

PROGRAMME SPECIFICATION



1	Awarding Institution	Newcastle University
2	Teaching Institution	Newcastle University
3	Final Award	MSc Physician Associate Studies
4	Programme Title	MSc Physician Associate Studies
5	Programme Code	5392F
6	Programme Accreditation	UK Association of Physician Associates until a National Professional body is established.
7	QAA Subject Benchmark(s)	Not yet developed
8	FHEQ Level	7
9	Last updated	July 2021

10 Programme Aims

The primary aim of the MSc Physician Associate Studies in Newcastle is to produce graduates who are fit to practise in accordance with the professional standards expected of Physician Associates by the Royal College of Physicians, Faculty of Physician Associates (FPARCP). We aim to deliver an educational experience of sufficient range, depth and rigour to provide students with the intellectual tools, knowledge and understanding, practical skills and professional attitudes required for clinical practice as a Physician Associate.

Therefore our aim for the provision of the MSc Physician Associate Studies is to:

Foster the development of a caring, knowledgeable, competent and skilful Physician Associate who broadly understands health and disease of the individual, the family and society; can adapt to future developments in practice and can work within the multi-professional health care team.

To achieve this aim, the Board of Studies seeks to make operational the commitment of Newcastle University to work with HENE to meet regional and national needs in relation to Health Care education by:

1. Providing a flexible programme responsive to the changing needs of the Health Service and its patients;
2. Admitting motivated students of high calibre with a demonstrable commitment to the provision of high quality health care;
3. Ensuring that the participation and contribution made by students from non-traditional backgrounds is encouraged and developed;
4. Engendering an educational environment conducive to the development of a reflective approach to Health Care practice that is patient-centred, questioning and self-critical;
5. Developing links and exploiting opportunities for inter-professional education in order to develop team working and engender an integrated approach to health care delivery;
6. Ensuring currency of provision by delivering programmes, the structure and content of which is informed by the needs of a modernized Health Service, inter-professional consensus, statutory recommendation, research and clinical audit.
7. Ensuring the Newcastle Curriculum is based upon and guided by national guidelines as in the Competence and Curriculum Framework (DH, 2006 and 2012) and the Matrix of conditions for PAs (DH 2006, under review).

The broad aims of the Physician Associate programme are as follows:

The programme aims to produce graduates who have the knowledge, skills and professional behaviours to function as Physician Associates (and to have their qualification nationally and internationally recognised) and the personal and intellectual attributes necessary for life-long professional development. Such graduates will be:

- a. safe practitioners under medical supervision in a wide variety of clinical settings, with patients from diverse social and ethnic backgrounds
- b. expert communicators who are empathic in a manner appropriate to a healthcare profession
- c. aware of health inequalities and the challenges of working in a multicultural environment
- d. aware of the limits of their competence and determined to act within those limits
- e. trained in the context of multi-professional working in a team environment
- f. adept in the use of C&IT (Communication and Information Technology) skills for healthcare
- g. capable and motivated lifelong learners continually engaged in active professional development
- h. understanding of the need to maintain and promote health, as well as to cure or palliate disease and aware of their obligations to the wider community as well as to individuals
- i. trained to integrate theoretical and clinical learning.
- j. able to undertake a research project within the workplace setting

11 Learning Outcomes

The learning outcomes for the Physician Associate programme are defined as a set of terminal learning outcomes which are classified into three domains: **Knowledge** and Critical Thought, Clinical and Communication **Skills** and **Professional Behaviour**. It is expected that throughout the two years of the course students are working towards these terminal outcomes. All individual learning outcomes at each stage of the course and all assessments are mapped to the appropriate terminal learning outcome.

Knowledge and Understanding

On completing the programme students should demonstrate a core theoretical knowledge sufficient to underpin clinical practice in the following areas:-

- a. Anatomy
- b. Biochemistry
- c. Communication
- d. Development, growth and ageing
- e. Ethics and law
- f. Healthcare policy
- g. Health education
- h. Health information technology
- i. Histology
- j. Immunology and microbiology
- k. Pathology
- l. Pharmacology and therapeutics
- m. Physiology
- n. Psychology
- o. Public health and epidemiology
- p. Research methodology
- q. Sexual health & reproduction
- r. Sociology
- s. Teaching and assessing:

Teaching and Learning Methods

Teaching and learning strategies are primarily student-centred, and designed to enable achievement and demonstration of the learning outcomes. Students, who are already

graduates, are expected to take responsibility for their learning from the earliest stages, while teachers guide, support and facilitate the process.

