

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 (for students starting September 2023)
5	Programme Code	BB96
6	Programme Accreditation	Faculty of Physician Associates until GMC regulation scheduled for 2024
7	QAA Subject Benchmark(s)	Not yet developed
8	FHEQ Level	7
9	Last updated	May 2023

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 General Medical Council. 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 professional and skilful Physician Associate who provides safe and effective care as part of the multidisciplinary team. We will develop practitioners who apply evidence based practice and clinical reasoning to make informed decisions. Our students will be committed to reflective practice, continuing professional development and support equality diversity and inclusion as well as a commitment to quality improvement.

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 from the GMC - Physician Associate Curriculum 2022, Physician Associate and Anaesthetic Associate shared learning outcomes (2022) and the PA registration assessment content (2022).

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 which are defined by the GMC as Capabilities in Practice (CiPs), covering generic skills and clinical skills 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:-

1. Anatomy
2. Biochemistry
3. Communication
4. Development, growth and ageing
5. Ethics and law
6. Healthcare policy
7. Health education
8. Health information technology
9. Histology
10. Immunology and microbiology
11. Pathology
12. Pharmacology and therapeutics
13. Physiology
14. Psychology
15. Public health and epidemiology
16. Research methodology
17. Sexual health & reproduction
18. Sociology
19. 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.
- Research supervision from experienced members of the School of Medicine 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 Physician Associate Registration Assessment (PARA) National examination. The assessments explicitly test achievement of the defined learning outcomes as set out in the Degree Programme Handbooks and Study Guides.

The GMC curriculum discusses "capabilities in practice" and are divided into generic capabilities and clinical capabilities. These terminal learning outcomes are covered by the knowledge, skills and professional behaviour elements of assessment used on the programme.

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.

Capabilities in practice (Generic)

Demonstrates professional behaviour and probity (Generic CiP 1)

1. Exemplifies adherence to professional codes of conduct and is responsible and accountable for their actions and omissions while working within the scope of their clinical practice
2. Consistently behaves with integrity and sensitivity
3. Behaves as an ambassador for the role of PA, acting professionally and behaving considerately, respectfully, and inclusively towards other professionals and patients
4. Recognises and works within the limits of their professional competence and scope of practice and within the scope of practice of their supervising clinician
5. Maintains effective relationships with colleagues from other health and social care professions
6. Informs patients, carers and others of the nature of the role of a PA
7. Demonstrates duty of candour appropriately
8. Demonstrates awareness of personal responsibilities and wellbeing, and is able to self-monitor, self-care and seek appropriate advice and support
9. Manages time and workload appropriately

Is able to deal with ethical and legal issues responsibly (Generic CiP 2)

10. Negotiates and works within an individual scope of practice within legal, ethical, professional and organisational policies, governance and procedures on managing risk and upholding safety
11. Draws on ethical and legal frameworks and critically evaluates situations to make judicious decisions
12. Demonstrates critical decision-making in awareness of and adherence to national legislation and legal responsibilities, including safeguarding of vulnerable groups and the principles of equality legislation in the context of patient care

13. Understands the role of the GMC in the regulation of PAs
14. Explains and demonstrates the importance of seeking consent from patients or their responsible carers
15. Maintains confidentiality and respects patients' dignity and privacy
16. Recognises and acts on people's beliefs, preferences and choices to create a psychologically and culturally safe environment for patients and colleagues
17. Welcomes and supports diversity and values people as individuals, demonstrating an awareness of how their attitudes and behaviours may influence or affect others
18. Identifies and addresses ethical and legal issues, which may impact on patient care, carers and society, including when contributing to a complaint response
19. Demonstrates ability to take appropriate action regarding safeguarding concerns and promotes the welfare of vulnerable patients
20. Accepts and responds positively to feedback
21. Escalates concerns appropriately through both informal and formal channels as appropriate about:
 - a. patient safety and quality of care
 - b. bullying, harassment and undermining
 - c. bias and discrimination leading to inequality of care for patients or inequitable opportunities for colleagues.

