous education and training, work or life experience. It allows for both formal and informal learning.
3. Every recognised institution will have an RPL policy. The policy should outline the commitment to the RPL process and bring consistency and clarity.
4. Supporting procedures for RPL should be clearly documented. The policies and processes should be available to current and prospective students and include assessment and verification mechanisms as appropriate.
5. A recognised institution may offer RPL for entry to courses, for module exemptions or in certain circumstances for full award; however specific Institutional conditions, limitations and application procedures will apply. The recognised institution should be contacted in the first instance for the particulars required.
6. In all cases, whether certified or experiential learning, an applicant will be required to appropriately demonstrate any previous learning.
7. In some cases, an applicant may be required to provide copies of certificates or demonstrate learning by another means, learning portfolios, interview, assessment and demonstration etc.
8. All individual applications should be reviewed and examined by suitably qualified persons with expertise in the subject area as well as knowledge and expertise in RPL policy and procedures.
9. PHECC accepts applications for RPL only in the following cases:
 - a. Recognition of equivalence in professional qualifications obtained inside Ireland from RGNs or other healthcare professionals. Possible outcomes are

Cardiac First Response

Education and Training Standard
(Draft V1 Date 2010)

Summary of work in progress

The current CFR Standard of Education and Training (2007) has undergone significant review from an educational perspective; the individual modules have been reorganised to include domain specific learning outcomes.

The aim of this content review, leading to the next edition (2011), is to revise and amend the content specifically to meet the emerging needs of laypersons and volunteers in the community with healthcare professional's pre-hospital and in-hospital that require training in basic life support and AED use. The next ILCOR guidelines are due in October (2010) and this draft will be subsequently revised to incorporate the recommendations. This next 2011 CFR standard will outline in full the expected competency of the student upon completion of a PHECC recognised course.

In parallel with the new CFR standard, PHECC will redesign its training materials to support the changes. A student handbook and instructor handbook and DVD is proposed to support a "practice while watching" course format.

List of changes made to date:

1. Removed the following Knowledge objectives: - List 4 life threatening emergencies, Definitions of the life threatening emergencies, list main components of AED, describe the actions to take when "no shock advised" x2, trouble shooting AED problems, functions of a barrier device.
2. Added new: FAST assessment, RED card, CFR Report and Child AED and Patient confidentiality.
3. Changed from knowledge to attitudinal objectives; To function effectively with members of healthcare team (value the contribution of others...), insurance and liability and legal implications and role of CIS management.
4. Terminology changes: FBAO to Choking, pre-hospital care continuum to healthcare team.
5. Changed emphasis on infection control from standard precautions to hand hygiene and barrier devices.
6. Removed practitioner level entirely.

Contents

Role and responsibility of the Cardiac First Responder

Learning Outcomes

Module 1: Basic Emergency Care

Module 2: Accessing and Use of an Automated External Defibrillator

Module 3: Safety and Communication

Role and responsibility of the Cardiac First Responder

A cardiac first responder (CFR) is a person trained in cardiopulmonary resuscitation and in the use of an automated external defibrillator (AED) and who can respond to someone who has suddenly collapsed. A cardiac first responder plays a critical role in keeping a person alive until the commencement of expert medical care.

A Cardiac First Responder may be part of the emergency medical services, a healthcare practitioner or a member of the public who has undertaken a Pre-Hospital Emergency Care Council (PHECC) recognised course within the last 2 years.

It includes citizens and trained members of Volunteer Organisations and Emergency Agencies such as An Garda Síochána and the Fire Services etc who may be dispatched or come across the following emergencies: cardiac arrest, heart attack, choking and stroke. The care management includes, FAST assessment, cardiopulmonary resuscitation (CPR) for adults, children and infants, AED use (adult and child) and Aspirin administration.

Successful completion of the CFR Standard and assessment leads to the award of the joint recognised institution and PHECC award at CFR. This award ensures that the responder has fulfilled the educational and training requirements as prescribed by PHECC, thereby possessing the knowledge, skills and professionalism in line with the expectations of the public and the profession. The CFR is required to ensure their ongoing competency by participation in annual refresher training and certification every two years.

Learning Outcomes for Cardiac First Response Standard

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

1. **Recognise** the signs of a life threatening emergency
2. **Respond** in an effective, safe and appropriate manner, to a life threatening emergency, utilising basic life support skills
3. **Retrieve** and appropriately use, if required, an automated external defibrillator during a cardiac arrest
4. **Report and Record** their actions and interventions appropriately and handover to emergency medical services

Framework for Cardiac First Response Standard	
Learning outcome	Module
Recognise the signs of a life threatening emergency	Basic Emergency Care
Respond in an effective, safe and appropriate manner, to a life threatening emergency, utilising basic life support skills	
Retrieve and appropriately use, if required, an automated external defibrillator during a cardiac arrest	Accessing and Use of an Automated External Defibrillator
Report and Record their actions and interventions appropriately and handover to emergency medical services	Safety and Communication

The learning objectives in the standard refer to adults, children and infants unless stated otherwise. The standard of care management for patients with cardiac chest pain, cardiac arrest, stroke and choking is outlined in the PHECC Clinical Practice Guidelines (CPGs). The CPGs may be accessed from the website of the PHECC www.phecc.ie

Module 1: Basic Emergency Care

On completion of Module 1 the student will be able to recognise the signs of a life threatening emergency and can initiate basic life support (A, B, C) to the person who suddenly collapses or is choking. The student will also learn to administer Aspirin in accordance with the appropriate PHECC CPGs.

Knowledge Objectives

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

1. State the importance of early cardiopulmonary resuscitation (CPR) and defibrillation
2. List the obvious signs of death and when resuscitation is not indicated.
3. List the signs of heart attack, stroke, cardiac arrest and choking
4. List the steps in a FAST assessment (Face, Arms, Speech & Time assessment)
5. List the steps in one-rescuer CPR
6. List the steps in the management of a choking patient who is responsive and then becomes unresponsive
7. List the steps to be taken prior to Aspirin (acetylsalicylic acid) 300 mg tablet administration for cardiac chest pain as per the PHECC Clinical Practice Guideline

Attitudinal Objectives

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

1. Demonstrate a caring attitude toward the patient, patient's family or bystanders

Skills Objectives

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

1. Assess responsiveness
2. Demonstrate airway assessment
3. Demonstrate an open airway using the head-tilt chin-lift technique
4. Demonstrate how to look, listen and feel for normal breathing
5. Demonstrate rescue breathing using mouth-to-mouth (using face shields), mouth-to-nose (infants only) and mouth-to-mask (pocket mask with disposable valves) techniques
6. Perform one-rescuer CPR
8. Demonstrate the care management for a responsive choking patient who becomes unresponsive
7. Demonstrate the recovery position
8. Demonstrate the administration of Aspirin (acetylsalicylic acid) 300 mg tablet for a patient suspected of having cardiac chest pain

Module 2: Accessing and Use of an Automated External Defibrillator

On completion of Module 2 the student will be able to use an Automated External Defibrillator (AED) without delay in accordance with the appropriate PHECC CPGs.

Knowledge Objectives

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

1. Outline the functions of an Automated External Defibrillator (AED)
2. Describe when to use an AED
3. Describe the steps of AED operation (adult and child)
4. List the safety precautions for using an AED

Attitudinal Objectives

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

1. Demonstrate an awareness of the importance of AED retrieval

Skills Objectives

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

1. Demonstrate defibrillation with an AED (adult and child) with minimal delay and interruption in CPR

Module 3: Safety and Communication

On completion of Module 3 the student will be able to activate the Emergency Medical Services and communicate efficiently with other healthcare professionals in the continuum of care for the patient.

Knowledge Objectives

At the completion of this module, the student will be able to

1. Describe the links in the chain of survival
2. State the importance of calling 112/ 999
3. Explain how using a RED Card (Request Emergency Dispatch Card) can enhance communication
4. List the elements of scene safety
5. State the benefits of an explicit handover, including documentation as appropriate, between Responders and healthcare professionals
6. Outline the role of the Cardiac First Response Report (CFRR) and the benefits of collecting information for the out of hospital cardiac arrest register (OHCAR)
7. Explain the term patient confidentiality and how it impacts emergency medical care

Attitudinal objectives

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

1. Value the contribution and role of the healthcare team emphasising the integration of Cardiac First Responders, Ambulance Services, Primary Care and acute hospital services in the chain of survival
2. Demonstrate an awareness of the ¹legal implications for those who attempt to provide pre-hospital emergency care.
3. Demonstrate an awareness of the issues regarding ²insurance and liability for those who attempt to provide pre-hospital emergency care
4. Demonstrate an awareness of the basic principles of infection prevention and control (e.g. hand hygiene and barrier device use)
5. Identify with the role of critical incident stress management
6. Provide emergency medical care accepting wholly the concepts of patient confidentiality

¹ The position paper prepared for PHECC summarising the principal issues in respect of the civil liability of those providing pre-hospital. Craven, C., Legal Opinion, July 2003; Available from the website www.phecc.ie.

² The Cardiac First Responder Guide; A guide to the development of Community Cardiac First Response Programmes. [Chapter 3 Insurance and liability] March 2008; Available from the website www.phecc.ie

Skills objectives

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

1. Assess for scene safety
2. Call 112/999 using a RED Card
3. Complete a CFRR

Emergency First Response

Education and Training Standard
(Draft V1 Date 2010)

Summary of work in progress

The current EFR Standard of Education and Training (2007) has undergone significant review from an educational perspective; the individual modules have been reorganised to include domain specific learning outcomes.

The aim of this content review, leading to the next edition (2011), is to revise and amend the content of the EFR Standard specifically to meet the emerging needs of volunteers in the community with auxiliary services providing pre-hospital emergency care (volunteers and employees). The next EFR Education and Training Standard will outline in full the expected competency of the student upon completion of a PHECC recognised course.

List of changes made to date:

1. Terminology changes: Module titles -Management of airway and breathing to *Airway and Ventilation*, Baseline vitals and SAMPLE history and Patient Assessment to *Primary and Secondary survey*; Infant and children to *Paediatrics*; Information management and PHECC clinical Handbook to *Information Management*. Terms - CVA to stroke breathing difficulty to inadequate respirations.
2. Moved epistaxis back into general medical emergencies
3. Added per CPG 3rd Edition: Wallace rule of 9s, BVM (2 -person), DCI and submersion and paed burns, obtaining consent. Also:
 - APO = Log roll, move using canvas sheet, move with orthopaedic stretcher, splint lower limb, secure and move with extrication device.
 - SA = move and secure on long board, rapid extrication. Added post resuscitation care (**problem with vitals**)
 - **Needs agreement on Pulse oximetry** (secondary survey)
4. Note in general emergencies, there are gaps in CPGs (*Pain, epistaxis* allergies and anaphylaxis, poisons/overdose, heat exposure bleeding, hypovolaemic shock, soft tissue injury (except burns) In Paeds: Pyrexia and seizures.
5. Needs in general discussion on the scope of practice of EFR for the following sections:
 - General medical emergencies
 - Bleeding shock, and soft tissue injuries
 - Musculoskeletal, head and spinal injuries
 - Paeds. **Note** there will be implications for CPG development following this exercise.

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Role and Responsibility of an Emergency First Responder

An Emergency First Responder (EFR) is a person trained in Cardiac First Response that possesses additional knowledge and skills in the assessment and management of patients in a pre-hospital environment. An EFR may be part of the emergency medical services, a healthcare practitioner or a member of the public who has undertaken a recognised EFR course.

In addition to basic life cardiopulmonary resuscitation and automated external defibrillation skills, the emergency first responder possesses defined skills in the further management of airway and breathing in the pre-hospital patient. The EFR is able to assess and manage (to a defined standard) common medical emergencies and trauma, including common paediatric emergencies and in providing assistance during labour childbirth. The EFR possesses appropriate knowledge and skills in the administration of certain prescribed medication. Emergency first responders are skilled in assisting with the movement of patients and can practice key rescue skills under special authorisation according to CPGs. Finally the EFR has basic training in relevant medico-legal issues and in adopting a professional approach to interacting with patients and other emergency medical services in the pre-hospital setting.

Successful completion of the EFR standard and assessment leads to the award of the joint recognised institution and PHECC award at EFR level. This award ensures that the EFR has fulfilled the educational and training requirements as prescribed by PHECC, thereby possessing the knowledge, skills and professionalism in line with the expectations of the public and the profession.

Emergency first responders must also be committed to the process of **continuous professional development and renewal** and will be required to maintain their skill levels in both CFR and EFR at defined time intervals.

Learning Outcomes for the EFR Standard

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

1. **Recognise and assess** both common life-threatening and common serious medical conditions in a pre-hospital environment
2. **React** to a pre-hospital emergency utilising appropriate EFR standard of care according to PHECC CPGs.
3. **Respond** in an effective, safe and appropriate manner to a medical emergency and trauma in a pre-hospital environment utilising the EFR skill set.
4. **Record and report** their actions and interventions appropriately during management and at handover to emergency medical services
5. **Retain** a professional manner and approach in the performance of their duties as an EFR

The learning objectives in the standard refer to adults, children and infants unless stated otherwise. The standard of care management for patients with common medical emergencies and trauma is outlined in the PHECC clinical practice guidelines (CPGs). The CPGs may be accessed from the website of the PHECC www.phecc.ie

Framework for the Emergency First Response Standard

Framework for Emergency First Response Standard	
Learning Outcome	Module
Recognise and assess both common life-threatening and common serious medical conditions in a pre-hospital environment	Primary survey Secondary survey Anatomy and Physiology
React to a pre-hospital emergency utilising appropriate EFR standards of care according to PHECC CPGs.	Continuum of pre-hospital emergency care Principles of lifting and moving Pharmacology
Respond in an effective, safe and appropriate manner, to a medical emergency and trauma in a pre-hospital environment utilising the EFR skill set.	Airway and ventilation Respiratory emergencies ¹ Cardiac First Response Cardiovascular emergencies General medical emergencies Bleeding, shock and soft tissue injuries Musculoskeletal, head and spinal injuries Paediatrics Childbirth
Record and report their actions and interventions appropriately during management and at handover to emergency medical services	Information management
Retain a professional manner and approach in the performance of their duties as an EFR	The wellbeing of the EFR Infection prevention and control Communications Medico-legal issues concerning the EFR

¹ The CFR course –is a pre or co-requisite to the EFR course.

Learning Outcome 1

Recognise and assess both common life-threatening and common serious medical conditions in a pre-hospital environment	Primary and Secondary Survey
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Primary Survey

At the completion of this module the student will be able to outline and demonstrate the elements of a primary survey for the medical and trauma patient while initiating interventions essential to maintain life in accordance with the appropriate CPG(s) and scope of practice for an EFR.

Objectives

Knowledge Objectives

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

1. Discuss the components of scene assessment
2. List common hazards found at the scene
3. Explain the reason for identifying the need for additional help or assistance
4. Identify the assessments made under the following as part of a Primary survey for a medical and trauma patient as appropriate:
 - Airway
 - c- spine
 - Breathing
 - Circulation
 - Disability
 - Exposure
5. State the reason for the management of cervical spine until trauma is ruled out
6. Discuss the need for assessing the patient for external bleeding
7. Outline the methods for assessing Disability or AVPU assessment
8. List the procedure for Exposure to check for obvious injuries
9. **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 other basic life support skills
2. Recognise and respond appropriately to the feelings patients experience during assessment

Skills Objectives

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

1. Demonstrate the assessment of various scenarios for scene safety scene survey and scene situation while identifying potential hazards and controls
2. Demonstrate the appropriate patient assessments made as part of a primary survey for a medical and trauma patient
3. **Demonstrate obtaining consent from a patient**

Secondary survey

At the completion of this module the student will be able to outline 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 an EFR.

Objectives

Knowledge Objectives

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

1. Outline the reason for forming a general impression of the patient
2. Collate a history based on the Pneumonic SAMPLE: Signs & Symptoms, Allergies, Medication, Pertinent medical history, Last intake, Event (SAMPLE)
3. Collate a focused history based on the Interview Pneumonic OPQRST: Onset, Provocation, Quality, Region / Referral / Recurrence / Relief, Severity and Time (OPQRST)
4. List the components of the detailed physical exam/ head to toe survey
5. Describe the methods for assessing Circulation, Sensation and Movement (CSM)
6. Outline the precautions to take during and after searching the patient for identification and medical history clues
7. State the normal ranges for adults, infants and children for
 - Pulse rate
 - Respiration rate
8. Pulse oximetry needs to be agreed? (not in CPGs 3rd Edition)
9. B/P needs to be agreed (not in 3rd edition CPGs) Monitoring vital signs is on post resuscitation care CPG.

Attitudinal Objectives

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

1. Explain the need for 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:

10. Demonstrate questioning the patient to obtain a SAMPLE history
11. Demonstrate questioning the patient to obtain a OPQRST history
12. Demonstrate obtaining additional information from the family members or bystanders at the scene as appropriate
13. Demonstrate the detailed physical exam/ head to toe survey
14. ? Pulse oximetry to be agreed

Clinical Anatomy and physiology

At the completion of this module the student will be able to outline the basic structure and function of the cardio-respiratory and musculoskeletal systems.

Objectives

Knowledge Objectives

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

The respiratory system

1. Describe the structure of the lungs and their position within the thorax
2. Describe the functions of the respiratory system

The cardiovascular system

1. Outline the functions of arteries, veins and capillaries
2. Describe the structure of the heart and its position within the thorax
3. Define coronary circulation
4. State the functions of the cardiovascular system
5. Define pulse

The musculoskeletal system

1. List the functions of bones and the skeletal system
2. Identify the main bones of the appendicular skeleton on a diagram
3. List the types of joints and give examples of each

The blood

1. List the functions of blood

The skin

1. List the functions of skin

Attitudinal Objectives

No attitudinal objectives

Skills Objectives

No skills objectives defined

Learning Outcome 2

React to a pre-hospital emergency utilising appropriate EFR standard of care according to PHECC CPGs.	Continuum of pre-hospital emergency care Principles of lifting and moving Pharmacology
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Continuum of pre-hospital emergency care

At the completion of this module, the student will be able to explain the principles of maintaining scene safety and able to explain the role and responsibilities of an EFR within the Irish healthcare system

Objectives

Knowledge Objectives

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

1. List the roles and responsibilities of the Emergency First Responder (EFR) in the continuum of pre-hospital emergency care
2. Describe the EFR's responsibility related to personal safety
3. List common hazards found at the scene of a trauma or a medical patient
4. Discuss the roles and responsibilities of the EFR with regard to others safety at the scene of an incident including the patient, emergency crew and bystanders
5. State the role the EFR should perform until appropriately trained personnel arrive at the scene of a hazardous material situation

Attitudinal Objectives

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

1. Realise when required the need to activate the emergency medical services

Skills Objective

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

1. Demonstrate the ability to differentiate various scenarios and identify potential hazards

Principles of lifting and moving patients

At the completion of this module, the student will be able to practice moving patients valuing working as a team and understand the particular circumstances when special authorisation according to CPGs can be beneficial to patients.

Objectives

Knowledge Objectives

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

1. Outline the specific manual handling hazards identified in the risk assessment and any possible measures to avoid or reduce manual handling
2. List the indications for emergency and non emergency moves
3. List the various devices associated with moving a patient pre-hospital
4. Explain the authorisations to practice from CPGs known as “special authorisation” and “assist practitioners only”

Attitudinal Objectives

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

1. Understand the importance of working as a team when lifting and moving patients

Skills Objectives

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

1. Demonstrate in teams how to assist with moving a patient with a canvas sheet
2. Demonstrate in teams how to assist with log rolling a patient
3. Demonstrate in teams how to place and secure a patient onto a long board
4. Demonstrate in teams how to assist with the application of an extrication device and move a patient
5. Demonstrate in teams how to assist with moving a patient with an orthopaedic stretcher

Pharmacology

At the completion of this module, the student will be able to safely administer and assist patients with self administration of medications in accordance with the appropriate CPGs.

Objectives

Knowledge Objectives

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

1. Define the terms: side effects, indications, contraindications and adverse reactions
2. Differentiate between trade and generic medication names
3. List the prescribed medication which the Emergency First Responder may assist the patient with self- administration
4. List the pre-administration checks to follow when administering medication
5. Explain the importance of establishing if there are any medication allergies
6. Explain the dangers associated with inappropriate administration of medication
7. List the dose, route of administration, indication, contraindications and side effects of medication for use by Emergency First Responders

Attitudinal Objectives

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

1. Explain the rationale for the administration of medication

Skills Objectives

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

2. Demonstrate the pre-administration checks to be undertaken prior to medication administration
3. Demonstrate the administration of all approved medication² for use by Emergency First Responders
4. Demonstrate documenting medication administration on the patient care report (PCR)

² Approved medication are outlined in full in PHECC CPGs

Learning Outcome 3

Respond in an effective, safe and appropriate manner, to a medical emergency and trauma in a pre-hospital environment utilising the EFR skill set	Airway and ventilation Respiratory emergencies Cardiac First Response Cardiovascular emergencies General medical emergencies Bleeding, shock and soft tissue injuries Musculoskeletal, head and spinal injuries Paediatrics Childbirth
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Airway and ventilation

At the end of this module, a student will be able to clear and maintain an airway and demonstrate safe use oxygen equipment and provide oxygen to a simulated patient using a range of oxygen administration devices and ventilate a patient using a bag-valve- mask under special authorisation according to CPGs.

Objectives

Knowledge Objectives

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

1. Describe the steps in head-tilt chin-lift and jaw thrust
2. Relate the mechanism of injury to opening the airway
3. Describe how to measure and insert an oropharyngeal airway
4. Describe the techniques of oral suctioning
5. Describe how to administer oxygen to the patient with a venturi mask, nasal cannula and a non rebreathing mask
6. Describe how to administer oxygen with a Bag-Valve- Mask use (2- person operation)
7. Explain why basic life support airway and ventilation skills take priority over most other basic life support skills
8. State the indications, contraindications, usual dosages and side effects of oxygen therapy (as per the PHECC Medication Formulary included in the PHECC CPGs)

Attitudinal Objectives

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

1. Demonstrate an awareness of the value of oxygen administration
2. Demonstrate a caring attitude towards patients with airway and breathing problems who request pre-hospital emergency care

Skills Objectives

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

1. Demonstrate airway and breathing assessment
2. Demonstrate head-tilt chin-lift and jaw thrust
3. Demonstrate oral suctioning
4. Demonstrate measuring and insertion of an oropharyngeal airway
5. Demonstrate the operation of oxygen cylinders and regulators
6. Demonstrate the use of a venturi mask, a non-rebreather facemask and nasal cannula and BVM (2 person technique) and state the oxygen flow requirements needed for each equipments use

Respiratory emergencies

At the end of this module, a student will be able to manage the care of a patient with a respiratory emergency in accordance with the appropriate CPGs.

Objectives

Knowledge Objectives

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

1. State the signs and symptoms of the patient with inadequate breathing
2. List the pre-hospital emergency care management for the patient with inadequate breathing
3. List signs of respiratory arrest

Attitudinal Objectives

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

1. Communicate with empathy with family members and friends of the patient with a respiratory emergency

Skills Objectives

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

1. Demonstrate the pre-hospital emergency care management for the patient with inadequate breathing
2. Demonstrate the pre-hospital emergency care management for the patient in respiratory arrest

Cardiovascular emergencies

At the end of this module, a student will be able to manage the care of a patient with cardiac chest pain and post resuscitation in accordance with the appropriate CPGs.

Objectives

Knowledge Objectives

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

1. Outline the pre-hospital emergency care management for the patient experiencing cardiac chest pain
2. Outline the benefits of post resuscitation care
3. Outline the circumstances when it is inappropriate to commence resuscitation

Attitudinal Objectives

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

1. Demonstrate a caring attitude towards the patients with cardiac chest pain who requests pre-hospital emergency care
2. Communicate with empathy with family members and friends of the patient with cardiac chest pain
3. Understand that a Paramedic and AP can discontinue resuscitation efforts

Skills Objectives

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

1. Demonstrate the assessment and pre-hospital emergency care management for the patient experiencing cardiac chest pain

General medical emergencies

At the end of this module, a student will be able to manage the care of a patient with an acute medical emergency in accordance with the appropriate CPG.

Objectives

Knowledge Objectives

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

2. Identify the patient with an altered level of consciousness
3. Explain the pre-hospital emergency care management for the diabetic patient with an altered level of consciousness
4. Identify the patient suffering from a stroke
5. Explain the pre-hospital emergency care management for the patient suffering a suspected stroke
6. Identify the patient who presents with seizures/ convulsions
7. Explain the pre-hospital emergency care management for the patient with seizures/ convulsions
8. Identify the patient who presents with allergies and severe allergic reaction
9. Explain the pre-hospital emergency care management for the patient with an allergic reaction and anaphylaxis
10. List various ways that poisons enter the body
11. Identify the patient who presents with poisoning/ overdose
12. Explain in pre-hospital emergency care management for the patient with poisoning/ overdose
13. Identify the patient who presents with exposure to cold
14. Explain the pre-hospital emergency care management for the patient with exposure to cold including submersion hypothermia
15. Explain the pre-hospital emergency care management for the patient with decompression illness
16. Identify the patient who presents with exposure to heat
17. Explain the pre-hospital emergency care management for the patient with exposure to heat
18. Explain the pre-hospital emergency care management for the patient with an epistaxis

Note: CPG ok, No CPG for Pain, epistaxis allergies and poisoning /overdose and exposure to heat,

Attitudinal Objectives

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

1. Demonstrate a caring attitude towards patients with a medical complaint who requests pre-hospital emergency care

Skills Objectives

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

1. Demonstrate the pre-hospital emergency care management for the patient with a general medical complaint
2. Demonstrate the pre-hospital emergency care management for the diabetic patient with an altered level of consciousness
3. Demonstrate the pre-hospital emergency care management for the patient suffering a stroke
4. Demonstrate the pre-hospital emergency care management for the patient with seizures
5. Demonstrate the pre-hospital emergency care management for the patient experiencing an allergic reaction and anaphylaxis
6. Demonstrate the pre-hospital emergency care management for the patient with poisoning/ overdose
7. Demonstrate the pre-hospital emergency care management for the patient with hypothermia
8. Demonstrate the pre-hospital emergency care management for the patient with exposure to heat
9. ~~Demonstrate the pre-hospital emergency care management for the patient with pain?~~
10. Demonstrate the pre-hospital emergency care management for the patient with an epistaxis

Bleeding, shock and soft tissue injuries

At the end of this module, a student will be able to manage the patient with external bleeding and shock as well as soft tissue injuries in accordance with appropriate CPGs.

Objectives

Knowledge Objectives

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

1. Differentiate between arterial, venous and capillary bleeding
2. Explain the pre-hospital emergency care management for the patient with external bleeding
3. List the signs and symptoms of hypovolaemic shock
4. Explain the pre-hospital emergency care management for the patient with signs and symptoms of hypovolaemic shock
5. Explain the pre-hospital emergency care management for the patient with a soft tissue injury
6. Explain the burn surface area calculation using Wallace's rule of nines
7. List the common causes of burns and scalds
8. Explain the pre-hospital emergency care management for the patient with burns
9. List the functions of dressing and bandaging

Note: CPG ok none for bleeding, hypovolaemic shock, soft tissue injury (except burns)

Attitudinal Objectives

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

1. Demonstrate a caring attitude towards patients with a traumatic injury who request pre-hospital

Skills Objectives

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

1. Demonstrate direct pressure as a method of pre-hospital emergency care management for external bleeding
2. Demonstrate the pre-hospital emergency care management for the patient with hypovolaemic shock
3. Demonstrate the pre-hospital emergency care management for the patient with closed soft tissue injuries
4. Demonstrate the pre-hospital emergency care management for the patient with open soft tissue injuries
5. Demonstrate the pre-hospital emergency care management for the patient with burns

Musculoskeletal, head and spinal injuries

At the end of this module, a student will be able to manage the patient with head, spinal or major limb injuries in accordance with appropriate CPGs.

Objectives

Knowledge Objectives

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

1. State the signs and symptoms of fractures
2. Explain the pre-hospital emergency care management for the patient with a painful, swollen, deformed extremity
3. Relate the mechanism of injury to suspected injuries of the head and spine
4. **Outline the indications and risks associated with rapid extrication**
5. List the sign and symptoms of a suspected spinal injury
6. Outline how to stabilise the cervical spine
7. Explain the pre-hospital emergency care management for assisting with the patient with suspected spinal injuries
8. State how to stabilise the head to remove the helmet
9. List the signs and symptoms of head injuries
10. Explain the pre-hospital emergency care management for assisting with the patient with head injuries

Attitudinal Objectives

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

1. Demonstrate a caring attitude towards patients with traumatic injuries who request pre-hospital emergency services

Skills Objectives

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

1. Demonstrate the pre-hospital emergency care management for the patient with a painful, swollen, deformed extremity
2. **Demonstrate using a splinting device to an upper limb**
3. **Demonstrate assisting with use of a splinting device for a lower limb**
4. Demonstrate manual stabilisation of the cervical spine
5. Demonstrate the application of a cervical collar
6. Demonstrate assisting with the pre-hospital emergency care management for the patient with a suspected spinal injury

7. Demonstrate assisting with the pre-hospital emergency care management for the patient with a head injury
8. Demonstrate helmet removal

Paediatrics

At the end of this module, a student will be able to manage the paediatric patient in accordance with appropriate CPGs.

Objectives

Knowledge Objectives

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

1. List the causes of pyrexia in an infant and child
2. Describe the pre-hospital emergency care management of the infant or child with a pyrexia
3. List the causes of inadequate respirations in infants and children
4. Describe the pre-hospital emergency care management of **inadequate respirations** in infants and children
5. List the causes of seizures in the infant and child patient
6. Outline the pre-hospital emergency care management of seizures in infants and children
7. Outline spinal immobilisation for infants and children
8. Outline the care management for children with **burns**
9. List the signs and symptoms of possible child abuse and neglect
10. Explain the need for critical incident stress support following serious illness or injury to an infant or child

Attitudinal Objectives

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

1. Demonstrate a professional caring approach to the feelings of the family when dealing with an ill or injured infant or child
2. Rationalise the EFR's own emotional response to caring for infants or children
3. Communicate with empathy to infants and children with an illness or injury, as well as with family members and friends of the patient

Skills Objectives

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

1. Demonstrate the pre-hospital emergency care management for the infant and child patient with a pyrexia
2. Demonstrate the pre-hospital emergency care management for the infant and child patient with inadequate respirations
3. Demonstrate the pre-hospital emergency care management for the infant and child patient with burns
4. Demonstrate the pre-hospital emergency care management for the infant and child patient with seizures

Childbirth

At the end of this module, a student will be able to assist with the basic care during a pre-hospital delivery in accordance with appropriate CPGs.

Objectives

Knowledge Objectives

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

1. State the indications of an imminent delivery
2. Explain the pre-hospital emergency preparation of the mother pre-delivery
3. Explain the pre-hospital emergency care management of assisting with the normal delivery of an infant

Attitudinal Objectives

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

1. Explain the rationale for attending to the feelings of a mother in need of pre-hospital emergency care during childbirth
2. Communicate with empathy to mothers during childbirth, as well as with family members and friends

Skills Objectives

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

1. Demonstrate assisting with the pre-hospital emergency care management for the normal delivery
2. Demonstrate assisting with the pre-hospital emergency post-delivery care of the mother
3. Demonstrate assisting with the pre-hospital emergency care management for the newly born

Learning Outcome 4

Record and report their actions and interventions appropriately during management and at handover to emergency medical services	Information management
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Information management

At the completion of this module, the student will be able to include all the required information on a Cardiac First Response (CFR) Report in accordance with the PHECC CFR Report Completion Guide.

Objectives

Knowledge Objectives

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

1. Explain the rationale for recording patient health information
2. Outline what information is required on the Cardiac First Response (CFR) Report and how it should be entered
3. Explain the essential elements of a verbal handover report to other pre-hospital emergency care teams

Attitudinal Objectives

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

1. Understand how recording data contributes to a high standard of patient care
2. Explain why documentation should be done in a timely manner but should not distract from care and communication with the patient

Skills Objectives

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

1. Complete a CFRR for a given patient scenario
2. Demonstrate the ability to deliver a “hand over” report to other pre-hospital emergency care teams

Learning Outcome 5

Retain a professional manner and approach in the performance of their duties as an EFR	The well-being of the EFR Infection prevention and control Communications Medico-legal issues concerning the EFR
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The wellbeing of the Emergency First Responder

At the completion of this module, the student will be able to outline the importance of maintaining a balance in personal lifestyle and work related stressors.

Objectives

Knowledge Objectives

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

1. List possible emotional reactions that an Emergency First Responder (EFR) may experience when faced with trauma, illness, death and dying
2. Outline the possible reactions that a family member may exhibit when confronted with death and dying
3. State the possible reactions that the family of an EFR may exhibit
4. List the steps in approaching the family confronted with death and dying
5. List the signs and symptoms of critical incident stress
6. State possible steps that the EFR may take to help reduce/ alleviate stress

Attitudinal Objectives

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

1. Explain the importance of understanding the response to trauma, illness, death and dying
2. Show compassion when caring for the physical and mental needs of patients

Skills Objectives

No skills objectives defined

Infection prevention and control

At the completion of this module, the student will be able to demonstrate the principles of infection prevention and control.

Objectives

Knowledge Objectives

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

1. Define standard infection control precautions
2. List the steps to take for personal protection against infection
3. Distinguish between cleaning and disinfecting, be cleaned or disinfected, or is single use only
4. State the importance of vaccinations in protecting personal health

Attitudinal Objectives

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

1. Adopt standard infection control precautions as fundamental to patient care

Skills Objectives

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

1. Demonstrate effective hand washing technique
2. Demonstrate correct glove use and disposal
3. Demonstrate the correct disposal of clinical waste

Communications

At the completion of this module, the student will be able to demonstrate effective and appropriate communication skills.

Objectives

Knowledge Objectives

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

1. List the golden rules of patient interaction
2. Describe how to adapt verbal and non-verbal communication for visually impaired patients and auditory impaired patients
3. Describe the principle barriers to effective patient and team communication
4. State the personal qualities that make an effective therapeutic communicator

Attitudinal Objectives

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

1. Whilst taking control of an emergency situation, demonstrate a courteous approach toward the patient, their family and bystanders

Skills Objectives

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

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 communicating with the professional pre-hospital emergency care services ensuring the principles of "Team" are maintained

Medico-legal issues concerning the EFR

At the completion of this module, the student will be able to outline the ethical and legal framework in relation to patient care pre-hospital.

Objectives

Knowledge Objectives

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

1. State the conditions necessary for the Emergency First Responder (EFR) to have a duty of care
2. Explain the importance, necessity and legality of patient confidentiality
3. Outline methods of obtaining patients consent
4. List the actions to take to assist in the preservation of a crime scene

Attitudinal Objectives

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

1. Participate willingly in the care of all patients
2. Outline why it is inappropriate to judge a patient based on a cultural, gender, age or socioeconomic model and to vary the standards of care rendered as a result of that judgement

Skills Objectives

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

1. Demonstrate obtaining consent from a patient in a variety of scenarios

Emergency Medical Technician

Education and Training Standard
(draft V1 Date 2010)

Summary of work in progress

The current EMT Standard of Education and Training (2007) has undergone significant review from an educational perspective; the individual modules have been reorganised to include domain specific learning outcomes.

The aim of this content review, leading to the next edition (2011), is to revise and amend the content specifically to meet the emerging needs of HSE, Private and Voluntary ambulance services that engage in the deployment of EMTs (employees and volunteers). Overall aim of this next version is to capture more accurately the role of EMT and their emerging scope of practice. The next EMT Education and Training Standard will outline in full the expected competency of the student upon completion of a PHECC recognised course.

List of changes made to date:

1. Redeveloped role and responsibilities of the EMT to incorporate categories and terminology from PHECC Inter Facility Patient Transfer Standard and PHECC EMS Priority Dispatch Standard.
2. All new skills included in CPGs Edition 3 were incorporated into knowledge, attitudinal or skills objectives as relevant. In no particular order: Early warning score, Clinical status decision, Capacity evaluation, splinting, rule of 9's, manual stabilisation of a # limb, Realignment of a fractured limb, post resus care.
3. New for paediatric patients: paediatric assessment triangle, paediatric pain (Wong barker), spinal immobilisation. stridor and glycaemic emergencies, spinal immobilisation and burns, haemorrhage control incl. Shock, symptomatic bradycardia.
4. Added supraglottic airway device for Module on Airway and Ventilation – **needs CPG.**
5. Re-titled (1.4) Legislation and information management” to “Health information management” (**work in progress**) incorporated terminology and principles of new Health Information Standard.
6. Re- titled; Infants and children – Paediatrics; Introduction to pre-hospital emergency care - Continuum of pre-hospital emergency care.
7. Moved glucometer use, pain management and epistaxis into General medical emergencies.
8. Removed (1.6) Principles of lifting and moving and reworked some objectives into Basic Care.
9. Reworked 2 modules (2.1 & 2.2) pertaining to Patient assessment into 2 new modules - Primary and Secondary survey.
10. Added new - Patient safety and Quality assurance (**work in progress**)
11. Terminology changes- CVA- stroke, near drowning –submersion incident; A&P – Clinical A&P; EMS Control terms incorporated into Ambulance operations and some other minor terminology changes throughout.
12. Reworked (1.3) “PHECC Code of Conduct and ethics and Medico-legal issues – “Professional practice and medico-legal issues concerning the EMT.
13. New module professional development (**work in progress**). Yet to agree **CPD terminology** throughout the document.
14. Inserted ceasing resus efforts to cardiac care (moved back from CFR).
15. Added some new objectives around minor injuries management incorporated into “*Bleeding shock.....*” and “*Musculoskeletal*” and *General Medical* in line with frequently occurring incident at events.
16. New terms EMC (call taker and dispatcher) written into Ambulance Operations.

17. Needs discussion and agreement on proposed deletions (noted with strike through) deemed not appropriate for EMT (see next point on scope of practice).
18. Needs discussion on the scope of practice of EFR for the following sections:
 - General medical emergencies
 - Bleeding shock, and soft tissue injuries
 - Musculoskeletal, head and spinal injuries
 - Paeds. **Note** there will be implications for CPG development following this exercise.

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Role and professional responsibility of an EMT

Emergency Medical Technicians (EMT) are trained emergency care practitioners. The education and training standard at EMT level prepares the course participants for managing patient care in inter-facility and pre-hospital emergency care settings. The standard for EMT includes patient evaluation skills in addition to more thorough patient care and management skills. An EMT is the minimum practitioner grade that is trained for transporting inter-facility patients who are defined as Acuity Levels 4B “Non acute Care” and partnered with a Paramedic can assist with 4C “Acute Non Emergent Care” (Ref: *PHECC’s Inter Facility Patient Transfer Standard, 2009*). EMTs may also be dispatched in response to pre-hospital emergency care patients who are defined as Clinical Status Category 3 (Omega) “Minor illness” (Ref: *PHECC’s EMS Priority Dispatch Standard, 2009*). In addition, EMTs provide pre-hospital emergency care services at events and other sporting and recreational events nationally.

Successful completion of the EMT standard and assessment leads to the Pre-Hospital Emergency Care Council (PHECC) award of the National Qualification in Emergency Medical Technology (NQEMT) at the level of EMT. This award is required for registration with PHECC at the EMT division. This requirement ensures that the EMT has fulfilled the educational and training requirements as prescribed by PHECC, thereby possessing the knowledge, skills and professionalism in line with the expectations of the public and the profession.

An EMT is required to maintain their name on the PHECC Register and is also required to ensure their on-going clinical competence by participation in on-going professional development and other competency assurance schemes.

Learning outcomes for the EMT standard

The education and training standard is the expected competency of the student upon completion of a recognised course. A graduate, at the end of a recognised EMT 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 professional development and continuous renewal.

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.
2. Selection of an appropriate patient management plan, application of appropriate interventions, 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 care record (PCR) and utilisation of best communication practice including 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 standard pre-hospital emergency care operational procedures.

Learning Outcome 4

Demonstrate a commitment to **professional development and continuous renewal.**

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

The learning objectives in the standard refer to adults, children and infants 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 www.phecc.ie

Framework for the EMT Standard

Framework for the Emergency Medical Technician Standard		
Learning Outcome (L)	Educational Domain(D)	Module(s)
Provide the appropriate standard of patient care for Interfacility transfers and pre-hospital emergency care services (L1)	Recognition and assessment of both common life-threatening and common serious medical conditions (L1D1)	<ol style="list-style-type: none"> 1. Primary survey 2. Secondary Survey
	Selection of an appropriate patient management plan, application of appropriate interventions, and the correct monitoring of the patient according to PHECC clinical practice guidelines and scope of practice (L1D2)	<ol style="list-style-type: none"> 1. Airway and ventilation 2. Respiratory emergencies 3. Cardiac first response¹ 4. Cardiovascular emergencies 5. General medical emergencies 6. Bleeding, shock and soft tissue injuries 7. Musculoskeletal, head and spinal injuries 8. Childbirth and neonatal resuscitation 9. Paediatrics
	Appropriate on-going maintenance of the patient record and utilisation of best communication practices including patient handover procedures (L1D3)	<ol style="list-style-type: none"> 1. Legislation and Information management 2. Communications
Safely and appropriately access, retrieve and transport patients (L2)		<ol style="list-style-type: none"> 1. Basic patient care 2. Gaining access to the patient at scene 3. Ambulance operations
Adopt a professional approach to their practice (L3)	Retaining a professional manner and method in the performance of their duties as a registered EMT (L3D1)	<ol style="list-style-type: none"> 1. Professional practice and medico-legal issues concerning the EMT 2. Patient safety and Quality assurance
	Basing their professional practice on a solid foundation of both basic and clinical sciences (L3D2)	<ol style="list-style-type: none"> 1. Clinical anatomy and physiology 2. Pharmacology 3. Infection prevention and control 4. Intramuscular injection
	Utilising best practice as prescribed by standard pre-hospital emergency care operational procedures (L3D3)	<ol style="list-style-type: none"> 1. Radio communications 2. Hazardous material incident 3. Major Emergency 4. Civil disorder
Demonstrate a commitment to professional development and continuous renewal (L4)	Maintaining personal well-being and professional relationships with colleagues (L4D1)	<ol style="list-style-type: none"> 1. The well-being of the EMT
	Identify with the role of the EMT (L4D2)	<ol style="list-style-type: none"> 1. Continuum of pre-hospital emergency care 2. Professional development

¹ The CFR course is either a pre-requisite or co-requisite.

Learning Outcome 1 – Domain 1

Provide the appropriate standard of patient care for interfacility transfers and pre-hospital emergency care services	<i>Recognition and assessment of both common life-threatening and common serious medical conditions</i>
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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 (including paediatric patients) 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 an EMT.

Objectives

Knowledge Objectives

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

1. Discuss the components of scene assessment
2. List common hazards found at the scene
3. Discuss the reason for identifying the total number of patients at the scene
4. Explain the reason for identifying the need for additional help or assistance
5. Identify the assessments made under the following as part of a primary survey for a medical and trauma patient as appropriate:
 - Airway
 - c- spine
 - Breathing
 - Circulation
 - Disability
 - Exposure
6. Differentiate between a clear, partially obstructed and obstructed airway
7. State the reason for the management of cervical spine until trauma is ruled out
8. Differentiate between normal, abnormal, fast, slow and absent breathing rates and between shallow, laboured and noisy breathing
9. Differentiate between regular, irregular and absent pulse rates
10. Discuss the need for assessing the patient for external bleeding
11. Differentiate between normal, pale, flushed and cyanosed skin types
12. Identify normal and abnormal capillary refill time
13. Outline the methods for assessing Disability or AVPU assessment
14. List the procedure for Exposure to check for obvious injuries
15. Explain the need for consent prior to assessment and or care management
16. Outline the categories in a “Clinical Status” decision (on the PCR)

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 other basic life support skills
2. Recognise and respond appropriately to the feelings patients experience during assessment

Skills Objectives

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

1. Demonstrate the assessment of various scenarios for scene safety scene survey and scene situation while identifying potential hazards and controls
2. Demonstrate the appropriate patient assessments made as part of a primary survey for a medical and trauma patient
3. **Demonstrate obtaining consent from a patient**

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 (including paediatric patients) while considering findings and initiating care management in accordance with the appropriate CPG(s) and scope of practice for an EMT.

Objectives

Knowledge Objectives

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

1. Define Clinical Impression
2. Distinguish between Chief Complaint and Clinical Impression
3. Collate a history based on the Pneumonic SAMPLE: Signs & Symptoms, Allergies, Medication, Pertinent medical history, Last intake, Event (SAMPLE)
4. Collate a focused history based on the Interview Pneumonic OPQRST: Onset, Provocation, Quality, Region / Referral / Recurrence / Relief, Severity and Time (OPQRST)
5. List the components of the detailed physical exam/ head to toe survey
6. Describe the methods for assessing Circulation, Sensation and Movement (CSM)
7. Outline the precautions to take during and after searching the patient for identification and medical history clues
8. Explain normal air entry and identify breath sounds associated with wheezing (asthma)
9. List the elements to be measured when obtaining a full set of vital signs
10. Outline the variables when calculating an early warning score
11. State the normal ranges for adults, infants and children for
 - Pulse rate
 - Respiration rate
 - Temperature
 - Blood pressure
12. Explain how to measure pain on the pain analogue scale (0-10)
13. Explain the benefits and limitations of pulse oxymetry

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

Skills Objectives

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

14. Demonstrate questioning the patient to obtain a SAMPLE history
15. Demonstrate questioning the patient to obtain a OPQRST history
16. Demonstrate obtaining additional information from the family members or bystanders at the scene as appropriate
17. Demonstrate assessment of vital signs
18. Demonstrate an early warning score calculation
19. Demonstrate assessment of the pupils
20. Demonstrate the detailed physical exam/ head to toe survey including inspection, palpation and assessment of CSMs as appropriate
21. Evaluate a patient's capacity to make decisions
22. Demonstrate the pre-hospital emergency assessment of the patient in pain using the pain analogue scale (0-10)
23. Demonstrate use of a pulse oximeter

Learning Outcome 1 – Domain 2

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

At the completion of this module, the student will be able to establish and maintain a patient airway, including a supraglottic airway device, and be able to oxygenate and ventilate a patient in accordance with the appropriate CPG(s) and scope of practice for an EMT.

Objectives

Knowledge Objectives

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

1. Describe the steps in head-tilt chin-lift and jaw thrust
2. Describe the techniques of oral suctioning
3. Describe how to measure and insert an oropharyngeal airway (OPA)
4. Describe how to measure and insert a supraglottic airway device (adult only) – needs CPG revision
5. List the indications and contraindications for use of an OPA
6. List the parts of a bag valve mask (BVM) system
7. Describe ventilating the patient with a BVM for one and two rescuers
8. List the component parts of an oxygen delivery system (oxygen cylinders, regulators Demand Valve, Constant Flow Meter etc)
9. Explain the principles of safe operation for an oxygen delivery system
10. Outline the different techniques in oxygen administration using a pocket mask, a venturi mask, nasal cannula and a non rebreathing mask

Attitudinal Objectives

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

Skills Objectives

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

1. Demonstrate head-tilt chin-lift and jaw thrust
2. Demonstrate oral suctioning
3. Demonstrate the insertion of an oropharyngeal airway
4. Demonstrate ventilating the patient with a BVM (one and two rescuers)
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 a pocket mask, a venturi mask, nasal cannula and a non rebreather mask

Respiratory emergencies

At the completion of this module, the student will be able to assess and manage the care of a patient with a respiratory emergency in accordance with the appropriate CPG(s) and scope of practice for an EMT.

Highlighted in green = CPG

Objectives

Knowledge Objectives

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

1. Describe the pre-hospital emergency assessment findings and care management for the patient with **inadequate respirations**; **asthma** and **chronic obstructive pulmonary disease (COPD)**
2. Describe the pre-hospital emergency assessment findings and care management for the patient in **respiratory arrest**
3. List the signs of respiratory depression secondary to known or suspected narcotic overdose

Attitudinal Objectives

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

1. Demonstrate a caring attitude towards the patient with airway and breathing problems
2. Communicate in a caring and professional manner with a patient with airway and breathing problems, as well as with family members and friends of the patient

Skills Objectives

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

1. Demonstrate the pre-hospital emergency assessment and care management for the patient with inadequate respirations; asthma and chronic obstructive pulmonary disease (COPD)
2. Demonstrate the pre-hospital emergency assessment and care management for the patient in respiratory arrest

Cardiac First Response

<, To later insert when next version approved>>

Cardiovascular emergencies

At the completion of this module, the student will be able to describe the basic underlying cause of major cardiovascular disease and as a result be able to (in accordance with established protocols) assess and manage the care of a patient with a cardiovascular emergency in accordance with the appropriate CPG(s) and scope of practice for an EMT.

CPG indicated in green

Objectives

Knowledge Objectives

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

1. Define the terms: Acute Coronary Syndrome; Myocardial infarction / heart attack, Angina and list the history, signs and symptoms commonly associated with each
2. Discuss the pre-hospital emergency care assessment findings and care management of the patient with cardiac chest pain
3. Define the role of the EMT in the chain of survival
4. Discuss the positions of comfort for patients with various cardiac emergencies
5. Explain the importance of pre-hospital Advanced Life Support (ALS)
6. Explain the importance of urgent transport to a medical facility
- ~~7. Define defibrillation and explain its effect on the cardiac electrical system~~
8. Discuss the pre-hospital emergency care management for the patient with a persistent shockable rhythm and no available ALS
9. Discuss the pre-hospital emergency care management for the patient with a recurrent shockable rhythm and no available ALS
10. Discuss the pre-hospital emergency care management for the patient found in a non shockable rhythm and no available ALS
11. Identify PQRST on a normal Electrocardiograph (ECG) rhythm strip
12. Identify the following rhythms from ECG Lead II: Normal Sinus Rhythm, Sinus Bradycardia, Sinus Tachycardia, Sinus Rhythm with Premature Ventricular Contractions, Ventricular Fibrillation, Ventricular Tachycardia, Asystole
13. Explain the function and use of a mechanical assist CPR device
14. Outline post resuscitation care
15. List the circumstances when a registered paramedic or advanced paramedic can discontinue resuscitation efforts

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
2. Communicate in a caring and professional manner with the patient, family members and friends of the patient during a cardiac event

Skills Objectives

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

1. Demonstrate the pre-hospital emergency assessment and care management for the patient with cardiac chest pain
2. 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
3. Demonstrate competence in the use of a mechanical assist CPR device
4. Demonstrate post resuscitation care
5. Demonstrate the completion of the AED: Operator's Shift Checklist

General medical emergencies

Objectives

Knowledge Objectives

At the completion of this module, the student will be able to assess and manage the care of a patient with an acute general medical emergency in accordance with the appropriate CPG(s) and scope of practice for an EMT.

Conditions in green have CPG

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

1. Explain the pre-hospital emergency care assessment findings and care management for the patient with a general medical complaint
- ~~2. Describe the mental health issues that may arise in the older patient~~
3. Explain the pre-hospital emergency assessment findings and care management for the patient with an **altered level of consciousness**
4. **List the causes of a faint**
5. **Explain the pre-hospital emergency assessment findings and care management for the patient with a faint**
6. Explain the pre-hospital emergency assessment findings and care management for the diabetic patient **with abnormal blood glucose levels**
7. State normal and abnormal blood glucose levels for adults, infants and children
8. Explain the pre-hospital emergency assessment findings and care management for the patient **with a stroke**
9. Explain the pre-hospital emergency assessment findings and care management for the patient with **seizures/ convulsions**
10. Explain the pre-hospital emergency assessment findings and care management for the patient with an **allergic reaction and anaphylaxis**
- ~~11. List various ways that poisons enter the body~~
12. Explain the pre-hospital emergency assessment findings and care management for the patient **with poisoning**
13. Explain the pre-hospital emergency assessment findings and care management for the patient with **hypothermia including a submersion incident**
14. Explain the pre-hospital emergency assessment findings and care management for the patient with an exposure to heat
15. Define the terms: deliberate self-harm, parasuicide and suicidal behaviour
- ~~16. Explain the spectrum of activities related to suicidal behaviour~~
17. Explain the pre-hospital emergency assessment findings and care management for the patient with a **behavioural emergency / mental health emergency including de-escalation and breakaway techniques**
18. Explain the pre-hospital emergency assessment findings and care management for the patient with **decompression illness**
19. Outline the pre-hospital emergency assessment findings and care management for the patient with **an epistaxis**

Attitudinal Objectives

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

1. Communicate in a caring and professional manner with a patient with a general medical complaint, as well as with family members and friends of the patient
2. Explain the rationale for modifying your behaviour towards the patient with a behavioural emergency

Skills Objectives

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

1. Demonstrate the pre-hospital emergency assessment and care management for the patient with a general medical complaint
2. Demonstrate the pre-hospital emergency assessment and care management for the patient with an altered level of consciousness
3. Demonstrate the pre-hospital emergency assessment and care management for the patient with a faint
4. Demonstrate the pre-hospital emergency assessment and care management for the diabetic patient with abnormal blood glucose levels
5. Demonstrate the pre-hospital emergency assessment and care management for the patient experiencing a stroke
6. Demonstrate the pre-hospital emergency assessment and care management for the patient with seizures/ convulsions
7. Demonstrate the pre-hospital emergency assessment and care management for the patient with an allergic reaction and anaphylaxis
8. Demonstrate the pre-hospital emergency assessment and care management for the patient with poisoning
9. Demonstrate the pre-hospital emergency assessment and care management for the patient with hypothermia
10. Demonstrate the pre-hospital emergency assessment and care management for the patient with an exposure to heat
11. ~~Demonstrate the pre-hospital emergency assessment and *care management for the patient who has deliberately self-harmed~~
12. ~~Demonstrate the pre-hospital emergency management for a suicide death~~
13. Demonstrate the pre-hospital emergency assessment and care management for the patient with a behavioural emergency/ mental health emergency including de-escalation and breakaway techniques
14. ~~Demonstrate the pre-hospital emergency assessment and *care management for the near drowning patient~~
15. Demonstrate pre-hospital emergency assessment and care management for the patient with decompression illness
16. Demonstrate the pre-hospital emergency care management for the patient with pain
17. Demonstrate the pre-hospital emergency assessment and care management for the patient with an epistaxis

Bleeding, shock and soft tissue injuries

At the completion of this module, the student will be able to assess and manage the care of a patient with bleeding, shock and soft tissue injury in accordance with the appropriate CPG(s) and scope of practice for an EMT.

Green have current CPG

Objectives

Knowledge Objectives

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

1. State the definition of a wound
2. List and describe the five main types of wounds
3. Differentiate between arterial, venous and capillary bleeding
4. Describe in sequence the body's response reaction to uncontrolled blood loss
5. Explain the pre-hospital emergency assessment findings and care management for the patient with external bleeding
6. Outline the pre-hospital emergency assessment findings and care management for the patient with hypovolaemic shock
7. List the signs of internal bleeding
8. Explain the sense of urgency to transport patients that are bleeding and show signs of hypovolaemic shock
9. State the types of open and closed soft tissue injuries
10. Outline the pre-hospital emergency assessment findings and care management for the patient with a soft tissue injuries; open and closed
11. Outline the pre-hospital emergency assessment findings and *care management for the patient with a penetrating chest injury
12. Outline the pre-hospital emergency assessment findings and *care management for the patient with an impaled object
13. List the functions of dressing and bandaging and the dangers of constricting bandages
14. Explain the burn surface area calculation using Wallace's rule of nines
15. List the characteristics of superficial, partial thickness and full thickness burns
16. Identify the common causes of burns and scalds and the characteristics of each
17. Outline the pre-hospital emergency assessment findings and care management for the patient with burns
18. Outline the pre-hospital emergency assessment findings and care management for the patient with an eye injury

Attitudinal Objectives

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

1. Demonstrate a caring attitude towards the patient with a traumatic injury
2. Communicate in a caring and professional manner with patients with a traumatic injury as well as with family members and friends of the patient

Skills Objectives

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

1. Demonstrate the pre-hospital emergency care management for the patient with external bleeding
2. Demonstrate the pre-hospital emergency assessment and care management for the patient with hypovolaemic shock
3. Demonstrate the pre-hospital emergency assessment and care management for the patient with closed soft tissue injuries
4. Demonstrate the pre-hospital emergency assessment and care management for the patient with open soft tissue injuries
- ~~5. Demonstrate the pre-hospital emergency assessment and *care management for the patient with a penetrating chest injury~~
- ~~6. Demonstrate the pre-hospital emergency assessment and *care management for the patient with open abdominal wounds~~
- ~~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 burns and scalds
9. Demonstrate the pre-hospital emergency assessment and care management for the patient with an eye injury

Musculoskeletal, head and spinal injuries

At the completion of this module, the student will be able to describe the basic underlying cause of head, spinal and limb injuries and assess and manage the care of a patient with such injuries in accordance with the appropriate CPG(s) and scope of practice for an EMT.

Objectives

Knowledge Objectives

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

1. Define the terms fracture, dislocation, sprain and strain
2. List the common causes of injuries to bones, joints and tendons
3. Differentiate between an open and a closed painful, swollen, deformed extremity
4. Explain how to manual stabilise a fractured limb
5. Explain how to assist with repositioning a fractured limb
6. List the benefits and possible complications of using a splinting device on upper limbs
7. Explain the pre-hospital emergency assessment findings and care management for the patient with a painful, swollen, deformed extremity
8. List the common types of head injury
9. Describe the consequences and complications that may be associated with head injuries
10. State the significance of visible cerebro-spinal fluid
11. State the injury mechanism commonly associated with injury of the head and spine
12. Explain the pre-hospital emergency assessment findings and care management for the patient with a suspected spinal injury
13. Outline how to stabilise the cervical spine
14. State the indications for sizing and using a cervical collar
15. Outline how to log roll the patient with a suspected spinal injury
16. Outline how to move and secure the patient to a long board
17. Outline how to assist with immobilising the patient using a vest type extrication device
18. Explain the reasons for removal of a helmet
19. Explain the preferred methods to remove a helmet
20. Explain the pre-hospital emergency assessment findings and *care management for the patient with a head injury
- ~~21. Outline the pre-hospital emergency assessment findings and *care management for the patient with maxillo-facial injuries~~
- ~~22. Outline the pre-hospital emergency assessment findings and *care management for the patient with a traumatic amputation including care of the amputated part~~

Attitudinal Objectives

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

1. State the value of analgesia and patients co-operation prior to immobilisation
2. Communicate in a caring and professional manner with patients with traumatic injuries as well as with family members and friends of the patient

Skills Objectives

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

1. Demonstrate the pre-hospital emergency assessment and care management for the patient with a painful, swollen, deformed extremity
2. Demonstrate the use and assisting with the use of **approved splinting and lifting devices
3. Demonstrate assisting with the use of **approved extrication devices
4. Demonstrate the pre-hospital emergency assessment and *care management for the patient with a suspected spinal injury – manual stabilisation, cervical collar application, move and secure a patient to a long board
5. Demonstrate the pre-hospital emergency assessment and care management for the patient with a head injury
6. Demonstrate helmet removal
- ~~7. Demonstrate the pre-hospital emergency assessment and *care management for the patient with maxillo-facial injuries~~
- ~~8. Demonstrate the pre-hospital emergency care assessment and *care management for the patient with a traumatic amputation including care of the amputated part~~

*** Approved devices as per the PHECC CPGs*

Childbirth and neonatal resuscitation

At the completion of this module, the student will be able to assess and manage in accordance with the appropriate CPG(s) and scope of practice for an EMT the care to a pregnant woman about to deliver a baby in a pre-hospital emergency environment. The student will also be able to deliver basic care, including resuscitation, to the newborn.

Highlighted in green = CPG

Objectives

Knowledge Objectives

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

1. State the indications of an imminent delivery
2. Explain the pre-hospital emergency care preparation of the mother pre-delivery
3. Explain the pre-hospital emergency care management of assisting with the normal delivery of an infant
4. Outline the pre-hospital emergency care management of the mother post-delivery
5. Outline the pre-hospital emergency care of the newly born including those requiring resuscitation

Attitudinal Objectives

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

1. Communicate in a caring and professional manner with mothers during delivery as well as with family members of the patient

Skills Objectives

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

1. Demonstrate assisting with the pre-hospital emergency care management of a normal delivery
2. Demonstrate the pre-hospital emergency care management for the mother post-delivery care
3. 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 basic care of a paediatric patient in accordance with the appropriate CPG(s) and scope of practice for an EMT.

Highlighted in green = CPG

Objectives

Knowledge Objectives

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

1. Outline the elements of the Paediatric Assessment Triangle
2. List the causes of respiratory emergencies in paediatrics
3. Outline the presentation of stridor
4. Describe the pre-hospital emergency assessment findings and care management for paediatrics with inadequate respirations
5. List common causes of seizures in the paediatric patient
6. Outline the pre-hospital emergency assessment findings and care management for the paediatric patient with seizures/ convulsions
7. Outline the pre-hospital emergency assessment findings and care management for the paediatric patient with pyrexia
8. Outline the pre-hospital emergency assessment findings and care management for the paediatric patient with allergic reactions and anaphylaxis
9. Outline the pre-hospital emergency assessment findings and care management for the paediatric patient with external haemorrhage including shock from blood loss
10. Outline the pre-hospital emergency assessment findings and care management for the paediatric patient with a glycaemic emergency
11. Outline the pre-hospital emergency assessment findings and care management for the paediatric patient with a symptomatic bradycardia
- 12.
13. Outline the pre-hospital emergency assessment findings and care management for the paediatric patient with burns
14. Outline the pre-hospital emergency assessment findings and care management for the paediatric patient with a traumatic injury who requires spinal immobilisation
15. ~~Outline the pre-hospital emergency assessment findings and *care management for the paediatric patient with known or suspected poisoning~~
16. ~~Outline the pre-hospital emergency assessment findings and *care management for the paediatric patient with signs and symptoms of possible abuse and neglect~~
20. 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
17. Explain the need for critical incident stress support following a difficult paediatric incident

Attitudinal Objectives

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

18. Respect the feelings of the family when dealing with an ill or injured paediatric patient
19. Appropriately manage the EMTs own emotional response when caring for infants or children

20. Demonstrate a caring attitude towards the infant and child with illness or injury who require pre-hospital emergency care
21. Communicate in a caring and professional manner with infants and children with an illness or injury, as well as with family members and friends of the patient

Skills Objectives

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

1. Demonstrate the pre-hospital emergency assessment and care management for the paediatric patient with **inadequate respirations including stridor**
2. Demonstrate the pre-hospital emergency assessment and care management for the paediatric patient **with seizures/ convulsions**
3. Demonstrate the pre-hospital emergency assessment and care management for the paediatric patient with pyrexia
4. Demonstrate the pre-hospital emergency assessment and care management for the paediatric patient with an **allergic reactions and anaphylaxis**
5. Demonstrate the pre-hospital emergency assessment and care management for the paediatric patient with **external haemorrhage including shock from blood loss**
6. Demonstrate the pre-hospital emergency assessment and care management for the paediatric patient with a **glycaemic emergency**
7. Demonstrate the pre-hospital emergency assessment and care management for the paediatric patient with a **glycaemic emergency**
8. Demonstrate the pre-hospital emergency assessment and care management for the paediatric **patient with burns**
9. Demonstrate the pre-hospital emergency assessment and care management for the paediatric patient with a **traumatic injury who requires spinal immobilisation**
10. ~~Demonstrate the pre-hospital emergency assessment and *care management for the paediatric patient with known or suspected poisoning~~
11. ~~Demonstrate the pre-hospital emergency assessment and *care management for the paediatric patient who is suspected as suffering from abuse or neglect~~
12. Demonstrate the pre-hospital emergency assessment and care management **for the paediatric patient with pain**

Learning Outcome 1 – Domain 3

Provide the appropriate standard of patient care for interfacility transfers and pre-hospital emergency care services	<i>Appropriate on-going maintenance of the patient record and utilisation of best communication practice including patient handover procedures</i>
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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 PHECC Patient Care Report Guidebook.

(remains a work in progress)

Objectives

Knowledge Objectives

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

Need more on HIS

1. Explain why it is essential to complete a patient care report (PCR) on patients pre-hospital
2. Explain the special considerations regarding patient refusal of treatment and or transport
3. Explain the special considerations regarding the sections: Cessation of Resuscitation, Recognition of Death and Pre-hospital Cardiac Arrest

Attitudinal Objectives

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

1. Explain why patient care documentation should be done in a timely manner but should not distract from care and communication with the patient
2. Manage with strict confidentiality all patient records, paper and electronic format

Skills Objectives

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

1. Collect, analyse and organise information to complete a PCR for a given patient scenario.
2. Use appropriate verbal and written communication processes and procedures to fulfil legal and organisational requirements

Communications

At the completion of this module, the student will be able to demonstrate the use of effective and appropriate communications skills which improve communication with patients.

Objectives

Knowledge Objectives

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

1. Describe each of the golden rules of patient interaction
2. Describe how to adapt verbal and non-verbal communication for visually impaired patients
3. Describe the principle barriers to effective patient and team communication
4. State the personal qualities that make an effective therapeutic communicator
5. Define each of the seven 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

Attitudinal Objectives

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

1. Demonstrate appropriate non-verbal communication to convey a caring attitude
2. Demonstrate confidence and professionalism in gaining co-operation from others
3. Demonstrate a professional non-judgemental attitude and demeanour throughout the communication process

Skills Objectives

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

1. Demonstrate the use of open questioning technique and obtain important and relevant clinical information
2. Demonstrate using simple language to aid comprehension when engaging 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~~

Learning Outcome 2

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 an EMT.

In blue extracted from Manual handling

Objectives

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
4. Describe the effects of reduced mobility on the older patient
5. Outline the special considerations for transporting the elderly
6. Outline the special considerations for transporting infants in incubators
7. Outline the special considerations for mentally and physically challenged population in relation to their needs
8. Explain why nursing escorts may accompany the patient in an inter-facility patient transfer

Attitudinal Objectives

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

1. Describe the need to maintain patient mobility as far as possible
2. Describe the importance of encouraging a patient's independence
3. Explain the importance of working as a team when lifting and moving patient

Skills Objectives

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

1. Demonstrate attending to a patient's 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 patient lifts, carries and drags appropriate to pre-hospital emergency care practice, using the principles of lifting
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 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
10. Demonstrate age appropriate moving and handling techniques

* Approved devices as per the PHECC CPGs

** Approved nursing positions as per the PHECC CPGs

Gaining access to the patient at 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 CPG(s) and scope of practice for an EMT

Objectives

Knowledge Objectives

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

1. Describe the purpose of extrication
2. Identify the stable patient who requires extrication
3. State the steps that should be taken to protect the patient during extrication
4. Identify the patient who will require rapid extrication
5. Outline the steps in rapid extrication

Attitudinal Objectives

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

1. Explain the concept of Team to ensure a safe and efficient extrication

Skills Objectives

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

1. Demonstrate the extrication of a simulated patient from a car
2. Perform rapid extrication

Ambulance operations

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

Objectives

Knowledge Objectives

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

1. List the functions of an EMS Control Centre
2. List the role and responsibility of the EMC (Call taker and dispatcher)
3. Describe the pre-arrival instructions
4. List the functions of a Medical Priority Dispatch System (AMPDS)
5. List the time phases of an ambulance call in response to an incident
6. Describe the considerations that should be given to a request for a Garda escort for an ambulance
7. Explain the PHECC EMS Priority Dispatch classifications (Clinical status 1-4)
8. 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

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 practice	<i>Retaining a professional manner and method in the performance of their duties as an EMT</i>
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Professional practice and medico-legal issues concerning the EMT

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.

Objectives

Knowledge Objectives

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

1. Outline the pertinent sections of current relevant legislation, highlighting their impact on an EMTs professional practice
2. Explain the professional duties of being a registered pre-hospital emergency care practitioner.
3. Discuss the PHECC Code of professional conduct and ethics of pre-hospital emergency care practitioners.
4. State the conditions necessary for the EMT to have a duty of care
5. Define informed and implied consent and discuss the methods of obtaining consent
6. Discuss the responsibilities for the EMT in cases of patient refusal of treatment and or transport
7. Explain the importance, necessity and legality of patient confidentiality
8. List the actions to take to assist in the preservation of a crime scene
9. State the conditions that require notification to the Gardaí
10. State the procedure following a suspicious death in a public place or in the home

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. Accept and uphold the professional responsibilities of the EMT 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

(remains a work in progress- x ref DoHC “Building a culture of Patient safety” report 2007)

It will include: Patient advocacy, adverse events management, open communication when things go wrong, clinical audit.....

(x ref WHO “Patient safety curriculum Guide for Medical schools” (2009)

Learning Outcome 3 – Domain 2

Adopt a professional approach to their practice	<i>Basing their professional practice on a solid foundation of both basic and clinical sciences</i>
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Clinical anatomy and physiology

At the completion of this module the student will be able to outline the basic structure and function of the cardio-respiratory, musculoskeletal and nervous systems of the body.

Objectives

Knowledge Objectives

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

The respiratory system

1. Describe the position and structure of the anatomical parts or organs of the respiratory system
2. Outline the basic physiology of breathing, differentiating between external and internal respiration
3. Outline the mechanism of breathing

The cardiovascular system

1. Describe the functions of arteries, veins and capillaries
2. Describe the structure of the heart and its position within the thorax
3. Define the coronary circulation
4. Outline the circulation of blood through the heart and major blood vessels of the body
5. Define the electrical conducting system of the heart
6. Define the cardiac cycle
7. Define pulse and blood pressure

The musculoskeletal system

1. List the functions of bone
2. Describe the structure of the vertebral column
3. Explain the movements of the vertebral column
4. Identify the bones of the appendicular skeleton
5. Describe the functions of muscles, ligaments and tendons

The blood

1. List the functions of blood

The skin

1. List the functions of skin

The nervous system

1. State the functions of the nervous system
2. State the functions of motor and sensory nerves
3. List the functions of cerebrospinal fluid

Attitudinal Objectives

No attitudinal objectives identified

Skills Objectives

No skills objectives defined

Pharmacology

At the completion of this module, the student will be able to safely administer the appropriate medication and also correctly monitor medicated patients in accordance with the appropriate CPG(s) and scope of practice for an EMT.

Objectives

Knowledge Objectives

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

1. Define pharmacology
2. Define the terms: side effects, indications, contraindications and adverse reactions
3. Differentiate between trade and generic medication names
4. List the medication which the EMT may administer to the patient from PHECC Clinical Practice Guidelines (CPGs)
5. List the medication which the EMT can administer under medical practitioners instructions
6. List the pre-administration checks to follow when administering medication
7. Explain the importance of establishing if the patient has any medication allergies or is taking complementary therapies e.g. homeopathy
8. Explain the dangers associated with inappropriate administration of medication
9. List the dose, route of administration, indication, contraindications and side effects of *approved medication for use by EMTs

Attitudinal Objectives

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

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

Skills Objectives

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

1. Demonstrate the pre-administration checks to be undertaken prior to medication administration
2. Demonstrate the administration of all *approved medication for EMT use
3. Demonstrate the documentation of medication administration on the Patient Care Report
4. Demonstrate the assessment and documentation of the patient's responses to medication

**Approved medications as per the PHECC CPGs*

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 the appropriate CPG(s) and scope of practice for an EMT.

Objectives

Knowledge Objectives

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

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 are 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:
 - Exposure to blood borne pathogens
 - Exposure to airborne pathogens
 - Exposure to biological agents
 - Exposure to ectoparasites
 - Exposure to 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/needleless systems
12. List the steps to be taken in the event of an inoculation injury; percutaneous and mucocutaneous types
13. List the steps in blood and body fluid spills management
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

Attitudinal Objectives

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

1. Demonstrate an appropriate professional, caring to patients irrespective of infective status
2. Communicate sensitively 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

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

1. Demonstrate effective hand washing technique
2. Demonstrate glove use and disposal
3. Demonstrate the management of blood or body fluids spills
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

Intramuscular injection

At the completion of this module, the student will be able to correctly and safely administer an intramuscular injection in accordance with the appropriate CPG(s) and scope of practice for an EMT.

Objectives

Knowledge Objectives

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

1. Identify the preferred sites for intramuscular injection
2. Outline the general indications of intramuscular medication administration
3. List the equipment required and describe the procedure of drawing up the medication from both a glass and plastic ampoules
4. List the common complications of intramuscular injection as well as some basic preventative steps
5. 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 an appropriate professional and a caring attitude for the patient who requires an intramuscular injection
2. Demonstrate an awareness of the real fear and anxiety some patients experience about receiving an injection

Skills Objectives

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

1. Demonstrate the preparation of an intramuscular injection
2. Demonstrate the administration of an intramuscular injection

Learning Outcome 3 – Domain 3

Adopt a professional approach to their practice	<i>Utilising best practice as prescribed by standard pre-hospital emergency care operational procedures</i>
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Radio communications

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

Objectives

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

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

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

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 Age, Sex, History, Incident, Clinical impression (ASHICE) and Estimated Time of Arrival (ETA)

Hazardous material incident

At the completion of this module, the student will be able to demonstrate a safe approach when dealing with a hazardous material incident in accordance with the appropriate CPG(s) and scope of practice for an EMT

Objectives

Knowledge Objectives

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

1. Outline the EMTs role during an incident involving hazardous materials
2. List the safety precautions required to ensure EMT and crew safety at a hazardous materials incident
3. Explain the methods for preventing contamination of self, equipment and facilities
4. Identify the component parts of an ADR hazard warning panel
5. Identify the component parts of a Hazchem warning panel

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

Skills Objectives

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

1. Identify the UN number and the type of hazard involved, given a hazardous warning panel

Major Emergency

At the completion of this module, the student will be able to perform their duties as an EMT effectively in conjunction with other relevant services at a Major Emergency.

Objectives

Knowledge Objectives

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

1. Define Major Emergency² 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 Tactical area 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. Sketch a schematic diagram of the patient through flow at a Major Emergency site identifying Operational and Tactical areas
13. Identify the tabard worn by the Controller of Operations for each of the three principle response agencies

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)

Skills Objectives

1. At the completion of this section, the student will be able to:
2. Given a scenario of a Major Emergency compose a METHANE message
3. Given a simulated patient perform a triage sieve and label correctly
4. Review the Major Emergency Plan from the student EMTs local area

² Major Emergency management as per the PHECC CPGs

Civil disorder

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

Objectives

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 Gardaí 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 EMTs 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

Learning Outcome 4 – Domain 1

Demonstrate a commitment to professional development and continuous renewal	<i>Maintaining personal well-being and professional relationships with colleagues</i>
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The wellbeing of the Emergency Medical Technician

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

Objectives

Knowledge Objectives

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

1. Discuss measures to be taken to ensure the safety of the patient, Emergency Medical Technician (EMT) and others
2. Explain the importance of emotional/ psychological wellbeing in a work context
3. Outline the importance of personal hygiene and physical fitness
4. List the ways in which people are affected by stress/ pressure
5. List commonly occurring work stressors in pre-hospital emergency services
6. Describe basic self-care procedures to help reduce/ alleviate stress
7. Describe the possible ways in which people are affected by exposure to critical incident/ traumatic stress
8. List the possible impact on the EMT when faced with trauma, illness, death and dying
9. List the signs and symptoms of critical incident stress
10. Describe the role and operation of a critical incident stress management system
11. Outline the possible way in which an EMTs family may be affected by his/her stress levels
12. Discuss the psychological impact of critical incidents/ trauma/ loss on bystanders or next of kin
13. Outline the steps in the EMTs approach to a bystander or next of kin confronted with trauma, illness, death and dying
14. Discuss how de-escalation techniques are used in the management of a behavioural disturbed person

Attitudinal Objectives

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

1. Explain the importance of recognising the response to trauma, illness, death and dying and communicating effectively with the patient's family
2. Explain the importance of being an advocate for the safety of self and others
3. Be familiar with 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 professional development and continuous renewal

<i>Identify with the role of the EMT</i>
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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 an EMT within this system.

Objectives

Knowledge Objectives

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

1. Outline the role and responsibility of the EMT in the continuum of pre-hospital emergency care
2. Define medical advice /direction and discuss how it is used to enhance patient care pre-hospital
- ~~3. Explain the reason and rationale to seek medical advice /direction for patients pre-hospital~~
4. Outline the circumstances to request advanced life support
5. List the role and functions of the Pre-Hospital Emergency Care Council
6. Outline the structures of the Health Service Executive
7. Outline the structures of the National Ambulance Service
8. Outline the role of the Private, Voluntary, Rescue and Auxiliary Agencies in the care continuum
9. List the various methods used to access pre-hospital emergency care
10. Describe the EMT's responsibilities to personal safety
11. Discuss the role and responsibilities of the EMT with regard to safety for others at the scene of an incident including the patient, emergency crew and bystanders
- ~~12. State the impact of Ireland's increasing population on health demographics~~
- ~~13. 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
- 3.

Skills Objective

No skills objectives identified

Professional development

(Work in progress to revise title in line with new terminology)

At the completion of this module, the student will be able to set goals for their own continuing professional and personal development plans.

Knowledge Objectives

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

1. Define Continuing Professional Development (CPD)
2. Define scope of practice
3. Identify own Continuing Professional Development (CPD) needs
4. State the principles of constructive feedback and how it provides for personal growth

Attitudinal Objectives

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

1. Actively participate and support the educational approach of lifelong learning
2. Understand the knowledge and practice competently the clinical practice guidelines of PHECC

Skills Objectives

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

1. Demonstrate use of a learning portfolio

.....

Paramedic

Draft Education and Training Standard
(V1 Date 2010)

Summary of work in progress

The current paramedic Standard of Education and Training (2007) has undergone significant review from an educational perspective; the individual modules have been reorganised to include domain specific learning outcomes.

The aim of this content review, leading to the next edition (2011), is to revise and amend the content specifically to meet the emerging needs of HSE, Private and Voluntary ambulance services that engage in the deployment of paramedics (volunteers and employees). Overall aim of this next version is to capture more accurately the role of paramedic and their emerging scope of practice. The next paramedic Education and Training Standard will outline in full the expected competency of the student upon completion of a PHECC recognised course.

List of changes made to date:

1. Redeveloped role and responsibilities of the paramedic to incorporate categories and terminology from PHECC Inter Facility Patient Transfer Standard and PHECC EMS Priority Dispatch Standard.
2. All new skills included in CPGs Edition 3 incorporated into knowledge, attitudinal or skills objectives as relevant. In no particular order: early warning score, clinical status decision, capacity evaluation, splinting, rule of 9's, manual stabilisation of a # limb, realignment of a fractured limb, RTS, external uterus massage, spinal injury rule out, mechanical assist CPR device, peak flow rate, active warming, active cooling, post resus care. Removed End tidal CO2 monitoring.
3. New for paediatric patients: paediatric assessment triangle, paediatric pain (Wong barker), spinal immobilisation, stridor and glycaemic emergencies, spinal immobilisation and burns, haemorrhage control incl. shock, symptomatic bradycardia.
4. Reworked 5 modules (2.2, 2.3, 2.4, 2.5, 2.6) pertaining to patient assessment into 2 modules - Primary and Secondary survey.
5. Re-titled Legislation and information management” to “*Health information management*” and incorporated terminology and principles of new Health Information Standard (**work in progress**).
6. Re- titled; Infants and children – Paediatrics; Introduction to pre-hospital emergency care - Continuum of pre-hospital emergency care, A&P – Clinical A&P; Work effectively with others - Interpersonal; and team management skills.
7. Merged (3.2) Advanced airway into Airway and Ventilation (previously breathing).
8. Added new – “*Patient safety and Quality assurance*” (**work in progress**).
9. Reworked (1.3) “PHECC Code of Conduct and ethics and Medico-legal issues – “Professional practice and medico-legal issues concerning the paramedic.
10. Terminology changes- CVA- stroke, near drowning –submersion incident; LMA/LT to Supraglottic airway and some other minor terminology changes.
11. Removed (1.6) Principles of lifting and moving and rework basic care to incorporate bits
12. Inserted ceasing resus efforts to cardiac care (moved back from CFR).
13. New module “*Professional development*” (**work in progress**). Yet to agree **CPD terminology** throughout the document.
14. New terms EMC (call taker and dispatcher) written into Ambulance Operations.
15. New module “Teat and referral” (**work in progress**).

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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 grade on the PHECC register (EMT), a paramedic possesses a higher skill set in advanced 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 life-saving patient care in diverse settings primarily outside of the traditional hospital environment. A paramedic is the minimum practitioner grade that is trained for transporting inter-facility patients who are defined as Acuity Levels 4C "Acute Non Emergent Care", 4D "Acute Emergent Care" and 4E "Mobile Intensive" (Ref: *PHECC's Inter Facility Patient Transfer Standard, 2009*). Paramedics will also be dispatched in response to the full spectrum of patients defined as Clinical Status Category 1 "Life threatening" 2 "Serious not life threatening" and 3, "Non serious or life threatening" (Ref: *PHECC's EMS Priority Dispatch Standard, 2009*). 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 grade. 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 **life-long professional development** and **other competency assurance schemes**.

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 professional development and continuous renewal.

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.*
2. *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/ or standards of operation and CPGs.

Learning Outcome 4

Demonstrate a commitment to professional development and continuous renewal.

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 adults, children and infants 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 www.phecc.ie

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 care services (L1)	Recognition and assessment of both common life-threatening and common serious medical conditions (L1D1)	<ol style="list-style-type: none"> 1. Primary Survey 2. Secondary Survey
	Selection of an appropriate patient management plan, application of appropriate interventions as required, and the correct monitoring of the patient (L1D2)	<ol style="list-style-type: none"> 1. Airway and ventilation 2. Respiratory emergencies 3. Cardiac First Response¹ 4. Cardiovascular emergencies 5. Diabetic emergencies 6. Allergies and anaphylaxis 7. Poisoning and overdose 8. Environmental emergencies 9. Mental health and behavioural emergencies 10. Altered level of consciousness and seizures 11. Bleeding and shock 12. Soft tissue injuries 13. Musculoskeletal injuries 14. Head and spinal injuries 15. Pregnancy and pre-delivery emergencies 16. Childbirth and neonatal resuscitation 17. Paediatrics
	Appropriate on-going maintenance of the patient record and utilisation of correct patient handover procedures (L1D3)	<ol style="list-style-type: none"> 1. Health information management 2. Communications

¹ The CFR course –level is either a pre-requisite or co-requisite.

Cont.....

Framework for the paramedic Standard		
Learning Outcome (L)	Educational Domain (D)	Module(s)
Safely and appropriately access, retrieve and transport patients (L2)		<ol style="list-style-type: none"> 1. Basic patient care 2. Scene assessment 3. Gaining access to the patient at scene 4. Ambulance operations
Adopt a professional approach to their practice (L3)	Retaining a professional manner and method in the performance of their duties (L2D1)	<ol style="list-style-type: none"> 1. Professional practice & medico-legal issues concerning the paramedic 2. Patient safety and Quality assurance
	Basing their professional practice on a solid foundation of both basic and clinical sciences (L2D2)	<ol style="list-style-type: none"> 1. Clinical anatomy and physiology 2. Pharmacology 3. Infection prevention and control 4. Intramuscular injection 5. Intravenous therapy
	Utilising best practice as prescribed by pre-hospital standard operational procedures/ or standards of operation? And CPGs (L2D3)	<ol style="list-style-type: none"> 1. Radio communications 2. Hazardous Material Incident 3. Major Emergency 4. Civil disorder 5. Treat and discharge/ referral
Demonstrate a commitment to professional development and continuous renewal (L4)	Maintaining personal well-being and professional relationships with colleagues (L4D1)	<ol style="list-style-type: none"> 1. The well-being of the paramedic
	Identify with the role of the paramedic (L4D2)	<ol style="list-style-type: none"> 1. Continuum of pre-hospital 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 patient care for interfacility transfers and pre-hospital emergency care services	<i>Recognition and assessment of both common life-threatening and common serious medical conditions</i>
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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 (including paediatric patients) 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.

Objectives

Knowledge Objectives

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

1. Identify the assessments made under the following as part of a Primary survey for a medical and trauma patient as appropriate:
 - **Airway**
 - **c- spine**
 - **Breathing**
 - **Circulation**
 - **Disability**
 - **Exposure**
2. Differentiate between a clear, partially obstructed and obstructed airway
3. State the reason for the management of cervical spine until trauma is ruled out
4. Differentiate between normal, abnormal, fast, slow and absent breathing rates and between shallow, laboured and noisy breathing
5. Differentiate between regular, irregular and absent pulse rates
6. Discuss the need for assessing the patient for external bleeding
7. Differentiate between normal, pale, flushed and cyanosed skin types
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
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

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 basic life support 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

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

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

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 (including paediatric patients) while considering findings and initiating care management in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

Objectives

Knowledge Objectives

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

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 mnemonic SAMPLE: **S**igns & **S**ymptoms, **A**llergies, **M**edication, **P**ertinent medical history, **L**ast intake, **E**vent
7. Collate a focused history based on the interview mnemonic 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. State the normal ranges for adults, infants and children for
 - Pulse rate
 - Respiration rate
 - Temperature
 - Blood pressure
17. Explain the physiology of pain
18. Describe pain assessment for adults and children using the interview mnemonic PQRST (**P**rovocation, **Q**uality, **R**egion, **R**eferral, **R**ecurrence, **R**elief, **S**everity and **T**ime). 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
19. Explain how to measure pain on the pain analogue scale 0-10
 20. Discuss referred pain with reference to mechanism, recognition and common sites of occurrence
 21. Explain the value of performing a continuous assessment
 22. Explain normal air entry and match breath sounds with lung conditions
 23. Describe how to measure the patient expiratory peak flow rate using a peak flow meter
 24. Explain the indications for use, benefits and limitations of pulse oxymetry
 25. Explain the indications for use, benefits and limitations of end tidal CO₂ monitoring in a ventilation circuit

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

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

1. Demonstrate questioning the patient to obtain a SAMPLE history
2. Demonstrate questioning the patient to obtain a OPQRST history
3. Demonstrate obtaining additional information from the family members or bystanders at the scene as appropriate
4. Demonstrate using a pulse oxymeter
5. Demonstrate auscultation of air entry and interpretation of breath sounds
6. Demonstrate the measurement of an expiratory peak flow rate
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 rapid assessment based on based on the mechanism of injury
12. Evaluate a patients capacity to make decisions

Learning Outcome 1 – Domain 2

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

CPG indicated in green

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 the techniques of suctioning
4. Describe how to measure and insert an oropharyngeal (OPA) airway
5. Describe how to measure and insert a nasopharyngeal (NPA) airway
6. List the indications and contraindications for use of an OPA or an NPA
7. Describe **Supraglottic airway insertion** and the benefits of use
8. Describe the benefits and limitations of ventilating the patient with a bag valve mask (BVM)
9. Describe ventilating the patient with a BVM (one and two rescuers)
10. List the component parts of an oxygen delivery system (oxygen cylinders, regulators Demand Valve, Constant Flow Meter etc)
11. Explain the principles of safe operation for an oxygen delivery system
12. Outline the different techniques in oxygen administration using a pocket mask, a venturi mask, nasal cannula and a non rebreathing mask
13. Explain the indications for use, benefits and limitations of oxygen humidification
14. List the equipment required for endotracheal intubation

Attitudinal Objectives

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

1. State the value of oxygen administration
2. Relate the mechanism of injury to opening the airway
3. Demonstrate a professional, caring attitude towards patients with airway and breathing problems
4. Communicate effectively with patients with airway and breathing problems, as well as with family members and friends of the patient

Skills Objectives

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

1. Demonstrate head-tilt chin lift and jaw thrust
2. Demonstrate oral suctioning
3. Demonstrate the insertion of an oropharyngeal airway
4. Demonstrate the insertion of a nasopharyngeal airway
5. Demonstrate insertion and ventilation of the patient using a supraglottic airway (adult only)
6. Demonstrate ventilating the patient with a BVM (one and two rescuers)
7. Demonstrate ventilation of the patient with a stoma using a BVM
8. Demonstrate the safe preparation and operation of an oxygen delivery system
9. Demonstrate oxygen administration for a range of patient scenarios (adult, infant and child) using a pocket mask, a venturi mask, nasal cannula and a non rebreather mask
10. Demonstrate the assembly of endotracheal intubation equipment

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.

CPG indicated in green

Knowledge Objectives

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

1. Define the terms Pulmonary Embolism, 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

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

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**

Cardiac First Response

<< To inset when approved >>

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 in accordance with the appropriate CPG(s) and scope of practice for a paramedic.

CPG indicated in green

Knowledge Objectives

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

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. Discuss the pre-hospital emergency assessment findings and care management for the patient with cardiac chest pain
3. Identify PQRST on a normal Electrocardiograph (ECG) rhythm strip
4. Identify the following rhythms from ECG Lead II: Normal Sinus Rhythm, Bradycardia, Tachycardia, Premature Ventricular Complexes, Ventricular Fibrillation, Ventricular Tachycardia, Asystole, Pulseless Electrical Activity
5. List the differential diagnosis for a patient with chest pain
6. Explain the importance of ST segment elevation and depression
7. Define ST elevation myocardial infarct and non ST myocardial infarction
8. Discuss the position of comfort for patients with various cardiac emergencies
9. Explain the importance of Advanced Life Support (ALS)
10. Define the role of the paramedic in the chain of survival
11. Explain the importance of urgent transport to an appropriate medical facility
12. Discuss the reasons for the acquisition of a 12 Lead ECG
13. Describe the heart's electrical conduction and relate this to the automated external defibrillators (AED's) operation
14. Discuss the pre-hospital emergency care management for the patient with **persistent ventricular fibrillation/ shockable rhythm** and no available Advanced Life Support (ALS)
15. Discuss the pre-hospital emergency care management for the patient with **recurrent ventricular fibrillation/ shockable rhythm** and no available ALS
16. Discuss the pre-hospital emergency care management for the patient found in **Asystole/PEA** and no available ALS
17. Differentiate between the single rescuer and multi rescuer care with an AED
18. Discuss the importance of coordination between ALS trained practitioners and Responders using an AED
19. List the benefits of a mechanical assist CPR device
20. Discuss the indications, contraindications and benefits of active cooling in **post resuscitation care**
21. List the circumstances when a registered paramedic or advanced paramedic can **discontinue resuscitation efforts** including **traumatic cardiac arrests**

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 pre-hospital emergency care
2. Communicate with empathy with family members and friends of the patient during a cardiac event

Skills Objectives

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

1. Demonstrate the pre-hospital emergency assessment and care management for the patient with cardiac chest pain
2. Demonstrate correct positioning of electrodes and leads to monitor patient's ECG
3. Demonstrate the acquisition and transmission of a 12 Lead ECG
4. Given a 12 lead ECG with an ST elevation myocardial infarct identify the location of the infarct
5. 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
6. Demonstrate the completion of the AED: Operator's Shift Checklist

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.

CPG indicated in green

Knowledge Objectives

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

1. Define the terms: diabetes mellitus: Type I and II, 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

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

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 pre-hospital patient with a severe 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. Describe the mechanisms of allergic response and the implications for airway management
2. Discuss the pre-hospital emergency assessment findings and care management for the patient with an allergic reaction
3. Discuss the pre-hospital emergency care assessment findings and care management for the patient with anaphylaxis
4. Discuss the relationship between the patient with a severe allergic reaction and airway management
5. 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

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

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.

CPG indicated in green

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. Explain why it may be essential to contact the Poisons Centre
5. Establish the relationship between the patient suffering from poisoning or overdose and airway management
6. List the common products most frequently used for illicit drug abuse including solvents
7. Describe the signs and symptoms which may indicate illicit drug abuse
8. Explain why oxygen therapy is contra-indicated in Paraquat poisoning

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

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

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.

CPG indicated in green

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
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
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

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

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
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 pre-hospital patient with acute, severe behavioural problems in accordance with appropriate 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.

CPG indicated in green

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

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

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

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 emergency management for 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.

CPG indicated in green

Knowledge Objectives

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

1. Define the terms Cerebrovascular Accident (CVA)/ **Stroke** , Transient Ischaemic Attack (TIA) and list the history, signs and symptoms commonly associated with each
2. Describe the following conditions: Parkinson's disease, Motor Neuron Disease, Multiple Sclerosis
3. Define the terms: Dysphagia and Dysphasia
4. Discuss the relationship between airway management and the patient with an **altered level of consciousness** or seizures
5. Describe the pre-hospital emergency assessment findings and care management for the patient with a CVA
6. Describe the pre-hospital emergency assessment findings and care management for the patient with a TIA
7. Discuss the medical causes of unconsciousness
8. State the causes of acute confusion
9. Describe the common causes and the clinical features of seizures
10. Describe the pre-hospital assessment findings and care management for the patient with a seizure and **following a seizure**

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

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

1. Demonstrate the pre-hospital emergency assessment and care management for the patient with a TIA

2. Demonstrate the pre-hospital emergency assessment and care management for the patient with a CVA
3. Demonstrate the pre-hospital emergency assessment and care management for the patient with a seizure and following a seizure
4. Demonstrate the pre-hospital emergency assessment and care management for the patient in a state of acute confusion

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.

CPG indicated in green

Knowledge Objectives

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

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

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

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.

CPG indicated in green

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

Attitudinal Objectives

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

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

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

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

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.

CPG indicated in green

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

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

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
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

*Approved devices as per the PHECC CPGs

Head and spinal injuries

At the completion of this module, the student will be able to assess and manage the care of a pre-hospital patient with a head and or 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 spinal injury.

CPG indicated in green

Knowledge Objectives

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

1. Relate the mechanism of injury to potential injuries of the head and spine
2. Describe the implications of not caring for 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 using 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 instances when a vest type extrication device should be used
11. Explain the rationale for utilising a vest type extrication device when moving the patient from the sitting to the supine position
12. Describe how to immobilise the patient using a vest type extrication device
13. Explain the reasons for removal of a helmet
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 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

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
2. Demonstrate helmet removal
3. Demonstrate the pre-hospital emergency assessment and care management for the patient with 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.

* 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 manage 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.

CPG indicated in green

Knowledge Objectives

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

1. Explain the physiology of a normal pregnancy
2. Define the terms: foetus, placenta, umbilical cord, amniotic sac and perineum
3. Describe the assessment of a pregnant patient who requires pre-hospital emergency care for something other than pregnancy related condition
4. Describe the special considerations for a pregnant patient in cardiac arrest
5. Outline the psychological care of a pregnant patient
6. Outline the pre-hospital emergency care assessment findings and care management for the pre-delivery 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

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

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).

CPG indicated in green

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 the term 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

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

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 pre-hospital emergency care services
3. Communicate effectively with mothers during delivery as well as with family members and friends of the patient

Skills Objectives

1. At the completion of this section, the student will be able to:
2. Demonstrate the pre-hospital emergency care management for the mother and child during each stage of the normal delivery
3. Demonstrate the pre-hospital emergency assessment and care management for the following abnormal deliveries: cord complications, limb presentation and breech birth
4. Demonstrate the pre-hospital emergency care management for the mother post-delivery care
5. Demonstrate the pre-hospital emergency assessment and care management for the mother with post-partum haemorrhage
6. 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).

CPG indicated in green

Knowledge Objectives

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

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 pre-hospital emergency services
4. Communicate effectively with infants and children with an illness or injury, as well as with family members and friends of the patient

Skills Objectives

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

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 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 patient care for interfacility transfers and pre-hospital emergency care services	<i>Appropriate on-going maintenance of the patient record and utilisation of correct patient handover procedures</i>
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Health information management

At the completion of this module, the student will be able to discuss the impact of the **Health Information Standard (?terminology)** 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.

(Work in progress)

Knowledge Objectives

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

1. Explain why it is essential to complete a Patient Care Report (PCR) on pre-hospital patients.
2. List the circumstances when a PCR must be completed.
3. Discuss ownership, access and control of PCRs.
4. Describe the required information in each section of the PCR and how it should be entered.
5. Explain the special considerations regarding patient refusal of treatment and or transport.
6. Explain the special considerations regarding the sections: Cessation of Resuscitation; Recognition of Death and Pre-Hospital Cardiac Arrest.
7. Describe the legal aspects of the PCR.
8. Explain how the PCR contributes to healthcare quality improvement and clinical audit.

Attitudinal Objectives

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

1. Understand that that patient care documentation should be done in a timely manner but should not distract from care and communication with the patient.
2. Explain the rationale for appropriately reporting and recording patient information.
3. Explain how the PCR contributes to the continuum of care for the patient.

Skills Objectives

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

1. Collect, analyse and organise information to complete a PCR for a given patient scenario.
2. Use appropriate verbal and written communication processes and procedures to fulfil legal and organisational requirements

Communications

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

Knowledge Objectives

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

1. Describe each of the golden rules of patient interaction
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 seven 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

Attitudinal Objectives

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

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

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

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

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.

(manual handling was removed and reworked here)

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 special considerations for transporting the elderly
5. Describe the effects of reduced mobility on the older patient
6. Outline the special considerations for transporting infants in incubators
7. Outline the special considerations for 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. Explain the need to maintain patient mobility as far as possible
2. Explain the importance of encouraging a patient's independence
3. Demonstrate the importance of working as a team when lifting and moving patients

Skills Objective

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

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 pre-hospital 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, 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
10. Demonstrate age appropriate moving and handling techniques

(* Approved devices as per the PHECC CPGs / ** 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
13. Explain the significance of the Golden Hour

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
2. Demonstrate the extrication of a simulated patient from a car

* 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 an EMS 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 (AMPDS)
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 (Clinical status 1-4)
9. Outline the special considerations for a long distance journey
10. Outline the special considerations for transporting out- patients
11. Outline the special considerations for mentally and physically challenged population in relation to their needs
12. 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 practice	<i>Retaining a professional manner and method in the performance of their duties</i>
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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

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

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 (? Introduce new terms credentialing/ privileging here)
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. Explain the paramedic's role in with other registered practitioners and other non ambulance personnel
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 suspicious 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.

(Work in progress-) x ref DoHC “Building a culture of Patient safety” report 2007)

It will include: Patient advocacy, adverse events management, open communication when things go wrong, clinical audit.....

(x ref WHO “Patient safety curriculum Guide for Medical schools” (2009)

Learning Outcome 3 – Domain 2

Adopt a professional approach to practice their practice	<i>Basing their professional practice on a solid foundation of both basic and clinical sciences</i>
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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. 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. Outline the gross and microscopic structure of a kidney
3. Describe the blood and nerve supply to the urinary system
4. 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: pharmacology, side effects, indications, contraindications and adverse reactions
2. Differentiate between trade and generic medication names
3. List the medication which the paramedic may administer to the patient from PHECC CPGs
4. List the medication which the paramedic can administer under medical practitioners instructions
5. List the pre-administration checks to follow when administering medication
6. Explain the importance of establishing if the patient has any medication allergies or is taking complementary therapies e.g. homeopathy
7. Explain the dangers associated with inappropriate administration of medication
8. List the dose, route of administration, indications, contra-indications and side effects of the *approved medications for use by paramedics

Attitudinal Objectives

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

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

Skills Objectives

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

1. Demonstrate the pre-administration checks to be undertaken prior to medication administration
2. Demonstrate the administration of all *approved medication for paramedic use
3. Demonstrate the documentation of medication administration on the Patient Care Report
4. Demonstrate the assessment and documentation of the patient's response to medication

**Approved medication as per the PHECC CPGs*

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

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

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 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 in blood and body fluid spills management
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

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

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

Intravenous therapy

At the completion of this module, the student will be able to administer and correctly monitor intravenous therapy on a patient in an out-of-hospital setting.

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 fluid therapy
3. List the equipment required and the procedure involved with insertion of the intravenous cannula
4. List the equipment required to set up for intravenous 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 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

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

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

1. Demonstrate the maintenance of a fluid regime including the correction of some basic administration complications
2. Identify an intravenous cannula that has tissueed
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 the intravenous cannula

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. Outline the general indications of intramuscular medication administration
3. List the equipment required and describe the procedure of drawing up the medication from both a glass and plastic ampoules
4. List the common complications of intramuscular injection as well as some basic preventative steps
5. 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

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

1. Demonstrate the preparation of an intramuscular injection
2. Demonstrate the administration of an intramuscular injection

Learning Outcome 3 – Domain 3

Adopt a professional approach to practice their practice	<i>Utilising best practice as prescribed by standard pre-hospital emergency care operational procedures</i>
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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:

2. Differentiate between radio and telephone communications
3. Differentiate between VHF and UHF
4. Describe the components of a typical ambulance service radio net
5. Identify factors that lead to poor radio transmission
6. Identify the importance of radio call signs to ensure effective radio communication
7. 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
8. List the phonetic alphabet
9. List and explain the acceptable radio shorthand words
10. List the principles of good voice procedure when transmitting a radio message
11. List the steps required for transmitting a long radio message

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

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

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 Age, Sex, History, Incident, Clinical impression & Estimated time of arrival (ETA)(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

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

Skills Objectives

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

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 Emergency² 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 Tactical area 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 ambulance crew on scene at a Major Emergency differentiating between the vehicle driver and attendant
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

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 Major Emergency management as per PHECC CPGs

Skills Objectives

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

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. Review the Major Emergency Plan from the student paramedic's local area
4. Given a simulated patient perform a triage sort and label correctly

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 Gardaí 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 patient who can be safely and reliably discharged or alternatively referred to another healthcare professional for additional medical assistance.

(Work in progress)

1. Implement treat and refer and treat and discharge procedures for patients as per PHECC CPGs

Learning Outcome 4 – Domain 1

Demonstrate a commitment to professional development and continuous renewal	<i>Maintaining personal well-being and professional relationships with colleagues</i>
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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 professional development and continuous renewal	Identify with the role of the paramedic
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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

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 pre-hospital 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 continuing professional and personal development plans.

Revise to refresh terminology CPD???

Knowledge Objectives

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

1. Define continuing professional development (CPD)
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 CPD needs
5. Describe how to evaluate CPD 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

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

1. Design a CPD profile and professional portfolio to plan, analyse, reflect and record evidence of professional development
2. Design a PDP, using SMART objectives to schedule and record ongoing professional development 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 multi-professional groups and support staff

Skills Objectives

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

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

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

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

Advanced Paramedic

Draft Education and Training Standard
(V1 Date 2010)

Summary of work in progress

The current AP Standard of Education and Training (2008) has undergone significant review from an educational perspective; the individual modules have been reorganised to include domain specific learning outcomes.

The aim of this content review, leading to the next edition (2011), is to revise and amend content to specifically meet the emerging needs of Statutory, Private, Voluntary & Rescue services that engage in the deployment of APs (employees and volunteers). Overall aim of this version is to capture more accurately the role of AP and their emerging scope of practice. The proposed next AP Education and Training Standard will outline in full the expected competency of the student upon completion of a PHECC recognised course.

List of changes made to date:

1. New skills included in CPGs Edition 3 incorporated into knowledge, attitudinal or skills objectives as relevant - ITD.
2. Pharmacology reworked to incorporate material from UCD regarding "Therapeutics"
3. Converted clinical quality improvement to "Patient safety and Quality assurance (work in progress)"
4. Terminology changes- CVA- stroke, near drowning –submersion incident; LMA/LT to Supraglottic airway and some other minor terminology changes
5. Redeveloped the role and responsibilities of AP to include categories and terminology from PHECC *Inter Facility Patient Transfer Standard* and PHECC *EMS Priority Dispatch Standard*
6. Yet to agree CPD terminology throughout
7. Added new "Treat and referral" (work in progress).
8. Revised some titles such as "Governance, professionalism Ethics and PHECC registration" to *Governance, Ethics and professional practice*". Legal aspects of pre-hospital emergency care" to *Medico -legal issues concerning the AP*"
9. Merged "Information management and the PHECC clinical handbook" into *"Patient safety, and "Governance....."*

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Role and professional responsibilities of an Advanced Paramedic

An advanced paramedic (AP) is a highly skilled and experienced emergency care practitioner who is trained to and maintains a high standard of professional competence. An AP acts as the clinical lead on calls and is an expert practitioner in the field of pre-hospital emergency care. APs are the recommended response to patients defined as Clinical Status Category 1 “Life threatening” 2 “Serious not life threatening” and 3, “Non serious or life threatening” for appropriate conditions (Ref: *PHECC’s EMS Priority Dispatch Standard*, 2009). An Advanced Paramedic may be required to transport inter-facility patients who are defined as Acuity Levels 4E “Mobile Intensive Care” (Ref: *PHECC’s Inter Facility Patient Transfer Standard*, 2009).

The role of the AP includes not only managing patients in the complex and unpredictable pre-hospital environment but also will include the treatment and referral or discharge of patients who access the health service through the 999/112 system who do not require hospital admission. Compared to the next lower grade on the PHECC register (paramedic), an AP possesses a substantially higher skill set in patient assessment, care and management. Leadership, mentorship and management and professional development are regarded as a key component of this grade.

As with all registered practitioners, an AP focuses on the delivery of immediate, often life-saving patient care in diverse settings primarily outside of the traditional hospital environment. AP deployment in the HSE is a matter for the National Ambulance Service and varies from region to region; nonetheless their role has been designed to contribute to a reduction in the morbidity and mortality of patients experiencing life threatening events. One significant advance in this area is the role of the AP in delivering pre-hospital thrombolysis.

Successful completion of the AP standard and assessment leads to the Pre-Hospital Emergency Care Council (PHECC) award of the National Qualification in Emergency Medical Technology (NQEMT) at the level of competence of AP. This award is required for registration with PHECC at the AP division. This requirement ensures that the AP has fulfilled the educational and training requirements as prescribed by PHECC, thereby, possessing the knowledge, skills and attitudes in-line with the expectations of the public and the profession.

An AP is required to maintain their name on the PHECC Register and is also required to maintain a high standard of training by active participation in **life-long professional development and an AP is expected to participate in** on-going competence assurance.

Learning Outcomes for the AP Standard

The education and training standard is the expected competency of the student upon completion of a recognised course. A graduate at the end of a recognised AP course will be able to:

1. Provide the appropriate standard of patient care for inter-facility transfers and pre-hospital emergency care services.
2. Adopt a professional approach to their practice
3. Demonstrate a commitment to professional development and continuous renewal.

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 inter-facility transfers and pre-hospital emergency care services including:

1. Recognition and assessment of common, serious and life-threatening conditions.
2. 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.

Learning Outcome 2

Adopt a professional approach to their practice by:

1. Providing clinical leadership in a pre-hospital environment
2. Retaining a professional manner and method in the performance of their duties
3. Basing their professional practice on a solid foundation of both basic and clinical sciences.
4. Utilising best practice as prescribed by pre-hospital standard operational procedures/ standards of operation (? terminology) and CPGs.

Learning Outcome 3

Demonstrate a commitment to professional development and continuous renewal by:

1. Developing their skills as a reflective practitioner

The learning objectives in the AP standard refer to adults, children and infants unless stated otherwise. The learning outcomes build substantially on those covered in the Paramedic standard; subsequently, students and teaching faculty are advised to refer to it as required. 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 www.phecc.ie

Framework for the advanced paramedic standard

Framework for the advanced paramedic standard		
Learning Outcome (L)	Educational Domain (D)	Module(s)
Provide the appropriate standard of patient care for Inter-facility transfers and pre-hospital emergency care services (L1)	Recognition and assessment of common, serious and life-threatening conditions (L1D1)	<ol style="list-style-type: none"> 1. History taking, differential diagnosis and clinical impression 2. Clinical decision making 3. Primary survey, immediate care and transport prioritisation 4. Secondary survey 5. Clinical examination of the respiratory, CVS, neurological systems and abdomen
	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 (L1D2)	<ol style="list-style-type: none"> 1. Airway and ventilatory support 2. Persistent foreign body obstruction 3. Inadequate respiration, apnoea and other respiratory emergencies 4. Advanced cardiac response 5. Abnormal cardiac conditions 6. Cardiac arrhythmias 7. Neurological disorders 8. Septicaemia and meningitis 9. Pain management 10. Diabetic emergencies 11. Allergies and anaphylaxis 12. Poisoning / overdose emergencies 13. Behavioural emergencies 14. Environmental emergencies 15. Special patient groups 16. Pregnancy and pre-delivery and post-delivery emergencies 17. Childbirth and neonatal resuscitation 18. Gynaecological emergencies 19. Paediatrics 20. Paediatric medical 21. Paediatric trauma 22. Haemorrhage and hypovolaemic shock 23. Soft tissue, musculoskeletal injuries including crush injuries 24. Head, brain and spinal injuries 25. Burn injuries

Cont....

Framework for the advanced paramedic standard		
Learning Outcome (L)	Educational Domain (D)	Module(s)
Adopt a professional approach to their practice (L2)	Providing clinical leadership in the pre-hospital environment (L2D1)	<ol style="list-style-type: none"> 1. Health safety and welfare 2. Lead and participate in work teams 3. Change management
	Retaining a professional manner and method in the performance of their duties (L2D2)	<ol style="list-style-type: none"> 1. Governance, ethics and professional practice 2. Medico-legal issues concerning the AP 3. Patient safety and quality assurance
	Basing their professional practice on a solid foundation of both basic and clinical sciences (L2D3)	<ol style="list-style-type: none"> 1. Clinical anatomy and physiology 2. Overview of the mechanisms and kinematics of trauma 3. Pharmacology and therapeutics 4. Medication administration 5. Infection prevention and control
	Utilising best practice as prescribed pre-hospital standard operational procedures/ or standards of operation? and CPGs (L2D4)	<ol style="list-style-type: none"> 1. Major Emergency 2. Treat and referral
Demonstrate a commitment to professional development and continuous renewal (L3)	Developing their skills as a reflective practitioner (L3D1)	<ol style="list-style-type: none"> 1. Experiential learning and reflective practice

Learning Outcome 1 – Domain 1

Provide the appropriate standard of patient care for Interfacility transfers and pre-hospital emergency care services including	Recognition and assessment of common, serious and life-threatening conditions
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History taking, differential diagnosis and clinical impression

At the completion of this module, the student will be able to demonstrate taking a relevant history and forming a clinical impression of a pre-hospital patient's condition.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The purposes of obtaining a detailed medical history
2. The techniques of history taking
3. The importance of open ended questions and the role of closed questions
4. How the skills of communication are employed to facilitate, clarify empathise and interpret a patient's medical history
5. The difference between the past medical and presenting medical history and outline how they often interrelate
6. How a medical history can be gathered concurrently with patient assessment
7. The concepts of differential diagnosis and clinical impression

Attitudinal Objectives

1. Advocate and practice the process of complete history taking on all patients
2. Value the requirements for confidentiality when obtaining a medical history

Skills Objectives

1. Obtain a detailed medical history pertaining to the patients presenting illness/ injury using interviewing skills and techniques
2. Obtain information regarding the patients past medical history
3. How to form a clinical impression, and from a list of possible clinical problems test a hypothesised primary problem by further closed questions and examination

Clinical decision making

At the completion of this module, the student will be able to apply clinical decision making skills to their diagnosis and on-going management of a patient.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The relevant PHECC clinical practice guidelines (CPGs)
2. The benefits of using a clinical problem solving model
3. The factors that may influence clinical judgement
4. Forming a clinical impression
5. The factors influencing pre-hospital emergency care to other medical settings
6. The strengths and weaknesses of CPGs in decision making
7. Preparation of strategies for effective clinical decision making under pressure
8. The fundamental elements of critical thinking
9. The importance of post intervention reassessment
10. How effective assessment is critical to clinical decision making
11. How advanced paramedic's attitudes affect assessment and decision making
12. How uncooperative patients affect assessment and decision making
13. The principles and different strategies of medical direction/ advice
14. Variables to consider when determining a patient's capacity to make informed decisions

Attitudinal objectives

1. Uphold clinical decisions made based on best practice and anticipate incidents when exceptions may arise
2. Advocate and practice the process of complete patient assessment on all patients
3. Apply strategies to prevent patient labelling and tunnel vision

Skills Objectives

1. Develop and implement appropriate patient care plans for given scenarios
2. Practice effective clinical decision making during clinical practice
3. Practice implementing effective patient care plans including evaluation for patients during clinical practice
4. Apply strategies to reduce scene distractions

Primary survey, immediate care and transport prioritisation

At the completion of this module the student will be able to describe and demonstrate the appropriate procedures for performing a primary survey, providing immediate care and the factors that determine transport prioritisation.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The types of immediately life-threatening problem which can be found during the primary survey and how to treat them for both medical and surgical/trauma patients
2. The differences between a primary survey for a medical and a trauma patient
3. Time/ transport criticality
4. How advanced care and transport requirements of the patient may be prioritised based on the results of the primary survey
5. The appropriateness of on scene care management versus rapid transport to definitive care
6. The reasons for reconsideration concerning the mechanism of injury

Attitudinal Objectives

1. Advocate and practice the process of completing a primary survey on all patients
2. Value the contribution of on scene care and medication management to morbidity/comfort

Skills Objectives

1. Carry out a primary survey on a medical and a trauma patient
2. Continuous assessment, analysis and prioritising the patient's immediate and definitive needs based on the findings of the primary survey

Secondary survey

At the completion of this module the student will be able to competently perform a secondary survey on a pre-hospital patient.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. How advanced care and transport requirements of the patient may be prioritised or revised based on the results of the secondary survey
2. How the finding of the secondary survey contribute to establishing presenting problems and forming a clinical impression
3. The differences between the physical exam for the trauma and the medical patient
4. Rapid physical exam

Attitudinal Objectives

1. Advocate and practice the process of completing a secondary survey on all patients; time permitting
2. Appreciate the limitation of the pre-hospital physical examination
3. Value the importance of continuous assessment

Skills Objectives

1. Carry out a secondary survey on a medical and a trauma patient
2. Carry out a rapid physical exam
3. Continuously assess, analyse and prioritise the patient's immediate and definitive needs based on the findings of the secondary survey

Clinical examination of the respiratory, CVS, neurological systems and abdomen

At the completion of this module the student will be able to take a relevant history and perform a relevant clinical examination of the vital systems of an out of hospital patient.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The purposes of obtaining a detailed medical history
2. The techniques of general and focussed clinical examination advanced paramedic level examination techniques of the respiratory, CVS, Neurological systems and Abdomen
3. The implications of typical abnormal findings in each of these systems

Attitudinal Objectives

1. Deal sensitively and respectfully with examination of patients recognising the need to maintain patient dignity wherever possible

Skills Objectives

1. Make some general physical assessments of the patient from nearby/ during approach
2. Focus the clinical examination based upon the presentation and history, as well as the clinical impression
3. Examine the respiratory system using inspection, auscultation, palpation and percussion of the patient generally, the chest and the neck
4. Examine the CVS using palpation of pulses, capillary refill, examination of the JVP, taking a BP, auscultation of the heart
5. Examine the neurological system checking limb sensation and power, and basic cranial nerve functions including those relating to raised intracranial pressure
6. Examine the abdomen to include examination of the abdominal aorta, examination for tenderness, rigidity or rebound tenderness, and auscultation for bowel sounds

Learning Outcome 1 – Domain 2

Provide the appropriate standard of patient care for Interfacility transfers and pre-hospital emergency care services including	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
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Airway and ventilatory support

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 patient in accordance with the appropriate CPG(s) and scope of practice of an AP.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The measurement of oxygen and carbon dioxide in the blood
2. The pre-hospital emergency assessment findings and evaluation of respiratory function
3. The gag reflex
4. Tracheostomies, stoma and the tracheostomy tube
5. The management of an occluded stoma or tracheostomy tube with mucous
6. The risk of infection to pre-hospital emergency care practitioners associated with ventilation
7. Rigid and soft suction catheters and the conditions when each should be used
8. The purpose of upper airway suctioning and describe the procedure
9. The purpose and procedure for tracheobronchial suctioning in the intubated patient
10. The concept of the airway management ladder
11. The indications, contraindications, benefits, limitations, complications, equipment and procedure of **endotracheal intubation and supraglottic airway** (adult and child)
12. Gastric distension and the factors that precipitate its occurrence
13. The methods to confirm correct placement of an endotracheal tube
14. The methods for securing an endotracheal tube
15. The indications, contraindications, procedure and complications for extubation
16. The special considerations in airway management and ventilation for patients with facial injuries
17. The indications for performing a **needle cricothyrotomy**
18. The equipment required when performing a needle cricothyrotomy

Attitudinal Objectives

1. Advocate for the patient who requires airway and ventilatory support
2. Use advanced airway skills appropriately

Skills Objectives

Demonstrate ability to:

1. Insert and secure an ETT and a supraglottic airway
2. Use end-tidal CO₂ detection - Colour metric & capnography
3. Manage an occluded stoma or tracheostomy tube with mucous
4. Perform ETT tracheobronchial suctioning in the intubated patient
5. Remove an advanced airway
6. Perform needle cricothyrotomy

Persistent foreign body airway obstruction

At the completion of this module, the student will be able to manage a patient with complete or partial airway obstruction, including the use of advanced airway access techniques.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The causes of upper airways obstruction
2. Complete airway obstruction
3. The implications of partial airway obstruction with good and poor air exchange
4. The pre-hospital emergency care assessment findings and care management of the patient with partial airway obstruction and complete airway obstruction
5. The visual landmarks for direct laryngoscopy
6. Laryngoscopy to remove a foreign body airway obstruction

Attitudinal Objectives

1. Demonstrate a caring attitude towards relatives or bystanders who witness a patient with airway obstruction.

Skills Objectives

1. Perform a rapid pre-hospital emergency assessment and care management of the patient with partial airway obstruction and complete airway obstruction
2. Perform laryngoscopy
3. Retrieve foreign bodies from the upper airway using **laryngoscopy and forceps or suction**
4. Perform endotracheal intubation where removal of foreign body obstruction is not possible with forceps
5. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Inadequate respiration, apnoea and other respiratory emergencies

At the completion of this module, the student will be able to manage the treatment of pre-hospital patients with acute respiratory emergencies.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The aetiology and pathophysiology of each of the following conditions
 - a. Chronic obstructive airway disease
 - b. Asthma
 - c. Bronchitis
 - d. Pneumonia
 - e. Pulmonary embolism
 - f. Pulmonary oedema
 - g. Simple and Tension pneumothoraces
 - h. Respiratory arrest
 - i. Inhalation injury
 - j. Haemothoraces
2. Inadequate respiratory depth and rate associated with narcotic overdose, allergic reactions, Stroke and traumatic brain injury
3. The pre-hospital emergency assessment findings and care management of the patient with the conditions listed above
4. The differences between hypoxia and hypoxemia
5. The time/ transport critical features of respiratory conditions
6. The indication, equipment and procedure for **needle thoracocentesis**
7. The importance of continuous positive airway pressure (CPAP) therapy

Attitudinal Objectives

1. Appreciate the sense of urgency for assessment and care management in the patient with inadequate respiration
2. Advocate for the patient who requires airway and ventilatory support
3. Demonstrate an appropriate caring attitude towards a patient who has a respiratory emergency

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above **(inadequate respirations)**
2. Demonstrate CPAP

Advanced cardiac response

This module builds on the skills first learnt in the Cardiac First Response and incorporates the use of advanced intervention and management techniques in accordance with appropriate CPG(s) and scope of practice of an AP.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The principles behind the latest International Liaison Committee on Resuscitation guidelines
2. The prime importance of correctly performed chest compressions in all CPR
3. The prime importance of quick and safe defibrillation for ventricular fibrillation (VF)/pulseless VT arrest
4. Methodologies to maximise effective CPR between deliveries of DC shocks
5. The rationale for the use of AP drugs in cardiac emergencies and their relevant importance in cardiac arrest compared to CPR and DC shocks
6. Understand the aetiology and treatment rationale for non-shockable arrests
7. The complex issues surrounding when not to resuscitate and when to cease resuscitative efforts
8. Outline the circumstances when a registered paramedic or advanced paramedic can discontinue resuscitation efforts including traumatic cardiac arrests
9. The benefits of induced hypothermia post VF arrest
10. The benefits of impedance threshold device use during cardiac arrest
11. Post resuscitation care

Attitudinal Objectives

1. Appreciate the sense of urgency for assessment and care management in the patient with apparent cardiac arrest
2. Advocate for the patient who has arrested

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above
2. Decide which actions are appropriate when treating such patients with- no Responder/Practitioner, 1 or 2 Responder /Practitioners present

Abnormal cardiac conditions

At the completion of this module, the student will be able to manage a pre-hospital patient with cardiac abnormalities.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The incidence, morbidity and mortality of cardiovascular disease (CVD) in Ireland
2. Prevention strategies that may reduce the morbidity and mortality of CVD
3. The risk factor profile of CVD
4. The zones of ischaemia, injury and infarct and differentiate between a transmural and subendocardial infarct
5. The aetiology of:
 - a. Atherosclerosis
 - b. Arteriosclerosis
 - c. Thrombosis
 - d. Ischaemia
6. The aetiology and pathophysiology of each of the following conditions:
 - a. Angina, stable and unstable
 - b. Acute myocardial infarct
 - c. Left ventricular failure
 - d. Cardiogenic shock
 - e. Symptomatic bradycardia
7. The pre-hospital emergency assessment findings and care management of the patient with the conditions listed above
8. The differential diagnosis of chest pain
9. The difference between pain of cardiac and non-cardiac origin
10. The time/ transport critical features of cardiac conditions
11. The role of aspirin, oxygen, nitrates, analgesia, thrombolytic agents and any other relevant PHECC CPG treatments in treating myocardial infarction
12. The role of percutaneous coronary intervention (PCI)
13. The rationale and evidence base for pre-hospital administration of thrombolytic agents
14. The selection of a patient eligible for thrombolytic therapy
15. The administration of thrombolytics, and their contra-indications and side effects
16. The recommendations of the DoHC (2006) *Task Force Report on Sudden Cardiac Death* as it relates to timely reperfusion (R 5.37 and 5.38, p. 108-111)
17. The cardiac surfaces or areas represented by the ECG leads
18. The changes to each monitoring lead that occurs as a result of the following conditions:
 - a. ST elevation myocardial infarction
 - b. Non-ST elevation myocardial infarction
 - c. Ischaemia/ angina
 - d. Right bundle branch block
 - e. Left bundle branch block
19. The three abnormal pulses – deficit, paradoxus and alternans

20. The “timeline window of opportunity” as it pertains to reperfusion of a myocardial injury or infarction
21. The term cardiac tamponade and the differing mechanisms by which it occurs
22. The characteristics of, clinical feature of, interpretation and management of patients in hypertensive crisis
23. The pathophysiology of vascular disorders
24. Define the terms aneurysm, claudication and phlebitis
25. The signs and symptoms that develop following peripheral artery occlusion
26. The signs and symptoms of dissecting thoracic or abdominal aneurysm
27. A treatment plan for the patient with vascular disorders

Attitudinal Objectives

1. Appreciate the sense of urgency for assessment and care management in the patient with cardiac compromise
2. Appreciate the sense of urgency required to protect the reperfusion opportunity in the patient suspected of a myocardial infarct
3. Explain the decision to possibly discontinue resuscitative efforts in cardiac arrest patients

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above
2. Using the CPG differentiate between the patient that will be transported to a facility for PCI verses a patient who will receive pre-hospital thrombolytic therapy
3. Using a PCR identify a patient who qualifies for thrombolysis
4. Demonstrate the care management of a patient with cardiac tamponade
5. Demonstrate the care management of a patient with a hypertensive emergency
6. Demonstrate the care management of a patient with a peripheral artery occlusion
7. Demonstrate the care management of a patient with a dissecting thoracic or abdominal aneurysm
8. Use semi-automatic and **manual defibrillators**

Cardiac arrhythmias

At the completion of this module, the student will be able to recognise and appropriately manage a pre-hospital patient.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. Patient presentations where ECG rhythm analysis is indicated
2. How to identify and correct the various causes of artefact on a 12 lead ECG
3. The characteristics, description and significance of the ECG waves, complexes, interval and segments
4. The electrophysiological and haemodynamic events occurring throughout the entire cardiac cycle with the various ECG waves, segments and intervals
5. The aetiology and pathophysiology of each of the following conditions:
 - a. Ventricular fibrillation and pulseless ventricular tachycardia
 - b. Pulseless electrical activity
 - c. Asystole
 - d. Symptomatic bradycardia
6. The pre-hospital emergency assessment findings and care management of the patient with the conditions listed above
7. The features of an automated implantable defibrillator and any special considerations when caring for a patient with one
8. The ECG characteristics of an implantable pacemaker system and recognise a malfunctioning internal pacemaker
9. The benefits of early advanced cardiac life support to patients pre-hospital
10. The significance of hypothermia in cardiac arrest
11. The significance of pregnancy and cardiac arrest

Attitudinal Objectives

1. Collaborate with all members of the pre-hospital emergency care team to maximise the benefits to patients with cardiac compromise

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above
2. Perform 12 lead ECG and interpret a wide range of arrhythmias, including:
 - a. Normal Sinus rhythm
 - b. Ventricular fibrillation
 - c. Sinus arrhythmias
 - d. Idioventricular rhythm
 - e. Atrial flutter
 - f. Premature atrial contractions
 - g. Atrial fibrillation

- h. Premature ventricular contraction
- i. Junctional rhythm
- j. First degree AV-nodal block
- k. Supraventricular tachycardia (SVT)
- l. Second degree Wenkebach block
- m. SVT with aberrant conduction
- n. Second degree Mobitz II block
- o. Ventricular tachycardia
- p. Third degree block
- q. Torsades-de-Pointes
- r. Junctional escape beats and rhythms
- s. Ventricular escape beats and rhythms
- t. Right bundle branch block
- u. Left bundle branch block

Neurological disorders

At the completion of this module, the student will be able to recognise and manage a pre-hospital patient suffering from a neurological emergency.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The relevant PHECC CPGs
2. The aetiology and pathophysiology of each of the following conditions:
 - a. Stroke
 - b. Intracranial haemorrhage
 - c. Transient ischemic attack
 - d. Meningitis/ meningococcal septicaemia
 - e. Multiple sclerosis
 - f. Parkinson's disease
 - g. Neurogenic shock
 - h. Muscular dystrophy
 - i. Seizure disorders/ convulsions
 - j. Headache
 - k. Intra cerebral mass
 - l. The aetiology of convulsions to include:
 - (a) Epilepsy
 - (b) Hypoxia
 - (c) Febrile convulsions
 - (d) Intracerebral insult/ head injury
 - (e) Hypoglycaemia
 - (f) Hypothermia
 - (g) Drug related
 - (h) Eclampsia
 - (i) Meningitis
3. The pre-hospital emergency assessment findings and care management of the patient with the conditions listed above
4. The major types of seizures
5. The phases of a generalised seizure
6. The categories of stroke
7. The rationale for stroke thrombolysis
8. The time/ transport critical features of neurological disorders

Attitudinal Objectives

1. Convey empathy to patients whose ability to communicate is limited by their condition
2. Empathise with the patient who regains consciousness among strangers

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Septicaemia and meningitis

At the completion of this module, the student will be able to recognise and initiate emergency treatment of a pre-hospital patient suffering from septicaemia and / or meningitis.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The key causes and presentations of septicaemia and meningitis, including meningococcal disease and toxic shock syndrome
2. The difference between septicaemia and meningitis
3. The time/ transport critical features of septicaemia and meningitis
4. The protective measures for exposure prone procedures for patients with confirmed meningococcal disease and outline public health guidelines for follow up

Attitudinal Objectives

1. Empathise with the relatives or bystanders who witness a patient with septicaemia or meningitis understanding the acuteness of the condition

Skills Objectives

1. Consider septicaemia and meningitis in all appropriate patients
2. Recognise rapid deterioration a critical history finding in meningococcal disease
3. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Pain management

At the completion of this module, the student will be able to assess and manage the pain relief of a pre-hospital patient using a prescribed list of medications.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The physiology of pain
2. The various types of pain
3. The pre-hospital emergency assessment findings and care management of pain
4. The therapeutic goals of pain relief
5. The non medicinal options for pain relief
6. The benefits and limitations of the interview mnemonic (PQRST) provocation, quality, region/referral/recurrence/relief, severity and time and the analogue scale 0-10
7. The difference between the descriptors:
 - a. Stabbing/sharp
 - b. Crushing
 - c. Acute
 - d. Chronic
 - e. Pulsating
 - f. Burning
 - g. Dull
 - h. Cramps
8. The time/ transport critical features of pain
9. The medical, pharmacological, physiological and legal aspects of pain management using the agents within the relevant PHECC CPGs
10. The assessment and care management of the patient with significant nausea and vomiting with or without pain.

Attitudinal Objectives

1. Respect the feelings that patient with pain, acute or chronic may be experiencing and support empathetically

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Diabetic emergencies

At the completion of this module, the student will be able to assess and manage the care of a pre-hospital patient with a diabetic emergency.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The aetiology and pathophysiology of diabetes mellitus including ketone formation
2. The normal range of blood glucose levels and the significance of variations to these
3. The difference between the types of diabetes mellitus
4. The complications of diabetes mellitus
5. The abnormal findings in assessment with clinical significance in the patient with hypoglycaemia
6. The body's physiological reaction to hypoglycaemia including gluconeogenesis
7. The abnormal findings in assessment with clinical significance in the patient with hyperglycaemia
8. The signs and symptoms of the patient with diabetic ketoacidosis
9. The pre-hospital emergency assessment findings and care management of diabetic emergencies
10. The time/ transport critical features of diabetic emergencies

Attitudinal Objectives

1. Demonstrate an appropriate caring attitude with the patient who regains consciousness among strangers

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Allergies and anaphylaxis

At the completion of this module, the student will be able to recognise and manage a pre-hospital patient suffering from a severe allergic reaction, including anaphylaxis.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Skills

1. The inflammatory response including causes and cardinal signs
2. The benefits and harmful effects of acute inflammation
3. The 4 types of allergic response
4. The risk factors most predisposing to anaphylaxis
5. The pathophysiology of allergy and anaphylaxis including the formation of antibodies
6. The common antigens most frequently associated with anaphylaxis
7. The common methods of entry of substances into the body
8. The difference between manifestations of an allergic reaction from anaphylaxis
9. The abnormal findings in assessment with the clinical significance in the patient with anaphylaxis
10. The aetiology and pathophysiology of anaphylactic shock
11. The pre-hospital emergency assessment findings and care management of the patient with allergic reaction or anaphylaxis
12. The time/ transport critical features of anaphylaxis

Attitudinal Objectives

1. Appreciate the concern of the patient himself/ herself or of the relatives or bystanders who witness a patient with anaphylaxis.

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Poisoning/overdose emergencies

At the completion of this module, the student will be able to recognise, assess and manage the care of a pre-hospital patient suffering from poisoning or overdose.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The time/ transport critical features of poisoning/ overdose emergencies
2. The term antidote
3. The antidotes available to the AP
4. The role of the National Poisons Information Centre
5. The assessment findings associated with various toxic groups
6. The treatment and pharmacological interventions available to the AP in the management of poisoning
7. The term overdose
8. The most common poisonings by overdose
9. The signs and symptoms related to the most common poisonings by overdose
10. The pre-hospital emergency assessment findings and care management of the patient with poisoning and overdose
11. The time/ transport critical features of poisoning and overdose
12. Drug abuse in Ireland
13. The most commonly abused drugs (both by chemical name and street names)
14. The pathophysiology of commonly used drugs
15. The signs and symptoms related to the most commonly abused drugs
16. The pathophysiological principles and the assessment findings to formulate a clinical impression and implement a care management plan for the patient with the most common poisonings and overdose

Attitudinal Objectives

1. Demonstrate an appropriate professional and caring attitude towards the patient, relatives or bystanders who witness a patient with poisoning or overdose.
2. Act in a non – judgemental and professional manner when managing self-poisoning and harm cases

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Behavioural & mental health emergencies

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

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 and mental health emergencies.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The time/ transport critical features of behavioural/mental health emergencies
2. Behavioural emergencies
3. Mental health emergencies
4. The medical legal considerations for management of behavioural/ mental health emergency
5. The pathophysiology of behavioural/mental health disorders
6. The techniques for physical assessment in a patient with behavioural/mental health disorder
7. The pre-hospital emergency assessment findings and care management of the patient with a behavioural/mental health disorder

Attitudinal Objectives

1. Demonstrate an appropriate professional and caring attitude towards relatives or bystanders who witness a patient with a behavioural/mental health emergency.
2. Appreciate that a behavioural disorder may have a complex aetiology

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Environmental emergencies

At the completion of this module, the student will be able to assess and administer care to a pre-hospital patient with adverse environmental exposure.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The time/ transport critical features of environmental emergencies
2. The aetiology and pathophysiology of heat / cold emergencies
3. The role of fluid therapy in the treatment of a heat / cold emergencies
4. The pre-hospital emergency assessment findings and care management of the patient with heat / cold emergencies
5. The time/ transport critical features of heat / cold emergencies
6. The assessment findings of a patient with a bite or sting
7. The pre-hospital emergency assessment findings and care management of the patient with a bite or sting
8. The pre-hospital emergency assessment findings and care management of the patient in a submersion incident
9. The pre-hospital emergency assessment findings and care management of the patient with a decompression illness

Attitudinal Objectives

1. Demonstrate an appropriate caring attitude towards the patient or their relatives or bystanders who witness a patient with an environmental emergency understanding the acuteness of the condition

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above
2. Demonstrate the pre-hospital emergency assessment findings and care management of the patient with heat/cold emergencies
3. Demonstrate the pre-hospital emergency assessment findings and care management of the patient with a bite or sting
4. Demonstrate the pre-hospital emergency assessment findings and care management of the patient in a submersion incident
5. Demonstrate the pre-hospital emergency assessment findings and care management of the patient with a decompression illness

Special patient groups

At the completion of this module, the student will be able approach the care and management of pre-hospital patients with special needs in an appropriate, caring and professional manner.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. Brief overview of
 - a. Minority ethnic and cultural groups
 - b. Hearing impaired
 - c. Vision impaired
 - d. Life-limiting illness patients
 - e. Arthritis patients
 - f. Psychiatric illness patients
 - g. Learning Disabilities including Down's Syndrome
 - h. Multiple Sclerosis
 - i. Spina Bifida
 - j. Myaesthesia Gravis
 - k. Chronic Fatigue
2. Elderly patients, in particular the polypathology and polypharmacy implications of assessment and treatment of this group
3. Elder abuse and abuse of any special patient group and the role of patient advocacy
4. The common causes of acute and chronic confusion in the elderly and the key differences in the history, presentation and management of the two groups.

Attitudinal Objectives

1. Be able to effectively communicate with the patient who may have communication, sensory, mobility or learning difficulties and make appropriate remediation and/or allowances for these impairments.

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of a patient within any of the above groups

Pregnancy and pre-delivery and post-delivery emergencies

At the completion of this module, the student will be able to assess and manage the care to a pregnant woman during pregnancy and for pre-delivery and post-delivery emergency care in an out-of-hospital setting in accordance with appropriate CPG(s) and policy/protocols.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The normal anatomical and physiological changes during pregnancy and limits beyond which they become pathological
2. The changes in and resulting from pre-existing disease, including asthma, diabetes, heart disease and hypertension
3. The significance of trauma during pregnancy including seat belt injury and domestic violence
4. The significance of cardiac arrest during pregnancy
5. The pre-hospital emergency care assessment findings of a pregnant woman and relate these to the gestational period
6. The position of the fundus and gestational age
7. The indications for an inspection of the vulva, taking into account consent and cultural issues into consideration
8. The pre-hospital emergency care assessment findings and care management of the patient with the following emergencies:
 - a. antepartum haemorrhage
 - b. ectopic pregnancy
 - c. pre-eclampsia
 - d. eclampsia
 - e. post-partum haemorrhage
9. The time/ transport critical features of pregnancy related conditions

Attitudinal Objectives

1. Appreciate the importance of maintaining a patient's modesty and privacy while being able to examine physically and interview as appropriate

Skills Objectives

Demonstrate ability to:

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

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) and policy/protocols.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The stages of labour and describe the mechanisms responsible for parturition
2. The physiology of the umbilical cord and maternal/ baby circulation after birth
3. The pre-hospital emergency care assessment findings of a pregnant woman when birth is imminent and during a delivery
4. The pre-hospital emergency assessment findings and care management of the following
 - a. Umbilical cord complications;
 - b. Prolapsed cord
 - c. Cord rupture
 - d. Short cord
 - e. Cord around the baby's neck
 - f. The types of breech presentation
5. The pre-hospital emergency assessment findings and care management of the following deliveries:
 - a. multiple deliveries
 - b. breech presentation
 - c. limb presentations
6. The consequences of the presence of meconium amniotic fluid or during delivery
7. The causes of haemorrhage during pregnancy and postpartum
8. Normal and pathological levels of blood loss during childbirth
9. The pre-hospital emergency assessment findings and care management of perineal tears and post partum haemorrhage
10. The significance of a premature baby
11. The importance of post delivery temperature control for the newly born
12. The time/ transport critical features of childbirth and neonatal care
13. Neonatal and maternal resuscitation

Attitudinal Objectives

1. Appreciate the importance of maintaining a patient's modesty and privacy during assessment and management of a delivery

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Gynaecological emergencies

At the completion of this module , the student will be able to assess manage the care of a woman suffering from a gynaecological emergency in an out-of-hospital setting, in accordance with appropriate CPG(s) and policy/protocols.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. Toxic shock syndrome
2. Threatened miscarriage
3. Ectopic Pregnancy
4. The time/ transport critical features of these conditions

Attitudinal Objectives

1. Demonstrate a caring professional attitude towards the relatives or bystanders who witness a patient with any of these conditions.

Skills Objectives

1. Consider pregnancy, threatened miscarriage and toxic shock in all appropriate patients (i.e. any woman of child bearing age)
2. Take a focussed clinical history
3. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Paediatrics

At the completion of this module, the student will be able to perform a relevant paediatric assessment and be aware of the special circumstances surrounding their approach to an acutely unwell child.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. Developmental milestones and identify the key growth and developmental characteristics for infants (<1 year) toddlers (< 2years) and pre-school children
2. The signs of a seriously ill or deteriorating child
3. The advanced paramedic's role in the reduction of infant and childhood morbidity and mortality from acute illness and injury
4. The importance of obtaining the patient's weight for effective care
5. Normal age group related vital signs
6. The care management for sudden infant death syndrome (SIDS) infants
7. The assessment and care management of suspected abuse/neglect infant or child and the special considerations

Attitudinal Objectives

1. Appreciate the emotional dependence of the infant/child on their parent/guardian
2. Interact with the infant/ child that conveys an understanding of their developmental stage

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above
2. Use parent/caregiver interviewing techniques and emotional support for infant and child death situations
3. Use parent/caregiver interviewing techniques for suspected infant and child abuse/neglect situations
4. Make accurate and detailed records in cases of suspected non-accidental injury and neglect

Paediatric medical

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 paediatric patient in an out-of-hospital setting in accordance with CPG(s). A particular focus will be on paediatric airway management.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge objectives

1. The aetiology and pathophysiology of each of the following conditions:
 - a. Inadequate respirations
 - b. Upper airway obstruction
 - c. Foreign body/croup/epiglottitis
 - d. Lower airway obstruction
 - e. Asthma
 - f. Bronchiolitis
 - g. Tension pneumothorax
 - h. Respiratory arrest
 - i. Cardiac arrhythmias
 - j. Asystole/ pulseless electrical activity
 - k. Ventricular fibrillation and pulseless VT
 - l. Bradycardia
 - m. Hypovolaemic shock
 - n. Seizure disorders/ convulsions (febrile and afebrile)
 - o. Hypoglycaemia/hyperglycaemia
 - p. Anaphylaxis
 - q. Pain
 - r. Meningococcal sepsis
 - s. Stridor
2. The pre-hospital emergency assessment findings and care management of the conditions listed above
3. The indications, contraindications, benefits, limitations, complications, equipment and procedure of paediatric supraglottic airway placement
4. The indications, contraindications, benefits, limitations, complications, equipment and procedure of paediatric endotracheal intubation
5. The indications, contraindications, benefits, limitations, complications, equipment and procedure for inserting a paediatric nasogastric tube
6. The methods to confirm correct placement of an endotracheal tube
7. The methods for securing a paediatric endotracheal tube
8. The indications, contraindications, procedure and complications for paediatric extubation
9. The time/transport critical features of infant/children with illness

Attitudinal Objectives

1. Understand common response of families with acute illness of an infant or child

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above
2. Perform laryngoscopy and foreign body airway removal, and endotracheal intubation where this is unsuccessful
3. Perform the care management options for airway and ventilatory support (basic airway adjuncts, Supraglottic airway and ETT etc as per PHECC CPGs)
4. Insert, confirm correct placement and secure an endotracheal tube, Supraglottic airway and other advanced airway
5. Extubate or remove any advanced airway

Paediatric trauma

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

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The common causes and characteristics of paediatric burns
2. The mechanisms of injury which commonly involve children
3. The pathophysiology of trauma in infants and children
4. The specific physiological responses to trauma in children
5. The care management of the paediatric trauma patient compared with the adult emphasising the needs of the injured child
6. The time/ transport critical features of infant/ children with traumatic injury

Attitudinal Objectives

1. Appreciate the reactions and response of families with acute injury of an infant or child

Skills objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Haemorrhage and hypovolaemic shock

At the completion of this module, the student will be able to describe the relevant pathophysiology of haemorrhage and shock and as a result be able to assess and manage the care of a pre-hospital patient with haemorrhage and shock.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The various types of and degrees of haemorrhage and shock
2. The pathophysiology of haemorrhage and shock
3. The body's physiological response to changes in perfusion
4. The difference between controlled and uncontrolled haemorrhage
5. The difference between compensated and uncompensated haemorrhagic shock
6. The pre-hospital emergency care assessment findings and care management of the patient with haemorrhage and shock
7. The time/ transport critical features of haemorrhage and hypovolaemic shock
8. The requirement to replace lost blood volume
9. The differences between crystalloid and colloid fluid
10. The role of medical direction in fluid replacement therapy
11. The routes of administration of fluid therapy
12. The difference in selecting a cannula and a site for vascular access in the trauma patient
13. The role of AED and ECG in trauma

Attitudinal Objectives

1. Appreciate the importance of a thorough patient assessment
2. Defend why basic life support takes priority over wound closure

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Soft tissue and musculoskeletal injuries including crush injuries

At the completion of this module, the student will be able to list the major types of soft tissue and musculoskeletal injuries and be able to assess and manage the care of a pre-hospital patient with soft tissue and musculoskeletal injury.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The assessment and management of wound infection
2. The pathophysiology of wound healing including;
 - a. Haemostasis
 - b. Inflammation phase
 - c. Epithelialisation
 - d. Neovascularisation
 - e. Collagen synthesis
 - f. Skin tension lines in the body
3. The time/ transport critical features of soft tissue, musculoskeletal and crush injuries
4. The pathophysiology of the following crush injuries
 - Thoracic (to include specific blunt and penetrating trauma)
 - Chest wall injuries
 - Rib fractures
 - Flail segment
 - Sternal Fracture
 - Lung injury
 - a. Simple pneumothorax
 - b. Tension pneumothorax (chest decompression)
 - c. Open pneumothorax
 - d. Haemothorax
 - e. Pulmonary contusion
 - f. Traumatic asphyxia
 - Myocardial injury
 - a. Cardiac tamponade (pericardiocentesis)
 - b. Myocardial contusion
 - c. Myocardial rupture
 - Vascular injury
 - a. Aorta
 - b. Vena cava
 - c. Pulmonary vessels
 - Visceral injury including
 - a. Oesophagus
 - b. Trachea
 - c. Bronchus
 - d. Diaphragm
 - Pelvic injury
 - a. Basin effect
 - Crush syndrome

- a. Renal failure
 - b. Rhabdomyolysis
- Compartment syndrome
- Abdominal injury
 - a. Open injury
 - b. Closed injury
 - c. Solid and hollow organ injuries
- 5. The pathophysiology of soft tissue injuries including;
 - a. Contusion
 - b. Haematoma
 - c. Abrasions
 - d. Lacerations
 - e. Major arterial lacerations
 - f. Avulsions
 - g. Impaled objects
 - h. Amputations
 - i. Incisions
 - j. Blast injuries
 - k. Penetrations/punctures (blunt and penetrating)
- 6. The pathophysiology of Barotrauma
- 7. The pre-hospital emergency care assessment findings and care management of the patient with the trauma injuries above according to the mechanisms involved

Attitudinal Objectives

1. Articulate the importance of a thorough patient assessment, with soft tissue, and musculoskeletal injuries including crush injuries.
2. Demonstrate a caring attitude towards the relatives or bystanders who witness a patient with a soft tissue and musculoskeletal injuries understanding the acuteness of the condition

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above

Head, brain and spinal injuries

At the completion of this module, the student will be able to assess and manage the care of a pre-hospital patient with a head, brain or spinal injury. In particular, the student will be able to demonstrate the specific procedures for safe extrication, protection and transport of a patient with a head, brain and / or spinal injury.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The motion and energy considerations of mechanisms other than a road traffic accident
2. The pathophysiology of the following traumatic injuries
 - **Head / Brain Injuries**
 - Raised ICP (relationship of O₂ & CO₂)
 - Diffuse axonal injury
 - GCS and the classification into mild, moderate and severe head injury
 - Brain haemorrhage
 - Extra dural
 - Sub dural
 - Intra cerebral
 - Sub arachnoid
 - Facial - Including the specific consequences
 - Eye
 - Ear
 - Nose
 - Throat
 - Mouth
 - Affects on the airway
 - **Spinal** - Spinal cord syndromes
 - Traumatic
 - Non traumatic
 - a. Low back pain
 - b. Herniated intervertebral disc
 - c. Spinal cord tumours
3. The pre-hospital emergency care assessment findings and care management of the patient with the trauma injuries above according to the mechanisms involved
4. The principles underlying the PHECC CPG spinal immobilisation decision tree
5. The time/ transport critical features of traumatic injuries

Attitudinal Objectives

1. Respond appropriately to the feelings that the patient or family may be experiencing at the scene and during transport of a traumatic injury

Skills Objectives

1. Perform the pre-hospital emergency assessment and care management of the patient with all the conditions listed above
2. Practical application of the PHECC CPG spinal immobilisation decision tree to the trauma patient

Burn injuries

At the completion of this module, the student will be able to assess and manage the care of a pre-hospital patient with a thermal injury. 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 spinal injury.

Highlighted text has CPG

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The pathophysiology of local and systemic responses to burns
 - a. Inhalation
 - b. Electrical (Based on an understanding of electrical conduction)
 - c. Thermal
 - d. Chemical
 - e. Radiation
 - f. Cold burns
2. The assessment and care management of burns

Attitudinal Objectives

1. Appreciate the importance of a thorough patient assessment, with the realisation that burns are often associated with other significant injuries

Skills Objectives

1. Perform the pre-hospital emergency care assessment and care management of the patient with burn injury

Learning Outcome 2 –Domain 1

Adopt a professional approach to their practice	<i>Providing clinical leadership in the pre-hospital environment</i>
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Health, safety and welfare

At the completion of this module, the student will be able to perform their duties in line with legislative requirements and demonstrate leadership in relation to local procedures/ policies in health, safety and welfare in the workplace.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. Describe the function of an organisation's Safety Statement
2. State the difference between hazard, risk and controls
3. Describe how a hazard, risk and control assessment is carried out
4. Explain the concept of the risk control hierarchy
5. Describe the benefits of an occupational health and safety programme in the workplace
6. Explain the term "Contributory negligence"
7. Explain the difference between a near miss and an incident
8. Describe the benefits of incident and near miss reporting
9. Outline the risk reduction approaches related to Advanced Paramedic practice

Attitudinal Objectives

1. Help develop and promote a safety workplace culture
2. Openly report risks and errors

Skills Objectives

1. Conduct a basic hazard, risk and control assessment of a workplace
2. Analyse relevant workplace data in order to identify, assess and control risks
3. Analyse relevant workplace data in order to evaluate the effectiveness of a health and safety programme

Lead and participate in work teams

At the completion of this module, the student will be able to take on the role of team leader and work effectively as a team member.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. How motivation affects productivity
2. Intrinsic and extrinsic motivation and its application in the workplace
3. The roles and responsibilities of a team leader
4. The differences between assessment and evaluation
5. The methods and application of Planning, Organising and Controlling
6. The three elements of a contract
7. How a contract can be terminated
8. Industrial relations procedures and how they protect both employer and employee.
9. How productivity can be evaluated in the health sector.

Attitudinal Objectives

1. Empower team members
2. Use appropriate interpersonal skills when dealing with resistance, conflict and difficult situations
3. Commit as a team player

Skills Objectives

1. Draw a concept map
2. Write a learning objective that can be measured
3. Produce monitoring, assessment and evaluation tools
4. Draw a process chart and demonstrate the advantages of applying it to problem definition and resolution
5. Show key abilities as a team member
6. Delegate responsibility with commensurate accountability
7. Defuse a conflict based interaction
8. Conduct an investigative interview
9. Document/ Report a problem

Change management

At the completion of this module, the student will be able to utilise a framework for initiating and managing change in their professional role.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The advantages and disadvantages of the SWOT Analysis
2. Each of the areas investigated in a PESTEL Analysis
3. The application of a Force Field Analysis
4. Emotion within a contextual setting of change
5. How attitudes and motivation can support or inhibit the change process
6. The attributes of relationship management within the context of change

Attitudinal Objectives

1. Motivate and use a rational approach toward the change process
2. Use a level of interpersonal skills that encourages open communication and rationality toward the change process
3. Perform objectivity when analysing an intended change

Skills Objectives

1. Construct a SWOT Analysis of change in an organisational context
2. Conduct a PESTEL Analysis
3. Construct a Force Field Analysis to identify the pressure of opposing forces acting on a change process
4. Deliver a short presentation to a peer group which clarify the important factors of change
5. Produce an objective evaluative model for a contextualised change affecting the student's organisation

Learning Outcome 2 – Domain 2

Adopt a professional approach to their practice

<i>Retaining a professional manner and method in the performance of their duties</i>
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Governance, ethics and professional practice

At the completion of this module, the student will be able to adopt a professional approach to their practice and be aware of their duties as an AP, both with regard to governance and registration.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. Explain the professional duties of being a registered pre-hospital emergency care practitioner
2. Critically analyse the PHECC Code of professional conduct and ethics
3. Explain the principles underlying Pre-Hospital Emergency Care Council's Fitness to Practice
4. Discuss the APs role in team work with other registered practitioners and other non ambulance personnel
5. Outline the concepts of good governance
6. List the four principles of healthcare ethics
7. Explain the difference between an ethical and a moral decision
8. Explain the principles of ethical clinical practice
9. Describe how the PHECC CPGs define an AP's scope of practice (? Introduce new terms credentialing/ privileging here)

Attitudinal Objectives

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. Value a commitment to the ethical principles of healthcare
3. Accept and uphold the professional responsibilities of an Advanced Paramedic in accordance with the standards of the PHECC Register
4. Limit practice to that within the AP responsibilities outlined by the PHECC CPGs

Skills Objectives

1. Apply the principles of good personal governance to practice
2. Work in a patient-centred way applying the principles of ethical clinical practice
3. Apply the principles contained with the PHECC codes and standards
4. Work effectively with other healthcare and emergency professionals

Medico-legal issues concerning the AP

At the completion of this module, the student will be able to outline the legal responsibilities of an Advanced Paramedic in accordance with best practice standards and current legislation.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. Outline the pertinent sections of current relevant legislation, highlighting their impact on AP professional practice
2. Explain the rationale for appropriately reporting and recording patient information
3. Describe the legal aspects of a Patient Care Report (PCR) including ownership, access and control of PCRs
4. Explain the “tort of negligence”
5. Discuss the concept of “Duty of Care”
6. The process of detention of mental health patients (*include reference to Mental Health Act 2005*)
7. The potential conflict between professional standards and the law
8. Define abandonment, negligence and battery and their implications for the Advanced Paramedic
9. Define informed and implied consent and discuss the methods of obtaining consent
10. Discuss the legal and ethical issues concerning obtaining the consent of minors
11. Discuss the legal responsibilities of the Advanced Paramedic in cases of patient refusal of treatment and or transport
12. Explain the importance, necessity and legality of patient confidentiality
13. Discuss the grounds for sharing patients' health information with other health professionals
14. Discuss disclosure of patients' health records for purposes of litigation

Attitudinal Objectives

1. Accept and uphold the legal responsibilities of an Advanced Paramedic in accordance with current legislation

Skills Objectives

1. Prepare a statement from a simulated case in a manner that meets legislative requirements
2. Manage the paperwork relating to compulsory detention under the MHA

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.

(Work in progress-)

x ref DoHC “Building a culture of Patient safety” report 2007)

It will include: Patient advocacy, adverse events management, open communication when things go wrong, clinical audit.....

(x ref WHO “Patient safety curriculum Guide for Medical schools” (2009)

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The term Clinical Audit
2. The differences between Clinical Audit and Research
3. Formulating and clarifying a research topic
4. Critically review relevant research literature
5. The differences between the deductive and inductive approaches to research
6. The process and layout of writing up the research findings
7. The clinical audit cycle

Attitudinal Objectives

1. Fully participate in the Clinical Audit Process
2. Contribute toward augmenting the body of knowledge to promote evidence based practice
3. Promote and promulgate professional requirements for a scientific approach to underpin professional practice
4. Encourage other professionals to endorse and participate in Research and Clinical Audit

Skills Objectives

1. Conduct a literature review and produce a critique of findings
2. Design a research question
3. Write the objectives for a small scale research project
4. Conduct a small scale research project
5. Produce a report on the findings of the research project
6. Construct a small scale clinical audit process
7. Measure a clinical outcome within the pre-hospital setting
8. Contribute towards the National PHECC clinical audit process

Learning Outcome 2 – Domain 3

Adopt a professional approach to their practice	<i>Basing their professional practice on a solid foundation of both basic and clinical sciences</i>
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Clinical anatomy and physiology

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

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

Homeostasis and Body Chemistry

1. Define the term homeostasis
2. Define the following terms pH, acid, alkali and buffer
3. Define the term electrolyte and state why they are important body constituents
4. Outline the concept of molar concentration and explain the difference between the terms isotonic, hypotonic and hypertonic
5. Explain why different body fluids have varying pH values
6. Outline why buffers are important in the maintenance of body pH
7. State the differences between the terms acidosis and alkalosis
8. Outline the basic chemical nature of sugars, proteins, lipids, nucleotides and enzymes
9. Compare and contrast between the processes of osmosis and diffusion
10. Describe how molecules move within and between body compartments
11. Define the terms intra- and extracellular fluid
12. Explain why homeostatic control of intra- and extracellular fluids is vital to body function

Cells, Tissues and Organisation of the Body

13. Outline the processes involved in the transport of substances across cell membranes
14. State which and also outline how different types of tissues can regenerate
15. Compare and contrast the structure and function of exocrine and endocrine glands

The Respiratory System

16. Outline the physiology of respiration
17. Explain the main mechanisms (nervous and chemical) which control and regulate respiration
Describe what effect physiological variables have on respiration
18. Outline the normal partial pressures of the gases present within air and the consequences of altered partial pressures on respiration
19. Describe what effect altered carbon dioxide levels and in particular the hypoxic drive have on respiration
20. Describe how respiration can affect the pH of certain body fluids
21. Outline the function of smooth muscle in the pulmonary system

The Cardiovascular System

22. List the 4 properties of cardiac cells
23. Outline the role of sodium and potassium in cardiac muscle contraction
24. Outline the 5 phases of the cardiac potential
25. Describe the electrical conducting system of the heart
26. Relate the electrical activity of the cardiac conduction system to the cardiac cycle
27. Describe the physiological and anatomical basis for the heart sounds
28. Define pulse and blood pressure
29. Describe the mechanisms that regulate pulse and blood pressure and the factors which cause variations in blood pressure and pulse
30. Describe the main control mechanisms for the regulation of blood pressure
31. Outline the effect that circulating catecholamines have on the heart
32. Describe the relationship between different types of blood vessels
33. Describe the effects of and the process and underlying mechanisms for vasodilatation and vasoconstriction of blood vessels
34. Outline the main arterial circulation
35. Outline the mechanism for venous blood flow
36. Outline the typical venous pathways in the hand and arm
37. Outline the circulation of blood the pelvis and lower limbs
38. Explain the mechanisms by which the exchange of gases occurs between blood and tissues within the systemic circulation
39. Describe the mechanism by which exchange of nutrients, waste and water occurs between the blood and tissues

The Musculoskeletal System

40. Explain the methods for classifying bone
41. Describe the characteristics of the 3 major joint types and relate them to their function
42. Compare and contrast between the structure and function of muscles, ligaments and tendons
43. Outline the importance of the growth plate to bone development
44. Describe the neuromuscular junction

The Digestive System

45. Describe the process of peristalsis
46. Describe the main physiological functions of the liver, pancreas and gallbladder

The Blood

47. Describe the structure, function and formation of erythrocytes, leucocytes and thrombocytes
48. List the constituent parts of plasma and describe the major functions of each
49. Review the relationship between intra- and extracellular fluid and the effect of this relationship on homeostasis
50. Outline the regulation of coagulation
51. Describe how the clotting process controls blood loss, in particular focusing on the role of platelets
52. Describe blood types in relation to transfusion

The Skin

53. Describe the structure of the skin layers: dermis, epidermis, superficial fascia, deep fascia
54. Describe the function of skin
55. Outline how blood vessels in the skin respond to heat, cold and to the stress response
56. Outline the difference between primary and secondary healing

The Nervous System

57. Outline the physiology of nerve impulse transmission including the role of neurotransmitters
58. Outline the differences between the functions of sensory and motor nerves
59. List the areas innervated by the cervical nerves
60. Outline the major functions of the 12 cranial nerves
61. Compare and contrast between the structural and neurochemical constituents of the 2 divisions of the autonomic nervous system
62. Describe how pain is perceived and outline the rationale for referred pain
63. Describe the composition of CSF
64. Describe the structure and function of the meninges

The Urinary System

65. Describe the structure of a nephron
66. Describe the role of the urinary system in maintaining fluid and electrolyte balance
67. Outline the process involved in the formation of urine
68. Outline the process of storage and passage of urine
69. Explain the role of the kidney in control of blood pressure

The Female Reproductive System and Labour

70. Identify the position of the main structures of the external female genitalia
71. Describe the position, structure and function of the vagina, uterus and fallopian tubes
72. Outline the development and functions of the placenta
73. Describe the location, structure and function of the umbilical cord
74. Outline the physiological changes that occur in the body during pregnancy
75. Outline the foetal circulation and the changes that occur to it at birth

The Endocrine System

76. List the major endocrine glands of the body and identify the hormones associated with each.
77. Describe the actions of aldosterone on the renin-angiotensin-aldosterone system in maintaining water and electrolyte balance
78. Describe the functions of adrenaline and noradrenaline and their action on the sympathetic nervous system
79. Describe normal control of blood sugar
80. Explain the pathophysiology of diabetes mellitus

Overview of the mechanisms and kinematics of trauma

At the completion of this module, the student will be able to outline the key forces involved in producing trauma during moving vehicle accidents.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The energy and force as they relate to trauma
2. The terms; mechanism of injury, “down and under”, “up and over” velocity, acceleration, deceleration, kinetic energy and gravity
3. The pathophysiology of the head, spine, thorax and abdomen that occur from the result of the above forces
4. How trauma injuries may be predicted based on the mechanism of injury
5. The principles of kinetic energy transfer in relation to the three impacts of a road traffic accident (RTA)

Attitudinal Objectives

No attitudinal objectives

Skills Objectives

No skills objectives

Pharmacology and therapeutics

At the completion of this module, the student will be able to safely and effectively use established best practice guidelines/protocols in their approach to utilising medication as part of their clinical role as Advanced Paramedics.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

1. Outline the legal framework and system of best practice that empowers Advanced Paramedics to administer medications
2. Demonstrate best practice utilising the relevant Pharmacology PHECC CPG for Advanced Paramedic Grade
3. Describe and demonstrate the documentation of medication administration on the Patient Care Report
4. Locate and interpret information about the properties of medications from sources such as the British National Formulary (BNF), the Monthly Index of Medical Specialities (MIMS) and the PHECC Formulary
5. Explain the rationale for near miss incident or medication error reporting and for IMB ADRs

Pharmacokinetics and Pharmacodynamics

1. Define the term pharmacology
2. Define the terms pharmacokinetics and pharmacodynamics
3. Explain the process of drug absorption
4. Outline the process of drug distribution and elimination
5. Describe how cardiovascular function affects medication distribution
6. Outline the characteristics of paediatric, elderly and pregnant patients that influence medication distribution, metabolism and excretion
7. Describe alpha, beta and nicotinic receptors, their function and how certain drugs affect them
8. Explain the factors that may influence drug absorption, distribution and elimination
9. Explain the term drug action and factors that may potentiate or diminish a drug's action
10. Define the term drug half-life and the consequences of drug half-life on drug administration and monitoring
11. Define the terms: precaution, side effects, indications, contraindications and adverse reactions.
12. Explain the term anaphylactic reaction and the importance of its prevention and recognition in relation to drug administration and post-administration patient monitoring
13. Outline the units of measurement of medications
14. Differentiate between trade and generic medication names

Therapeutics (Coronary artery disease, diabetes, asthma, COPD, trauma)

1. Demonstrate the relationships between key acute and chronic illnesses and the treatment strategies used to manage them
2. Explain the relationships between serious injuries and the treatment strategies used to manage them
3. List the key pathophysiologic and clinical characteristics of CAD, diabetes, asthma, COPD and major trauma
4. Outline the key treatment strategies used in each
5. Describe the principal characteristics of the key pharmacologic agents used in each of these problems
6. Explain the potential for interaction between AP interventions and standard therapies used for these problems

Medication Protocols

1. Explain the rationale for the administration of medication
2. List the medication which the Advanced Paramedic may administer to a patient from PHECC CPGs
3. List and demonstrate the pre-administration checks to follow when administering medication
4. Explain the importance of establishing if the patient has any medication allergies or is taking complementary therapies e.g. homeopathy
5. Explain the dangers associated with inappropriate administration of medication
6. List the class, action, dose, route of administration, indications, contra-indications and side effects of the *approved medications for use by Advanced Paramedics
7. Outline the formulas used as a basis for performing medication calculations
8. Calculate the correct dosage of all *approved medications for adults, infant and children
9. Calculate the correct intravenous infusion rates of all * approved infusions for adults, infant and children
10. Demonstrate the administration of all *approved medication for Advanced Paramedic use
11. Describe and demonstrate the assessment and documentation of the patient's response to medication
12. Outline the principles and special considerations when administering medication under a medical practitioner's direction
13. List the medication which the Advanced Paramedic can administer under the direction of a medical practitioner

Medication administration

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

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. Demonstrate knowledge of PHECC approved Controlled Drug use protocol
2. List the procedure to be followed in the event of a medication error
3. List the preferred sites for an intravenous cannula and intraosseous needle insertion
4. List the indications, equipment required, procedure and general principles of inserting an intravenous cannula
5. List the indications, equipment required, procedure and general principles of intravenous medication injection and infusion
6. List the indications, equipment required, procedure and general principles of intraosseous needle placement, injection and infusion
7. The indications, equipment required, procedure and general principles of administering medication by the following routes:
 - a. oral sublingual and buccal
 - b. inhalation
 - c. intramuscular
 - d. subcutaneous
 - e. intravenous
 - f. intraosseous
 - g. rectal
 - h. transdermal
8. List the common complications of an intramuscular and intraosseous injection and outline basic remedial action
9. Describe the assessment findings and documentation of the patient response to all medication administered
10. List the indications, equipment required, procedure and general principles of obtaining a blood sample
11. Outline the special considerations for intravenous access in the trauma patient
12. Outline the special considerations for intravenous access and intramuscular injection in the paediatric patient
13. Outline the special considerations for injections for the paediatric patient

Attitudinal Objectives

1. Accept responsibility for potential drug errors (near miss)and report same
2. Accept responsibility for the secure handling and recording of Morphine and any other
3. Act responsibly and with care relating to each of the above AP procedures

Skills Objectives

1. Apply safe practice relating to each of the above AP procedures
2. Safely handle, secure and store all PHECC approved medication carried including additional precautions with Morphine
3. Administer all PHECC approved medication for advanced paramedic use; by oral, buccal, sublingual, inhalation, rectal, intravenous, intraosseous, intramuscular, subcutaneous and transdermal routes.
4. Assess and document the patients' responses to medication administered

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.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. Explain why infection prevention and control is relevant to patient safety
2. Explain the devastating effects of inadequate infection control

Attitudinal Objectives

1. Adopt standard infection control precautions as fundamental to patient care
2. Be aware of the issues at stake and actively encourage others to comply with standard infection control precautions

Skills Objectives

1. Perform an assessment of a patient suspected of or identified as having an infectious disease
2. Effectively and safely manage a patient according to standard precautions
3. Apply safe practice relating to all Advanced Paramedic procedures

Learning Outcome 2 – Domain 4

Adopt a professional approach to their practice	<i>Utilising best practice as prescribed by pre-hospital standard operational procedures/ or standards of operation and CPGs.</i>
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Major emergency

At the completion of this module, the student will be able to perform their duties effectively in conjunction with other relevant emergency services during a Major Emergency.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge objectives

1. Apply the protocol and procedure in the relevant PHECC CPG during a Major Emergency
2. Apply the protocol and procedures in the “Framework for Major Emergency Management” document during a Major Emergency

Attitudinal Objectives

1. Explain the concept of the most (help) for the most (patients)
2. Demonstrate a calm, professional and controlled manner during a major emergency situation
3. Liaise in a professional manner with other professionals in a post-incident debrief
4. Liaise in a professional manner with legal and other agencies post-incident

Skills Objectives

1. Apply the MIMMS concepts dynamically in a Major Incident situation

Treat and referral

At the completion of this module, the student will be able to assess and make a sound clinical decision about patient who can be safely and reliably discharged or alternatively referred to another healthcare professional for additional medical assistance.

1. Implement treat and refer and treat and discharge procedures for patients as per PHECC CPGs

Learning Outcome 3

Demonstrate a commitment to professional development and continuous renewal	<i>Developing their skills as a reflective practitioner</i>
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Experiential learning and reflective practice

At the completion of this module, the student will begin to utilise the skills of reflective practice in the further development of their professional career.

Objectives

A student will be able to demonstrate adequate working knowledge and comprehension of:

Knowledge Objectives

1. The importance of reflective practice in pre-hospital emergency care
2. The term experiential learning
3. How experiential learning is accomplished
4. Each of the four elements of Kolb's Experiential Learning Cycle
5. Honey and Mumford's Learning Styles to Kolb's Experiential Learning Cycle
6. The terms reflection-in-action and reflection-on-action as per Schön's postulation
7. The adult learning preferences and motivational influences that maximise learning outcomes
8. Knowles' five assumptions for adult learning
9. How individual differences in learning styles affect the learning process
10. The terms andragogical and pedagogical
11. Reflective practice can improve the quality of care delivered
12. Reflective practice informs personal and professional development processes

Attitudinal Objectives

1. Commit and motivate toward experiential learning and reflective practice
2. Demonstrate enthusiasm when conducting reflective practice
3. Seek regular feedback on how the student responds to the diverse needs of patients, peers and other interested parties
4. Show a willingness to learn from what happens in practice
5. Being open enough to share elements of practice with other people
6. Value the potential for clinical practice to emerge from within, as well as outside the profession
7. Value the conditions necessary for reflection to occur
8. Develop a belief that it is possible to change as a practitioner as a result of learning
9. Develop a belief that there is no end point in learning about clinical and professional practice
10. Refrain from being defensive about what other people notice about one's practice
11. Be courageous enough to act on reflection
12. Work out schemes to personally action what has been learned
13. Be honest in describing clinical practice to others

Skills Objectives

1. Construct a concept map (mind map) within the students' area of learning and identify knowledge gaps that need to be addressed
2. Write a reflective practice document
3. Demonstrate application of experiential learning applying Kolb's Experiential Learning Cycle
4. Use reflection to illustrate personal and professional strengths and weaknesses
5. Work reflectively as part of a Pre-Hospital Emergency care team
6. Reflect routinely on everyday practice in both a clinical and professional development context
7. Describe in detail clinical practice problems
8. Describe the consequences of not applying reflective practice as part of professional development
9. Articulate what happens in clinical and professional practice and evaluate it