To ensure a problem-first, task-based focus to learning, a case-led approach is adopted. The cases used reflect the range of core clinical presentations and problems which will be encountered by graduates. The cases form part of a blended approach in which students are expected to take responsibility for their own learning through access to a range of learning resources and material from the standard (A100) and accelerated (A101) MBBS courses.

Specific teaching and learning methods

Throughout the programme, the choice of teaching and learning method is tailored to the student's stage of development and prior experience. Specific learning experiences are differentiated according to the particular outcome to be achieved, i.e. the learning experience is set in the professional context best suited to facilitating the achievement of the desired outcome. From the outset learning is student-centred, case-led and contextual.

The following teaching and learning methods are used to enable students to achieve outcomes relating to **knowledge and understanding of basic, social and clinical sciences and their underlying principles**:

- Whole class plenary sessions may be used to introduce core concepts.
- Small group tutorials and seminars are used to provide opportunities for interaction, discussion and clarification in support of learning in selected areas.
- Small-group clinical teaching is used for experiential learning in hospital and community care settings.
- Guided self-study using clearly defined learning outcomes, supported by the provision of on-line learning materials and access to recorded lectures will allow students to expand knowledge and understanding.
- Research supervision from experienced members of the School of Medical Education will enable students to complete their dissertation.

Assessment Strategy

General assessment strategy

Our system of assessment is designed to monitor acquisition and utilisation of core knowledge, skills and professional behaviour necessary for the student's first experience of clinical practice as a Physician Associate. A student is therefore required to pass each domain of assessment (Knowledge, Skills and Professional Behaviour) in order to progress to the next Stage of the course and ultimately to qualify to sit the National Licensing examination. The assessments explicitly test achievement of the defined learning outcomes as set out in the Degree Programme Handbooks and Study Guides. In line with the overall design of the curriculum all assessments reflect the integrated and interdisciplinary nature of the programme.

Each examination in the Knowledge and Skills domains is given a numerical score. Standard setting procedures will be used to determine the pass mark for each examination. Scaling will then be used to adjust the marks to give a pass mark of 50% in line with the postgraduate exam convention. The scaling formula used is detailed in the Assessment Schedule.

In-course assessments are graded on a competent/non-competent basis by domain. Students must achieve a majority of competent grades in order to pass this element of assessment.

Professional Behaviour will be deemed Acceptable (A) or Unacceptable (U) following monitoring and assessment of attitudes and behaviours throughout the course of the year.

The dissertation will be marked on the University standard scale in accordance with published criteria for each marks band.

Students presenting for examination on the first occasion who have an overall mark greater than or equal to 60% (scaled mark) and are Acceptable in Professionalism will pass Year 1 with Merit.

Students presenting for final examination on the first occasion who have an overall mark greater than or equal to 70% (scaled mark) and are Acceptable in Professionalism will be eligible for the award of Masters with Distinction. Students with a final mark greater than or equal to 60% and less than 70% (scaled mark) and are Acceptable in Professionalism will be eligible for the award of Masters with Merit. Discretionary awards of Merit and Distinction are subject to review of a student's professionalism record at the final examination board.

The assessment process also identifies those students with difficulties and who are in need of support and remediation for whatever reason. All examinations are scrutinised by External Examiners to ensure the requisite standards are maintained.

The following modes/instruments are used to assess knowledge:

- Single Best Answer questions (SBA)
- Dissertation (Year 2)

To demonstrate satisfactory achievement in the Knowledge domain at the end of each year of the course the scores from the various Knowledge assessments are combined to give a single numerical end of year score. The threshold mark for this combined score is determined according to the weighting of the assessment episodes and the individual threshold marks for each assessment. Details of assessments and weightings are published to students in the relevant Handbooks for each year of the course.