Is able to communicate effectively and demonstrates interpersonal skills (Generic CiP 3)

22. Communicates clearly, sensitively and effectively with patients, their relatives, carers or others in a variety of settings, demonstrating empathy, compassion, courtesy and respect, and advocating for patient needs
23. Creates psychologically safe and inclusive healthcare environments
24. Listens to patients, takes account of their views, and responds honestly and openly to their questions
25. Tries to find out what matters to patients so they can share relevant information about the benefits and harms of proposed options and reasonable alternatives, including the option to take no action
26. Is considerate to those close to the patient and is sensitive and responsive in giving them information and support
27. Identifies and utilises opportunities for patient and carer education
28. Communicates appropriately with patients, carers, colleagues and others, even when communication is difficult
29. Demonstrates effective consultation skills, including effective verbal and non-verbal interpersonal skills
30. Shares decision-making by informing the patient, making the care of the patient their first concern, and respecting the patient's beliefs, concerns, and expectations
31. Identifies and manages barriers to communication (eg cognitive impairment, speech and hearing problems, language barriers)
32. Adjusts their communication approach as required, for example for people who communicate differently due to a disability, who speak a different first language or who are from a different cultural background
33. Uses appropriate language in their communication to role model the principles of ED&I
34. Articulates their clinical reasoning and explains their decision-making process to diverse audiences of all ages
35. Initiates and maintains accurate, timely and relevant medical records. Communicates effectively with clinical, professional and other colleagues
36. Carries out clear and effective handover to colleagues
37. Develops and maintain effective teamworking and interpersonal relationships, which includes recognising and showing respect for the roles and skills of the people they work with and listening to their contributions
38. Welcomes, supports and values diversity within and across teams
39. Role-models self-awareness, emotional intelligence and resilience, and engages in courageous conversations when advocating for self and others
40. Adapts own professional language and actively promotes the use of a range of communication styles to influence, advocate and promote PA practice to different audiences

**Is able to function within healthcare organisational and management systems
(Generic CiP 4)**

41. Recognises their role in contributing to the management and leadership of the health service
42. Demonstrates awareness of local procedures and protocols, including those related to the death of a patient
43. Contributes to an inclusive environment for patients and colleagues by demonstrating effective and compassionate leadership appropriate to their role
44. Exemplifies an open and transparent culture by demonstrating respectful and effective team working and being an active bystander – challenging behaviours, respecting and valuing diversity
45. Demonstrates that they welcome, support and value ED&I within and across teams
46. Works collaboratively across care settings, demonstrating knowledge and understanding of the range of services available
47. Manages risk appropriately, especially where there may be complex and unpredictable events, and supports teams to do likewise to ensure safety of individuals, families and carers
48. Demonstrates judicious use of resources
49. Recognises that there are differences in healthcare systems across the four nations of the UK

Is focused on patient safety and understands the role of quality improvement in patient care (Generic CiP 5)

50. Prioritises patient safety in clinical practice and places patient needs and safety at the centre of the care process
51. Recognises potential clinical risk situations and takes appropriate action
52. Recognises risks to themselves, the team, patients and others, and takes appropriate action to eliminate/minimise danger
53. Raises and escalates concerns where there is an issue with patient safety or quality of care
54. Demonstrates commitment to learning from patient safety investigations and complaints
55. Shares good practice appropriately with others
56. Promotes and maintains health and safety in all settings, escalating concerns to and requesting support from colleagues where appropriate, including applying the principles of infection prevention and control
57. Contributes to quality improvement
58. Understands and applies the principles of human factors within own practice
59. Creates and promotes an environment of psychological safety for patients and colleagues
60. Recognises and works within limit of personal competence, escalating issues and concerns as appropriate
61. Critically appraises and applies evidence on an individual patient basis to deliver high-quality care
62. Recognises how errors can happen in practice and demonstrates ability to learn from their own and others' errors to promote a culture of safety
63. Recognises the potential consequences of over-diagnosis and overtreatment
64. Recognises key diagnostic errors and the issues relating to diagnosis in the face of incomplete data

