



BRITISH PARAMEDIC ASSOCIATION  
College of Paramedics

*Meditatio per Eruditio*

# A Curriculum Framework for Ambulance Education

## February 2006

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## 1.0 Foreword

This curriculum guidance has been prepared for Higher Education Institutions (HEIs) in partnership with ambulance services to plan the delivery of the education curricula for the profession. It will be used in the formal approvals and monitoring process. The profession itself will also benefit from the document by improving personal understanding of this approach to education and training. The guidance has been produced by the British Paramedic Association (College of Paramedics) and it is designed to be inclusive of the wider profession.

Ambulance staff in the UK has seen major changes since the beginning of the National Health Service (NHS) in 1946<sup>1</sup>. From the early days of simple first aid qualifications and the status of manual workers, progression in training, education and development of competencies has seen radical improvements in the standard and quality of patient care. Today's paramedics are now established health professionals in their own right, with all the attendant responsibilities that such status brings with it. The provision of training has, until recently, rested with ambulance services and stood apart from the education sector both in its planning and delivery. Since the publication of the Millar report on training in 1966 ambulance training has been delivered on a more consistent basis than had historically been the case<sup>2</sup>. A broader input to the curriculum was made from other professions including medical, nursing and midwifery and mental health professionals. Nevertheless, preparation was short, dominated by a training, rather than educational, ethos and was focussed at the basic life support level of care provision. This situation changed with the advent of advanced life support training schemes for ambulance staff in the 1970s, ultimately leading to the development of today's registered paramedic<sup>3</sup>.

The profession is now at a major crossroads in its journey to establishing the very best in provision of care to patients. The transition from a training paradigm into the world of higher education will take us to the next era of preparing the profession to fulfill its role in a modern Health Service.

This guidance does not stand alone in achieving a curriculum that will deliver to the patient the paramedic suitably and fully prepared for the role expected of them. Closely linked to this work and to the process of approvals for HEIs are three other important documents that influence strongly the standards and quality of paramedic services that aim to be delivered:

- Health Professions Council (HPC) Standards of Proficiency<sup>4</sup>;
- HPC Standards of Education and Training<sup>5</sup>;
- Quality Assurance Agency (QAA) Benchmarking statements<sup>6</sup>.

The Standards of Proficiency (SoP) and the Standards of Education and Training (SET) are established by the HPC to define the requirements in these two important areas. The QAA benchmarks are an external reference used for the design and development of new programmes. These documents, along with this Professional Body Curriculum Guidance, will provide those planning the detailed curriculum with a complete framework within which to operate.

Improving the delivery and standards of education through the use of this curriculum guidance will be inclusive for the whole profession, whatever level of care or from wherever the service is being provided. The wealth of experience and good practice that has been developed throughout the current training based model will need to be moulded into the HEI model through establishing partnerships between HEIs and ambulance services for the effective delivery of high standards of appropriate education<sup>7</sup>. The delivery of the curriculum leading to qualification and registration will need to be supported by taking up the personal responsibility for continuous professional development.

In order to take forward and develop the concept of self regulation and the need to adapt to ever changing demands, requirements and the expanding role of the profession, it has been necessary to provide greater clarity about the scope of practice. This supports a holistic approach to defining the profession and the education pathway for paramedic development that needs to respond to the wider changes in the pattern of disease and injury, the impact of technology, patient expectation and service delivery needs. The section on scope of practice found in this guidance defines what is expected from paramedics at each level of their career development and acknowledges that while clinical knowledge and skills remain central to good practice these aspects must be complemented by appropriate attitudes. It also recognizes that student paramedics will need to develop the interpersonal and interdisciplinary behaviours characterized by good communication with patients, staff and others including the ability to work as a member of a team. It will also be essential to ensure that the important issues of patient safety, leadership and the other factors, such as clinical governance, each have an effect on patient outcome and are fully considered and internalized.

*Roland Furber  
Chief Executive  
British Paramedic Association*

## 2.0 History of Paramedic Education and Training

In the UK, the enthusiasm for training ambulance men and women to carry out advance resuscitation procedures occurred slightly later than in the United States. Nevertheless, from 1970, only three years after the first paramedic programme was developed in Miami, Dr Bernard Lucas of the Medical Commission on Accident Prevention (MCAP), considered the potential of ambulance staff to undertake an expanded 'paramedic' type role. Dr Lucas's committee expressed the opinion that, 'as ambulance staff were frequently the first to arrive at an accident scene, it would be logical to train them in advanced resuscitation techniques'<sup>8</sup>. This recognition that the plagues of the late twentieth century, heart disease and traumatic injury, could benefit from treatment before the patient reached hospital played a part in creating conditions for change. Technological considerations, particularly the development of the portable defibrillator, also proved influential.

The first UK 'paramedic' scheme started in Brighton in the summer of 1971 under the stewardship of Dr. (now Professor) Douglas Chamberlain, a Cardiologist. Dr. Peter Baskett, an Anaesthetist, followed with another widely acclaimed scheme in Bristol the following year and other pilot sites became operational, albeit with small numbers of trained personnel, during the early 1970s. The focus and content of these schemes and the many others that followed often differed, reflecting local medical opinion; but the original projects shared the essential features of strong medical direction and absolute commitment from the ambulance staff that were recruited to the schemes. Enthusiasm and a pioneering spirit characterized these early projects and proved to be important ingredients to the considerable local success that followed. In 1973 the National Health Service Reorganization Act, implemented on 1 April 1974, transferred all ambulance services, including those services with experimental 'paramedic' schemes, from local authority control to the NHS.

Following this transition there was considerable discussion regarding the merit of 'paramedics' or as it was referred to at the time, 'extended trained ambulance staff', the Department of Health commissioned an analysis as to the potential benefits of such training. This research, conducted by University of York's Institute for Research in the Social Sciences was published in 1984 and proved extremely positive, providing a compelling and economically sound vision for extended (paramedic) training. Despite some resistance, acceptance of the need for more highly trained ambulance crews grew rapidly and led to the Department of Health introducing a national scheme in 1985 that was ultimately adopted by all UK ambulance services. This initiative brought together the many disparate schemes in operation into a standardised package of training taught within regional ambulance training schools and in local hospitals.

During the mid 1990s a small number of educational establishments formed partnerships with ambulance services to develop degree schemes in paramedic science, setting the future pattern of development that will see a much wider role of HEIs in the preparation of paramedics. After the registration of paramedics in 2000 with the Council of Professions Supplementary to Medicine (CPSM)<sup>9</sup>, which was shortly thereafter succeeded by the HPC, paramedics became the 12<sup>th</sup> group of health workers to become registered Allied Health Professionals (AHPs). This

important evolutionary step had the effect of accelerating the professionalizing process setting national minimum standards for education and training that complied with established academic levels. In 2001, the British Paramedic Association (BPA) became the professional body for paramedics and soon became engaged in collaborative work with the HPC, the Joint Royal Colleges Ambulance Liaison Committee (JRCALC), the QAA and others to help develop the instruments and reference points that would enable the profession to move forward, including the curriculum guidance notes.

In a mere 34 years paramedics have been developed in the UK from an experimental idea by a few leading authorities and a few enthusiastic ambulance staff to a situation today where the future for paramedics and their place within the health care landscape is now well established. During most of this short history their primary purpose has been firmly routed in providing emergency care and this role itself is now growing to incorporate the assessment and management of undifferentiated cases traditionally within the province of primary care. Paramedics are now found in the majority of industrialised countries and the United Kingdom can be rightly proud of producing personnel who have the knowledge skills, attitudes and aptitudes to play an increasingly important part in the delivery of health care in the 21<sup>st</sup> Century<sup>7</sup>.

### **3.0 Scope of Practice**

Paramedics are independent practitioners working, to their specified level of competence, with patients of all ages, with individuals and in groups, and are essential members of interdisciplinary and inter-agency teams. Effective practice requires the recognition and understanding of the social and economic context of their patients in assessing, planning, delivering and evaluating care.

Given the complex nature of out of hospital, unscheduled care and the diversity of health care situations encountered, Paramedics must be well educated, skilled and knowledgeable practitioners in a range of subjects and be able to appraise and adopt an enquiry-based approach to the delivery of care.

Paramedic practice is evidence based health care that applies vocational and academic disciplines that are often practised in a variety of complex situations across the health-illness continuum. The BPA has a commitment to the development of evolutionary roles that increasingly support the interface between health and social care practice leading towards role transferability.

This variety and diversity of paramedic practice is articulated in this document via an integrated five stage paramedic pathway that encompasses current titles of Emergency Medical Technician (EMT), Paramedic, Paramedic Practitioner (incorporating Emergency Care Practitioner (ECP) competencies), Advanced Paramedic Practitioner and Consultant Paramedic. It is recognized that the name and the role of Paramedic is protected in law<sup>3</sup>, but we wish to show the aspirational concept of an integrated educational paramedic pathway for the profession. This is a continuum of life long learning that allows flexible access to professional and academic development.

Throughout this document, the five stages are referred to as:

- Ambulance Clinician/Technician; Student Paramedic
- Paramedic
- Paramedic Practitioner
- Advanced Paramedic Practitioner
- Consultant Paramedic

They are able to act as first contact practitioners, and patients usually seek direct care without referral from another health care professional. They are responsible for the quality of care they provide for their patients by the employment of the principles and practice of clinical governance.

HEI providers and their ambulance service partners will need to embrace changing and developing roles which will affect the scope of practice for staff at all grades, for example the transition from the storage and administration of drugs to their independent and supplementary prescribing.

A defining feature of paramedic practice is that it is always available, 24 hours a day 365 days a year, with a focus on meeting people's immediate care needs.

**All grades of practitioners on the Paramedic pathway will be able to demonstrate;**

- a knowledge and understanding of the age span of human development from neonate to old age;
- acknowledgement/understanding of individuals and groups in a broad range of settings including acute, primary and critical care settings who present with complex and challenging problems resulting from multi-pathology illness and injury;
- the integration of theory and practice and the development of creative problem-solving processes;
- effective critical reflection, self evaluation and commitment to the use of evidence/research in the paramedic profession in providing optimum patient care;
- a commitment to team and partnership working and to working with other professionals;
- an understanding of patient/client autonomy, embracing the concepts of inclusion, equal opportunities, individual rights and empowerment of patients;
- arrange for appropriate and prompt referral to another health care professional or agency, where the patient requirements exceed the scope of practice of the Paramedic.

**Ambulance Clinician/Technician, Student Paramedic (Certificate of Higher Education);**

A clinician at this level will have a sound knowledge of the basic concepts of patient care through vocational training and academic education at level 4, having completed a basic training programme supported by the employing organisation in collaboration with their HEI partners.

Staff at this level will be clinically safe and accurate in their provisional diagnosis and treatment planning skills, using their knowledge and skills to identify and differentiate between life and non-life threatening conditions, and be able to interpret and record baseline observations and gain a basic individual, familial and social history of a patient during an assessment of the patient's needs. From this they will be able to determine the extent of patients' illness or injury and initiate a treatment plan, based on the principles of the current national clinical guidelines<sup>10</sup>, in an attempt to stabilize the condition. This will include the use of, amongst other things, airway adjuncts, defibrillation and drug therapy. Whilst acknowledging the limitations of their training, they will be able to draw upon the advice and guidance from more advanced and experienced practitioners as appropriate

They will, at this stage of the paramedic pathway, begin to develop their own professional principles and judgement, enabling them to challenge ideas.

In being awarded the Certificate of Higher Education (Cert HE) they will be efficient, co-ordinated and confident in the delivery of patient care.



They will be able to interact within a team and be able to develop relationships with multi-disciplinary professionals.

Through reflection, mentorship and review, they will be able to continually evaluate their own performance and recognise their personal strengths and areas for development, demonstrating a commitment to lifelong learning.

### **Paramedic (Current Registered Paramedic) (Foundation Degree/Diploma of Higher Education/Non-Honours Degree)**

A Paramedic will have a sound understanding of the principles of paramedic practice, and will be able to apply those principles more widely, through vocational training and academic education, having completed a further programme supported by the employing organisation in collaboration with their HEI partners.

Staff at this level will be clinically safe and accurate when working alone or as part of a team.

They will be able to utilise their advanced knowledge and skills to act independently to best meet the patients' individual needs. These skills will include advanced airway adjuncts and procedures, intra-venous fluid therapy and drug therapy using those medicines available to registered Paramedics, and other invasive procedures. They will be able to use their knowledge and experience to determine the extent of the patients' presenting condition and to decide on the appropriate receiving facility based on clinical need.

On award of the Diploma/Degree they will be proficient, co-ordinated and confident in the delivery of care.

They will be able to apply their own professional judgement and experience to make clinical decisions to best suit the patients' individual needs and be able to accept, explain and justify these decisions when challenged.

With the advantage of preceptorship, they will be able to take the leadership role in care delivery within a team.

Through reflection, mentorship, preceptorship and review, they will be able to continually evaluate their own performance and recognise their personal strengths and areas for development, demonstrating a commitment to lifelong learning. They will also be able to evaluate the performance of others by embracing the role of supervisor, mentor and preceptor.

### **Paramedic Practitioner (Incorporating Emergency Care Practitioner Competencies) (Honours Degree)**

A Paramedic Practitioner will have an understanding of a complex body of knowledge, some of which will be at the current boundaries of paramedic practice through level 6 academic education supported by the employing organisation in collaboration with their HEI partners.

On award of the Honours Degree staff at this level will be proficient, co-ordinated and confident in the delivery of care.

They will be clinically safe and accurate when working alone or when leading a team.

They will be able to thoroughly examine and assess patients' acute and chronic conditions and be able to record and evaluate an individual's full medical, social and familial history.

With their advanced knowledge and skills they will be able to suggest and instigate a care plan that may be an alternative to the traditional route of hospital admission, where that is inappropriate, and therefore best suits the patients' needs.

Being able to critically review evidence, arguments and assumptions, they will be in a position to advise patients and care teams on health care issues, health promotion and injury prevention, and will be able to reach sound clinical decisions and develop care plans with a greater degree of independence.

They will also have the advantage of being able to prescribe medicines beyond those available to an 'ordinary' paramedic.

Through reflection, mentorship, preceptorship and review, they will be able to continually evaluate their own performance and recognise their personal strengths and areas for development, demonstrating a commitment to lifelong learning. They will also be able to evaluate the performance of others by embracing the role of supervisor, mentor and preceptor.

### **Advanced Paramedic Practitioner**

An Advanced Paramedic Practitioner will have a detailed understanding of a complex body of knowledge, some of which will be at the current boundaries of paramedic practice through level 6/7 academic education supported by the employing organisation in collaboration with their HEI partners.

On award of the Masters Degree staff at this level will be proficient, co-ordinated and confident in the delivery of care.

They will be clinically safe and accurate when working alone or when leading a team.

They will be able to thoroughly examine and assess patients' acute and chronic conditions and will be able to record and evaluate an individual's full medical, social and familial history.

With their advanced knowledge and skills they will be able to suggest and instigate a care plan that may be an alternative to the traditional route of hospital admission, where that is inappropriate, and therefore best suits patients' needs.

Being able to critically review evidence, arguments and assumptions, they will be in a position to advise patients and care teams on health care issues, health promotion

and injury prevention, and be able to reach sound clinical decisions and develop care plans with a greater degree of independence.

They will also have the advantage of being able to prescribe medicines beyond those available to other level II/III practitioners on the paramedic pathway.

Through reflection, mentorship, preceptorship and review, they will be able to continually evaluate their own performance and recognise their personal strengths and areas for development, demonstrating a commitment to lifelong learning. They will also be able to evaluate the performance of others by embracing the role of supervisor, mentor and preceptor.

### **Consultant Paramedic**

Consultant Paramedics are clinical and organisational leaders who are professionally registered paramedics and have a minimum of 10 years full time clinical experience as paramedics<sup>11</sup>.

Consultant paramedic practice embraces four key areas;

First is expertise in practice. Practitioners work at the forefront of their field, providing an expert clinical resource, often managing complex cases both autonomously and as part of a team. They work with stakeholders to provide advice and guidance at all levels of paramedic practice. Practitioners develop and lead clinical improvements through collaboration and partnerships arrangements with clinical networks, academic bodies and others as appropriate.

Secondly, they will be involved in both research and other activities to support practice, devising and implementing approaches that engage the wider profession encouraging research and audit activity at all levels.

Thirdly, Practitioners will establish strong links to education and training (possibly via shared appointments), promoting evidence based practice and reflection across the whole range of clinical services and encouraging a professional culture that fosters learning and the dissemination of good practice.

The fourth key area is strategic and professional leadership, incorporating the patient's perspective, national policy direction and providing liaison with and advice to a wide range of organisations. These can be expected to include the Department of Health and other stakeholders, such as the HPC, the QAA, and the Commission for Health.

Consultant Paramedics may specialise in any branch of clinical care. Examples include emergency pre-hospital and out of hospital care including unscheduled care and critical care, both ground and air operations, typically but not necessarily limited to ambulance services. They should be intimately involved in the strategic direction and development of the provision of services in whichever area of work they are involved with.

Through personal reflection and peer group review, they will continually evaluate their performance recognising their own strengths while undertaking developments to maintain their standing and position within the profession as a whole.

## 4.0 Accreditation of Prior Learning (APL) & Accreditation of Prior Experiential Learning (APEL)

### Introduction

The BPA advocates the process of APEL/APL for access onto Paramedic training programmes. This access must be supported with a transparent and academically rigorous process for accrediting learning (Burgess, 2005). This section aims to incorporate many of the recommendations of the Burgess Report (2005) but is not exhaustive. It is not intended to dictate to Further and Higher Education Institutions on how to provide an AP(E)L process, but to offer an example of how this may be achieved for Paramedic education

As discussed previously the original concept for Ambulance services was to offer a fast response to emergencies, carrying out basic first aid and transporting patients to hospital. During the past 25 years the role of the ambulance service has changed from one concerned with taking people to hospital to a role in pre-hospital care, often requiring sophisticated clinical skills. Today's NHS requires its personnel to become "Lifelong Learners" and as such it is important that equity of access to Higher Education is embraced for Ambulance personnel<sup>12</sup>.

This section aims to provide guidance on how such personnel can access academic programmes by utilising the AP(E)L process to recognise both certificated and experiential learning. This will not only benefit the Ambulance personnel involved but promote multidisciplinary learning and the concept of the "University without walls".

### Background to ambulance training & mapping exercise

Clinical ambulance staff can be subdivided into three groups

- Care assistants
- Technicians
- Paramedics

The majority of ambulance personnel enter as care assistants who then train as technicians. Following a minimum of 12 months service at this level further training may be accessed to gain the qualification of paramedic.

Following successful completion of the paramedic's course personnel may then be registered, the existing programme is validated via Edexcel. Ambulance training programmes have not been credit rated nationally to date. Information from Edexcel intimates the variety of APL credits that have been awarded to ambulance personnel to date from HEI's.

This mapping exercise is not intended to match individual module learning outcomes but is intended to follow the general outcomes of a programme/course. The grid below is a partial example of a mapping exercise, which is intended to demonstrate the complexities of the paramedic curriculum and has been compared to modules in the Diploma in Higher education in Healthcare and BSc (Hons) in Clinical Practice (validated by the University of Surrey).

*Partial example of mapping exercise carried out by HEI*

Care assistant

<i>Skills accessed</i>	<i>Assessment methods</i>	<i>Academic level</i>
Moving & handling	Work based assessment	Equivalent to NVQ 2 Health & Social Care
First aid	Written examinations	
Basic patient care		

Technician

<i>Skills accessed</i>	<i>Assessment methods</i>	<i>Academic level</i>
Pre hospital emergency care 6-9 weeks	Examinations Assessments	Equivalent to NVQ 3 Health & Social Care
Up to 1 years supervised practice	Competency assessments	

Paramedic

<i>Skills accessed</i>	<i>Assessment methods</i>	<i>Diploma/ degree modules which are met by paramedic training</i>
480 hours of training 80 hours of Hospital placements for supervision & assessment skills  <ul style="list-style-type: none"> <li>• Defibrillation</li> <li>• Intubation</li> <li>• Administration of IV fluids</li> <li>• Administering drugs via a variety of routes</li> </ul>	Competency based assessment Clinical skills testing Examination Portfolio of evidence	Principles and practice of assessment L3 <ul style="list-style-type: none"> <li>• Demonstrate implementation of appropriate tools of assessment</li> <li>• Effectively utilise, in their field of practice, assessment skills related to the implementation of selected therapeutic interventions</li> <li>• Demonstrate safe application of appropriate technological equipment</li> </ul> Developments of clinical practice  <ul style="list-style-type: none"> <li>• Use appropriate &amp; relevant evidence in assessment, implementation and evaluation of care</li> <li>• Demonstrate ability to evaluate practice</li> <li>• Practice independently and accountably within their area of practice</li> <li>• Ensure public protection by</li> </ul>

		creating and maintaining a safe environment
Anatomy & physiology Respiratory system Cardiovascular system Nervous system		Physiology L2- all module aims

On completion of the mapping exercise the Paramedic training was accredited with

120 credits Level 4 (L1)

30 credits Level 5 (L2)

These credits are not mandatory and are subject to the provision of a portfolio of evidence including a period of practice consolidation. Applicants for AP(E)L will have to adhere to the AP(E)L processes of the FE College or HEI they wish to study at. Part of this process will involve counselling of the individual to identify how evidence may be presented to meet the required credit claim and the types of sources of evidence to be used. Candidates should realise that the process for AP(E)L is rigorous and therefore potentially requires significant commitment to provide a sufficient depth of evidence to satisfy examination boards.

In the following example Jane is an Ambulance Technician with 4 years experience and is currently working with and supporting a junior technician. She wants to access paramedic training via an HEI course. Sample sources of Evidence for APL and AP(E)L for Jane may be derived in the following manner (these examples are not exhaustive):-

APL	Rationale	APEL	Rationale
IHCD certificate	Standard requirement for students to access F/HEI courses	Curriculum Vitae	Demonstrates a career pathway to enable the student to show continuation of learning and application of knowledge
HEI Courses	If a non-medical pathway then may illustrate critical thinking and level of study	Portfolio of competency assessment	E.g. Continuing Professional Development Portfolio  Reflections on practice demonstrating decision making and evidence based practice
Other certificated learning courses	Can be individually mapped against learning outcomes if nationally recognised i.e. Advanced Life Support	Portfolio of case studies	Examples of which can indicate academic writing
		Case study, reflection on practice	Demonstration of other EXPERIENTIAL learning  Supported by:  Minutes of meetings  Agendas  Practice developments and documentation evidencing of effective change  Supporting statements from managers.



**With a portfolio of evidence drawn together both Jane and the HEI can see whether she meets the entry criteria for the programme. It may also be that a bridging module is offered to support the APL / AP(E)L process. Conclusion**

It is vital that HEI's and FE Colleges acknowledge both professional experience as well as certificated learning. An agreed process for AP(E)L should be used setting out clearly the expectations of the candidate as well as the academic support and assessment. It is advisable that a national approach is taken to awarding APL for both Paramedic and EMT education to ensure equity of access to Further and Higher Education. A recommended minimum credit tariff should be as detailed above for Paramedic. A facility for EMT to step on and step off preparatory programmes should be provided in acknowledgement of the new academic levels at which ambulance personnel will be accessing learning. Inter-professional learning will enhance the transferability of key skills and enable future ambulance personnel to have flexible career pathways to address the changing needs of healthcare.

## **5.0 Curriculum Guidance**

### **5.1 Selection and Admission onto Programmes**

All programmes should demonstrate a clear selection and admissions criteria that meets the minimum entry criteria identified by the HPC, HEI and those requirements agreed by the partner ambulance service. There should be particular reference to ensuring a standard appropriate to the level of study of that programme. It is essential that all selection criteria allow the prospective student to demonstrate good command of written and spoken English to a recognised standard.

As with all selection and admission criteria, all stages of the process should be clearly documented, and have a policy on equal opportunities, disability awareness and quality control measures. This is to ensure a fair, documented pathway for access to programmes. There is also the requirement for public safety and protection through Criminal Records Bureau (CRB) checks addressing vulnerable adults and children<sup>13</sup>. Appropriate mechanisms for occupational health clearance should also be stated (with particular reference to fitness and blood borne viruses).

Although the HPC Standards of Proficiency (SoP), and Standards of Education (SET), do not stipulate that driving is essential for registration, it is acknowledged that it is an employer requirement. When selecting on to a programme this element needs to be explicitly addressed, i.e. appropriate driving licence, medical clearance and fitness for emergency driving.

There should be a clear range of information to allow students to make an informed choice on the educational programme and future employability. The requirements and structure of the course, including assessment and programme progression, should be made available to prospective students.

There must be a documented quality assurance and review process in place to ensure consistency and anti-discriminatory practice within any selection process.

### **5.2 Underlying Principles**

The rationale for the overarching framework is that emergency medical technicians and paramedics share a common core of knowledge and skills, as will other developing roles within the profession. For example, whilst it is certainly the case that paramedics require a greater range of knowledge and skills than emergency medical technicians, the main difference between the two is the level of understanding required for safe performance of their roles. Further reference may be found in section 3 (Scope of Practice). Differences in achievement levels can be found in the table 'Level Descriptors Applied to the Proposed Ambulance Professions Pathway' (page 32).

The development of safe and competent practitioners must be the prime consideration for providers of ambulance education. Accordingly, paramedic programmes should cover the complete range of patients throughout lifespan (older adults, children, neo-nates etc). Programmes should also ensure that topics relevant

to particular patient groups (such as learning disabilities, mental health, paediatrics, obstetrics and trauma etc.) are taught. In addition, theory and practice should be integrated in such a way as to ensure the attainment of competence in all of the identified areas. Furthermore, because of the essential nature of the theoretical and practical components of programmes, students must successfully complete all of the required theoretical and practical activities.

A second principle is to ensure that programmes of study equip students with the necessary skills, knowledge and attitudes to become effective life-long learners.

It is a requirement that all programmes of ambulance education involve a close partnership between one or more NHS ambulance services (or other appropriate out of hospital care providers), and HEIs. This partnership should cover all stages of course development, implementation and operation, including student selection, teaching and assessment.

### 5.3 Policies, Procedures and Programme Management

All programmes should have robust policies and procedures covering the key areas of the paramedic education process. As a minimum, they should include; an admissions policy, an attendance policy, a failures policy, and a student conduct policy. All policies and procedures should be fair, transparent and in accordance with the principles of natural justice. The scope of these policies and procedures must cover both the theoretical and practical elements of the programme. A policy on sickness absence must be designed to ensure that students have covered the areas to demonstrate proficiency to practice and subsequent registration. Attendance monitoring should also focus not only on the time of absence but also on the subject or placement area missed.

Programmes should be sustainable (in terms of student numbers, finance and support etc). The educational programme should have a clear course structure and, where appropriate, module or unit leaders. The working relationship between the HEI and partner ambulance service should be clearly documented to ensure clarity for all parties concerned. This structure should allow for a defined evaluation and review point for the programme as a whole and for each intake. The structure should be developed further to establish a mechanism for academic and placement support that gives access to students whilst studying both the theoretical and practical elements of the programme. Clear links between HEI's and placement areas should be identified and documented with appropriately timed reviews and educational audits.

### 5.4 Course Tuition

The ethos of any course is around the delivery of a high standard and quality educational process that develops the individual student in a way that will allow them to practice, at an end point, as a registered professional. In order to achieve this it is recognised there is a need for the teaching staff to have an ability to relate theory to

paramedic practice. To support this, staff should have the ability to maintain their clinical practice.

- teaching should be delivered by individuals with an appropriate educational, scholarly and professional background. As far as is reasonably practicable, paramedic education should be primarily delivered by paramedics;
- it is a requirement that all teaching staff involved in paramedic education programme are familiar with the nature and scope of paramedic practice, and how their specialty relates to paramedic practice;
- clinical teaching should only be delivered by registered health professionals, with experience relevant to the topic they are teaching;
- all non paramedic teaching staff should have, as a minimum, a first degree and, ideally, a Post Graduate Certificate in Adult Education (or equivalent professional teaching qualification). Membership of the Higher Education Academy is also desirable;
- paramedic teaching staff should have, or be working towards, the same minimum level of qualifications as non paramedic teaching staff. The current IHCD Ambulance Tutors Award is a worthwhile qualification for current vocational training but does not encompass sufficient coverage of educational theory and practice for university based courses;
- teaching staff should be acceptable to both the university and its ambulance service partner/s;
- programme management committees must include paramedic representatives;
- the staff to student ratio may not exceed 1 to 8 for practical sessions.

## 5.5 The Learning Process

### *Introduction*

This section explains expectations about how students' learning is developed within qualifying programmes in paramedic science. In so doing, it draws together key tenets about the learning process that inform subsequent sections of the document.

The curriculum framework's emphasis on the learning process reflects the importance of underpinning the curriculum with the educational evidence to enable students with diverse learning styles to learn effectively about the complexity of knowledge, skills and attributes they need to gain in preparation for future practice and the significance of enabling students to develop the aptitude for continued learning throughout their professional career.

A balanced curriculum employs a variety of teaching and learning strategies that encourage and enable clinical decision-making, lifelong learning and collaborative

working with specific emphasis on the application of knowledge and understanding to practice; and which place equal emphasis on learning undertaken both in the classroom and during study and within placements and practice based experiences.

### *Underlying principles*

The curriculum framework is based on the following principles:

- learning achieved in HEI and practice-based settings is of equal value, with each contributing in the same way to students' fulfilment of the curriculum framework outcomes;
- learning achieved in HEI and in practice-based settings should be wholly integrated, and the reciprocal relationship between theory and practice should be recognised;
- learning achieved in HEI and practice based settings requires the partnership of the HEI and at least one partner ambulance service (or other appropriate out of hospital care provider).

The learning process created within qualifying paramedic programmes is fundamental to students' preparation for the challenges and opportunities of their subsequent professional practice, both for their employment on qualification and for their on-going career in paramedic practice. Therefore, qualifying education should provide the foundations for growth in paramedic practice by

- assuring diplomates'/graduates' safety and effectiveness within the core areas of practice and their appropriate preparation for their initial posts;
- equipping diplomates/graduates with the broader skills, attitude and attributes required for career-long learning and development.

### *Developing key skills*

The learning process has its foundation in the key values of respecting the individual student and the life experiences the student brings to the course. The educational process should enable students to adapt and further their existing knowledge within an appropriate framework, which will enable them to be critical agents in the provision of paramedic care. It is envisaged that the student will be able to work in partnership with the patient and their families, and provide care based upon best evidence making the registered practitioner fit for purpose, fit for practice and fit for award within modern service provision, which is constantly evolving. The learning philosophy should be based on the following principles:

- where appropriate, student centred learning using an approach which will prepare them from the outset in ways of enquiry, working with evidence, in partnership and within groups, with the ability to respect individuals and the ability to problem solve within a team;

- the creation of learning environments both in the academic institution and clinical areas which support and enable students to experience the full range of the paramedic role and responsibilities in a variety of contexts;
- the adoption of an enquiry-based learning approach that facilitates integration between academic and professional subject matter, and encourages critical enquiry skills to develop from the beginning of the course;
- the use of teaching and learning strategies which utilise simulation, workshops and clinical decision making exercises to develop the students' range of knowledge and skills in areas where experience may be limited;
- the recognition that students bring with them a wealth of life experiences which will be developed throughout the course;
- the promotion, consultation and collaboration between education and practice-based staff using effective processes and shared vision;
- the maintenance of strong structures to support students in clinical practice. This is achieved by regular contact between student, mentor and link lecturer through clearly defined processes of communication;
- the recognition that sound approaches for the preparation of mentors who will be involved in the support of students is given careful consideration and planned in partnership with relevant services;
- the ability for students to acquire a research-based enquiry approach to help critique their own practice;
- the valuing of users' views to inform the planning of education for students and encouraging students to recognise this element in shaping services as care and services are evaluated;
- upon qualification, the demonstration of the ability to function as a practitioner with the support of the relevant employer's induction programme in line with HPC recommendations for good practice
- the preparation of multi-skilled practitioners to meet the demands of the NHS in the 21<sup>st</sup> Century;
- central to the learning process is the development of transferable skills;
- an ability to learn independently, whilst being aware of relevant and appropriate sources of support, advice and guidance and how to access these;
- an appreciation of the necessarily reciprocal relationship between theory and practice within professional learning;

- a capacity for clinical-reasoning, problem-solving, practice evaluation, and reflection and the critical appraisal of the profession's evolving evidence base and its application to practice;
- recognition of the central importance of deploying a problem-solving, reflective approach to all elements of professional practice;
- recognition of the fundamental importance of developing a genuine commitment to the values encapsulated in the concept of patient partnership;
- a capacity to recognise the scope for, and to engage in, the transfer of knowledge, skills and attributes to different professional settings and situations, while having due regard for the limits of personal scope of practice;
- a strong understanding of the links between different elements of the curriculum they follow and an appreciation of the broad concepts and values that underpin paramedic practice in all settings and environments;
- an aptitude and enthusiasm for CPD and an appreciation of the continuum between qualifying education and post-qualifying practice and development;
- building an awareness of the limitations of the scope of practice for staff at different levels, and the necessity to seek advice from more appropriately qualified/experienced staff when appropriate.

### *Learning and teaching strategies*

A range of learning methods should be employed, including lectures, small group problem-solving and skills' development sessions, guided study and work-based learning with the support of a mentor.

Students can be helped to fulfill the framework outcomes and to develop the qualities described above in the following ways:

- a student-centred approach to learning, balanced with access to appropriate sources of support and guidance;
- opportunities to engage in shared learning with students from other disciplines and health care study routes;
- time within the programme – and the provision of appropriate tools and support - to reflect on their learning;

- teaching and learning approaches that facilitate the development of high-level cognitive skills (particularly relating to problem-solving, clinical reasoning and the exercise of professional judgement);
- learning facilitated through a range of activities and media (including computer-assisted learning, where appropriate);
- sensitivity to particular needs of individual students in terms of access to the curriculum, with appropriate adaptations made to its delivery;
- exposure to, and experience of, clinical practice in a diverse range of settings and environments;
- assessment procedures that focus on students' development and demonstration of the key qualities of learning expected at appropriate levels.

'Problem-based learning developed from research and an evidence base encourages from the outset, independent learning. This approach also fosters the students' ability to analyse, think critically and use knowledge, information, research and evidence logically'<sup>14</sup>. This helps to develop the students' ability to distinguish the relevance of knowledge and how it may be applied in a given episode of care. This, with the benefits of simultaneously developing reflective skills through the ability to examine practice using critical reflection, enables students to compare and contrast different approaches to care. Reflection will enable the student to evaluate the effectiveness of care approaches and interventions. This will support the skills and abilities that will enhance the lifelong learning so necessary in practice since statutory requirements demand that practitioners be able to function independently within a climate of change.

The particular ways in which learning is supported within individual programmes are at the discretion of education providers. Innovative approaches to programme design and delivery (particularly within components of practice-based and inter-professional learning) are actively encouraged. Of particular importance are:

- the creation of flexible opportunities for students' knowledge and skill acquisition, sustained by the recognition that learning takes place through a range of activities and in a variety of settings (providing that students are enabled and encouraged to transfer new knowledge and skills from one area to another);
- recognising the significance of practice-based learning for delivering curricula, developing professional attributes, identity and relationships and enabling students to fulfill the framework outcomes;
- a true integration of learning developed in HEI and practice-based settings;



- acknowledging that a prime purpose of paramedic education is to equip students with the aptitude, skills, curiosity and enthusiasm for on-going learning throughout their professional career, while ensuring they have the capacity to practise safely and effectively in their initial post-qualifying employment.

Within the HEI learning environment, students should benefit from belonging to strong peer groups (although it is acknowledged that establishing such groups can be difficult, particularly within large student cohorts). The learning environment should offer students stability when such peer groups have formed, and the opportunity to undertake both individual and group activities as a source of learning.

## 5.6 Learning in practice settings

Practice-based learning forms an indispensable and integral part of the learning process. Learning gained in practice settings is vital to students' educational and professional development and to their fulfilment of the framework outcomes. Students are therefore required to undertake approximately fifty percent of their programme of study within the practice environment. It should be noted that, because of the critical importance of this aspect of the education programme, students are required to record all practice based learning in a portfolio or similar document. The actual required practice hours are summarised in the table on page 29.

Students should develop new knowledge and skills while in practice-based settings, in addition to applying, consolidating and reflecting on learning gained in the HEI environment. They should gain experience that enables them to develop, apply and reflect on their clinical practice across the core areas of contemporary paramedic practice (particularly the management of a range of patient groups). These practice elements should reflect the current guidance from the QAA, HPC and BPA, additionally drawing on and reviewing the evidence base of the profession. Students should also be enabled to develop their understanding of the wide range of individuals who can benefit from paramedic interventions and the diverse settings in which ambulance care (in its widest sense) is delivered (including the paramedic's role in health education and promotion).

Consideration should also be given to:

- the overall profile of students' practice experience (including ensuring an appropriate balance between placements in acute, primary settings and with allied professionals, including social care and relationships to health delivery) and its contribution to their acquisition of core paramedic skills and their fulfilment of the framework outcomes;
- the impact of the length and location of placements (including traveling time) on the quality of students' learning.

Key areas in which students' learning should develop in practice settings include:

- the ability to apply and adapt their clinical and social skills in different practice environments, taking account of the varying needs of individuals, groups and carers;

- their communication and teaching skills, including their ability to listen effectively, to address individuals' needs with sensitivity, to explain their thinking and action in appropriate styles and formats;
- their commitment to patient partnership, manifested in their sensitivity and responsiveness to the needs and interests of patients and carers through the negotiation and evaluation of mutually-agreed goals;
- their capacity to collaborate with other members of health care teams, including members of other professions and support workers, recognising and respecting the roles, responsibilities and contribution of each;
- the ability to make independent decisions, based on a thorough evaluation of need, contextual factors and the best available evidence, while referring to appropriate sources of advice and support when needed;
- the ability to manage patients effectively and efficiently in a range of settings, making appropriate decisions about priorities and drawing on sources of advice and support when needed;
- the ability to keep full and accurate records, respecting issues of confidentiality, information security obligations and standards of professional practice, and responding appropriately to developments in information and computer technology (ICT) and knowledge management that impact on record-keeping processes and requirements;
- recognition of and appropriate response to the limits of their personal scope of practice and to the scope of practice of the profession at large;
- the ability to acknowledge, and deal appropriately with, uncertainty, unpredictability and change (both in terms of clinical practice itself and the organisational contexts in which care in the paramedic arena is delivered).

While observation of the unusual has a value, students should spend the maximum time possible during periods of practice-based learning in direct contact with patients, enabling them to deploy and refine their paramedic knowledge and skills. Where electives are available, students should be discouraged from undertaking an excessive number of clinical hours within one particular clinical setting, particularly if they have had scant exposure to another core area of practice. Ideally any elective placement should be negotiated outcomes for any elective placement that enables the student.

All those involved in supporting students' learning (including HEI educators, clinical educators and service managers) must have a shared and coherent picture of paramedic's role and responsibilities in the early career stages. The integration of learning through facilitated reflection, discussion and critical debate needs to be achieved to enable students to exercise the capacity, on qualification and within their scope of practice, to manage a full patient caseload in a range of environments within acute and primary care.

### **Illustrative issues for students relating to practice-based learning**

- students' understanding of the role of practice-based learning;
- establishing realistic expectations (both students' expectations of their learning in the practice setting and educators' expectations of students' learning in the practice setting);
- putting into practice concepts such as patient partnership, non-discriminatory practice and the promotion of equality (and valuing diversity);
- the profile and range of students' clinical experience;
- equity and appropriateness of experience;
- using learning contracts and logs;
- issues of quality relating to the length of placements and the frequency with which the learning environment changes;
- facilitated development of transferable skills and the holistic management of patients;
- reciprocity of learning and the integration of theory and practice;
- the transition from student to newly-qualified paramedic;
- developing independent practice;
- developing the skills to question, challenge and promote change;
- critical care experience.

### **Illustrative issues for clinical educators relating to practice-based learning**

- the transition from supervisor to educator;
- dealing sensitively with students from different cultural and ethnic backgrounds, with different ability levels, and at different stages of a qualifying programme;
- facilitating transfer of skills from one practice setting to another;
- enabling student to take control and responsibility;
- enabling ownership of learning and professional development
- assessing students' learning;
- managing the failing student;
- HEI-clinical placement relationship and broader issues of liaison;
- raising the profile of the clinical educator in practice-based and university settings;
- Issues relating to the application of national and local standards and protocols.

### **Illustrative issues for visiting HEI tutors relating to practice-based learning**

- clarification of role and responsibilities;
- building and maintaining relationships with clinical educators;
- role in student assessment;
- resolving placement difficulties.

<b>Grade of paramedic and educational award</b>	<b>Minimum cumulative effort hours of educational programme</b>	<b>Minimum assessed clinical practice based learning hours for each stage of the educational programme</b>	<b>Minimum cumulative assessed clinical practice based learning hours</b>	<b>Proposed Educational award</b>
Ambulance Clinician/Technician; Student Paramedic	1500 hours	750 hours, with a minimum of 150 hours in a supernumerary capacity in the role to which they are moving, and the remaining 600 in a supervised capacity	750 hours	Certificate of Higher Education
Paramedic	3000 hours	750 hours, with a minimum of 150 hours in a supernumerary capacity in the role to which they are moving, and the remaining 600 in a supervised capacity	1500 hours	BSc/ Foundation Degree/ Diploma of Higher Education
Paramedic Practitioner incorporating current ECP competencies	4500 hours	750 hours, with a minimum of 150 hours in a supernumerary capacity in the role to which they are moving, and the remaining 600 in a supervised capacity	2250 hours	Honours degree
Advanced Paramedic Practitioner	6000 hours	750 hours, with a minimum of 150 hours in a supernumerary capacity in the role to which they are moving, and the remaining 600 in a supervised capacity	3000 hours	Masters degree
Consultant Paramedic	10500 hours (Research based award)	No additional clinical practice hours required	No additional clinical practice hours required	Doctorate (or working towards). It is anticipated that professional doctorates will be developed to support this role

### *Practice Hours*

Practice hours are required to take place in an appropriate clinical environment incorporating patient contact relating to the practice placement learning outcomes. Elements of a programme that are not directly linked to the HPC SET and SoP, for example driving and skills simulations, cannot contribute towards the calculated practice hours.

### *Practising Clinical Skills during placements*

Prior to applying for registration, students will often have received training in a number of skills and procedures that may only be legally performed by a registered paramedic. Unregistered students may practice these clinical skills and procedures (e.g. I.V. cannulation, drug administration etc.) during clinical placements, provided they are being supervised by an appropriately registered practitioner. In doing this the registered practitioner assumes responsibility for the safe performance of the procedure.

#### 5.7 Assessment

The assessment of students' learning should be integral to the learning process. Students should have opportunities to demonstrate their learning in a variety of ways and through assignments and examinations that have direct benefits for their learning. The approaches used should also provide students with regular and constructive feedback on their progress and performance, while encouraging self-directed learning and evaluation of personal achievements.

The assessment strategy used within programmes should achieve the following:

- a combination of approaches that enable programme providers to test, and students to demonstrate, fulfillment of the curriculum framework outcomes;
- an appropriate balance between formative and summative assessment, ensuring students receive regular and in-depth feedback on their performance and progress and guidance on areas in which they need to develop their knowledge and skills further;
- approaches that encourage and develop students' confidence to
  - Assess their own learning through reflection and evaluation
  - Identify areas and ways in which they want and need to develop further
  - Make judgements about their own performance with some accuracy and without external or formal input;
- explicit and detailed guidance (including the assessment criteria against which learning is to be measured) on what is expected of students in each element of the assessment process;
- a robust assessment of students' ability to practise safely and effectively in the core areas of paramedic practice and their preparedness for professional practice on initial qualification;
- learning achieved in practice settings must be accurately recorded in a portfolio or similar document;
- assessment is required to be explicit for key areas of operation, that are required as an expected standard for paramedics to be able to deliver care;

- A robust, ethical and transparent failures policy that clearly identifies the process to be followed if a student is unsuccessful in any element of the assessment process. The policy should include a fair appeals process.

Level Descriptors applied to the proposed Ambulance professions Pathway

Ambulance Clinician/Technician; Student Paramedic Cert HE 1 Year FT	Paramedic FdSc/Dip HE/BSc 2 Years FT	Paramedic Practitioner BSc (Hons) 3 Years FT	Advanced Paramedic Practitioner MSc 4 Years FT
<b>Subject knowledge</b>			
Sound knowledge of the basic concepts	Sound understanding of the principles in paramedic practice, and will have learned to apply those principles more widely.	Understanding of a complex body of knowledge, some of it at the current boundaries of paramedic practice.	Detailed and comprehensive understanding of specialised areas of knowledge, many at the boundaries of paramedic practice.
<b>Levels of Safety and Responsibility</b>			
Clinically safe and accurate, requiring some supervision	Clinically safe, accurate when working alone with minimal supervision	Clinically safe, accurate when working alone without supervision	Autonomously manages complex cases. Manages teams providing care.
Begins to develop own professional principles and judgement and is therefore able to challenge ideas	Applies own professional judgement and experience to make clinical decisions and is able to accept challenge from others	Able to critically review evidence, arguments and assumptions to reach sound clinical decisions; and is able to accept challenge from others	Can independently critically evaluate evidence and approaches to sound clinical decisions. Able to accurately assess/report and others work justifications
<b>Characteristics of Performance</b>			
Increasingly efficient, co-ordinated and confident in the delivery of care	Proficient, co-ordinated and confident in the delivery of care	Highly proficient, co-ordinated and confident in the delivery of care	Highly proficient, co-ordinated and confident in the delivery of care in specialised areas of complex domains
Needs some reminders and prompting to facilitate the delivery of care in non routine situations	Needs minimal prompting to facilitate the delivery of care	Needs no prompting to facilitate the delivery of care	Autonomous management

<b>Level of Supervision, Prompting and Support</b>			
Evaluates own performance, although appreciates regular feedback	Actively seeks and makes use of feedback	Actively seeks and makes use of feedback	Actively seeks and makes use of feedback
Begins to interact effectively within a team and is able to develop professional relationships	Begins to take a leadership role in care delivery and within a team	Takes a leadership role in care delivery and within a team	Manages/ leads team.
Recognises personal strengths and areas for development	Evaluates own and others' performance	Evaluates own and others' performance	Responsible for evaluating the performance of team members



## 5.8 Curriculum Content

### *Underpinning professional knowledge*

#### **Physical Sciences**

Physical Sciences form a small but important component of the paramedic curriculum, and include:

1. Units of measurement used in clinical science and health care.
2. Pressure and gas laws, especially as related to respiration and the flow of fluids through tubes.
3. Heat transfer in relation to maintenance of normal body temperature.
4. The physical laws governing kinematics.
5. Composition of fluids: concentration, salts, electrolytes, solutes, solutions, colloids and suspensions.
6. The properties and reactions of acids and bases.
7. Diffusion and osmosis, especially as applied to gas exchange and movement of water between body fluid compartments.
8. Ergonomics as applied to the working environment and manual handling.

#### Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound knowledge of the basic concepts of the relevant physical sciences.

#### Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

#### Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

#### Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

#### Consultant Paramedic

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they

will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

## **Life sciences**

The nature of ambulance work dictates that paramedics require a detailed knowledge and understanding of life sciences. The emphasis of course programmes should be to ensure that paramedics are able to apply these concepts to practice within specific situations and patient groups. Consequently, life sciences are a major component of the ambulance professions curriculum, and include:

1. Normal human anatomy and physiology: all major body systems but with an emphasis on the cardiovascular, respiratory, nervous, and musculoskeletal, systems.
2. The dynamic relationship between anatomical structure and function.
3. Homeostasis and major homeostatic processes.
4. Human growth and development across the lifespan.
5. The factors influencing individual variations in human ability and health status.
6. The role of nutrition in health and illness.
7. Microbiology: the main classes of pathogenic micro organisms, the spread of infection and infection control.
8. Immunology and the response to infection and injury.
9. Genetics.
10. Epidemiology.

### Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound knowledge of the basic concepts of the relevant life sciences.

### Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

### Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

### Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the

application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

### Consultant Paramedic

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

### **Social, Health and Behavioural Sciences**

Social, health and behavioural sciences are another major component of the paramedic curriculum. The emphasis of course programmes should be to ensure that paramedics are able to apply these concepts to practice within specific situations and patient groups, and include:

1. Diversity and anti-discriminatory practice; including fairness, social inclusion, gender, sexuality, ethnicity, spirituality and culture.
2. Children and vulnerable adults: both paramedic care and within the wider context of society.
3. Loss, change and bereavement.
4. Models of health and illness.
5. Psychosocial determinants of health, including the factors that influence an individual in health and illness.
6. The factors contributing to social differences.
7. The problems of inequality and the needs of different social groups.
8. Patients' mental health issues.
9. Theories of communication to enable the practice of effective communication.
10. Theories of Learning.
11. Theories of stress and coping, and the effects of stress on individuals.
12. Theories of pain and the effects of pain on individuals.
13. Team-working and leadership in relation to effective team performance and reduction of human error.
14. Theories supporting human information processing, problem solving and clinical reasoning.
15. Health promotion.

### Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound knowledge of the basic concepts of the relevant social, health and behavioural sciences.

### Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

### Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

### Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

### Consultant Paramedic

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

## **Clinical Sciences**

Clinical sciences are one of the most important components of the paramedic curriculum. The emphasis of course programmes should be to ensure that paramedics are able to apply these concepts to practice within specific situations and patient groups, and include:

1. Pathological changes, and the related clinical features, of conditions encountered by paramedics.
2. Physiological, structural, behavioural and functional changes in patient presentation and those that result from paramedic intervention.
3. The factors, including life span and individual variations, influencing susceptibility to disease, injury and responses to treatments.
4. The theoretical basis of assessment and treatment, and the scientific evaluation of effectiveness.
5. Pharmacology and the administration of medications, including pharmacodynamics and pharmacokinetics; major classes of drugs and their effects; and a detailed knowledge of the drugs administered by paramedics.
6. Health care language and terminology.
7. Medical technology and equipment used in pre-hospital and out of hospital paramedic practice, including the factors limiting the reliability of equipment.

## Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound knowledge of the basic concepts of the relevant clinical sciences.

## Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

## Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

## Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

## Consultant Paramedic

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

## **Health care policy**

It is important that paramedics have an understanding of the political and economic context in which they operate. The emphasis of course programmes should be to ensure that paramedics are able to identify how these concepts impact on their practice, and include:

1. Clinical Governance.
2. Organization of the NHS.
3. Health economics.
4. Health and social policy.
5. Politics.
6. The impact of health and social care policies on professional practice.

## Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound knowledge of the basic concepts of the relevant health care policy.

## Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

## Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

## Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

## Consultant Paramedic

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

## **Ethics and law for practice**

It is important that paramedics have an understanding of the ethical and legal context in which they operate. The emphasis of course programmes should be to ensure that paramedics are able to identify how these concepts impact on their practice, and include:

1. The ethical, legal and professional issues that inform and shape paramedic practice.
2. The professional, statutory and regulatory codes of practice; code of conduct, values and beliefs.
3. The ethical and legal frameworks within paramedic practice, and relevant legislation.
4. Law relating to the driving and operating emergency vehicles.

5. Caring and the primacy of patient interest.
6. Awareness of practical issues relating to actions at crime scenes and evidence preservation.
7. Patient confidentiality and data protection.

#### Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound knowledge of all the basic concepts of the relevant ethics and law.

#### Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

#### Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

#### Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

#### Consultant Paramedic

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

#### *Underpinning professional skills*

#### **Communication and interpersonal skills**

Paramedics need to have a thorough understanding of communication theory and a high degree of proficiency in their interpersonal skills. These skills have an impact on almost all aspects of their professional practice; from their interactions with seriously ill or injured patients through to their dealings with colleagues and team members.

1. Communication and counselling skills applied to specific patient situations in both emergency and non-emergency patient interactions.
2. Communication skills within the care giving team.
3. Identifying and managing challenging behaviours, including intoxicated patients, acute emotional disturbance in adults and children; and the special needs of vulnerable groups.
4. The management of aggressive and violent patients.
5. Recognising anxiety, stress and depression, give emotional support and identify when specialist counselling intervention for patients is needed, including stress and 'burn out' in self and colleagues.
6. Taking account of the diversity of life experiences and key events in the human life cycle that influence health through interview and individual discussion, understanding the values, beliefs and interests of patients and their families and carers.

#### Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound knowledge of all the relevant communication theories and interpersonal skills.

#### Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

#### Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

#### Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

#### Consultant Paramedic

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.



## **Patient assessment**

Patient assessment is the possibly the single most important area of the paramedic curriculum. It is important that the framework or system of patient assessment that is taught is the same for all levels of paramedic, and that paramedics are able to develop that framework as they continue their education and training.

1. Scene assessment and equipment to scene.
2. Conduct a primary survey and identify patients with time critical injuries and illness.
3. Communicating effectively with the patients, relatives, carers, and other health care practitioners.
4. Obtaining a comprehensive history appropriate to the patient's needs.
5. Assessment of mental status and capacity.
6. Obtaining a comprehensive set of clinical observations/vital signs appropriate to the patients needs.
7. Conducting a comprehensive physical assessment (secondary survey) appropriate to the needs of the patient.
8. Collecting, collating and analysing data using systematic approaches to inform paramedic investigation, using suitable methods for age and intellectual ability of patient and taking account of environmental and social context of the patient.
9. Formulating a provisional diagnosis from the analysis and integration of case history and assessment findings.
10. Documenting findings and all the necessary information to support the professional paramedic judgement.
11. Identifying the need for further assessment, appropriate intervention or referral to other services or agencies.
12. Recognising situations where the best interests of the patient can be more appropriately served by a different health professional or a multidisciplinary approach to care.
13. Using information technology to identify and access information, to record and manage patient data.

### **Ambulance Clinician/Technician; Student Paramedic**

At this level paramedics will be expected to have a sound knowledge of, and the ability to apply the principles of patient assessment theory and basic skills.

### **Paramedic**

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

### **Paramedic Practitioner**

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

## Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the clinical theory to practice will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

## Consultant Paramedic

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

## Care delivery

This area of the curriculum covers all of the interventions and treatments that paramedics undertake. The current permitted interventions for paramedics are detailed in the JRCALC Guidelines<sup>10</sup>.

1. Practitioner and patient safety, including scene safety, universal precautions, infection control and PPE.
2. Identification and management of patients with time critical injuries or illness in accordance with current national pre-hospital guidelines.
3. Basic and Advanced life Support.
4. Management of pain.
5. Formulating, negotiating and implementing treatment plans.
6. Selecting and utilising appropriate paramedic interventions, taking into account the unique specific therapeutic needs of patients and carers.
7. Moving and handling of patients within a wide range of emergency and non-emergency situations using appropriate ambulance equipment.
8. Providing relevant physical, psychological and social caring skills required of specific patients or groups.
9. Selecting the appropriate transport destination or referral option required to meet patients' care needs.
10. Transporting patients to hospitals and other facilities.
11. Management of multiple casualty and major incident situations in accordance with agreed policies and procedures including Chemical, Biological, Radiological and Nuclear (CBRN) incidents.
12. Care in multidisciplinary and multi-professional teams.
13. Delegating patients' care.
14. Documenting and communicating accurately the outcomes of patient assessment, diagnosis and treatment plans.
15. Re-stocking of the ambulance; or designated to a team who are dedicated to this role.

## Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound knowledge of care delivery theory and basic skills.

## Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

## Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

## Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the clinical theory to practice will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

## Consultant Practitioner

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

## **Management of self and others' reflective practice**

Paramedics are required to have an understanding of the broader context in which they operate and to be aware of the factors that may impact on their performance.

1. Human factors, patient safety and team working as applied to health care generally and ambulance practice specifically.
2. Evidence-based health care and its application to paramedic care, including an in-depth knowledge of the national pre-hospital care guidelines.

3. Leadership, 'fellowship' and the relationship with human factors and patient outcome.
4. Concepts of 'quality' and the application to paramedic services including a basic appreciation of, and delineation between, 'system thinking' and 'command and control' approaches.
5. Resource management, including modern approaches to resource deployment, control centre operations and priority dispatch systems.
6. Reflective practice and continuing professional development
7. Mentorship, teaching and learning.
8. Patient triage and prioritising care, including the use of priority dispatch systems, telephone and face-to-face clinical decision support systems;
9. Principles of management within organisations.
10. Clinical governance and maintaining/monitoring standards
11. Contribute to the development and implementation of policies at a local level.

#### Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound knowledge of all of topics listed above.

#### Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

#### Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

#### Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

#### Consultant Paramedic

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

## Research

1. Research methods; application of all of these to paramedic care of patients and patient groups
2. The perspectives and research evidence into the design and implementation of effective paramedic practice
3. The principles of evaluation and research methodologies which enable the integration of theoretical and practical applications.
4. The use of IT to process and analyse research findings.
5. Formulating research questions, pursuing the development of a research design and the implementation of the research process.
6. Utilising literature to inform current and evolving research and evidence-based practice

### Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have an awareness of the importance of research in paramedic practice.

### Paramedic

Paramedics at this level will be expected to have an understanding of all of the topic areas, and their possible application within care delivery.

### Paramedic Practitioner

Paramedics at this level will be expected to have a detailed understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

### Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

### Consultant Practitioner

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

## **Information Technology (IT) & Numeracy**

1. Use word processing, email, spreadsheets and informational databases
2. Access health care research and literature databases
3. Use the internet as an information source
4. Use relevant electronic patient information systems and related information technology. (evolving Electronic Patient Records (EPR) and its potential benefits e.g. decision support)
5. Understand and carry out drug calculations and administration of drugs via appropriate routes;
6. manage information relevant to the particular patient or patient group;
7. record access patient data appropriate to the health care setting;
8. Report changes in patient information/data appropriately.

Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have basic IT and numeracy skills and an awareness of the importance of IT and numeracy in paramedic practice.

Paramedic, Paramedic Practitioner, Advanced Paramedic Practitioner and Consultant Paramedic

Paramedics at these levels will be expected to have a thorough understanding of all of the topic areas, and their application to care delivery.

### **5.9 EMT and Paramedic practice**

#### **The nature and scope of EMT and paramedic practice.**

1. Understanding and competent performance of, the skills and procedures identified in the JRCALC Clinical Practice Guidelines.
2. Patient and provider safety including key research, policy and behaviours associated with safety.
3. Changing philosophical and historical perspectives in paramedic practice including the requirements of the statutory regulatory body associated with registration as a paramedic.
4. Specific terminology applied to paramedic practice radiotelephony and 'remote', telephone-based assessment, such as those utilised in priority dispatch systems, and emerging decision support systems.
5. Response to special circumstances, including public order, hazardous materials, light rescue and the first line response to major incidents.
6. Evidence-based health care including a knowledge of the key research that has shaped paramedic and ambulance service practice.
7. Professional paramedic issues such as team-working, advocacy, accountability, informed consent, independent practice and partnerships.
8. Context within which paramedic practice is delivered.
9. Quality assurance frameworks encompassing, for example clinical governance, clinical guidelines, priority dispatch, resource deployment and professional standards;

10. Performance indicators and outcome measures derived from a range of scientific and measurement approaches.
11. Safety at work practices including risk assessment.
12. Legal implications of the supply and administration of prescription only medicines available to paramedics.
13. The value of research and scholarly activity within the health care and professional context and the impact this will have on the development of the paramedic profession.

#### Ambulance Clinician/Technician; Student Paramedic

At this level paramedics will be expected to have a sound basic knowledge of the relevant topic areas.

#### Paramedic

Paramedics at this level will be expected to have a thorough understanding of all of the topic areas, and their application within care delivery.

#### Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice.

#### Advanced Paramedic Practitioner

Paramedics at this level will be expected to have a detailed and critical understanding of all of the topic areas, and their application to care delivery. Some of the material may be at the current boundaries of paramedic practice. However, at this level the application of the material will become increasingly specialised, focussing increasingly on the clinical domains in which the paramedic operates.

#### Consultant Practitioner

Paramedics at this level will be increasingly specialised within their own narrow domains of expertise, where they will be involved in the creation and interpretation of new knowledge and applications. If this curriculum area is within their domain they will be expected to have an expert and highly detailed understanding of the area, and be at the forefront of the discipline. If this area is outside their domain of expertise they will be expected to have the same level of knowledge as an Advanced Paramedic Practitioner.

## 6.0 Practice Placement Guidelines

The role of the paramedic is changing rapidly and increasing medical technology and public awareness of advanced health care issues have had a significant impact upon the delivery of ambulance care. Paramedics must now utilise a range of academic disciplines in order to provide the level of skill required within contemporary society and to support optimum quality care.

A range of teaching, supervising and assessment methods should be employed to facilitate learning and enable students to adopt a problem-solving, critical approach encouraging independent learning and professional conduct. The range of subjects covered to educate paramedics of the future should include areas such as biosciences, pharmacology, psychology and communication, ethics, law, social sciences, health promotion, and clinical professional studies to enhance the paramedic curriculum. In addition to the development of an academic foundation the importance of understanding evidence based practice, audit and research is fundamental, with a tier of clinical staff studying to graduate level.

Practice placements should be integral to the programme enabling the integration of theory into practice and development of clinical skills. "There should be adequate numbers of appropriately qualified and experienced staff at the placement area, and the education provider must maintain a thorough and effective system for approving and monitoring all placements. The placement provider must have an equal opportunities and anti-discriminatory policy in relation to paramedic students, together with an indication of how this will be implemented and monitored" (HPC 2004)

Ambulance services and HEI partnerships should aim to enhance the ongoing development of paramedics by developing safe, effective and stimulating practice placements within primary, secondary and tertiary care settings. These types of placements will introduce the student to inter-professional learning, allowing the development and understanding of the roles and responsibilities of other Health care systems.

Practice placements should not be merely visits; they should be designed so there is a structure to the placement with set learner outcomes. The placement area/team and the paramedic student should be briefed as to what is expected and debriefed as to what was achieved. Any assessments or examinations that are to take place in the placement area should be explained fully, as to how and when they will be conducted. "All assessments must provide rigorous and effective processes by which compliance with external reference frameworks can be measured" (HPC 2004).

The number, duration and range of practice placements and practice outcomes should be tailored to match the programme, module, performance and progression of the student, placements must be appropriate to the achievement of the practice outcomes. Minimum cumulative practice based learning hours are as follows.



Ambulance Clinician/Technician/Student Paramedic (Currently Non- Registered).  
There should be no less than 750 cumulative clinical practice based learning hours.  
At completion the ambulance clinician will be expected to have a sound knowledge of care delivery and basic skills acquisition.

#### Paramedic

There should be no less than 1500 cumulative clinical practice based learning hours.  
At completion the Paramedic will be expected to have a thorough understanding of care delivery and advanced skills acquisition.

#### Paramedic Practitioner

There should be no less than 2250 cumulative clinical practice based learning hours.  
At completion the Paramedic will be expected to have a detailed and critical understanding of care delivery and advanced skills acquisition.

#### Advanced Paramedic Practitioner

There should be no less than 3000 cumulative clinical practice based learning hours.  
At completion the Paramedic will be expected to have a detailed and critical understanding of care delivery and advanced skills acquisition. At this level the materials will become increasing specialised focussing on the clinical domains in which the paramedic operates.

#### Consultant Paramedic

Currently no additional practice hours are required as practice is seen as an integral part of the research environment. Consultant paramedic practitioners will be expected to 1. Deliver expert clinical service, 2. Develop research to support practice 3. Provide consultancy to own profession and others, 4. Take an active role in education and training. This level is currently in it embryonic stage and will continue to develop as the role matures.

#### Practice placement themes

The Paramedic student is to maintain a high level of professionalism throughout the duration of their placement and must be able to demonstrate fitness for practice. They will be expected to work collaboratively with other members of the healthcare arena and be able to make an effective contribution to the interdisciplinary and multi-professional team.

The following practice placement outcomes use Blooms' taxonomy cited in Quinn<sup>15</sup>.

#### Cognitive

- Apply health and safety regulations and be able to establish and maintain a safe practice environment
- Understand the hazards of cross infection and apply the principles of infection control relating to patient care

- Understand patient confidentiality and be able to handle data sensitively and professionally
- Evaluate and respond accordingly to the healthcare needs of patients suffering from acute, chronic and minor medical conditions
- Identify patients who have conditions that require immediate intervention and understanding the urgency that is required when dealing with emergency situations

#### Psychomotor

- Demonstrate effective communication and interpersonal skills in their interactions with patients, service users, carers and colleagues
- Demonstrate safe and effective patient care through the use of a range of emergency procedures
- Conduct accurate patient assessment and physical examination
- Demonstrate effective and appropriate patient referral
- Demonstrate the safe handling (ordering, receiving, preparing, administering and monitoring) of medicines
- Demonstrate the ability to appropriately select and safely use a range of equipment
- Conduct appropriate diagnostic monitoring procedures, treatments and therapies
- Demonstrate an understanding of the principles of dealing with multiple casualties and major incident management.
- Demonstrate at the point of observation utilising the appropriate evidence to support the formulation and delivering effective patient treatment and management
- Maintain accurate patient records conforming to legislative requirements and good practice guidance.

#### Affective

- Critically appraise clinical decision-making
- Respond to the needs of patients, service users in the provision of care
- Establish and preserve the legal, professional, moral and ethical boundaries of Paramedic practice

The following overarching themes should have practice outcomes designed to suit the programme level and module complexity as the student progresses along the paramedic pathway.

- 1 Ability to establish and maintain a safe practice environment in accordance with current health and safety regulations.
- 2 Recognition of and appropriate response to the hazards of cross infection taking account of the principles of infection control relating to patient care and staff welfare.
- 3 Ability to apply and adapt their clinical and social skills in different practice environments, taking account of the varying needs of the individuals, groups and carers;

- 4 Communication and teaching skills, including their ability to listen effectively, to address individuals' needs with sensitivity, to explain their thinking and action in appropriate styles and formats;
- 5 Commitment to patient partnership, manifested in their sensitivity and responsiveness to the needs and interests of the patients and carers through the negotiation and evaluation of mutually-agreed goals;
- 6 Capacity to collaborate with other members of health care teams, including members of other professions and support workers, recognising and respecting the roles, responsibilities and contributions of each;
- 7 Ability to make independent decisions, based on a thorough evaluation of need, contextual factors and the best available evidence, while referring to appropriate sources of advice and support when needed;
- 8 Ability to manage patients effectively and efficiently in a range of settings, making appropriate decisions about priorities and drawing on sources of advice and support when needed;
- 9 Ability to keep full and accurate records, respecting issues of confidentiality, information security obligations and standards of professional practice, and responding appropriately to developments in information and computer technology and knowledge management that impact on record-keeping processes and requirements;
- 10 Ability to safely handle, order, receive, prepare, and administer medicines in the practice environment;
- 11 Recognition of the legal, ethical and moral boundaries and appropriate response to the limits of their personal scope of practice and to the scope of practice of the profession at large;
- 12 Ability to acknowledge, and deal appropriately with, uncertainty, unpredictability and change (both in terms of clinical practice itself and the organisational context in which care in the paramedic arena is delivered).

#### Practice placements areas

The following are practice placements areas within primary, secondary, tertiary and emergency care settings where practice outcomes for the aforementioned themes may be achieved. These are ideal areas for inter-professional learning and the time spent in each area should be adjusted to suit the programme, module complexity, and student level. Some of these areas may be revisited to achieve more complex practice outcomes as the student progress along the paramedic pathway.

- 1 *Emergency Services Control*, this comprises ambulance emergency control centre, NHS direct, this will allow the student to gain an understanding of the

communication skills and strategic decision making involved in the patient pathway.

- 2 *Emergency Ambulance*, this allows the student to work with Paramedics and Technicians dealing with emergency and urgent cases in a clinical setting, and also to consolidate theoretical knowledge in practice.
- 3 *Non-Emergency Services*, this allows the student to observe the role and operation of patient transport services delivery of care and transportation. As an introduction to an ambulance service this is an ideal area to develop communication skills.
- 4 *Accident and Emergency Department*, this allows the students to experience interaction between paramedics and hospital staff, also handovers, patient assessment, further treatment and investigation.
- 5 *Medical Assessment Unit*, this will allow students to develop patient assessment skills incorporating medical models of assessment, understand hospital investigations and admissions criteria.
- 6 *Surgical Assessment Unit*, this will allow students to develop patient assessment skills incorporating surgical models of assessment, understand hospital investigations and admissions criteria.
- 7 *Coronary Care/ Cardiac Unit*, this will allow student to identify with the relevant NSF for 12 lead ECG, acute coronary syndrome, thrombosis's including in hospital assessment, treatment and care pathways.
- 8 *Intensive Care/ High Dependency*, this will allow the student to focus on the critically ill patient and the management and monitoring of the unconscious patient.
- 9 *Operating Theatres*, this can be in main theatres or day procedure units. This placement time will allow the paramedic student to focus on advanced airway management techniques such as Laryngeal masks and intubations.
- 10 *Out of Hours Unscheduled Care*, this will allow the student to experience unscheduled care and gain an understanding of patient referral pathways.
- 11 *Mental Health Awareness*, this placement should allow the student to appreciate the complexities of mental health situations and focus on patient assessment techniques.
- 12 *Primary care*, these placements are designed to allow the student to identify the assessment process and treatment provision of General Practice surgeries.
- 13 *Primary care trusts*, these placements are designed to allow the student to identify the assessment process and treatment provision to which they may refer as practitioners.

- 14 *Children*, this placement will involve teaching by specialists in the placement setting and will consolidate paediatric advance life support theoretical knowledge.
- 15 *Older adult*, this placement should allow the student to focus on assessment and communication relating to degenerative conditions.
- 16 *Midwifery*, this placement will involve teaching by specialists in the placement setting and will consolidate midwifery theoretical knowledge.
- 17 *Single Response Vehicles*, this will allow the student to observe out of hospital treatment and referral pathways and the added dimensions of lone worker practice.
- 18 *Operations Manager*, this will allow the student to experience the clinical support and scene management that is available within the ambulance setting.
- 19 *Allied Health Team*, such as physiotherapy, occupational, speech therapies. This will allow the student to gain an appreciation of the specific and collaborative role that each team can play in the patient care pathway.
- 20 *Critical Care Networks*, this comprises of units such as air ambulance, BASIC doctors. This will allow the student to gain an appreciation of the specific and collaborative role that each team can play in the patient care pathway.
- 21 Other Emergency Services, Road Policing Units, Fire Service, Royal National Lifeboat institute, HM Coast Guard, Mountain and Search and Rescue Teams. This will allow the student to gain an appreciation of the specific and collaborative role that each team can play in the patient care pathway.

#### Practice Placement Educators.

Practice placements will need to be facilitated and monitored by practice placement educators this is an extremely important role and as such, comes with much responsibility; action and examples set by practice placement educators have lasting consequences whether positive or negative. This section highlights some of the key areas and sets guidelines for good working practice and for the educational development of the paramedic student.

Good quality practice placement education should allow the paramedic students to develop their professional knowledge and clinical assessment skills, enabling them to become informed independent practitioners within the pre-hospital care environment. Paramedic students and practice placement educators must be fully prepared for placement, with information and understanding of the expected learner outcomes, the timing and duration of the placement experience, what records are to be maintained and the professional conduct to be displayed. The assessment procedures including the implications of and any actions to be taken in case of failure

must be clearly communicated and understood by both the practice placement educators and the paramedic students.

Practice placement educators should be appropriately registered, be capable of giving guidance and support and of assessing the paramedic student's achievements and competencies in relation to their development. They must undertake practice placement educators training, and it is desirable for practice placement educators to hold a recognised assessors qualification. Although not exhaustive, examples are: Edexcel A1, A2 & V1 Awards<sup>16</sup>, City and Guilds 7407 Award<sup>17</sup>. For educational tutors it may be that the certificate in post compulsory education (Cert Ed) or equivalent academic qualification would be desirable.

The practice placement educator is responsible for the clinical supervision of the paramedic student whilst on placement, they must therefore ensure the appropriate treatment of patients at all times. The practice placement educators should assist the paramedic student to progress, offering advice and guidance where appropriate. The practice placement educator should be constructive and positive in the advice given and if a problem exists a solution should be sought.

Where a problem persists whether professional or personal, and the practice placement educator has not been able to correct it, for whatever reason, then the situation must be referred to the services education department. Documentation must be completed in all cases in order that an action plan can be decided and instigated to help resolve the problem.

A critique and evaluation in the form of a debrief should be carried out at the completion of each individual case or at the discretion of the practice placement educator. This debrief should form the basis of a weekly evaluation and record of the paramedic student's progress. The practice placement educator should, on a weekly basis, submit a written evaluation as to the progress of the paramedic student. The appropriate documentation must be completed comprehensively and discussed with the individual paramedic student.

Practice placement education will need to be resourced according to the needs of the practitioner and the demands and complexity of the particular course they are undertaking. Good quality practice placement education is a key element in producing well prepared paramedic practitioners of the future.

#### Paramedic assessment standards

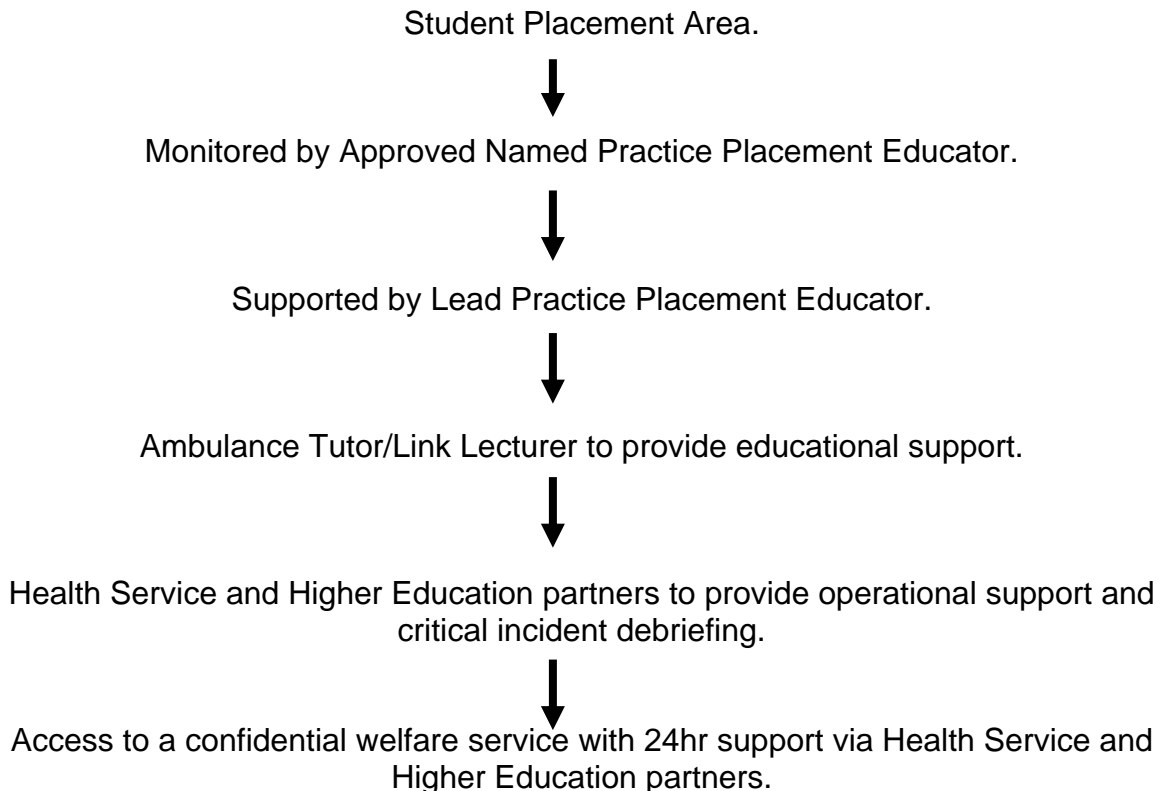
- 1 The assessment design and procedure must assure that the paramedic student can demonstrate fitness for practice.
- 2 Assessment methods must be employed that measure the learning outcomes and skills that are required to practice safely and effectively.
- 3 All assessments must provide a rigorous and effective process by which compliance with external reference frameworks can be measured.

- 4 The measurement of the paramedic student's performance and progression must be an integral part of the wider process of monitoring and evaluation, and use objective criteria.
- 5 There must be effective mechanisms in place to assure appropriate standards in the assessments.
- 6 Professional aspects of practice must be integral to the assessment procedures in both the education setting and practice placement area.
- 7 Assessment regulations must clearly specify requirements for the paramedic student's progression and achievement within the programme. Any awards which do not provide eligibility for inclusion onto the Paramedic Register not to contain any reference to the HPC protected title "Paramedic" in their title<sup>5</sup>. For an aegrotat award not to provide eligibility for admission to the register.
- 8 There must be a right to appeal and at least one external examiner to be appointed<sup>5</sup>.

#### Student support structure

Paramedic students and practice placement educators should be fully supported throughout their practice placements; there should be clear lines of communication and responsibility. Example of student support structure.

#### STUDENT SUPPORT STRUCTURE



## **7.0 Recommendations for Driver Training**

It is acknowledged that it is not mandatory to hold a driving qualification to be able to register with the HPC as a paramedic, and that a small number of paramedics work in specialised areas where driving duties are not a requirement. However it would be advantageous for HEIs and health care providers to consider that the vast majority of paramedics are employed by NHS Ambulance Services and, as part of their duties, have a responsibility to undertake emergency response driving; this is also true of the private and voluntary sectors. Successful completion of the suggested driving curriculum will therefore aid potential employment by NHS Ambulance Services, private and voluntary sectors. Provision of driver training is not an expectation of HEI's.

The aim of the ambulance driving course is to equip the paramedic with the knowledge and practical ability to make the best use of all road and traffic conditions and be capable of controlling position and speed to match all road and traffic situations. It should allow the paramedic, through increased observation and awareness to anticipate, prioritise and plan thus avoiding loss of control and near misses. Some of the advantages of paramedics undertaking an approved driving course are to aid patient and public safety, to reduce insurance premiums, to reduce accident claims and overall fleet cost.

The driving course syllabus should be based on the most current edition of the Highway Code (Driving Standards Agency) and the most current text books relating to advanced driving techniques within emergency services. An indicative driving curriculum may be found on the BPA website.



## 8.0 Consultant Paramedic

The Department of Health in conjunction with the NHS Leadership Centre and the Modernisation Agency has developed generic criteria against which appointments to Allied Health Profession Consultant posts should be considered. This section draws heavily upon these national reference points and also considers the specific additions with respect to the appointment of consultant paramedics<sup>11 18 19</sup>. Further information on this topic is available from the BPA website.

Anticipating and leading change in how paramedic services are delivered is the natural *raison d'être* of the consultant paramedic role<sup>7</sup>. There are many examples of changes to the scope of practice that might hasten the development of consultant level practitioners relating to developments in both primary and critical care. Example of changes in how patients are triaged and treated and the advent of Paramedic Practitioners are one example of this trend, the advent of Critical Care Paramedics another. While it does not automatically follow that these initiatives, developing 'advanced' level clinicians, will lead to individuals migrating to AHP consultant posts, it is the case that the first consultant paramedic post has now been established. It is foreseeable that more posts will emerge as a consequence of the expansion of role and scope of practice. Such changes should be considered in the context of wider service modernisation, linking to important issues such as patient outcome, access, opportunities presented to enhance care through NSF's and the application of new ways of working and new technology.

The following competency cluster relates to the NHS Knowledge and Skills Framework (KSF) Dimensions.

1. Is politically aware and demonstrates a good understanding of the NHS national agenda and opportunities this provides for local service improvement coupled with an extensive knowledge of ambulance service delivery in an historic, current and developing context.
2. Is innovative and creative; searches for opportunities to do things better or more efficiently through re-design of services and the application of new methods and new technology.
3. Demonstrates an in-depth knowledge of patient pathways and highlights areas for improvement and the professional context of care, preferably demonstrated through strong links to the professional body and others.
4. Is rigorous in collecting and evaluating the data needed to support service development (e.g. quality and resource data and benchmarks with practice elsewhere).
5. Is skilled at enabling health professionals to reflect on whether the current way of doing things is the best way ( e.g. through providing data, facilitating discussion and posing challenging questions).
6. Can communicate a compelling vision of a re-designed service, and how it will deliver benefits to patients and staff.

7. Builds support for change through early involvement of key stakeholders and effective influencing skills.
8. Understands and uses effective approaches to managing change e.g. judges when to use a system-wide approach, and when to use pilots.
9. Identifies the clinical governance aspects of service change, e.g. ensures risks are assessed.
10. Is able to plan and manage a whole programme of service change (e.g. reorganisation of work, workforce planning, protocol development, infrastructure, evaluation, etc).

### **8.1 Delivering an expert clinical service**

Consultant Paramedics will deliver an expert clinical service in various ways and in many settings, some of which may be relatively uncontrolled. The first of these is providing consultancy to their own profession and other disciplines, typically in situations where patient needs are complex and where there are difficult decisions about diagnosis and treatment, or issues around ethics, multidisciplinary input and support systems. The location of care and the assessment of risk in providing care in non-clinical environments will also be a factor in some cases. Secondly, Consultants will use their expertise to develop and deliver new specialist services, and to develop the clinical expertise of staff to deliver these services, e.g. via enhanced roles. This section links to the NHS KSF 'Quality' dimension and to 'Developing Practice in Addressing Individual's Health and Wellbeing Needs'.

#### **Characteristics**

1. Is able to work autonomously, e.g. in making clinical decisions on complex cases.
2. Has the advanced clinical skills, experience and qualifications to be an expert resource and supervisor for AHP staff at all levels (e.g. is able to advise Clinical Specialists and other colleagues on the diagnosis and management of highly complex cases). At a minimum applicant would be expected to have 10 years of full-time clinical experience as paramedics in the NHS, reduced to 8 if the applicant comes from another registered health care background or another non-NHS background.
3. Has the credibility and clinical experience to collaborate as an equal colleague with Medical Consultants and other disciplines (e.g. on patient consultations); and has the confidence to challenge these colleagues where necessary. Is also experienced in inter agency work with other Emergency Authorities.
4. Demonstrates expertise in practice; is at the forefront of his/her field, e.g. actively leads or participates in clinical networks.
5. Identifies opportunities to improve patient care by developing more specialist /multi-disciplinary services, e.g. for a patients with particular complex needs

6. Guides the development of the protocols, guidelines, quality systems, training, supervision and audit to enable staff to deliver a more specialist service with enhanced roles.
7. Understands quality standards and quality systems, and uses this knowledge to assess and manage potential risks to quality.
8. Leads the selection and design of audits across the relevant patient pathways, and is good at disseminating audit data and 'closing the loop'.
9. Leads the development of evidence-based practice, e.g. identifying themes for evaluation of evidence, managing an action plan, and disseminating findings.
10. Uses expertise in an enabling and empowering way – through empathy, support and helping people develop new levels of knowledge and skill (rather than trying to do it all oneself).

## **8.2 Developing research to support practice**

This cluster of competencies is about the ability to take research from the 'ivory tower' to the coal-face, in order to develop a culture where 'all clinicians are researchers', and research and evidence is used to guide practice development. This in turn means de-mystifying research and helping staff at all levels to develop an interest in research, and research skills. This competency cluster relates particularly to Research and Development in the KSF.

### **Characteristics**

1. Recognises important research questions and opportunities – the things that will make a difference to practice and patient care.
2. Contributes to research governance – for example, takes an overview of research in specialist field, consults stakeholders on research needs, and judges the benefits and feasibility of research proposals.
3. Is able to initiate and manage research projects (e.g. required multi-disciplinary involvement, proposals, ethics, funding etc).
4. Identifies the skills and capacity for research of the team, and develops the ability of colleagues to use critical analysis and synthesis of knowledge.
5. Is IT literate e.g. knows how to conduct key word searches and access databases.
6. Is able to advise on appropriate research methodologies, e.g. blind trials.
7. Establishes a culture where research and reflective practice is 'everyone's business', e.g. through encouraging all levels of staff to formulate research questions, and get involved in research projects.

8. Coaches, teaches and supports staff in developing their research skills.
9. Undertakes interventions in a manner that is consistent with evidence-based practice, own scope of practice, and litigation.
10. Disseminates research findings effectively – through presentations, publications, and staff communication.

### **8.3 Developing training, education and learning to support evidence based practice**

Historically, AHPs have tended to base their practice more on taught courses than on their own examination of the literature and reflective practice. Consultant AHPs have a key role in leading the development of a culture of reflective practice, and the work-based learning to support this. They help people to see the relevance of work based learning, and establish processes to support it, e.g. through learning contracts and Personal Development Plans (PDP's) and identifying on-the-job learning opportunities. This section particularly relates to the People and Personal Development dimension in the NHS KSF.

#### **Characteristics**

1. Leads the development of a learning culture that encourages reflection, evidence based practice and work-based learning.
2. Is able to design a strategic framework for learning and development, e.g. learning themes, contracts, methods and evaluation.
3. Identifies the learning that is needed to support service modernisation, improved practice, and enhanced roles.
4. Helps people to select and use appropriate learning methods and to value learning opportunities throughout life.
5. Emphasises the development of multi-disciplinary understanding, communication skills and reflective practice alongside clinical knowledge and skills.
6. Takes action on own continuing professional development, and applies what is learned to development of own work.
7. Has good teaching skills – e.g. presenting a topic to peers, (and would be expected to hold existing instructional certificates as an 'ambulance tutor' and also to undertake specific training at post-graduate level, such as the PGCE or above).
8. Shares skills with others, e.g. through coaching, supervision, and disseminating evidence and clinical expertise 'down the line'.

9. Influences design and development of national and international education at both Undergraduate and Masters levels.

10. Fosters an environment where all are encouraged to make suggestions and ideas, and learn from experience.

## **5. STRATEGIC AND PROFESSIONAL LEADERSHIP.**

The four previous competency clusters (Modernising Services, Delivering an Expert Clinical Service, Research, and Training, Education and Learning) all require leadership skills. Consultant AHPs need a vision of how a service and its clinical organisation should develop, they need to collaborate with and influence many different stakeholders, and they need to deliver change. They require personal qualities of confidence, courage, resilience, and risk-taking. And they need credibility in the eyes of their colleagues – this typically coming from their clinical expertise, experience, and interpersonal skills. This cluster relates to the NHS KSF Communication Dimension, and to items in the National Leadership Qualities Framework.

### **Characteristics**

1. Is passionate about making a real difference to people's health and improving services; is only satisfied with delivering real improvement on the ground.

2. Pays exceptional attention to patient experience and perspectives, and to empowering patients and their families to do things for themselves.

3. Has excellent communication skills, for example, in listening to others' views, and tailoring language to needs of particular professional or patient group.

4. Contributes effectively to strategic decisions, e.g. about service and workforce plans.

5. Collaborates effectively with other disciplines and is a good team player.

6. Has good influencing skills and is able to judge what influencing style will work best in a given situation.

7. Has confidence and 'presence', e.g. can communicate with, and constructively challenge, people from all levels and professions (including national professional bodies, Service Boards and Medical Consultants).

8. Is able to turn broad aims into practical plans – understands project management and gets effective project management into place.

9. Is prepared to grasp opportunities for service re-organisation, and has the courage to take a calculated risk to make things happen.

10. Is aware of own feelings and able to stay calm under challenge and pressure; has resilience and staying power and retains a sense of proportion, equanimity and ideally humour in dealings with patients, relatives, colleagues and others.

## 9.0 Transition and Preceptorship

Much has been documented over the content of paramedic programmes to ensure they produce an individual who is fit for practice. This practice, as described in this guidance, varies from registration to continued specialist independent practice. This breadth of change brings with it a transitional period from either student to practitioner or from one practice area to another. While all programmes structure developmental learning there is a point at which an individual is deemed competent. This competence allows for a paramedic to practice freely but without the support of a mentor. When concentrating on this transitional period, an individual can be asked to practice with the educational knowledge but may not necessarily have the experience or exposure. There may also be a cultural change to address from student to employee. To assist to address these issues the BPA advocates a defined preceptorship period after taught programme completion. This should be actively encouraged through HEI and employers to build a solid programme of preceptorship.

### Preceptorship

This should be a defined period that although intense must consist of structure in the initial stages of undertaking a new role. The purpose of this is:

- socialisation and orientation;
- clinical development;
- support and guidance;
- feedback through observation;
- acting as a role model;
- facilitating personal development and action planning.

In order to ensure this is delivered then the employer must have a preceptorship package that provides access to a suitable preceptor both personally (see box 1) and professionally (see box 2).

Box 1	Box 2
<ul style="list-style-type: none"> <li>• leadership skills;</li> <li>• good communication skills;</li> <li>• decision making ability;</li> <li>• interest in professional development;</li> <li>• desire to teach and support;</li> <li>• non-judgemental attitude.</li> <li>• flexibility to change</li> <li>• assertiveness</li> <li>• adaptability</li> </ul>	<ul style="list-style-type: none"> <li>• 12 months post qualifying experience;</li> <li>• preferably a teaching qualification;</li> <li>• attended preceptor training;</li> <li>• participate in audit;</li> <li>• reflective practitioner.</li> </ul>

## **10.0 Glossary of Terms**

### **Ambulance Clinician/Technician; Student Paramedic**

Educated to Higher Certificate of education; currently Ambulance Emergency Medical Technician (EMT).

### **British Paramedic Association (BPA)**

The professional body for the Ambulance Profession.

### **Consultant Paramedic**

The Consultant Paramedic will hold a doctorate award and will practice within the Department of Health guidance for Allied Health Professional Consultant appointments.

### **Continuous Professional Development**

A range of learning activities for the maintenance of competencies within developing scope of practice.

### **Curriculum Framework**

Complete guidance containing content to be used flexibly in planning detailed curricula.

### **Joint Royal Colleges Ambulance Liaison Committee (JRCALC)**

Advisory board on clinical matters for the ambulance service to Department of Health.

### **Level Descriptors**

a guide to the learning achievement expected of learners at the end of each level in higher education.

### **Millar Report**

Government report on ambulance training 1966.

### **Paramedic**

Educated to Foundation degree/Diploma of Higher Education; currently a registered Paramedic.

### **Paramedic Practitioner**

A newly developing role, that enables a more diverse management plan to be established for the care of patients. The Paramedic Practitioner will be educated to an Honours Degree level.

### **Advanced Paramedic Practitioner**

Awarded a Masters Degree, this professional level will encompass an extended role including prescribing of medicines beyond those available to other Paramedics.

### **Practice Placement**

Learning experienced in the varying environments in which practice takes place. Practice placement provides the opportunity for the learner to develop learning and skills gained from the academic environment.

**Practice Placement Educator**

A person who undertakes education responsibilities within the work place or other clinical environment. The practice placement educator is registered on the appropriate professional register and has undertaken training for the role.

**Preceptorship**

A defined period of planned support for the graduate when undertaking a new role.

**Quality Assurance Agency**

To safeguard the public interest in sound standards of higher education qualifications and to encourage continuous improvement in the management of the quality of higher education.

**Reflective Practice**

The analysis and evaluation used to modify previous understanding and using the new learning to improve care for patients.

**Regulator**

The statutory body is the Health Professions Council.

**Scope of Practice**

A description explaining the range of working practices for the individual practitioner.

**Unscheduled care**

Patients who require support or treatment (usually in an emergency), which has not been pre-planned.



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