Intellectual Skills

On completing the programme students should be able to:

B1. Demonstrate proficiency in clinical reasoning, through ability to:

- a. recognise, define and prioritise problems
- b. analyse, interpret and prioritise information, recognising its limitations

B2. Make diagnosis

- a. describe the differential diagnosis of core conditions

B3. Demonstrate ability to think critically, by

- a. adopting an inquisitive and questioning attitude and applying rational processes
- b. recognising irrationality in oneself and others
- c. recognising importance of own value judgements and those of patients

B4. Demonstrate insight into research, through:

- a. recognising the relationship between evidence based medicine, audit and the observed variation in clinical practice
- b. Successfully completing a dissertation which investigates and analyses professional practice in a workplace setting

B5. Exhibit creativity / resourcefulness, by:

- a. demonstrating self-reliance, initiative and pragmatism
- b. demonstrating preparedness to think out with conventional boundaries when appropriate

Teaching and Learning Methods

The following teaching and learning methods are used to enable students to achieve outcomes relating to **appropriate skills of decision making, clinical reasoning and judgement:**

- Problem-oriented learning opportunities: to develop problem-solving, numeracy, critical reasoning and clinical decision making skills through data handling and evidence-based activities;

<ul style="list-style-type: none"> • Clinical attachments where the development of diagnostic and clinical reasoning skills is promoted in the relationship to patients encountered on the wards, in out-patients clinics or in GP surgeries • Analysis of literature and data sources required to produce a Masters level dissertation
<p>Assessment Strategy</p> <p>For general assessment strategy see Assessment Strategy section under Knowledge and Understanding.</p> <p>The following modes/instruments are used to assess ability to apply knowledge, solve problems, critically evaluate evidence and test clinical reasoning:</p> <ul style="list-style-type: none"> • Data Interpretation within SBA questions • Problem Solving within SBA questions • Data analysis and critical thought within a dissertation
<p style="text-align: center;">Practical Skills</p> <p>On completing the programme students should be able to achieve the following outcomes:-</p> <p>:</p> <p>C1 Professional Behaviour & Probity</p> <p>a. Behave as an ambassador for the role of Physician Associate, acting professionally and behaving considerately towards other professionals and patients.</p> <p>C2 The patient relationship</p> <p>a. Demonstrate the ability to develop and maintain clinician – patient relationships which will foster informed patient choice and negotiated care decisions.</p> <p>C3 Common core skills and knowledge when working with children, young people and families</p> <p>a. Demonstrate effective communication and engagement with children, young people and families</p> <p>C4 History taking and consultation skills</p> <p>a. Elicit a patient history appropriate to the clinical situation, which may include, presenting complaint, history of the present illness, past medical history, social history, family history, medications, allergies, review of systems, risk factors and appropriate targeted history</p> <p>C5 Examination (general)</p> <p>a. Perform a physical examination tailored to the needs of the patient and the demands of the clinical situation, including, as appropriate, neurological examination, musculoskeletal examination, blood pressure (BP) measurement and control, male and female uro-genital examination, breast examination, ophthalmic examination, oropharyngeal examination cardiovascular examination, respiratory examination, abdominal examination and dermatological examination</p> <p>b. Perform a comprehensive mental state examination, tailored to the needs of the patient and the demands of the clinical situation, including as appropriate, assessment of appearance and behaviour, levels of consciousness, posture and motor behaviour, thoughts and perceptions, affect, speech and language, orientation, memory and higher cognitive function.</p> <p>C6 Interpreting evidence/determining the requirement for additional evidence</p> <p>a. Interpret the findings from the consultation (history, physical examination and mental state examination) in order to determine the need for further investigation and, with the patient/carer, the appropriate direction of patient management</p> <p>C7 Clinical judgement in diagnosis and management</p> <p>a. Formulate a differential diagnosis based on objective and subjective data</p>

C8 Therapeutics and prescribing

- a. Working under medical delegation clauses, determine and propose appropriate therapeutic interventions from the full range of available prescription medications used in the clinical setting

C9 Clinical planning and procedures

- a. Formulate and implement a management plan in collaboration with the patient, the carers and healthcare professionals

C10 Ethical and legal issues

- a. Identify and address ethical and legal issues, which may impact on patient care, carers and society.