Understands the application of research and is able to manage information and data safely (Generic CiP 6)

65. Understands the importance of information governance, confidentiality, and data protection legislation, and complies with local information governance and storage procedures when recording, transferring, and coding patient information
66. Applies the principles of health informatics to medical practice
67. Manages clinical and research data appropriately, demonstrating adherence to local and national policy

68. Understands the role of evidence in clinical practice and supports patients in their decision-making with regards to involvement in research
69. Critically evaluates own clinical practice, selecting and applying valid, reliable methods to improve quality
70. Demonstrates appropriate knowledge of research methods, including qualitative and quantitative approaches in scientific enquiry
71. Critically appraises relevant research, evaluation and quality improvement, and uses the results to inform own clinical practice

Is able to safeguard vulnerable patients (Generic CiP 7)

72. Identifies signs and symptoms of abuse or neglect and is able to safeguard children, young people, adults and older people, using appropriate systems for sharing information, recording and raising concerns with supervising clinicians
73. Takes a history that includes consideration of the patient's views, needs and values and any associated vulnerability, and reflects this in care plans
74. Understands the needs of, and support required for:
 - a. people with a learning disability
 - b. people with mental health conditions
75. Considers the needs and welfare of adults, children and young people who may be vulnerable, and acts promptly on any concerns about a patient, or someone close to a patient, who may be at risk of, or suffering, abuse or neglect
76. Understands the professional responsibilities in relation to procedures performed for non-medical reasons, such as female genital mutilation and cosmetic interventions.
77. Understands the relevant health legislation that may result in the deprivation of liberty to protect the safety of individuals and society
78. Recognises where addiction (to drugs, alcohol, smoking or other substances), poor nutrition, self-neglect, environmental exposure, or financial or social deprivation are contributing to ill health and takes action by seeking advice from colleagues and making appropriate referrals

Develops as a learner and educator (Generic CiP 8)

79. Engages in appropriate and timely CPD
80. Utilises reflection as a development tool
81. Participates in the effective teaching, mentoring and training of other healthcare professionals, adapting to individuals' diverse backgrounds and experiences, including for colleagues who are new to UK practice and those who don't have easy access to sources of support
82. Recognises the factors that cause inequality of opportunity and the importance of equality of access to learning opportunities, and ways to address these
83. Actively engages in feedback dialogue on their developing competence, and understands how their own behaviour and values can impact on others
84. Contributes to a culture of organisational learning and promotes collaboration of the wider team – clinical, academic and patients – to identify and facilitate team learning
85. Educates patients, carers and others on the nature of the role of a PA
86. Acts as a role model for others and the profession

Teaching and Learning Methods

The following teaching and learning methods are used to enable students to achieve outcomes relating to **appropriate skills in professional behaviour, ethical issues, research and quality improvement, safeguarding and developing as a reflective practitioner.**

The following teaching and learning methods are used to enable students to achieve outcomes above:

- Role play: to teach communication skills, and develop attitudes and promote reflective practice;

- Supervised training sessions: to develop information skills and proficiency in the use of communications
- Small group activities: to encourage team work and involvement;
- The use of the e-portfolio Learning Diary which includes personal reflection and planning to develop one's own practice
- The use of established training packages to improve understanding of vulnerability and professional attitudes
- Whole class plenary sessions may be used to introduce core concepts.
- Guided self-study using clearly defined learning outcomes, supported by the provision of on-line learning materials
- Case based learning around professional and ethical dilemmas
- Robust strands throughout year 1 for ethics and research/audit/quality improvement dissertation strand throughout year 2, which focuses on analysis of literature and data sources
- Year 2 peer teaching development and delivery to students in year 1

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, role modelling 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

