

In partnership with



Subject Benchmark Statement

Paramedics

June 2016

UK Quality Code for Higher Education
Part A: Setting and maintaining academic standards

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How can I use this document?

This document is a Subject Benchmark Statement for paramedics that defines what can be expected of a graduate in the subject, in terms of what they might know, do and understand at the end of their studies.

You may want to read this document if you are:

- involved in the design, delivery and review of programmes of study in paramedic science or related subjects
- a prospective student thinking about studying paramedic science or related subjects, or a current student of the subject, to find out what may be involved
- an employer, to find out about the knowledge and skills generally expected of a graduate paramedic.

The document also defines what can be expected of a post-registered paramedic in terms of what they know, are able to do and understand at the end of their studies.

You may want to read this document if you are:

- involved in the design, delivery and review of specialist and/or advanced programmes at master's level for post-registered paramedics
- an existing registered paramedic thinking about studying to become a specialist or advanced paramedic, to find out what may be involved
- an employer, to find out about the knowledge and skills generally expected of a specialist and/or advanced paramedic.

Explanations of unfamiliar terms used in this Subject Benchmark Statement can be found in the Quality Assurance Agency for Higher Education's (QAA's) glossary.¹

¹ The QAA glossary is available at: www.qaa.ac.uk/about-us/glossary.

About Subject Benchmark Statements

Subject Benchmark Statements form part of the UK Quality Code for Higher Education (Quality Code)² which sets out the Expectations that all providers of UK higher education reviewed by QAA are required to meet. They are a component of Part A: Setting and Maintaining Academic Standards, which includes the Expectation that higher education providers 'consider and take account of relevant Subject Benchmark Statements' in order to secure threshold academic standards.³

Subject Benchmark Statements describe the nature of study and the academic standards expected of graduates in specific subject areas, and in respect of particular qualifications. They provide a picture of what graduates in a particular subject might reasonably be expected to know, do and understand at the end of their programme of study.

Subject Benchmark Statements are used as reference points in the design, delivery and review of academic programmes. They provide general guidance for articulating the learning outcomes associated with the programme but are not intended to represent a national curriculum in a subject or to prescribe set approaches to teaching, learning or assessment. Instead, they allow for flexibility and innovation in programme design within a framework agreed by the subject community. Further guidance about programme design, development and approval, learning and teaching, assessment of students, and programme monitoring and review is available in Part B: Assuring and Enhancing Academic Quality of the Quality Code in the following Chapters:⁴

- *Chapter B1: Programme Design, Development and Approval*
- *Chapter B3: Learning and Teaching*
- *Chapter B6: Assessment of Students and the Recognition of Prior Learning*
- *Chapter B8: Programme Monitoring and Review.*

For some subject areas, higher education providers may need to consider other reference points in addition to the Subject Benchmark Statement in designing, delivering and reviewing programmes. These may include requirements set out by professional, statutory and regulatory bodies, national occupational standards and industry or employer expectations. In such cases, the Subject Benchmark Statement may provide additional guidance around academic standards not covered by these requirements.⁵ The relationship between academic and professional or regulatory requirements, is made clear within individual statements, but it is the responsibility of individual higher education providers to decide how they use this information. The responsibility for academic standards remains with the higher education provider who awards the degree.

Subject Benchmark Statements are written and maintained by subject specialists drawn from and acting on behalf of the subject community. The process is facilitated by QAA. In order to ensure the continuing currency of Subject Benchmark Statements, QAA initiates regular reviews of their content, five years after first publication, and every seven years subsequently.

² The Quality Code, available at: www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code, aligns with the *Standards and Guidelines for Quality Assurance in the European Higher Education Area*, available at: www.enqa.eu/wp-content/uploads/2015/05/ESG_endorsed-with-changed-foreword.pdf.

³ Part A: Setting and Maintaining Academic Standards, available at: www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code/quality-code-part-a.

⁴ Individual Chapters are available at: www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code/quality-code-part-b.

⁵ See further Part A: Setting and Maintaining Academic Standards, available at: www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code/quality-code-part-a.

Relationship to legislation

Higher education providers are responsible for meeting the requirements of legislation and any other regulatory requirements placed upon them, for example by funding bodies. The Quality Code does not interpret legislation nor does it incorporate statutory or regulatory requirements. Sources of information about other requirements and examples of guidance and good practice are signposted within the Subject Benchmark Statement where appropriate. Higher education providers are responsible for how they use these resources.⁶

Equality and diversity

The Quality Code embeds consideration of equality and diversity matters throughout. Promoting equality involves treating everyone with equal dignity and worth, while also raising aspirations and supporting achievement for people with diverse requirements, entitlements and backgrounds. An inclusive environment for learning anticipates the varied requirements of learners, and aims to ensure that all students have equal access to educational opportunities. Higher education providers, staff and students all have a role in, and a responsibility for, promoting equality.

Equality of opportunity involves enabling access for people who have differing individual requirements as well as eliminating arbitrary and unnecessary barriers to learning. In addition, disabled students and non-disabled students are offered learning opportunities that are equally accessible to them, by means of inclusive design wherever possible and by means of reasonable individual adjustments wherever necessary.

⁶ See further the *UK Quality Code for Higher Education: General Introduction*, available at: www.qaa.ac.uk/publications/information-and-guidance/publication?PubID=181.

Joint statement from QAA and the College of Paramedics

The QAA, in partnership with the College of Paramedics, is publishing this revised Subject Benchmark Statement for paramedics. Since the Statement was first published in 2004, the nature, scope and range of paramedic practice has changed dramatically, and there is widespread recognition that related qualifications need to keep pace and be aligned with other allied health and non-medical professions throughout the UK.

The publication of the *Keogh Report*⁷ signalled the beginning of developing a modernised, multi-professional approach to urgent and emergency healthcare that uses the skills and expertise of paramedics.

'By supporting and developing paramedics, and providing direct access to the expertise of general practitioners ... around half of all 999 calls which require an ambulance to be dispatched could be managed at the scene'.

The publication of the *Paramedic Evidence Based Education Project* (PEEP)⁸ report made a recommendation for the development of a pre-registration education development model that would lead to paramedics becoming an all-graduate profession.

This Statement has been produced to ensure that pre-registration programmes in paramedic science or related subjects and postgraduate programmes of study in paramedic practice or related subjects continue to respond to these changes and meet the needs of the continuing demands on the profession.

The revised Subject Benchmark Statement supports this process by providing a robust framework for developing qualifications that produce competent, reflective practitioners who are responsive to the individual patient and service users' healthcare needs in the twenty-first century.

Prior to consulting with key stakeholders with an interest in paramedics, this Statement has been reviewed and updated by an expert group, convened by QAA, comprising student, professional, statutory, regulatory body, employer and higher education representation.



Signed on behalf of QAA
Mr Ian Kimber, Director of Quality Development, QAA



Signed on behalf of The College of Paramedics
Graham Harris FCPara, National Education Lead

⁷ NHS England (2013) *High quality care for all, now and for future generations: Transforming urgent and emergency care services in England - Urgent and Emergency Care Review End of Phase 1 Report*. Keogh Report. Leeds. NHS England, available at:

www.nhs.uk/NHSEngland/keogh-review/Documents/UECR.Ph1Report.FV.pdf.

⁸ Lovegrove, M (2013) *Paramedic Evidence-Based Education Project*. Buckingham. Allied Health Solutions, available at: www.collegeofparamedics.co.uk/publications/paramedic-evidence-based-education-project-peep.

About this Subject Benchmark Statement

This Subject Benchmark Statement refers to bachelor's degrees with honours in Paramedic Science, and master's degrees in advanced paramedic practice.⁹

This version of the Statement forms its second edition, following initial publication in 2004.¹⁰

Honours degrees in paramedic science are expected to meet the Standards of Education and Training,¹¹ and the Standards of Proficiency - Paramedics¹² as required by the regulatory body, the Health and Care Professions Council (HCPC). Programmes leading to an honours degree in paramedic science are designed with reference to curriculum guidance produced by the professional body, the College of Paramedics.¹³

The introduction of the College of Paramedics Post Registration Career Framework,¹⁴ which provides post-registered paramedics with guidance relating to master's degrees in advanced paramedic practice, is an important step in the development of a professional identity for specialist and advanced paramedics. As the profession of paramedics has matured, graduates have been instrumental in the ongoing development of a specific knowledge base in the care of patients in the pre and out-of-hospital arena. This growing maturity is also reflected in the development of this Subject Benchmark Statement.

Note on alignment with higher education sector coding systems

Programmes of study that use this Subject Benchmark Statement as a reference point are generally classified under the following code in the Joint Academic Coding System (JACS).¹⁵

B950 (Paramedical Science).

⁹ Quality Assurance Agency (2014) Bachelor's degrees are at FHEQ level 6/SCQF level 10 and Master's degrees are at FHEQ level 7/SCQF level 11 in *The Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies*, available at:

www.qaa.ac.uk/publications/information-and-guidance/publication?PubID=2843.

¹⁰ Further information is available in the *Recognition scheme for Subject Benchmark Statements*, available at: www.qaa.ac.uk/publications/information-and-guidance/publication?PubID=190.

¹¹ The HCPC Standards of Education and Training, available at:

www.hcpc-uk.org/aboutregistration/standards/sets.

¹² The HCPC Standards of Proficiency - Paramedics, available at:

www.hcpc-uk.org/aboutregistration/standards/standardsofproficiency.

¹³ The College of Paramedics - Paramedic Curriculum Guidance, available at:

www.collegeofparamedics.co.uk/publications/professional-standards.

¹⁴ The College of Paramedics - Post Registration Career Framework, available at:

www.collegeofparamedics.co.uk/publications/post-reg-career-framework.

¹⁵ Further information about JACS is available at: www.hesa.ac.uk/component/content/article?id=1787.

Summary of changes from the previous Subject Benchmark Statement (2004)

Since the first Subject Benchmark Statement for paramedics was published, paramedic practice has changed to satisfy an increased strategic emphasis on '*Taking Healthcare to the Patient*',¹⁶ '*Taking Healthcare to the Patient 2*',¹⁷ and ambulance services delivering '*mobile urgent treatment services*'.¹⁸ This has resulted in a rapidly developing scope and increasing breadth of practice for paramedics and the need for educational programmes to adapt accordingly. The intent of this Statement is to outline a flexible framework for higher education providers to develop competent and capable graduate paramedics. At the point of professional registration, paramedics need to have the right values and behaviours, and the necessary adaptability to provide safe, effective person-centred care in a variety of contexts, within a constantly changing healthcare environment.

Throughout the paramedic scope of practice, there is a requirement for the paramedic to autonomously problem solve, make evidence-based, rationalised decisions, manage risk and refer in a complex environment. There is also a requisite capacity for clinical leadership, decision making and critical thinking in response to patients with undifferentiated needs and within an uncertain context.

The following key changes to the 2004 Statement for Paramedic Science include:

- An enhanced focus on clinical leadership.
- An increased emphasis on enhanced patient assessment to ensure a comprehensive approach to practice.
- A focus on clinical, diagnostic reasoning to ensure that the right decision is made at the right time for patients.
- An emphasis on multi-professional, interdisciplinary practice and patient referral, towards delivering seamless, integrated care.
- Recognition of the need for paramedics to deliver public health interventions.
- The necessary inclusion of dealing with uncertainty, risk management and safety netting, towards delivering safe patient care.
- An enhanced focus on reflective, evidence-based practice, to ensure a critical approach to practice and in recognition of the need for continuous quality improvement in the delivery of safe, person centred care.
- Reference to postgraduate development pathways and progression to specialist and advanced practice.
- The change of title reflecting that the Statement is for Paramedics as Health Professionals.

¹⁶ Department of Health (2005) *Taking Healthcare to the Patient: Transforming NHS Ambulance Services*. London. DH Publications, available at:

webarchive.nationalarchives.gov.uk/20061023110946/dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4114269.

¹⁷ Association of Ambulance Chief Executives ((AAACE) 2011) *Taking Healthcare to the Patient 2: A review of 6 years' progress and recommendations for the future*. London. Produced by AAACE, available at:

aace.org.uk/new-report-taking-healthcare-to-the-patient-2.

¹⁸ NHS England (2013) *High quality care for all, now and for future generations: Transforming urgent and emergency care services in England - Urgent and Emergency Care Review End of Phase 1 Report*. Keogh Report. Leeds. NHS England, available at:

www.nhs.uk/NHSEngland/keogh-review/Documents/UECR.Ph1Rep.

1 Introduction

1.1 The purpose of this Statement is to make explicit the nature and the academic standards of degrees in the area of paramedic science, and paramedic practice. It also describes the attributes and capabilities that graduates have, and the nature of teaching, learning and assessment in paramedic science and practice.

1.2 The College of Paramedics¹⁹ (CoP) is the professional body that represents paramedics across the UK. It does this by:

- promoting clinical excellence through enhancing the quality of education and training and supporting clinical practice at all levels
- influencing and shaping policy that relates to pre-hospital and unscheduled care
- continually developing the profession's knowledge and evidence base.

1.3 The professional body is also responsible for the synthesis and publication of the *Paramedic Curriculum Guidance*,²⁰ *Paramedic Career Framework*,²¹ the *Post-Graduate Paramedic Curriculum*,²² and related professional development criteria.

1.4 The Health and Care Professions Council (HCPC) regulates the practice of paramedics in the UK. By law (The Health and Social Work Professions Order 2001),²³ only those registered with the HCPC are entitled to call themselves paramedics and practise in the UK. A student who wishes to become a paramedic in the UK must complete a programme approved by the HCPC.²⁴ All HCPC approved programmes meet their '*Standards of education and training*'²⁵ and produce individuals (graduates) who can demonstrate that they meet the HCPC '*Standards of proficiency*'.²⁶ HCPC approved programmes also reflect the wider curriculum guidance available for the profession, including this Subject Benchmark Statement for Paramedics.

1.5 The HCPC does not have legislative powers to specify the academic award or level required for entry to their Register. Their 'normative' threshold level of qualification is currently 'equivalent to Certificate of Higher Education' (level 4 on the Framework for Higher Education Qualifications (FHEQ); level 7 on the Scottish Credit and Qualifications Framework (SCQF)). This has remained unchanged since 2004 when their standards were first developed. In recent years, the HCPC has discussed consulting on changes to the normative threshold level of qualification, but at the time of this Statement's publication this work was still ongoing. The profile of HCPC approved programmes is currently very diverse, including a range of programmes across three academic levels (levels 4, 5 and 6 on the Framework for Higher Education Qualifications (FHEQ)/and level 8 on the Scottish Credit and Qualifications Framework (SCQF)), and a number of different academic awards (for example bachelor's degree with honours, foundation degree, Diploma in Higher Education).

1.6 Once qualified and registered with the HCPC, paramedics are able to practise as independent and autonomous professionals. Paramedics, including those newly qualified, are expected to practise safely and effectively within their scope of practice and make

¹⁹ College of Paramedics: www.collegeofparamedics.co.uk.

²⁰ Available at: www.collegeofparamedics.co.uk/publications/professional-standards.

²¹ Available at: www.collegeofparamedics.co.uk/publications/post-reg-career-framework.

²² Available at: www.collegeofparamedics.co.uk/college-governance/structure/post-graduate-curriculum-guidance-group.

²³ Available at: www.hcpc-uk.org/aboutus/legislation/rules.

²⁴ Further details about these programmes can be found on the HCPC website available at: www.hcpc-uk.org/education.

²⁵ Available at: www.hcpc-uk.org/aboutregistration/standards/sets.

²⁶ Available at: www.hcpc-uk.org/aboutregistration/standards/standardsofproficiency.

informed and reasoned decisions about their practice and any new areas of practice. To remain registered, paramedics must continue to meet the HCPC's '*Standards of proficiency*', '*Standards of conduct, performance and ethics*'²⁷ and '*Standards of continuing professional development*'.²⁸ The HCPC do not approve post registration degrees for paramedics, which are designed to extend the breadth and depth of paramedic study and practice beyond the HCPC threshold standards for safe and effective practice.

²⁷ Available at: www.hcpc-uk.org/aboutregistration/standards/standardsofconductperformanceandethics/.

²⁸ Available at: www.hcpc-uk.org/aboutregistration/standards/cpd/.

2 Nature and scope of Paramedic Science

2.1 At the point of registration, a paramedic is an autonomous practitioner who has the knowledge, skills and clinical expertise to assess, treat, diagnose, supply and administer medicines, manage, discharge and refer patients in a range of urgent, emergency, critical or out of hospital settings.

2.2 Paramedics are educated and trained to provide a high standard of care based on the principles of evidenced-based practice, and are able to:

- apply their skill and knowledge in the provision of care, enabling patients to achieve the best possible quality of life, whatever their condition, while ensuring that the welfare of the patient is not compromised
- recognise that relationships with service users should be based on mutual respect and trust, and are able to maintain high standards of care even in situations of personal incompatibility.

2.3 While primarily based in the pre and out-of-hospital emergency and urgent care settings, paramedics may also work in a wide variety of both clinical and non-clinical settings. These include GP surgeries, walk in centres, minor injury units, urgent and emergency care centres, education/teaching, research, management, military and commercial settings. The paramedic role is diverse and includes supporting patients through an increasing number of environments that form part of modern day paramedic practice. The role encompasses detailed technical expertise in areas such as history taking and physical examination, documentation, clinical presentations, diagnosis on the information available in unique settings, and processing scientific diagnostic testing, as well as demonstrating attributes, values and behaviours such as, empathy, compassion and understanding in treating and caring for patients and supporting relatives and others.

2.4 Paramedics are personally responsible for making sure that they promote and protect the best interests of service users. They respect and take account of these factors when providing care or a service, and do not abuse the relationship they have with a service user. They demonstrate that they are maintaining their expertise, skills and knowledge through undertaking continuing professional development, and are accountable as professionals.

2.5 As defined by the College of Paramedics, a Specialist Paramedic is a paramedic holding at least a postgraduate diploma in a subject relevant to their practice. They have acquired, and continue to demonstrate, an enhanced knowledge base, complex decision-making skills, competence and judgement in their area of specialist practice.

2.6 An Advanced Paramedic is a paramedic holding at least a master's degree in a subject relevant to their practice. They have acquired and continue to demonstrate an expert knowledge base, complex decision-making skills, competence and judgement in their area of advanced practice.

3 Education and training

3.1 Paramedic programmes leading to bachelor's with honours degrees develop students' knowledge and understanding and provide graduates the opportunity to demonstrate capability in the regulatory body standards and the professional body's curriculum.

3.2 Programmes combine academic and theoretical learning and place emphasis on the learning process, which reflects the importance of underpinning the curriculum with appropriate educational evidence. The practical and clinical reasoning skills support critical clinical decision making, and effective practice. Individuals, who may have diverse learning styles, develop the required knowledge, performance, practical application of skills, and personal and professional awareness they need in preparation for future practice, as well as the aptitude for continued learning throughout their professional career.

3.3 Paramedic pre-registration programmes have a robust focus on the acquisition and application of practical skills, ranging from basic to advanced techniques. This is achieved by closely integrating the learning opportunities in academic learning and clinical practice settings, with acknowledgement of the equal relationship between theory and practice.

3.4 As an allied health professional it is important that student paramedics graduate with a detailed, wide-ranging knowledge and understanding of the clinical, physical, life and social, health and behavioural sciences. They also need excellent communication and interpersonal skills to enable effective liaison with service users, carers, emergency services, agencies and other health professionals.

3.5 Learning processes encountered during the programme prepare graduates positively for the challenges and opportunities encountered as a professional registrant. Graduates are adequately equipped to practice as a registered paramedic, and enabled to follow the paramedic career pathway. Programmes leading to professional registration:

- rigorously assess the safety and effectiveness of students in core areas of practice, and prepare them appropriately for registration
- enable students to be familiar with a range of clinical reasoning frameworks or models to support their application of paramedic principles
- enable students to practice safely and effectively as registered allied health professionals who meet all of the standards and requirements of the professional, statutory and regulatory bodies (PSRBs).

Post-registration programmes

3.6 Post-registration programmes for paramedics at master's level extend the breadth and depth of paramedic study beyond that required of a bachelor's degree in paramedic science. They may cover topics already covered in an honours degree programme at a more advanced level or may introduce new, more complex topics. Examples include specialist areas of clinical practice, advanced research, development for an educational environment, business and management development, and health policy and strategy development. Learning outcomes for programmes at this level reflect the master's level qualification descriptors in the UK Frameworks for Higher Education Qualifications of degree-awarding bodies.

3.7 Paramedics who complete programmes at this level are capable of initiating, leading and sustaining change, which advances and improves the quality and professionalism of paramedic practice.

4 Knowledge, understanding and skills

4.1 The nature of paramedic practice is multi-disciplinary. Bachelor's with honours degrees in Paramedic Science cover a broad curriculum including cognitive, theoretical and practical learning. The acquisition of practical manual skills, and generic skills such as effective communication (by oral, electronic and written means), team working, (including multi-professional/multi-agency), problem solving, reflective practice, the use of information and communications technology, applying research, and critical reasoning. The ethical and legal extents of paramedic practice are united with these so that the whole enables the complete preparation of graduates for professional practice as paramedics. Essential to the education of paramedics is the integration and application of knowledge and skills for safe and effective patient care, and the development of learner autonomy.

4.2 On successful completion of their studies, graduates will have established the following core knowledge, understanding and skills.

Knowledge applicable to safe and competent practice as a paramedic:

- i A comprehensive and cohesive knowledge of human anatomy and physiology, sufficient to recognise, identify and differentiate between normal and abnormal structures and processes, with emphasis on the cardiovascular, respiratory, nervous, digestive, endocrine, urinary, musculo-skeletal and other systems.
- ii Knowledge of human growth and development across the lifespan including the factors influencing individual variations in human ability and health status.
- iii Knowledge of human disease sufficient to inform clinical judgement and other clinical findings and to recognise disorders which require referral for more investigation or additional professional support.
- iv Knowledge of human psychology and sociology, relevant to the acquisition and maintenance of health, sufficient to provide a context for critical clinical decision making and patient management.
- v Knowledge of the psychological and social factors that influence an individual in health and illness.
- vi Knowledge of how psychology and sociology can inform an understanding of health, illness and healthcare within the context of paramedic practice.
- vii Knowledge of pain neurophysiology and the impact this has on the patient and their clinical presentation.
- viii Knowledge of the theories of communication: communication and interpersonal skills are vital to competent and effective practice, informing effective interaction with patients, service users, carers, peers, and other health care professionals.
- ix Knowledge of the theories of learning: the process of learning is important for both patients and paramedics. The theories underpin continuing professional development, enabling individuals to be active lifelong learners. This knowledge also equips the paramedic to become an effective teacher in a wide range of settings.
- x Knowledge of the theories of teamwork: understanding of effective multi-professional/multi-agency teamwork that respects and uses the contributions of members of the health and social care team.
- xi Knowledge of the theories of leadership: understanding that clinical leadership is a key component of paramedic practice.
- xii Knowledge of mental health issues that patients' may present with, including the recognition, assessment and referral procedure(s) for appropriate management.
- xiii Knowledge and understanding of mental health legislation, agreements and policies and the implications within the context of paramedic practice.
- xiv Knowledge and understanding of human factor principles encountered in paramedic practice.

- xv Knowledge and understanding of obstetric and gynaecological conditions and emergencies encountered in paramedic practice, including assessment, treatment and management.
- xvi Knowledge and understanding of the principles of end-of-life care, and palliative care in relation to paramedic practice.
- xvii Knowledge and understanding of the role paramedics contribute to, in relation to the public health and health promotion of service users.
- xviii Knowledge of pathological changes and related clinical features of conditions encountered in paramedic practice.
- xix Knowledge of the physiological, structural, behavioural and functional changes in patient presentation and those that result from paramedic intervention.
- xx Knowledge of the theoretical basis of assessment, treatment and management and the scientific evaluation of their effectiveness.
- xxi Knowledge of the principles of evaluation and research methodologies, which enable the integration of theoretical and practical applications.
- xxii Knowledge of the perspectives and evidenced-based research into the design and implementation of effective paramedic practice.
- xxiii Knowledge of the theories supporting problem solving and clinical reasoning.
- xxiv Knowledge of the principles of pharmacology and the safe administration of therapeutic medications.

5 Teaching, learning and assessment

5.1 Strategies and methods for teaching, learning and assessment are determined by individual higher education providers in conjunction with the requirements of the College of Paramedics (CoP), and the Health and Care Professions Council (HCPC). They aim to complement the broad learning outcomes for an honours degree in Paramedic Science and post-registered/graduate programmes of study at master's level in paramedic practice or related subjects.

5.2 Student learning is achieved through a reflective and critical approach to the application of knowledge and skills in paramedic science and practice. In order that graduates develop the ability to learn independently, an emphasis is placed on student-centred modes of learning and teaching, to foster a professional approach to lifelong learning.

5.3 Assessment strategies ensure alignment between learning outcomes and learning and teaching methods and may vary between higher education providers. A variety of assessment styles may be employed to test the spectrum of knowledge, performance, practical application of skills and the personal and professional awareness required by a registered paramedic, including while undertaking placements the use of Bloom's revised taxonomy.²⁹ Ongoing formative assessment allows for feedback on performance throughout the programme while summative assessment ensures that the student meets academic and professional requirements.

5.4 Assessment of competence and the subsequent award is determined in partnership between academic and clinical supervisors. An integral aspect of all programmes is clinical practice, by means of placement periods within suitable clinical environments that meet the requirements of the CoP and HCPC.

²⁹ Anderson, L W et al (2001) *A Taxonomy for Learning, Teaching and Assessing: A revision of Bloom's Taxonomy of Educational Objectives*. New York: Pearson, Allyn & Bacon.

6 Benchmark standards

The following benchmark standards are defined as the threshold for bachelor's degree with honours (FHEQ level 6/SCQF level 10) and master's degree (FHEQ level 7/SCQF level 11) respectively.

Standard	Bachelor's degree with honours	Master's degree
	Working as a professional paramedic	
	Graduates should be able to:	
6.1.1	i manage themselves, their own professional practice and that of others within the changing and diverse context which paramedic practice is delivered and in accordance with the HCPC; <i>Standards of conduct, performance and ethics, Standards of proficiency - Paramedics.</i>	i manage themselves, their own professional practice and that of others within the changing and diverse context which enhanced or expert paramedic practice is delivered and in accordance with the HCPC; <i>Standards of conduct, performance and ethics, Standards of proficiency - Paramedics</i> ii critically evaluate their own abilities and limitations, but also critically evaluate and appraise others in a leadership context.
6.1.2	i select and apply comprehensive knowledge and skills to complex and unexpected emergency and urgent situations, while having a critical understanding of principles and concepts of paramedic practice and how these inform and guide rational clinical decision-making activities.	i demonstrate expertise and proficiency in selecting and applying cohesive knowledge and skills to complex and unexpected situations through their ability to, recognise, define and prioritise problems ii critically analyse, interpret, objectively evaluate and prioritise information recognising its limitation iii recognise the limitations of knowledge in paramedic practice and the importance of professional judgement.

6.1.3	i implement strategies to promote, exchange and evaluate collaborative working within a multi-disciplinary team, comprising of patients, clients, colleagues and others in both therapeutic and preventative healthcare.	i implement strategies to promote, exchange and evaluate collaborative working within a multi-disciplinary team, comprising of patients, clients, colleagues and others in both therapeutic and preventative healthcare ii adopt a reflective and inquisitive approach and apply rational processes and recognise the impact of their own value judgements and those of patients.
6.1.4	i understand the importance of appropriate care and safeguarding support in relation to potential stressful situations of self and others within the wider context of society while minimising risk where necessary.	i understand the importance of appropriate care and safeguarding support in relation to potential stressful situations of self and others within the wider context of society while minimising risk where necessary ii accept that stressful situations are unavoidable in paramedic practice iii use appropriate cognitive and intellectual strategies to deal with stressful situations as and when they arise.
6.1.5	i understand the concept and significance of statutory regulation authorised by Parliament (The Health and Social Work Professions Order 2001) and the ethical, legal and professional issues that inform and shape paramedic practice, while adhering to the professional, statutory and regulatory bodies' standards.	i critically demonstrate detailed knowledge and understanding of the concepts and significance of statutory regulation authorised by Parliament (The Health and Social Work Professions Order 2001) and the ethical, legal and professional issues that inform and shape paramedic practice, while adhering to the professional, statutory and regulatory bodies' standards.
6.1.6	i demonstrate the ability to implement sound clinical judgement across a range of situations and critically evaluate the effectiveness of clinical judgement and teamwork across a range of professional care contexts.	i demonstrate enhanced or expert clinical judgement across a range of situations and critically evaluate and synthesise the information to enhance the effectiveness of clinical judgement and teamwork across a range of professional care contexts.
6.1.7	i monitor the quality of practice, and contribute and participate in a range of quality assurance, quality improvement and risk management strategies to create and maintain a safe working environment.	i demonstrate the ability to lead and manage the quality of practice and contribute and participate in a range of quality assurance, quality improvement and risk management strategies to create and maintain a safe working environment.

6.1.8	<ul style="list-style-type: none"> i collaborate with colleagues and others, contribute to the organisation of, and participation in, activities relevant to the development and enhancement of paramedic practice as a profession including appropriate levels of guidance, role-modelling, mentorship and support to others in the health and social care setting. 	<ul style="list-style-type: none"> i develop collaborative partnerships with colleagues and others, contribute to the organisation of, and participation in, leadership activities relevant to the development and enhancement of paramedic practice as a profession including appropriate levels of guidance ii act as a role-model and mentor and support others in the health and social care setting.
6.1.9	<ul style="list-style-type: none"> i use critical problem-solving skills to a level that informs and guides the interpretation of clinical and other data, and contributes to effective clinical reasoning and decision-making skills as part of the wider healthcare team. 	<ul style="list-style-type: none"> i demonstrate and facilitate the critical evaluation of problem-solving skills to a level that informs, the interpretation of clinical and associated data, and which contributes to safe and effective clinical reasoning and decision-making skills as part of the wider healthcare team.
6.1.10	<ul style="list-style-type: none"> i practise safely, competently and effectively in accordance with the law. This includes, for example, compliance with data protection and health and safety legislation modifying practice accordingly to reflect individual circumstances. 	<ul style="list-style-type: none"> i exhibit through enhanced knowledge and understanding, the capacity to practice in accordance with the professional, ethical and legal frameworks, ensuring adherence to health and safety, and adapting practice to reflect individual circumstances.
6.1.11	<ul style="list-style-type: none"> i understand how paramedic principles are expressed and translated into action through a number of different assessment and management approaches ii select or modify techniques to meet the needs of the individual patients, reflecting a level of care consistent with appropriate evidence-based practice. 	<ul style="list-style-type: none"> i critically appraise paramedic principles and how these are expressed and translated into action through a variety of assessment and management approaches ii synthesise and modify techniques to meet the needs of the individual patients, reflecting a level of care consistent with appropriate evidence based local, national and international practice standards.
6.1.12	<ul style="list-style-type: none"> i understand the factors contributing to social differences; the problems of inequalities and the needs of different social groups and the ability to act as an advocate when appropriate. 	<ul style="list-style-type: none"> i counsel and provide sound judgement and understanding of the factors contributing to social differences; the issues of inequality, recognising the needs of different social groups along with the ability to act as an advocate when appropriate.

6.1.13	i critically evaluate research and other findings concerning the efficacy and application of paramedic interventions to specific clinical interventions and the therapeutic claims of other healthcare disciplines, including the development of an evidence base for clinical practice.	i critically evaluate and synthesise both research and evidence-based findings concerning the efficacy and application of paramedic interventions to specific clinical interventions and the therapeutic claims of other healthcare disciplines, including the development of an evidence base for clinical practice.
6.1.14	i participate effectively in the planning, implementation and evaluation of multi-professional approaches to healthcare and participate at an appropriate level as part a multi-professional healthcare team.	i participate as leaders in the planning, implementation and critical evaluation of multi-professional approaches to healthcare and participate at an enhanced or expert level as part of a multi-professional healthcare team.
6.1.15	i recognise the need to develop existing knowledge and skills so as to remain confident and competent practitioners and acquire new knowledge and competencies through evidence-based literature and continued professional development, supporting lifelong learning.	i draw on existing knowledge and skills to remain confident and competent specialist and advanced practitioners, acquiring new knowledge and competencies through evidence-based literature and continued professional development, supporting lifelong-learning through professional self-development.

	Principles and concepts of application	
	Graduates should be able to:	
6.2.1	<ul style="list-style-type: none"> i demonstrate the ability to contribute to and understand research and other scholarly activities to promote personal professional development ii understand and critically appraise methodological approaches to research iii formulate research questions that inform outcomes in paramedic practice iv understand the choice and application of appropriate quantitative and qualitative methodologies v recognise the importance of bias and rigour in collecting, analysing and interpreting data vi recognise the relationship between evidence, audit, evaluation and observed variation in clinical practice. 	<ul style="list-style-type: none"> i demonstrate expertise and critical understanding of research and other scholarly activities to promote personal professional development ii understand and synthesise methodological approaches to research iii critically appraise research questions that inform outcomes in paramedic practice iv critically appraise the choice and application of appropriate quantitative and qualitative methodologies v critically understand the importance of bias and rigour in collecting, analysing and interpreting data vi critically appraise the relationship between evidence, audit, evaluation and observed variation in clinical practice.
6.2.2	<ul style="list-style-type: none"> i contribute to the development of clinical guidelines and procedures to guide the provision of quality healthcare and minimise risk through understanding legislation concerning safety at work practices including risk assessment. 	<ul style="list-style-type: none"> i participate in the synthesis and ongoing development of clinical guidelines, policies and procedures at all levels, to guide the provision of quality healthcare and minimise risk through critical understanding of legislation concerning safety at work practices including risk assessment.
6.2.3	<ul style="list-style-type: none"> i understand the significance and potential effect of psychosocial and economic factors in helping patients and carers to make informed choices about their personal healthcare through the development of health education/promotion, and public health interventions. 	<ul style="list-style-type: none"> i critically analyse the significance and potential effect of psychosocial and economic factors in helping patients and carers to make informed choices about their personal healthcare through the development of health education/promotion, and public health interventions.
6.2.4	<ul style="list-style-type: none"> i articulate and rationalise clinical leadership problem-solving and decision-making processes associated with paramedic practice as a registered healthcare professional. 	<ul style="list-style-type: none"> i demonstrate self-direction and originality in rationalising clinical leadership problem-solving and decision-making processes associated with enhanced and expert level of paramedic practice.

6.2.5	i appraise practical skill levels in order to deliver the expected standards of paramedic care and update priorities within a changing and dynamic environment.	i critically reflect on and synthesise practical skill levels in order to deliver the expected standards of enhanced and expert paramedic care and update priorities within a changing and dynamic environment.
6.2.6	i critically analyse and evaluate contemporary research and use this evidence to inform practice and enhance patient-centred care.	i critically analyse and synthesise contemporary research and use this evidence to inform practice and enhance patient-centred care.
6.2.7	i demonstrate an ability to critically challenge and develop practice, taking into account, dynamic social, cultural, spiritual, ethical, legal, political and economic factors.	i demonstrate an ability to critically challenge and synthesise practice, taking into account, dynamic social, cultural, spiritual, ethical, legal, political and economic factors.
6.2.8	i select a suitable course of action, based on a rational decision-making process which includes a critical consideration of personal scope of practice and patient choice, adjusting one's care accordingly.	i demonstrate originality in selecting a suitable course of action, based on enhanced or expert decision-making process, which includes a critical consideration of personal scope of practice and patient choice, adjusting one's care accordingly.
6.2.9	i demonstrate a critical understanding of the delivery of healthcare provision and the contribution of paramedic practice within this context along with that of the multiple disciplinary team and multi-professional/multi-agency working.	i critically understand and evaluate the delivery of healthcare provision and the contribution of enhanced and expert paramedic practice within this context along with that of the multiple disciplinary team and multi-professional/multi-agency working.
6.2.10	i apply theories, concepts and principles of paramedic practice to deliver patient-centred care for individuals, families and communities in urgent, emergency, critical or other care settings.	i critically understand and apply theories, concepts and principles of enhanced and expert paramedic practice to deliver patient-centred care for individuals, families and communities in urgent, emergency, critical or other care settings.
6.2.11	i recognise potential risks and intervene, to maintain a safe and effective standard of patient, public and personal safety.	i recognise and evaluate potential risks and intervene, to maintain a safe and effective standard of patient, public and personal safety.

6.2.12	i apply critical problem-solving skills to a level that informs and guides the interpretation of clinical and other data, and contributes to effective clinical reasoning and decision making based on the information available.	i demonstrate critical problem-solving skills to an enhanced and expert level which informs and guides the interpretation of clinical and other data, and contributes to effective clinical reasoning and decision making based on the information available.
6.2.13	i undertake and document a systematic and accurate assessment of the physical, psychological, social and spiritual needs of patients, service users and communities, modifying practice to take account of the criticality of the patient's condition.	i undertake and document a comprehensive, systematic and accurate assessment of the physical, psychological, social and spiritual needs of patients, service users and communities, modifying enhanced or expert level of practice to take account of the criticality of the patient's condition.
6.2.14	i assess both clinical and operational priorities in practice, including multiple casualty situations and major incidents, reacting with due regard to local and national policies and procedures.	i critically assess and provide leadership and management of both clinical and operational priorities in practice, including multiple casualty situations and major incidents, reacting with due regard to local and national policies and procedures.
6.2.15	i formulate, implement and document a plan of care without avoidable delay where appropriate and, where feasible, in partnership with, and with the consent of patients, service users, their carers and families to the beneficence of the end service user.	i formulate, implement and document an enhanced or expert plan of care without avoidable delay where appropriate and, where feasible, in partnership with, and with the consent of patients, service users, their carers and families to the beneficence of the end service user.
6.2.16	i demonstrate professional accountability for the care delivered, taking into account, social, spiritual, cultural, ethical, legal, political and economic factors.	i critically analyse and evaluate professional accountability of care delivered, taking into account, social, spiritual, cultural, ethical, legal, political and economic factors.
6.2.17	i accurately document and evaluate the outcomes of care and other interventions delivered.	i accurately document and critically evaluate the outcomes of care and other interventions delivered.
6.2.18	i demonstrate knowledge and understanding of effective multi-disciplinary and multi-professional/multi-agency working practices, and participate in teamwork that respects and uses the contributions of members of the health and social care team.	i demonstrate a comprehensive knowledge and understanding of effective multi-disciplinary and multi-professional/multi-agency working practices, and provide appropriate leadership in team settings that respects and uses the contributions of members of the health and social care team.

6.2.19	i critically analyse and interpret relevant health education/ promotion and public health interventions and use this knowledge to promote the health and well-being of patients, carers and service users in the effective planning, implementation and evaluation of multi-professional approaches to healthcare.	i critically analyse and synthesise relevant health education/ promotion and public health interventions and use this knowledge to promote the health and well-being of patients, carers and service users in the effective planning, implementation and evaluation of multi-professional approaches to healthcare.
6.2.20	i critically understand the delivery of healthcare provision in the UK and its relevance to the professional and national bodies, along with the contribution of paramedic practice within this context.	i critically understand and evaluate the delivery of healthcare provision in the UK and its relevance to the professional and national bodies, along with the contribution of enhanced and expert paramedic practice within this context.
6.2.21	i use relevant theoretical and research evidence to inform a comprehensive, systematic assessment of the physical, psychological, emotional and social needs of patients, service users and carers.	i critically analyse contemporary theoretical and research evidence to inform a comprehensive, systematic assessment of the physical, psychological, emotional and social needs of patients, service users and carers.
6.2.22	i take responsibility for maintaining professional boundaries and disclose and justify actions to others when appropriate ii critically evaluate the moral and ethical issues that relate to patient care.	i provide leadership and management in maintaining professional boundaries and disclose and justify actions to others when appropriate ii critically evaluate the moral and ethical issues that relate to patient care.
<p>Subject knowledge, understanding and associated skills</p> <p>Graduates should be able to:</p>		
6.3.1	i demonstrate knowledge and understanding of the subjects underpinning paramedic science, in urgent, emergency, critical or other care settings.	i critically demonstrate knowledge and understanding of the subjects underpinning advanced practice, in urgent, emergency, critical or other care settings.
6.3.2	i use knowledge and understanding of the subjects and skills underpinning paramedic science to provide innovative and contemporary solutions to patient care.	i critically demonstrate knowledge and understanding of the subjects and skills underpinning advanced practice to provide innovative and contemporary solutions to patient care.
6.3.3	i assess, evaluate and manage an individual patient's condition, based on the criticality of the patient, and apply treatment to evidence-based practice standards.	i critically assess, evaluate and manage an individual patient's condition, based on the criticality of the patient, and apply treatment to evidence-based practice standards.

6.3.4	<ul style="list-style-type: none"> i confidently and professionally present information using a number of communication strategies and, where appropriate through the use of technology, provide coherent and logical arguments in the support of decision making. 	<ul style="list-style-type: none"> i confidently and professionally present enhanced or expert information using a number of communication strategies and, where appropriate through the use of technology, provide coherent and logical arguments in the support of decision making.
6.3.5	<ul style="list-style-type: none"> i appropriately manage multiple casualty situations, employing triage strategies and major incident procedures as applicable to the circumstances and with reference to local and national policies and procedures. 	<ul style="list-style-type: none"> i demonstrate leadership and critically manage multiple casualty situations, employing triage strategies and major incident procedures as applicable to the circumstances and with reference to local and national policies and procedures.
6.3.6	<ul style="list-style-type: none"> i demonstrate an understanding and commitment to considering the patient holistically, recognising that the presenting problem may mask underlying injuries and/or health concerns ii use practical skills with knowledge and confidence and innovation to improve the quality of care. 	<ul style="list-style-type: none"> i critically understand the importance of considering the patient holistically, recognising that the presenting problem may mask underlying injuries and/or health concerns ii use enhanced or expert knowledge and skills with confidence and innovation to improve the quality of care.
6.3.7	<ul style="list-style-type: none"> i critically analyse and interpret data and appraise its value for healthcare delivery and management, along with an awareness of the principles and practice of other relevant health and social care approaches. 	<ul style="list-style-type: none"> i critically analyse and synthesise data to appraise its value for healthcare delivery and management, along with an advanced awareness of the principles and practice of other relevant health and social care approaches.
6.3.8	<ul style="list-style-type: none"> i critically examine the impact of political and social contexts on the provision of health and social care on professional practice. 	<ul style="list-style-type: none"> i critically examine and evaluate the impact of political and social contexts on the provision of health and social care on enhanced or expert paramedic practice.
6.3.9	<ul style="list-style-type: none"> i understand the differences in beliefs and cultural practices of individuals and groups ii recognise and challenge discriminatory practice. 	<ul style="list-style-type: none"> i critically understand the differences in beliefs and cultural practices of individuals and groups ii recognise and challenge discriminatory practice.
6.3.10	<ul style="list-style-type: none"> i critically evaluate research findings, and suggest changes to practice and contribute to healthcare research to inform practice development ii manipulate quantitative and qualitative data for audit and related purposes. 	<ul style="list-style-type: none"> i critically evaluate and synthesise research findings, and suggest changes to practice and contribute to healthcare research to inform practice development. ii manipulate quantitative and qualitative data for audit and related purposes.

6.3.11	i demonstrate a level of subject understanding that facilitates the ability to work at standards specified by the professional, statutory and regulatory bodies.	i demonstrate a critical understanding of practice that facilitates the ability to work at enhanced or expert standards, specified by the professional, statutory and regulatory bodies.
6.3.12	i use reflection to appraise, evaluate and enhance professional practice in self and colleagues.	i critically draw on reflection and reflexivity to appraise, evaluate and enhance professional practice in self and colleagues.
6.3.13	i manage therapeutic relationships with patient's through the creative use of theories and skills, demonstrating ethical discernment and clinical judgement.	i critically understand and manage therapeutic relationships with patient's through the creative use of theories and skills, demonstrating ethical discernment and clinical judgement.
<p>Generic skills</p> <p>Graduates should be able to:</p>		
6.4.1	i use language to articulate opinions and formulate arguments effectively and select between different forms of communication with patients and colleagues (paramedics, healthcare professionals and others) while maintaining a commitment to ethical values and considerations.	i employ enhanced or expert language skills to articulate opinions and formulate arguments effectively and select between different forms of communication with patients and colleagues (paramedics, healthcare professionals and others) while maintaining a commitment to ethical values and considerations.
6.4.2	i reflect on personal and professional strengths and limitations to promote a commitment to active and planned future self-directed professional development and show a significant ability for self-critical reflection.	i critically reflect on personal and professional strengths and limitations to promote a commitment to active and planned future self-directed professional development and show a significant ability for self-critical reflection.
6.4.3	i be critically aware of their practical skill level in order to deliver the expected standards of paramedic care and understand and apply the concept of evidence-based practice in the clinical environment.	i demonstrate critical knowledge and practical skills in order to deliver the expected standards of enhanced or expert paramedic care and understand and apply the concept of evidence-based practice in a clinical leadership context.
6.4.4	i use information technology consistent with the effective and efficient management of modern paramedic practice, including the use of enhanced verbal and written presentations.	i actively use information technology consistent with the effective and efficient management of modern paramedic practice, including the use of enhanced verbal and written presentations.

6.4.5	i demonstrate an understanding of the importance of managing confidential information in an appropriate manner and the ability to guide colleagues in maintaining this ethos where necessary.	i demonstrate a critical understanding of the importance of managing confidential information in an appropriate manner and the ability to guide colleagues in maintaining this ethos where necessary.
6.4.6	i maintain a professional non-judgemental position in all aspects of work and avoid stigmatising any category of patients, service users and carers.	i maintain an enhanced, professional non-judgemental position in all aspects of work and avoid stigmatising any category of patients, service users and carers.
6.4.7	i uphold high standards of personal and professional conduct, maintaining the integrity of the profession and not bringing it into disrepute.	i uphold and display high standards of personal and professional conduct, maintaining the integrity of the profession and not bringing it into disrepute.
6.4.8	i adopt and maintain a reflective approach to professional practice and that of others within the healthcare team including the identification of opportunities to introduce innovative approaches to patient care and management of the clinical environment.	i adopt and maintain a reflective and reflexive approach to enhanced or expert practice and that of others within the healthcare team including the identification of opportunities to introduce innovative approaches to the advancement of patient care and management in the clinical environment, while critically evaluating their own ability and limitations.

Appendix 1: Membership of the benchmarking and review groups for the Subject Benchmark Statement for Paramedics

Membership of the review group for the Subject Benchmark Statement for Paramedics (2016)

Higher Education Provider Representatives

Kerry Crawley	University of the West of England
John Donaghy	University of Hertfordshire and Council of Deans of Health

Professional and Regulatory Body Representatives

Bob Fellows	College of Paramedics (University of Hertfordshire)
Abigail Gorringe	Health and Care Professions Council
Graham Harris (Chair)	College of Paramedics
Professor Andrew Newton	College of Paramedics (University of Hertfordshire)
James Petter	College of Paramedics (University of the West of England)

Employer representative

Julian Rhodes	National Education Network for Ambulance Services
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Student reader

Michael Stevens	University of Plymouth
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QAA Officer

Helen Kealy	Quality Assurance Agency for Higher Education
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Membership of the original benchmark statement group for Paramedic Science (2004)

Details below are as published in the original Subject Benchmark Statement for Paramedic Science.

Bob Fellows	London Ambulance Service NHS Trust
Roland Furber	The British Paramedic Association
Andrew Newton (Chair)	University of Hertfordshire
David Whitmore	Health Professions Council
Tom Berrie	Health Professions Council

With acknowledgement to:

Indra Jones	Teaching and learning fellow University of Hertfordshire
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Members of the British Paramedic Education and Training Committee

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Southgate House, Southgate Street, Gloucester GL1 1UB
Registered charity numbers 1062746 and SC037786

Tel: 01452 557050
Web: www.qaa.ac.uk