C11 Equality and diversity

- a. Recognise the importance of people's rights in accordance with legislation, policies and procedures

C12 Public health

- a. Address issues and demonstrate techniques involved in studying the effect of diseases on communities and individuals

C13 Moving and Handling

- a. Assess the risks to self, colleagues and the patient prior to moving and handling and act to minimise those risks by using appropriate manual handling techniques for the situation

By the end of the programme the graduate should be able to demonstrate competence in the following procedural skills:-

C14 Cardiovascular system

- a. Perform and interpret a 12 lead ECG
- b. Participate in cardiopulmonary resuscitation to the level expected in Immediate Life Support Training: including oxygen with mask, bag intubation, which medication to use and when, depending upon ECG reading.

C15 Respiratory system

- a. Undertake respiratory function tests, including the performance of peak flow measurement
- b. Commence and manage nebulised therapy
- c. Commence and manage oxygen therapy
- d. Instruct patients in the use of devices for inhaled medication

C16 Gastrointestinal system

- a. Insert a naso-gastric tube (tested in simulation)
- b. Undertake nutritional assessment

C17 Musculoskeletal system

- a. Undertake appropriate strapping and splinting for common musculoskeletal injuries

C18 Eyes

- a. Perform fluorescein dye examination of the cornea
- b. Remove loose foreign bodies from under eyelids

C19 Female reproductive system

- a. Obtain a cervical smear, cultures for a range of infections

C20 Renal and genitourinary system

- a. Undertake male and female urinary catheterisation
- b. Perform a urine dipstick test

C21 Skin

- a. Undertake simple skin suturing
- b. Be competent in the use of local anaesthetics

C22 Diagnostics and therapeutics

- a. Interpret written prescriptions accurately, seeking confirmation when the drug, dose or route of administration are unclear, or where the prescription as written is outside standard practice
- b. Draw up and give intramuscular, subcutaneous, intra-dermal and intravenous injections.
- c. Take a venous blood sample, using appropriate tubes for required tests
- d. Obtain an arterial blood gas (ABG) sample
- e. Undertake venous cannulation and set up an infusion and infusion pump
- f. Commence and manage a blood transfusion (in simulation)
- g. Measure body temperature
- h. Measure pulse rate
- i. Monitor oxygen saturation transcutaneously
- j. Take nose, throat and skin swabs
- k. Calculate dosage of insulin using a pre-prescribed sliding scale and administer

Teaching and Learning Methods

The following teaching and learning methods are used to enable the student to achieve outcomes relating to clinical skills and practical procedures and clinical and professional competency in the areas of investigation, management and health promotion and disease prevention:

- Clinical skills training: initially in the supportive environment of the Clinical Skills Laboratory, and subsequently in small groups in the Clinical Base Units and other clinical attachments
- Small-group clinical teaching: for experiential learning in hospital and community care settings
- Case presentations/discussions: opportunities to present and discuss cases in small groups to develop initially history and examination skills and subsequently to increase competency in investigation, diagnosis and management.

The following teaching and learning methods are used to enable students to achieve outcomes relating to health promotion and disease prevention:

- Small group tutorials and seminars: provide opportunities for interaction, discussion and clarification in support of learning in selected areas
- Practical learning exercises: provide opportunities to work through problems/practical exercises in groups and individually

The following teaching and learning methods are used to enable students to achieve outcomes relating to communication skills:

- Supervised training sessions: to develop information skills and proficiency in the use of communications
- Video/role play/consultation skills training: to teach communication skills

The following teaching and learning methods are used to enable students to achieve outcomes relating to **professional behaviours and personal development**:

- Video and role play: to teach communication skills, and develop attitudes and promote reflective practice;
- Small group activities: to encourage team work and involvement;
- Training in the use of the e-portfolio and the use of personal reflection and planning to develop one's own practice

Clinical attachments, from the regular visits to general practices in Year 1 through to the Essential Rotations of Year 2, provide the opportunity for integration, consolidation and application of the knowledge, skills and attitudes accumulated from all the other course

components and as such provide teaching and learning experiences which enable students to achieve learning outcomes in all three domains.

Assessment Strategy

For general assessment strategy see Assessment Strategy section under Knowledge and Understanding.