The following modes/instruments are used to assess ability to apply knowledge, **behave professionally** and develop as a reflective practitioner Knowledge,

- Data Interpretation, professionalism, standard operating procedures within SBA (Single Best Answer) questions
- Data analysis, quality improvement and critical thought within a dissertation
- In course professional assessments and monitoring
- Data interpretation in WriSkE (Written Skills Examination)
- Range of communication skills in OSCE (Observed Structured Clinical Examination)
- Compliance with learning agreement
- Participation in Evaluation activities

Clinical CiPs

On completing the programme students should be able to achieve the following outcomes:

Demonstrates knowledge, clinical reasoning and judgement in formulating differential diagnoses and clinical decision-making (Clinical CiP 1)

1. Takes a comprehensive history working in partnership with patients, which may include a thorough mental health assessment, as appropriate to the situation and healthcare setting Listens to patients', carers' or relatives' experience, ideas, concerns and expectations as part of holistic clinical reasoning and decision-making
2. Understands how conditions may present or be experienced differently in different patient populations
3. Structures interviews so that the patient, carer or others are encouraged to express their concerns, expectations and understanding, so that these can be appropriately addressed
4. Works as part of a team to request relevant investigations, interprets and appropriately acts on results and determines the requirement for additional evidence
5. Obtains appropriate consent and performs relevant and accurate physical examinations, including intimate examinations (with a chaperone present if required)
6. Makes clinical judgements and decisions with a patient, based on all available evidence, as appropriate for their level of training and experience
7. Recognises diversity in patients, its impact on clinical evidence and care choices when making clinical judgements and decisions

8. Utilises up-to-date clinical knowledge, reasoning and judgement in formulating differential diagnoses
9. Demonstrates clinical judgement in formulating management plans
10. Identifies and responds in a timely manner to acute clinical deterioration
11. Deals effectively with differentiated and undifferentiated presentations with appropriate consultation with colleagues and supervisors, including escalating complex situations.
12. Communicates clinical reasoning and management decisions effectively to colleagues and understands the process of making appropriate referrals
13. Communicates clinical reasoning and diagnoses with patients, carers and others, and works together to reach management decisions
14. Assesses a patient's capacity to understand and retain information and make decisions, and makes reasonable adjustments to support their decision-making if necessary
15. Safely and sensitively undertakes a mental and cognitive state examination, including establishing whether the patient is a risk to themselves or others, seeks support and refers to senior colleagues and others as required
16. Demonstrates awareness of the socioeconomic factors that may contribute to health, illness and disease in different population groups and is able to apply this understanding when assessing and treating patients
17. Seeks timely engagement with other colleagues / healthcare professionals as appropriate
18. Demonstrates awareness of own limitations within clinical practice and proactively seeks support when recognising limits of practice

Understands safe prescribing of medications (Clinical CiP2)

19. Establishes an accurate medication history, covering both prescribed and non-prescribed medications, herbal medicines, supplements and drugs of abuse
20. Establishes and clarifies medication allergies and the types of medication interactions that patients experience
21. Describes medications and medication actions: therapeutics and pharmacokinetics, medication side effects and interactions, including for multiple treatments, long-term conditions and non-prescribed drugs
22. Describes the role of antimicrobial stewardship in safe prescribing
23. Recognises the challenges of safe prescribing for patients in high-risk groups such as those with long-term conditions, multiple morbidities and medications, in pregnancy, at extremes of age and at the end of life
24. Recognises patient choice to use complementary therapies and how this might affect the safety and efficacy of other types of treatment that patients receive
25. Recognises the challenges of delivering care when prescribing and providing treatment and advice remotely, for example via online services
26. Understands and is able to demonstrate in a simulated environment how to:
 - a. carry out an assessment of benefit and risk for the patient of starting a new medication, taking into account the medication history and potential medication interactions in partnership with the patient and, if appropriate, their relatives, carers or other advocates
 - b. provide patients, carers or others with appropriate information about their medications in a way that enables patients to make decisions about the medications they take
 - c. recognise the risks of over-prescribing and excessive use of medications and apply these principles to prescribing practice
 - d. agree a medication plan with the patient that they are willing and able to follow
 - e. calculate safe and appropriate medication doses and record the outcome accurately, seeking support and advice from the supervising doctor or healthcare professional, pharmacist or other colleagues when necessary
 - f. prepare safe and legal prescriptions for a prescriber, tailored to the specific needs of individual patients, using either paper or electronic systems and using decision support tools where necessary
 - g. utilise reliable information about medications and use different technologies to support prescribing

- h. communicate appropriate information to patients, carers and others about what their medication is for, when and for how long to take it, what benefits to expect, any common or serious adverse effects that may occur and what follow-up will be required
- i. monitor the efficacy and effects of medication and, with appropriate advice from colleagues, adjust medication, including stopping medication with due support, care and attention if it proves ineffective, is no longer needed or the patient wishes to stop taking it
- j. 10.detect and report adverse medication reactions and therapeutic interactions and react appropriately by stopping or changing medication

Participates in acute intervention for patients, recognising the acutely deteriorating patient, and the need for the delivery of resuscitation (Clinical CiP 3)

- 27. Assesses and determines the severity of a clinical presentation and the need for immediate emergency care
- 28. Diagnoses and manages acute medical and psychiatric emergencies, escalating appropriately to colleagues for assistance and advice
- 29. Prioritises tasks to initiate interventions in a timely manner to form a collaborative management plan working in partnership with patients, and liaises with other team members as appropriate
- 30. Communicates clinical reasoning and decision-making to the patient, carers or others Works collaboratively across services to provide optimal care
- 31. Performs prompt assessment of the patient who presents an acute risk to themselves or to others in the context of mental disorder or lack of capacity
- 32. Works as part of a team, and with supervisors, to select, manage and interpret appropriate investigations in a timely manner
- 33. Demonstrates appropriate reassessment and ongoing management of acutely unwell patients
- 34. Uses evidence-based interventions in acute medical and psychiatric emergencies
- 35. Recalls, and acts in accordance with, professional, ethical and legal guidance in relation to cardiopulmonary resuscitation (CPR)
- 36. Participates sensitively and effectively in conversations regarding CPR, including decisions to not attempt CPR, and involves patients, carers and others as appropriate
- 37. Demonstrates competence in carrying out resuscitation

Assesses and manages patients in a range of healthcare settings, including management of long-term conditions (Clinical CiP 4)

- 38. Demonstrates the ability to manage medical problems in patients under the care of a range of specialties and in a range of healthcare settings, escalating appropriately to colleagues for assistance and advice
- 39. Demonstrates evaluative skills in the assessment and maintenance of ongoing treatment plans, escalating concerns as appropriate
- 40. Appropriately manages comorbidities as part of a multidisciplinary team in outpatient clinic, ambulatory or community settings
- 41. Constructs appropriate diagnostic and management plans as part of a multiprofessional team, taking into account patient preferences
- 42. Explains clinical reasoning behind diagnostic and clinical management decisions to patients, carers and others and with colleagues
- 43. Recognises when liaison with other services is required, and does so in a timely way
- 44. Recognises the role of the multidisciplinary and wider health and social care team as part of integrated care in the management of conditions and special cases
- 45. Demonstrates effective communication and proactively seeks support when recognising limits of practice
- 46. Demonstrates awareness of local services and community opportunities available to support patient care, including those that facilitate wellbeing
- 47. Effectively and efficiently hands over responsibility to other health and social care professionals
- 48. Demonstrates awareness of the quality of patient experience

49. Identifies, as part of a team and with supervisors, patients with limited life expectancy and their palliative and end-of-life care needs

Is able to deal with complexity and uncertainty (Clinical CiP 5)

50. Recognises and acts on the complex medical needs, goals and priorities of patients, the factors that can affect a patient's health and wellbeing and how these interact; these include psychological and sociological considerations that can also affect patients' health
51. Demonstrates ability to adapt management proposals and strategies for dealing with health problems to take into consideration patients' preferences, social needs, multiple morbidities, frailty and long-term physical and mental conditions
52. Works collaboratively with patients, carers or others, in planning their care, negotiating and sharing information appropriately and supporting patient self-care
53. Works collaboratively with other health and care professionals and organisations when working with patients, particularly those with multiple morbidities, frailty and long-term physical and mental conditions
54. Recognises how treatment and care can place an additional burden on patients, carers and others, and makes decisions to reduce this burden where appropriate, particularly where patients have multiple conditions or are approaching the end of life
55. Manages the uncertainty of diagnosis and treatment success or failure and communicates this openly and sensitively with patients, carers or others
56. Understands the clinical complexities, uncertainties and emotional challenges involved in caring for patients who are approaching the end of their lives and demonstrate the relevant communication techniques and strategies that can be used with the patient, carers or others

Understands the role of health promotion and illness prevention (Clinical CiP 6)

57. Understands and recognises the factors that contribute to illness, the course of the disease and the success of treatment and applies these to the care of patients – including:
- a. issues relating to health inequalities and the social determinants of health, the links between occupation and health, and the effects of poverty and affluence
 - b. understanding and addressing the causes of health inequalities, including the factors within the health service itself
 - c. recognising that some groups have experienced and continue to face discrimination when accessing health and care services, and how this affects their trust in the medical professions
 - d. awareness of the existence of biases within the healthcare system that could affect health inequalities
 - e. having the clinical skills necessary to recognise conditions as they present in different population groups
58. Evaluates the social determinants of health and disease and variations in healthcare delivery and medical practice, and the impact these may have on local health and wellbeing, and is aware of health services being accessible to a diverse range of patients in hard-to-reach communities
59. Demonstrates a comprehensive understanding of primary and secondary health promotion, barriers to health promotion and concordance issues
60. Empowers patients to achieve the best health possible, including promoting lifestyle changes such as smoking cessation, avoiding substance misuse and maintaining a healthy weight through physical activity and diet
61. Discusses and advises patients on the role and impact of nutrition on health
62. Uses basic epidemiological techniques and measurements to describe the health of a population
63. Evaluates the environmental, social, behavioural and cultural factors that influence health and disease in different populations
64. Assesses, by taking a history, the environmental, social, psychological, spiritual, economic and cultural factors influencing a patient's presentation, and identifies options to address these, including advocacy for those who are disempowered

<p>65. Understands how epidemiological data are used to manage healthcare for the individual and the community, with awareness of the clinical and costeffectiveness of interventions Educates patients, carers and others on the principles of primary, secondary and tertiary prevention of disease, including immunisation and screening</p> <p>66. Understands the principles of sustainable healthcare and global health</p> <p>67. Understands the role of environmental and occupational hazards in ill-health and the impact of climate change on health, and discusses ways to mitigate their effects</p> <p>68. Applies the basic principles of communicable disease control in hospital and community settings, including disease surveillance</p>
<p>Teaching and Learning Methods</p> <p>The following teaching and learning methods are used to enable the student to achieve outcomes relating to Knowledge, clinical and professional competency in the areas of clinical information gathering, clinical reasoning, investigation, management of acute and long term conditions, health promotion, disease prevention and therapeutics:</p> <ul style="list-style-type: none"> • Clinical skills training: initially in the supportive environment of the Clinical Skills Laboratory in a block and then as a strand throughout year 1, then subsequently in real world situations and supervised practice in primary care and trust placements • Small-group clinical teaching: for experiential learning in hospital and community care settings • Bespoke on line clinical reasoning tutorials to work through cases in a safe and secure environment • Classroom and clinical based case presentations/discussions: opportunities to present and discuss cases in small groups to develop history, examination and reasoning skills and to increase competency in investigation, diagnosis and management. • Whole class plenary sessions may be used to introduce core concepts. • The use of the e-portfolio Learning Diary which includes personal reflection and planning to develop one's own practice. • Health promotion and disease prevention as a strand throughout the cases in year 1 and as experiential during placements. • Pharmacology and prescribing strand throughout year 1 and application of knowledge during placements through case discussions. • Intermediate Life Support course in year 2 • 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, role modelling 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.
<p>Assessment Strategy</p> <p>For general assessment strategy see Assessment Strategy section</p> <p>The following modes/instruments are used to assess knowledge, clinical and professional competency in the areas of clinical information gathering, clinical reasoning, investigation, management of acute and long term conditions, health promotion, disease prevention and therapeutics. Clinical and communication skills and emergency scenarios in OSCE</p> <ul style="list-style-type: none"> • Multiple Observed Structured Long Examination Records (MOSLER) - Formative • Use of electronic skills sign off Monitoring of professional attitudes and behaviours and in course professional assessments • Knowledge, standard operating procedures in SBA • Pharmacology and prescribing knowledge in SBA, OSCE, WriSkE • Knowledge, health promotion, disease prevention in dissertation
<p>Demonstratable skills for PARA</p> <p>On completing the programme students should be able to:-</p>

1. Take baseline physiological observations (measure temperature, respiratory rate, pulse, blood pressure, oxygen saturations and urine output) and record appropriately
2. Perform surgical scrubbing-up
3. Participate in cardiopulmonary resuscitation to the level expected in Immediate Life Support (ILS) training
4. Carry out venepuncture
5. Carry out intravenous cannulation
6. Carry out arterial blood gas and acid–base sampling from the radial artery in adults and be able to interpret results (in simulation only)
7. Take blood for culture of infectious organisms
8. Measure capillary blood glucose
9. Explain to a patient how to perform a peak expiratory flow, assess that it is performed adequately and interpret results
10. Carry out a urine multi-dipstick test and be able to interpret results
11. Carry out a 12-lead electrocardiogram and be able to interpret results
12. Take and/or instruct patients how to take a swab
13. Carry out male and female urinary catheterisation
14. Carry out nasogastric tube placement (in simulation only)
15. Recommend and administer oxygen appropriately
16. Instruct patients in the use of devices for inhaled medication
17. Undertake basic drug dose calculations
18. Set up an infusion
19. Prepare and administer medications, including parenteral medications (subcutaneous, intramuscular and intravenous).
20. Use local anaesthetics in different forms (topical, subcutaneous infiltration, urethral)
21. Carry out wound care and closure, including suturing and dressing

Teaching and Learning Methods

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

- initially in the supportive environment of the Clinical Skills Laboratory in a block and then as a strand throughout year 1, subsequently in real world situations and supervised practice in primary care and trust placements.
- The use of the e-portfolio Learning Diary which includes personal reflection and planning to develop one's own practice
- Use of electronic sign off

Assessment Strategy

For general assessment strategy see Assessment Strategy section

The following modes/instruments are used to assess procedural skills:

- Skills assessed in the OSCE

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 an audit in the workplace or a literature review 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 Medicine.

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

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

Faculty of Medical Science and the School of Medicine

The Physician Associate programme sits within the School of Medicine 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 and Medical Learning Environment (MLE). The MLE 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 MLE also 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 trust and primary care setting is a clinician responsible for the Physician Associates.

Programme regulations (link to on-line version)

[RBB96_2324_vFinal.pdf](#)

13 Support for Student Learning

Generic information regarding University provision is available at the following link.

[qsh_progspec_generic_info.docx](#)

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

Generic information regarding University provision is available at the following link.

[qsh_progspec_generic_info.docx](#)

15 Regulation of assessment

Generic information regarding University provision is available at the following link.

[qsh_progspec_generic_info.docx](#)

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.