The following modes/instruments are used to assess competence in Clinical and Communication Skills:

- Multi-station Objective Structured Clinical Examinations (OSCE)
- Multiple Observed Structured Long Examination Records (MOSLER)
- Workplace based assessment of practical clinical skills
- Monitoring of professional attitudes and behaviours

Transferable/Key Skills

On completing the programme students should be able to:-

D1. In accessing and manipulating data, demonstrate ability to use:

- a. library and other information systems to access data
- b. information from primary sources to inform evidence-based practice
- c. use information from secondary sources (e.g. professional guidelines)
- d. Analyse data sources to produce a dissertation

D2. Demonstrate C&IT skills

D3. Maintain records for personal & professional development

D4. Manage one's own learning

D5. Manage one's own self-care, by:

- a. recognising the pressures of a demanding professional life on oneself and others and the need to maintain a balance between professional and personal activities
- b. attending to one's own lifestyle and recognising the hazards of self- medication and substance abuse
- c. making use of available help and advice in stressful circumstances

D6. Identify the value of career planning and be able to set realistic short and long-term goals

D8. Recognise key personal motivating factors and their importance in sustaining a high level of commitment

D9. Participate fully in the life of the professional community

Teaching and Learning Methods

The following teaching and learning methods are used to enable students to achieve outcomes relating to data & information handling skills:

- Group work: working in small groups to collectively produce material for presentation in written and oral format

Assessment Strategy

For general assessment strategy see Assessment Strategy section under Knowledge and Understanding.

The following modes/instruments are used to assess Professional Behaviour:

- Multi-station Objective Structured Clinical Examinations (OSCE)
- Multiple Observed Structured Long Examination Records (MOSLER)
- Participation in Evaluation activities
- Compliance with Learning Agreement
- Clinical Logbooks
- Monitoring of behaviours and attitudes, including attendance and behaviour in clinical and teaching sessions

12 Programme Curriculum, Structure and Features

Basic structure of the programme

Year 1 of the programme comprises 46 weeks of tuition and assessment including:-

1. An in-depth period of training in clinical, communication and diagnostic skills using mannequin-based and role play simulations
2. A team based learning course based around clinical case studies which will introduce students to the core knowledge they will need to enter the clinical workplace.
3. A day a week will be based in a Primary care setting where students will have the opportunity to practice history taking skills
4. Blended learning to introduce research methodologies for workplace based enquiry
5. A five week apprenticeship in a hospital based setting to introduce the students to the role of the physician associate

Year 2 of the programme is 46 weeks long and is largely hospital and community based. It comprises essential rotations through the following clinical areas :-

1. Emergency medicine
2. Mental Health
3. Community Medicine/Primary care
4. O&G
5. Paediatrics
6. General Medicine
7. General Surgery

These rotations are followed by an 8 week senior apprenticeship in which trainees work as Physician Associates under clinical supervision.

The student will also conduct a piece of research in the workplace and will submit a dissertation based on this at the end of Year 2. Supervision for the dissertation will be provided by experienced members of the School of Medical Education.

The content of each year of the course is managed by the Degree Programme Director who is a member of the School of Medical Education.

Key features of the programme (including what makes the programme distinctive)

Faculty of Medical Science and the School of Medical Education

The Physician Associate programme sits within the School of Medical Education and is supported by the Faculty of Medical Sciences Learning Technology Support Unit through the development and maintenance of the e-portfolio, electronic student record system, Learning Support Environment (LSE) and Teaching Support Environment (TSE). The LSE is a bespoke virtual learning environment supporting student learning through provision of timetable and course information as well as teaching resources and links to external material. The TSE helps support teachers across the regional medical school enabling the School to maintain equity of experience for our students. The student record system allows details of student progress, absences and meetings with tutors and curriculum officers to be logged. This is invaluable as students move around the region in enabling those responsible for student welfare to have easy access to a student's personal records.

Regional basis

The delivery of the Physician Associate curriculum depends on a partnership between the Newcastle University and the NHS. In order to meet the needs of NHS workforce planning we place students across the Northern region of England. This is supported by management structures that have been put in place, with each local set of hospitals and other health care providers (a Base Unit) being the responsibility of a local Sub-Dean.

Programme regulations (link to on-line version)

https://teaching.ncl.ac.uk/docs/regsdocs2021/documents/-R5392F_vFinal.pdf

13 Support for Student Learning

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

14 Methods for evaluating and improving the quality and standards of teaching and learning

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

15 Regulation of assessment

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

In addition, information relating to the programme is provided in:

The University Prospectus: <http://www.ncl.ac.uk/postgraduate/courses/>

Degree Programme and University Regulations: <http://www.ncl.ac.uk/regulations/docs/>

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided.