

PROGRAMME SPECIFICATION



1	Awarding Institution	Newcastle University
2	Teaching Institution	Newcastle University
3	Final Award	MBBS
4	Programme Title	Medicine
5	UCAS/Programme Code	A101, A106N, D or E
6	Programme Accreditation	General Medical Council
7	QAA Subject Benchmark(s)	Medicine
8	FHEQ Level	Masters
9	Date written/revised	June 2007

10 Programme Aims

In order to produce doctors, who recognise their duty to maintain a good standard of practice and care and show respect for human life, our aim for the provision of basic medical education is:

To foster the development of a caring, knowledgeable, competent and skilful medical graduate who broadly understands health and disease of the individual, the family and society, and who is able to benefit from subsequent medical education, adapt to future developments in practice, and work within the multi-professional health care team.

In pursuit of this aim, the Board of Medical Studies seeks to make operational the commitments of the Institutional Plans of the Universities of Newcastle and Durham in meeting regional and national needs in relation to medical education by:

- *Providing a flexible portfolio of programmes responsive to the changing needs of the Health Service and its patients;*
- *Admitting motivated students of high calibre with a demonstrable commitment to medicine and the provision of high quality health care;*
- *Ensuring that the participation and contribution made by students from non-traditional backgrounds is encouraged and developed;*
- *Engendering an educational environment conducive to the development of a reflective approach to medical practice that is patient-centred, questioning and self-critical;*
- *Developing links and exploiting opportunities for inter-professional education in order to develop team working and engender an integrated approach to health care delivery;*
- *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.*

Objectives

In relation to the award of the degrees MBBS, objectives are set to ensure that a medical graduate, will:

- *demonstrate an ability to think critically, a proficiency in clinical reasoning, an insight into research and scientific method, a resourcefulness and creativity, and an ability to cope with uncertainty;*
- *possess an integrated core knowledge of biomedical, behavioural, population and clinical knowledge relevant to the understanding and management of problems and conditions encountered in the Foundation Programme F1 year;*
- *possess a range of generic (transferable) skills which are those expected of all*

university graduates;

- demonstrate competence in those core clinical, interpersonal, and practical/technical skills relevant to the commencement of the Foundation Programme F1 year and in line with the 'New Doctor'¹;
- demonstrate appropriate professional behaviours in relation to all aspects of clinical practice;
- demonstrate attitudes consistent with 'Duties of a Doctor'² as defined by the GMC in 'Good Medical Practice';
- broaden their academic, individual and professional perspectives through special study.

For those choosing to step aside from their mainstream studies to intercalate one year of study, additional objectives are set to ensure that graduates:

- gain an early introduction to basic research skills and method;
- develop understanding of the research process through the conduct of a research project of an original nature.

For those few, highly motivated and talented medical students admitted to the combined MBBS/PhD programme, the additional objectives of the doctoral period of study are the same as those for the conventional PhD.

Graduates will;

- demonstrate the creation and interpretation of new knowledge, through original research of a quality to satisfy peer review, extend the forefront of the subject, and merit publication;
- demonstrate a systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of their discipline;
- demonstrate a detailed understanding of applicable techniques for research and advanced academic enquiry;
- be able to make informed judgements on complex issues in specialist fields, and be able to communicate their ideas and conclusions effectively;
- be able to continue to undertake research and development at an advanced level;
- have the qualities and transferable skills necessary for exercising personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional environments.

11 Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

The learning outcomes for the MBBS programme are defined as a set of terminal learning outcomes which are classified into three domains :- Clinical and Communication Skills, Knowledge and Critical Thought, Professional Behaviour. It is expected that throughout the 5 years of the course that students will be 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:

A1. Demonstrate knowledge and understanding of:

- ⇒ Normal structure, and function of the major organ systems and how they interrelate
- ⇒ The different stages of the life cycle and how these affect normal structure and function
- ⇒ Behaviour and relationships between individuals and their family / partners, immediate social groups,

¹ 'The New Doctor', Recommendations on General Clinical Training, GMC

² 'Duties of a Doctor', a pack of booklets, including *Good Medical Practice*, published by the GMC

and society at large

- ⇒Molecular, biochemical and cellular mechanisms important in maintaining homeostasis
- ⇒Causes of disease and the ways in which diseases affect the body
- ⇒Disease aetiology and relationships with risk factors and disease prevention
- ⇒Alteration in structure and function of the body & its major organ systems
- ⇒Pharmacological principles of treatment using drugs & efficacy of therapeutic measures in management and symptomatic relief of diseases
- ⇒Principles of disease surveillance and screening, disease prevention, health promotion, and health needs assessment
- ⇒Principles of healthcare planning, prioritisation of service and communicable disease control, including basic concepts of health economics
- ⇒Epidemiological principles of demography and biological variability
- ⇒Educational principles through which learning takes place (for patients, students and colleagues)

A2. Be able to define public health problems at a population level or in clinical practice

- ⇒recognise the causes of disease & threats to health of individuals & populations at risk

A3. Be able to appreciate that health promotion & disease prevention depend on team- working and collaboration with other professionals & agencies

A4. Demonstrate knowledge of the appropriate use of drugs:

- ⇒for all ages and with awareness of underlying chronic diseases
- ⇒in prescribing, calculating dosages, & methods of delivery
- ⇒their interactions & adverse effects

A5. Be able to recognise opportunities for screening, disease prevention, health education, health promotion

A6. Demonstrate knowledge of the range of interventions and indications, for surgery, including the principles of pre-, peri- and post- operative care

A7. Demonstrate knowledge of the indications for the provision of range of interventions and therapies provided by other health care professionals

A8. Demonstrate knowledge of the range of more common clinical investigations and procedures and their appropriate use .

A9. In relation to acute & chronic care, demonstrate knowledge of the management of:

- ⇒conditions, not immediately life-threatening but requiring early treatment
- ⇒appreciation of impact of acute illness on chronic disease and the transition between acute and chronic conditions
- ⇒chronic diseases
- ⇒rehabilitation in recovery from major illness
- ⇒impairment & disability
- ⇒pharmacological, physical and psychological interventions in pain control
- ⇒care of the dying

A10. Demonstrate knowledge of the circumstances in which the commoner laboratory-based investigations are indicated, and procedures required to obtain the necessary material for investigation

A11. Demonstrate knowledge of the range of more common radiological investigations available and their appropriate use in different circumstances

A12. In relation to critical care, demonstrate knowledge of the management of:

- ⇒life threatening conditions due to trauma or disease
- ⇒intensive care, indications for intervention / monitoring
- ⇒implications for the patient & family

A13. Demonstrate an understanding of the basic ethical principles of autonomy, beneficence, non-maleficence and justice, and their application

A14. Demonstrate an understanding of legal responsibilities, with respect to:

- ⇒human rights
- ⇒drug prescribing
- ⇒physical and sexual abuse of children and adults
- ⇒death certification
- ⇒codes of conduct
- ⇒reporting of adverse medical care / standards involving other practitioners

A15. Demonstrate an understanding of the practice of medicine in a diverse, multicultural

society, by:

⇒ understanding the roots of prejudice, and how prejudice and discrimination may be challenged in respect of age, gender, sexual orientation, ethnicity, disability, and socio-economic status

A16. Be aware of the requirements to ensure patient safety

Teaching and Learning Methods

Teaching and Learning Strategy

Teaching and learning strategies have been developed which are primarily student-centred, and designed to enable achievement and demonstration of the learning outcomes. Students are expected to take responsibility for their learning from the earliest stages, while teachers guide, support and facilitate the process.

The overall approach can be best described as one of guided discovery. This is an approach in which students are actively involved in the exploration of knowledge and take responsibility for mastering the content needed for understanding themselves.

Key features include the provision of:

- A motivational context for learning based upon early clinical experience and application;
- A well-structured core knowledge base, focused upon integrated, multi-disciplinary units of study;
- Clearly articulated learning outcomes;
- A student-centred approach, which encourages the adoption of a problem-oriented, self-motivating learning style, and promotes active learning through self study;
- The opportunity for interaction and the exploration of knowledge and its clinical application in small groups;
- The opportunity for choice.

To ensure a problem-first, task-based focus to learning, a case-led approach is adopted. Within the framework of each course unit, each constituent theme is introduced by an index case or clinical presentation so that the learning issues may be identified to inform the subsequent teaching/learning process. The index cases reflect the range of core clinical presentations and problems which will be encountered by graduates. The index cases lead to the underlying key concepts and mechanisms, and it is mastering these that should be the aim rather than simply the clinical entity itself.

The development of skills, both generic and professional, is an integral part of the learning framework. Skills appropriate to the stage of development, are introduced sequentially in relation to other ongoing activity.

Acquisition and development of the required personal and professional attributes that underpin relationships with patients and colleagues, and professional standards and behaviour, are fostered through the 'Personal and Professional Development' strand of the curriculum, and the experiential clinical learning in Phase II.

The overall learning process is managed and supported through the use of detailed Study Guides, and the Portfolio and Logbook, which allows students to evidence and reflect upon their experience.

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.

Most students who enter Stage 1 of the five-year programme are in a transitional phase from earlier educational experiences, and benefit from a learning environment that has clear structure. Some teaching and learning methods are familiar to them at this stage, whereas others are not. Alternative, less familiar methods are introduced in a progressive manner as students gain experience and confidence. Through the five years of the programme, the teaching and learning strategies encourage and ultimately require the student to adopt increasing self reliance and independence in their study and learning. The learning and teaching strategy employed for Phase I of the Accelerated MBBS programme is matched to the maturity and prior experience of the students. 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:**

- *Large class plenary sessions (e.g. lectures, clinical demonstrations, case presentations) used, particularly in Phase I of the five-year programme, to present index cases, to establish a learning framework for the development of understanding, to explain complex concepts, and to provide early insight into the relationship between basic and clinical science and practice and in Stage 4 to present index cases, to activate prior knowledge and to provide opportunities for clarification;*
- *Small group tutorials and seminars - provide opportunities for interaction, discussion clarification in support of learning in selected areas;*
- *Small-group clinical teaching - for experiential learning in hospital and community care settings*
- *Guided self-study, supported by the provision of targets and direction in Study Guides, to expand knowledge and understanding through active and task-based learning.*

The following teaching and learning methods are used to enable students to achieve outcomes relating to **an understanding and acceptance of appropriate attitudinal, ethical and legal responsibilities:**

- *Video/role play/consultation skills training - to develop attitudes;*
- *Small group tutorials and seminars - to allow discussion and debate, e.g. ethics, medico-legal aspects;*

Assessment Strategy

Role and General Principles of Assessment

- The Medical School has an overriding duty to ensure that on graduation students are fit to practise in accordance with the professional standards set by the GMC for all doctors.
- Our system of assessment is designed to monitor acquisition and utilisation of core knowledge, explore your attitudes and certify achievement of competence in those skills required to meet the aims and objectives of the programme and necessary for the student's first experience of clinical practice as a Foundation Programme doctor.
- As assessment has a strong influence in directing learning, the structure content and process of assessments are designed also to reinforce desirable learning behaviour and encourage appropriate learning skills.
- The programme of assessment explicitly tests achievement of the defined learning outcomes, and progress from one Stage to the next through the five stages of the curriculum, and ultimately to the Foundation Programme, is dependent upon accomplishment of the required standard in each assessment strand. Both the core course and the student selected components are assessed. Detailed assessment requirements and criteria for attainment defined for each Stage are provided for to students in the Stage Handbooks.
- Throughout the programme an emphasis is placed upon progressive assessment rather than end-point examination. This progressive assessment process encourages and rewards transfer of learning from one unit of a Stage to the next, and/or from one Stage to the next. In addition, it provides students with individual feedback and a graded profile of their progress in each assessment strand. This feedback provides students with information about their development and allows them to gauge their particular strengths and weaknesses and alter their learning accordingly. It also allows them to seek academic guidance as and when required.
- A range of reliable and valid assessment methods is used, with the choice being tailored to the particular competency/outcome being tested. All 'unseen' examinations are marked anonymously.
- Assessments are both formative (i.e. assessment experiences which allow students to gauge their own progress, but which do not count towards progress) and summative (i.e. assessments which count cumulatively towards progress). In line with the overall design of the curriculum all assessments reflect the integrated and interdisciplinary nature of the programme.
- Merits and Distinctions recognise excellence in Stage Examinations, and MBBS with Honours outstanding performance throughout the course. The assessment process also identifies those students with difficulties and who are in need of support and remediation for whatever reason.
- Stage Examinations are scrutinised by External Examiners to ensure that the requisite standards are maintained.

Outcomes, Domains and Progressive Assessment

- In each stage of the programme students are assessed summatively in each of three separate domains of assessment. Each of these maps directly to one of the three essential elements of the competent and reflective practitioner used to derive the outcomes of the MBBS programme
 - Clinical and communication skills (Skills)
 - Knowledge and critical thought (Knowledge)
 - Professional behaviour (Professionalism)
- To progress from one Stage to the next students must satisfy the Examiners that they have reached a satisfactory standard in EACH assessment strand.

- Over each Stage students are summatively assessed on a number of occasions, using a variety of assessment instruments. On each occasion of Progress Assessment achievement of the outcomes defined for each strand is assessed, and performance for each is classified according to the student's attainment, within the range:
- **M** Merit
- **S** Satisfactory Pass
- **B** Borderline
- **U** Unsatisfactory
- The results of the progress tests in each of the domains are combined so that on completion of a Stage, candidates will be holding three separate overall grades, one for each of the three domains (Skills, Knowledge, Professionalism). The methods used for combining the individual Progress Assessment grades and for determining the final outcome vary between the five Stages of the five year curriculum and Phase I of the Accelerated MBBS programme. Details for each Stage/Phase are given in the appropriate Stage/Phase Handbook.

Assessment Instruments

- Different modes of assessment and different assessment instruments (question type) are used to assess competency, with the choice of question type/mode being matched carefully to the outcome being assessed.
- The following modes/instruments are used to assess medical knowledge:
- **Extended Matching Item Questions (EMI)**
- **Short Structured Questions (open response)**
- **Critical Appraisal Exercises**
- **Project Reports and other written assignments**
- These various instruments are used both individually, as part of continuous assessment (e.g. project work, structured assessor reports, Clinical Portfolio and Logbook), or in combination at episodic Progress Assessments (e.g. in semester progress assessments in Phase I, an 'examination' paper will include a range of different question types).

Intellectual Skills

On completing the programme students should be able to:

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

- ⇒ recognise, define and prioritise problems
- ⇒ analyse, interpret and prioritise information, recognising its limitations

B2. Make diagnosis

- ⇒ Describe the differential diagnosis of core conditions

B3. Demonstrate ability to think critically, by

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

B4. Demonstrate insight into research & scientific method, through the:

- ⇒ appreciation of quantitative and qualitative methodology
- ⇒ choosing and applying appropriate methodologies and statistical tests with some understanding of the underlying principles
- ⇒ recognising the relationship between evidence based medicine, audit and the observed variation in

clinical practice

B5. Exhibit creativity / resourcefulness, by:

- ⇒ demonstrating self-reliance, initiative and pragmatism
- ⇒ demonstrating preparedness to think outwith 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;
- Laboratory practicals – to develop skills in scientific method;
- Project work – working in small groups to collectively produce material for presentation in written and oral format;
- Written assignments, project work and Student-Selected Components - to promote individual investigative and exploratory study;
- 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

Assessment Strategy

For strategy see above.

- The following modes/instruments are used to assess ability to apply knowledge, solve problems, critically evaluate evidence and test clinical reasoning:
- [Data Interpretation Questions](#)
- [Problem Solving Questions](#)
- [Mini Cases](#)
- [Project Reports and other written assignments](#)
- [Poster and Oral Presentations](#)

These various instruments are used both individually, as part of continuous assessment (e.g. project work, structured assessor reports, Clinical Portfolio and Logbook), or in combination at episodic Progress Assessments (e.g. in semester progress assessments in Phase I, an 'examination' paper will include a range of different question types).

Practical Skills

On completing the programme students should be able to:

C1. Take a medical history, which:

- ⇒ is patient centred
- ⇒ is sensitive, structured & thorough in approach
- ⇒ recognises and takes account of the age and state of the patient, and a range of contexts including multicultural factors
- ⇒ recognises the need for skilled communication

C2. Undertake physical & mental state examination of patients, which is:

- ⇒ general & systems-based
- ⇒ appropriate for age, gender, culture and state
- ⇒ thorough, sensitive & systematic

C3. Integrate results of history, examination & common investigative tests, so as to facilitate diagnosis

C4. Make diagnosis

- ⇒By gathering and interpreting relevant clinical information
- ⇒By recognising the patterns of presentation of core conditions

C5. Record findings, such that records:

- ⇒are contemporaneous, legible, concise, dated, and signed
- ⇒include all relevant communications with patients / relatives and colleagues

C6. Measure & record a range of common clinical parameters

C7. Be able to perform a range of tasks commonly used in medical practice

C8. Follow general principles of patient investigation by:

- ⇒making evidence-based choice of relevant investigations, with awareness of limitations
- ⇒requesting relevant investigations according to national guidelines and local protocols
- ⇒obtaining informed consent
- ⇒preparing patients practically & with adequate information

C9. Be able to request, justify and interpret appropriate and relevant laboratory-based investigations according to national guidelines and local protocols

C10. Be able to order, package and label appropriate and relevant samples for laboratory based investigations

C11. Be able to write a prescription for a range of commonly prescribed drugs

C12. Be able to interpret a range of common x-rays.

C13. Follow general principles of patient management recognising:

- ⇒The patient's safety at all times
- ⇒effect on patient & concordance
- ⇒age and social circumstances when determining treatment
- ⇒requirements for informed consent
- ⇒need for team work
- ⇒need for appropriate referrals to right professionals

C14. Formulate management plans:

- ⇒which focus on patient's needs & involve patient in decision making
- ⇒prioritising treatments / interventions
- ⇒involving other health care professionals as appropriate
- ⇒recognising one's own limitations

C15. In relation to critical care, be able to demonstrate

- ⇒effective working in the emergency care team

C16. In relation to acute and chronic care be able to formulate a management plan for

- ⇒chronic diseases
- ⇒the dying patient
- ⇒pain control

C17. Be able to accurately write up a drug cardex for a newly admitted patient according to information supplied in the patients notes

C18. Be able to calculate drug dosages for individual patients and work out loading and delivery rates

C19. Be able to request and justify appropriate and relevant radiological investigations according to national guidelines and local protocols

C20. Demonstrate ability to prioritise the patient's care, including the management of tasks, events and time

C21. Follow general principles of good communication, including:

- ⇒active listening
- ⇒gathering and giving information with good record keeping and correspondence skills
- ⇒mediating, negotiating & dealing with complaints
- ⇒making oral presentations & writing reports
- ⇒safeguarding confidentiality
- ⇒recognising own limitations, extent of personal knowledge

C22. In communicating with patients / relatives, be able to:

- ⇒demonstrate empathy
- ⇒elicit patient's ideas, concerns & expectations
- ⇒achieve a shared understanding
- ⇒build and maintain a relationship

- ⇒ answer questions & give explanations
- ⇒ deal with challenging consultations
- ⇒ make requests
- ⇒ obtain informed consent for appropriate procedures

C23. In communicating with other health professionals, be able to:

- ⇒ transfer information (oral, written & electronic)
- ⇒ write a good referral letter
- ⇒ write good discharge summaries
- ⇒ refer patients appropriately

C24. In communicating with other agencies (e.g. police, coroner), and the media/press:

- ⇒ follow proper procedures without breaking rules of confidentiality
- ⇒ act as a patient's advocate when appropriate
- ⇒ write a death certificate
- ⇒ complete cremation forms

C25. Be able to communicate as a teacher and mentor

C26. In relation to patient records:

- ⇒ maintain high quality of recording (whether by writing or on computer)
- ⇒ write up patient notes in a legible and structured format
- ⇒ demonstrate an awareness of the different types of records and how they are stored and retrieved
- ⇒ maintain confidentiality
- ⇒ demonstrate awareness of legislation governing access to medical records and data

C27. In relation to health promotion be able to

- ⇒ assess the health, health care and health promotion needs of individual patients

C28. Be able to take appropriate action in communicable disease control according to national guidelines and local protocols

C29. Implement evidence-based risk reduction strategies for individual patients

- ⇒ Be able to recommend appropriate vaccination regimes for individuals

C30. Plan and implement, where appropriate, health promotion taking into account barriers to disease prevention and health promotion both in the individual & population

C31. Recognise and contribute to meeting patients' needs within the health care system

C32. Behave in such a way as to maintain patient safety at all times

C33. Demonstrate acceptance of the professional responsibilities and role of the doctor, through:

- ⇒ commitment to the '*Duties of a Doctor*' as defined by the General Medical Council and local codes including clinical governance
- ⇒ participation in clinical governance and valuing professional self-reflection
- ⇒ valuing the role and opinions of other health care professionals and ability to benefit from, and contribute to, the multi-professional team
- ⇒ appreciating the value of, and opportunities for medical research and its role in career progression
- ⇒ participation in teaching and mentoring students, colleagues and other health care professionals
- ⇒ fostering a culture of life-long learning in the health service
- ⇒ appreciating the role of the doctor as manager both in one's own practice and in the health care system
- ⇒ appreciating the medical profession as a voice in society and an agent of change

C34. Demonstrate the acquisition of appropriate professional attitudes, by

- ⇒ accepting the duties of a doctor and codes of professional practice
- ⇒ maintaining confidentiality, truthfulness and integrity
- ⇒ behaving at all times in an ethical manner
- ⇒ establishing trust and showing respect in the doctor / patient relationship
- ⇒ demonstrating an empathic and holistic approach to patients
- ⇒ valuing and preserving patient autonomy and involving patients in decisions affecting them
- ⇒ respecting colleagues, other health care professionals and regulatory bodies
- ⇒ dealing effectively with complaints
- ⇒ appreciating financial and other constraints affecting the NHS and their impact on delivery of care
- ⇒ recognising the importance of contributing to the advancement of medicine

C35 Behave within an appropriate legal framework with respect to:

- ⇒ human rights

- ⇒ drug prescribing
- ⇒ physical and sexual abuse of children and adults
- ⇒ death certification
- ⇒ codes of conduct
- ⇒ reporting of adverse medical care / standards involving other practitioners

Teaching and Learning Methods

Clinical and Communication Skills

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:

- *Laboratory practicals - to develop observational, manual proficiency and practical procedures*
- *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*
- *Project work – involving working as a team, defining and solving problems*

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*
- *Project work – working in small groups to collectively produce material for presentation in written and oral format*

The following teaching and learning methods are used to enable students to achieve outcomes relating to **professional 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;*
- *Written assignments, project work and Student-Selected Components - to provide acquisition of many opportunities for self expression and choice, and serve to foster the of the attitudinal objectives*

Clinical attachments from the early contextual visits to hospitals and general practices in Phase I through to the Essential Senior Rotations of Stage 5, to 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 strategy see above

- The following modes/instruments are used to assess skills and clinical and professional competency:
 - Multi-station Objective Structured Clinical Examinations (OSCE)
 - Multiple Observed Structured Long Examination Records (MOSLER)
 - Structured Assessor Reports (from supervisors and other members of the clinical team)
- The following are used to assess professional behaviour and development:
 - OSCE
 - Structured Assessor Reports
 - Participation in Evaluation/Audit/Appraisal activities
 - Compliance with Learning Agreement
 - Clinical Portfolio and Logbooks

These various instruments are used both individually, as part of continuous assessment (e.g. project work, structured assessor reports, Clinical Portfolio and Logbook), or in combination at episodic Progress Assessments (e.g. in semester progress assessments in Phase I, an 'examination' paper will include a range of different question types).

Transferable/Key Skills

On completing the programme students should be able to:

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

- ⇒ library and other information systems to access data
- ⇒ information from primary sources to inform evidence-based practice
- ⇒ use information from secondary sources (e.g. professional guidelines)

D2. . Demonstrate C&IT skills, including use of:

- ⇒ E-mail
- ⇒ word-processing
- ⇒ on-line databases
- ⇒ spreadsheets & statistical packages
- ⇒ search engines and decision support tools

D3. Maintain records for personal & professional development

D4. Conduct oneself as a reflective and accountable practitioner

D5. Manage ones own learning

D6. Manage one's own self-care, by:

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

D7. Identify the value of career planning and be able to set realistic short and long-term goals

D8. Accept a commitment to medicine through adherence to the codes of conduct and behaviour expected of a member of the profession

D9. Recognise key personal motivating factors and their importance in sustaining a high level of commitment

D10. Participate fully in the life of the professional community

D11. Demonstrate an understanding of the practice of medicine in a diverse, multicultural society, by:

- ⇒ valuing diversity
- ⇒ showing respect for differing personalities, lifestyles and cultures, in patients and colleagues and in health and illness

D12. Demonstrate the ability to cope with uncertainty, by:

- ⇒ appreciating that uncertainty exists and using cognitive and intellectual strategies when dealing with uncertainty
- ⇒ making decisions in partnership with colleagues and patients, recognising one's own level of responsibility and capability

Teaching and Learning Methods

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

- *Laboratory practicals - to develop data handling and interpretative skills*
- *Supervised training sessions - to develop information skills and proficiency in the use of information technology (C&IT);*
- *Laboratory practicals - to develop data handling and interpretative skills*
- *Project work – working in small groups to collectively produce material for presentation in written and oral format*

Assessment Strategy

Strategy see above.

- The following are used to assess professional behaviour and development:
- [OSCE](#)
- [Structured Assessor Reports](#)
- [Participation in Evaluation/Audit/Appraisal activities](#)
- [Compliance with Learning Agreement](#)
- [Clinical Portfolio and Logbooks](#)

These various instruments are used both individually, as part of continuous assessment (e.g. project work, structured assessor reports, Clinical Portfolio and Logbook), or in combination at episodic Progress Assessments (e.g. in semester progress assessments in Phase I, an 'examination' paper will include a range of different question types).

12 Programme Curriculum, Structure and Features**Basic structure of the programme****General Design of the Curriculum**

The curriculum is designed to provide students with a general medical education, suitable for all types of doctor, and to serve as the foundation for later career specialisation.

Broadly Phase I, whether studied as part of the five-year programme or as part of the four-year accelerated programme, deals with normal and abnormal structure, function and behaviour, and Phase II with clinical practice. An integrated system and topic based approach is taken with the emphasis changing in each stage as students progress through the curriculum. Students study each system/topic in Phase I and again in Phase II.

The content of the programme is organised to provide a core course, encompassing the basic knowledge, understanding, personal attributes and skills needed at the start of the Foundation Programme, and Student-Selected Components which augments the core and allows students to study in depth topics of their own choosing.

In relation to the core MBBS programme, a fully integrated approach is adopted from the outset. Each unit of study offered relates to a system of the body or topic of relevance. In order to emphasise integration and build interrelationships between the disciplines within a Stage, each unit/rotation is delivered by an interdisciplinary teaching team. All teaching is

based around a series of core cases which allow learning about basic clinical sciences to be contextualised in a clinical scenario.

The various units and rotations relating to each system/topic area of the curriculum are consolidated into eight subject strands, which run throughout the course ensuring vertical continuity between the Stages. As a student progresses from one Stage to the next, new information and skills are introduced that link back to the information and skills they acquired at the previous stage. Annual Quality Management meetings ensure that teachers in the various Phases of each strand of the curriculum get the opportunity to meet and discuss vertical integration.

The eight Subject Strands comprise:

- *Personal & Professional Development*
- *Medicine in the Community*
- *Clinical Sciences & Investigative Medicine*
- *Nutrition, Metabolism & Endocrinology*
- *Cardiovascular, Respiratory & Renal Medicine*
- *Thought, Senses & Movement*
- *Life Cycle*
- *Student Selected Choice*

Core content is organized into cases/rotations, and mapped onto each of seven core Subject Strands over the 5-years of the programme. Student Selected Components (SSCs) are mapped onto the eighth Subject Strand, Student Selected Choice.

Overview of the MBBS programme

Phase I of the programme establishes the essential knowledge base for medicine in a clinical context, and Phase II (3 years) provides clinical experience in a wide range of hospital and community settings across the region.

Phase I experience stresses the integrated nature of medical training and places early emphasis on the clinical aspects of the programme. In Phase I of the Accelerated MBBS Programme, the 'long' Foundation Year, provides an experience separate, but equivalent to Phase I of the standard five year programme. Learning outcomes are shared in common, but the organisation of the curriculum is distinct.

During Stage 1 of the five-year programme students receive the preparatory introduction to student selected components (SSCs), and in Stage 2 students will undertake the first SSC proper (SSC1). Given the prior experience of students taking the four-year programme this element is omitted from the Accelerated programme.

In Phase II, students will be allocated to one of four regional Clinical Base Units for Stage 3 clinical experience. At the beginning of Stage 3 those students who studied Phase I at the Queen's Campus, Stockton will have been integrated with peers from Newcastle within a Base Unit.

The Stage 3 Base Unit attachment starts with a comprehensive 15-week clinical practice introduction in which students learn the key clinical skills of history taking and examination, and gain early experience in medicine and surgery in both hospital and general practice settings.

The Foundations of Clinical Practice course is followed by a series of Essential Junior Rotations in Child Health, Women's and Reproductive health, Mental Health, Public Health, Infectious Diseases, Chronic Disease and Rehabilitation and Primary care. These attachments emphasise the importance of hospital, primary care and community medicine,

and address the overall theme of Health & Disease; students gain relevant experience by rotating through the various hospitals, practices and community facilities associated with their Stage 3 Base Unit.

Following the Stage 3 Base Unit Attachment, which finishes at the end of the third year, Stage 4 begins with a 12-week course in Clinical Sciences and Investigative Medicine (CSIM3) which is delivered at the Medical School.

Stage 4 continues in January of the fourth year with 21 weeks spent studying full-time, a series of student selected components (SSC2). These SSCs are arranged in three six-week blocks (plus three weeks of assessment), with topics being chosen from a wide range of over 300 clinical and non-clinical titles. SSC2 is followed by an eight-week period of elective study. This elective period provides each student with the opportunity to study any aspect of medicine almost anywhere in the world.

For the Final Year (Stage 5) of the curriculum, students are again allocated to a Base Unit to undertake whole-time work in clinical and community settings. The final year begins with an induction programme introducing concepts of patient safety and prescribing and during which students are taught to teach. This is followed by four three week Senior rotations in Child Health, Women's Health, Mental Health and Primary Care. There is then a three week course entitled Preparing for Practice containing elements of advanced communication, ethics, patient safety and governance. Students then undergo a 16 week period of Hospital Based Practice which focuses on acute management in Medicine and Surgery and prepares students for their role as F1 doctors.

Following the final examination at the end of Stage 5, graduates undertake a 2-week preparatory course to ease the transition from final year student to Foundation Programme Doctor. This course allows graduates to 'shadow' the F1 doctor whom they will be relieving.

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

Regional basis

The delivery of the MBBS curriculum depends on a partnership between the university and the NHS. In order to provide sufficient clinical placements for the numbers of students we currently have on the course we need to use teaching hospitals across the whole of the Northern region. One of the strengths of the course has been the ability to deliver an equivalent student experience across a geographically dispersed region. This has in large been due to the 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. The Sub-Deans meet almost weekly during term and ensure coordination of the student experience across the region.

School of Medical Education Development

The MBBS course has strong links with the School of Medical Education Development and has benefited from their educational and technological expertise in the development of e-portfolios and the development of the Learning Support Environment (LSE) a specifically designed VLE which allows students to access a wide range of teaching and support materials from wherever they are located. This has facilitated the regional basis of the medical school and has allowed us to maintain equity of experience for all our students. We have also developed our own student record system – MEDSAS – which 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.

Intercalation opportunities

The fundamental aim of basic medical education is to produce graduates who have a sound and broadly based knowledge of the principles and practice of medicine. Opportunities for gaining research experience are necessarily limited in the mainstream programme. However, it is essential for the future scientific and clinical development of the profession that it can draw on a pool of clinically qualified graduates also trained in research.

It is the practice of this Medical School to encourage some highly motivated and able medical students to step aside from their mainstream undergraduate studies to intercalate one year of additional study.

Opportunities for intercalation exist at two stages in the MBBS programme.

Following successful completion of Stage 2 (at the first attempt) if a student wishes to pursue study in depth they will be able to elect to intercalate the final year of one of the following science honours degrees available in the Faculty

Following successful completion of Stage 4 (at the first attempt) students who wish to pursue study in depth will be able to elect to intercalate a programme from the postgraduate taught or research programmes available in the Faculty.

MBBS/PhD Degree

This combined degree programme is offered to one or two students undertaking the intercalated MPhil programme following completion of Stage 4 MBBS. The aims of the programme are to foster talented undergraduates who are motivated to a future in medical research and who will ultimately be among the key clinical academics of the future.

Candidates for entry to the programme are expected to have demonstrated particular aptitude in the MPhil. Transfer to the MBBS/PhD programme is based upon a rigorous assessment of the applicant's progress to date, including a full curriculum vitae with a personal statement and the student's outline of proposed research with their own aims and objectives.

On entry to the programme, students commence a three year period research and are expected to submit a doctoral thesis before resuming the mainstream medical course.

Following submission of the thesis, students commence the final year and follow the full Stage 5 MBBS programme.

Programme regulations (link to on-line version)

<http://www.ncl.ac.uk/regulations/programme/2007-2008/programme/a106.php>

13 Criteria for admission

Entry qualifications

A Levels

AAA including Chemistry or Biology at A or AS level, and excluding General Studies and Critical Thinking. If only one of Biology and Chemistry is offered at A/AS level, the other should be offered at GCSE grade A (or Dual Award Science grade A). Minimum of five passes at GCSE required at grade C or above.

Scottish Qualifications

AAAAA at Higher Grade including Chemistry and/or Biology. Minimum of five passes at grade 2 Standard Grade (or Intermediate 2 equivalent) required.

International Baccalaureate

38 points including a minimum of grade 5 in all subjects, with Higher Level grade 6 in Chemistry or Biology. Combinations including two science subjects, Mathematics and English are desirable.

Irish Leaving Certificate

AAAAAA at Higher Level, including Chemistry and Biology and excluding Irish. Physics and English Language required at Ordinary Level, if not offered at Higher Level.

Access Qualifications

For applicants offering Access to HE courses, modules in Biological Sciences and Chemistry and Quantitative Methods are essential (at Distinction grade for HEFC). For applicants offering Access to Medicine courses, Distinctions in all units/modules are required.

BTEC Higher National Diploma

BTEC Higher National Diploma in a science-related subject with Distinction grades in all subjects.

Admissions policy/selection tools

MBBS Admissions Policy – 2008 Entry

Introduction

The admissions process is supervised by the Senior Tutor for MBBS Admissions, acting on behalf of the Dean of Undergraduate Studies. The Admissions Policy is intended to ensure that the process of student selection is free from discrimination of any kind. It is based on guidelines from the Medical Schools Council produced in consultation with the Commission for Racial Equality. In considering all applicants, the Medical School will take into account the General Medical Council's guidelines on [Fitness to Practise](#).

The admissions policy is reviewed annually by the MBBS Recruitment and Admissions Executive Committee (a joint committee of the Universities of Newcastle and of Durham). Since the policy is made freely available, via the World Wide Web and other sources, and in order to ensure that all applications are dealt with on the same basis, changes are not made part-way through the admissions cycle.

As a member of the UKCAT consortium Newcastle University and Durham University requires UKCAT scores as part of the entry requirements for medicine. (See section 11 for further information)

The Executive Committee takes a strategic overview of the admissions policy and ensures that the policy is applied consistently to medical admissions to both Newcastle University and Durham University, [Queen's Campus](#), Stockton.

Equal Opportunities Statement

The Universities aim to ensure equality of opportunity for applicants and for all their students in teaching, learning and assessment, and in the provision of services. The Universities aim to create conditions whereby students are treated solely on the basis of their academic achievement, ability and potential, regardless of age, religion or belief, ethnicity, gender, marital or family status, sexual orientation, or disability. However, selection for a medical degree course implies selection for the medical profession and all applicants must have the potential to fulfil the duties of a doctor as stated by the GMC in their document '[Good Medical Practice](#)'.

Admissions Selectors are drawn from a wide pool representative of gender and ethnicity and including individuals from both a healthcare and lay background. All selectors and staff involved in the selection exercise are aware of their responsibility to implement the Universities' policies on equal opportunities and have participated in training sessions covering equal opportunities. Any selector who is found to be in breach of the Admissions Policy will be required to stand down from office.

As part of our policy review, admission statistics on ethnic origin, and gender and socio-economic background are regularly monitored.

Additional factors that will not determine the assessment of the UCAS application for medicine are:

being from a medical family, or being related to a member of the Alumni or staff of either University or the Health Service

inclusion of choices other than medicine in the UCAS form.

type of school or college attended

political belief

Disability

The Universities are committed to the principle of equal treatment of disabled persons and the proper application of the Disability Discrimination Act. Thus, an applicant who is judged academically suitable will, subject to the provisions of the Act, be neither treated less

favourably nor placed at a substantial disadvantage on the grounds of disability unless this can be justified within the provisions of the Disability Discrimination Act. It is important for applicants to contact the Medical School and/or Disability Support Unit to discuss the course requirements, and any concerns they may have. For all applicants/students issues of [fitness to practise](#) are taken into account at admission and throughout the degree programme. Applicants should be aware that such requirements change from time to time in line with evolving good practise and prevailing legislation.

Selectors assess individuals on their personal and academic merits without reference to any declared disability.

Any applicant who (a) meets the academic requirements, (b) is called for interview, and (c) has declared a disability on the UCAS application form, may be contacted by the University's Disability Support Service where the applicant can discuss his/her support requirements, and in certain circumstances be invited for an information visit to ascertain if there are any access issues. On receiving an offer to study at Newcastle University Medical School applicants will be automatically contacted by the University's Disability Support Service to discuss support requirements. Applications from disabled people are welcomed and applicants are encouraged to disclose their disabilities, of whatever nature, on their application.

Health Requirements for Admissions and Continuing Practice

The Medical School has an overriding duty of care to the public with whom students come into close contact. Consequently, all successful applicants must produce satisfactory evidence of immunisation against Hepatitis B (or evidence of non-infectivity) in order to be registered as a medical student, as well as evidence of immunisation or immunity against Polio, TB, Rubella, Tetanus, Diphtheria, Varicella. Also, those applicants who are Hepatitis C virus positive or HIV positive must declare their status on their UCAS application forms. All applicants who take up an offer from Newcastle University are required to complete a NHS Occupational Health questionnaire. From this Occupational Health will assess their immunisation status and may take any relevant intervention. Students will be required to fulfil any stipulated requirements identified from this assessment.

Occupational Health

In certain circumstances, it may also be necessary for applicants to undergo an Occupational Health Assessment with an NHS Occupational Health Consultant in the Newcastle Hospitals Trust before we are able to confirm their offer of a place. This assessment is designed to help us ensure that applicants are not only able to undertake the rigours of the MBBS programme, especially with respect to working with patients in the clinical setting, and meet its outcomes in line with the statutory requirements of the General Medical Council, but to also ensure that we provide any reasonable support necessary.

Criminal Records Bureau Disclosure

The Medical School requires that their new medical students undergo a Criminal Records Bureau ([CRB](#)) Enhanced disclosure check. This type of disclosure is designed to check the background of individuals who will have a high degree of contact with children or vulnerable adults. Applicants who decide to firmly accept an offer of a place will be requested to initiate the process to obtain an Enhanced disclosure. We reserve the right to withdraw an offer if an applicant does not declare an unspent conviction on their UCAS application, unspent as described by UCAS in document 'How to Apply'. We reserve the right to discontinue your studies on receipt of an unsatisfactory disclosure.

Providing False or Misleading Information

Applicants suspected of providing, or found to have provided, false information shall be referred to UCAS if their application was originally submitted through that service. The University reserves the right to cancel an application and withdraw any offer if it is found that the application contains false or misleading information.

Description of Programmes and Application

A101 [Accelerated programme](#): available only at the University of Newcastle and open only

to graduates or practising health care professionals with post-registration qualifications.(further information in section 10 (e)) Only 'home/EU' students are eligible to apply. Home status will need to be established before an application can proceed. If an applicant's fees status is determined to be 'International', the application will not be processed. Valid UKCAT scores are required.

A106 [Five-year programme:](#) available as either a full five-year programme at the Newcastle University or a programme which commences with the first two (pre-clinical) years at the Durham University, Queen's Campus Stockton before three years as a student at Newcastle University. Available to both 'home/EU' and 'International' students at Newcastle and Durham, Queen's Campus, Stockton. Valid UKCAT scores are required.

Internal Transfers: as part of widening participation practice

Newcastle BSc students to Stage 1 of the five-year programme: available only to those students registered on Stage 1 of one of the Bioscience or Bio Molecular degree programmes at Newcastle University. There are a small number of places available and students wishing to apply must be in good academic standing and are required to achieve a minimum average Stage 1 mark of 75%. All students to be considered will be interviewed. Valid UKCAT scores will be required.

Durham, Queen's Campus Medical Foundation Programme Queens Campus, Stockton accept a small number of students from their medical foundation programme.

Dental Graduates [Stage 3 entry:](#) We no longer accept applications via this route of entry. We welcome applications to the A101 or A106 programmes. Applicants must have valid UKCAT scores.

All applicants should read carefully the full description of the [Phase II](#) programme of clinical training. During Phase II, clinical teaching takes place in NHS facilities throughout the North East, and students may be required to spend prolonged periods at sites distant from either of the two University campuses.

It is usual for candidates applying for the standard five-year programme (A106) to make a single application, and in this circumstance they must indicate, in the 'Campus Code' section of their UCAS application, their campus preference as follows:

D - entry through the Durham University, Queen's Campus Stockton

N – entry through the Newcastle University

E - no preference (leaving the decision to be made by the Medical School)

A minority of candidates may choose to make multiple applications, e.g. to A101 at Newcastle, and/or to A106 at either/both Newcastle and Durham, Queen's Campus, Stockton. Such candidates should be aware that each will be considered as a separate choice of the four allowed for medicine. Selectors will consider candidates independently for each course to which they have applied. Therefore, an application made to one entry route will not be considered or diverted to another.

The Admissions Process

Applications are received from UCAS in the period from early September to 15th October. Entry to medicine is highly competitive. For example, by the 15th October 2006 deadline, approximately 3000 applications were received for 352 places.

All applications will be acknowledged on receipt by the Medical School. Candidates should note that there can be a three-week delay between submitting an application to UCAS and the form being received by the Medical School. We do not normally consider applications which have been submitted to UCAS after the 15 October deadline.

The selection process involves three stages: a) shortlisting; b) selective interview of shortlisted candidates; and c) making offers. The following are the processes used at Newcastle University.

These may differ slightly to those used at Durham University, Queen's Campus, Stockton and further information can be found at Durham University, [Queen's Campus website](#).

a) Shortlisting

Applications are assessed initially to check the acceptability of qualifications. Subjects should include Chemistry or Biology at A or AS level. If only one of Biology and Chemistry is offered at A or AS level, the other should be offered at GCSE grade A (or Dual Award Science grade A). Candidates are also required to have a minimum of five GCSE passes at grade C or above. We do not accept General Studies or Critical Thinking as an A level entry qualification. AS level is equivalent to half an A level; however, where three A levels are offered, AS levels will not form part of the threshold score. Applications fulfilling the academic threshold will be passed to the next stage, those failing to achieve this threshold are not normally considered further unless they are participating in the PARTNERS programme (see below).

Applicants offering qualifications other than A levels (e.g. Scottish Highers, International Baccalaureate, Access etc.) should refer to the Section on 'Particular Groups' below. Potential applicants offering qualifications not mentioned in the 'Particular Groups' below are advised to contact the medical school for clarification on whether their qualifications are acceptable.

Note: We would normally expect applicants to have achieved their A levels on their first attempt, those who wish results to be considered must provide information on the extenuating circumstances they wish to be considered. Supporting evidence must be provided from your school or GP.

We do not normally consider applications from candidates who have previously commenced a medical degree at another institution.

Please Note: Once the academic screening criteria have been met academic achievement is not considered further in subsequent parts of the application process.

In relation to the standard 5-year programme (A106) and the 4 year programme (A101), applications fulfilling the academic threshold will then be assessed on their UKCAT scores, these scores will be used to determine in which of the following categories an applicant is placed.

- to interview
- unsuccessful

b) Interview

The purpose of the interview is to confirm whether the candidate has the aptitude, motivation and personal qualities to succeed as a medical student in Newcastle or at Durham University, Queen's Campus Stockton, and as a doctor of the future.

Interviews will be held between mid-November and early-March at Newcastle University, and between mid-November and mid-March at Durham University, Queen's Campus, Stockton.

We do not admit to the 5-year (A106) or the 4-year Accelerated programme (A101) without interviewing applicants. Applications that do not meet our criteria at this stage will be rejected without interview.

The interview will be conducted by two Selectors. At the conclusion of the interview each selector will grade the candidate's performance and complete an assessment form. These grades are used as the basis for the decision making process for actual offers. Selectors will not convey their recommendations to the candidates at the time of the interview or at any time thereafter.

Given the number of applications received we will normally endeavour to arrange interviews whilst taking applicant requests on limited availability into consideration but this cannot be guaranteed.

At interview applicants to the standard 5 year programme (A106) will be assessed and graded for 'evidence of commitment to caring for others', 'team working with leadership skills', 'non-academic personal interests', and 'insight into medicine as a career with an understanding of the NHS'.

In relation to the 4-year Graduate entry programme (A101), applicants identified for interview are assessed and graded as for the 5-year programme but in addition, also look for 'evidence of an aptitude for intensive self-directed study'.

At interview your personal statement, reference and your contribution at interview are the sources from which the above information is derived. In making their judgement, Selectors will expect applicants to show evidence of insight into their personal attributes, the learning that has resulted from their experiences, and an understanding of the relevance of these factors to a career in medicine. Selectors are looking for applicants to show evidence of:

- commitment, and insight into a career in medicine
- empathy with reflection, i.e. insight and personal attributes that have been acquired as a result of experience gained, in showing concern in the welfare for others
- breadth and quality of experience in extra-curricular interests, e.g. sports, hobbies, music, and personal endeavour, again to include an element of reflection

Due consideration will be given to candidates who have overcome significant disadvantages, for example acting as the principal 'carer' for a parent with ill health while coping with school work at the same time.

Making Offers

Candidates who have been unsuccessful at the shortlisting stage, will normally be informed by the mid February

Those candidates recommended for offer following interview are ranked in accordance with their performance. The final ranking of a candidate at interview will determine whether or not they receive an offer. Offers will be made to candidates in order of merit. To ensure equity, offers will be made in writing by the Administrator (MBBS), following interview, once all interviews have been completed. The official offer will be sent via the UCAS system. All offers will normally be made in March.

For A Level candidates, offers will normally be conditional on achievement of AAA. Offers to candidates with Scottish Highers will be conditional on AAAAA.

For graduate candidates, offers will normally be conditional on achievement of at least a 2(i).

Note: All results must be confirmed and received by August to coincide with the release of the 'A' level results. Those applicants who hold an offer and are appealing an A level grade must inform the University as soon as possible to obtain information on the timescales relating to their offer.

Particular Groups

International applicants

There is a fixed HEFCE quota of 26 places for International students (i.e. non-home/EU applicants) each year. Applications falling into this category will be processed and assessed separately but by the same method as outlined above. Newcastle University will normally admit 19 and Durham University, Queens Campus, Stockton will normally admit 7.

All applicants required to provide an English Language qualification must have achieved/achieve a minimum score of 7 in each domain of the IELTS or equivalent qualification.

(see Newcastle University web site <http://www.ncl.ac.uk/langcen/els/elp/intro.htm> for further information)

All applicants must have taken the UKCAT, see section 11

Graduate applicants to the 4-year Accelerated Programme (A101)

Graduate applications will follow the processes as detailed in section 8. Offers will be conditional on a 2(i) or first class honours degree. A level and GCSE results for graduate applicants will have no direct bearing on the decision to interview or offer a place to such a candidate, but evidence of recent and relevant academic endeavour, obtained within the last three years, should be provided. Such as: postgraduate 'A' levels, GAMSAT, OU, or an Access or Foundation Programme.

Health care professional applicants to the 4-year Accelerated Programme (A101)

Offers may be made to candidates who have relevant experience which includes a substantial amount of contact with patients gained as a health care professional within the NHS or similar body, (e.g. RGN, RMN, Physiotherapist), with a qualification recognised by a statutory body. Such candidates will not be required to meet the standard A level and GCSE requirement due to their professional experience but evidence of recent and relevant academic endeavour should be provided. In the absence of recent academic endeavour, applicants will be expected to offer qualifications such as 'A' levels, GAMSAT, OU, or an Access or Foundation Programme obtained within the last three years.

Please note: those candidates who are unsure whether they would be considered a health care professional should contact the university.

All applicants must have taken the UKCAT, see below

Applicants through the PARTNERS Programme

Eligible applicants to the standard five-year course (A106) will be considered through the Newcastle University [PARTNERS](http://www.ncl.ac.uk/partners/) Programme which operates in partnership with schools and colleges within the North East and Cumbria region. Applicants wishing to be considered through this route must check that their school or college participates in this programme. The applicant must ensure they meet the PARTNERS eligibility criteria before they apply to the A106 programme. For further information, please visit the website at <http://www.ncl.ac.uk/partners/> or email: PARTNERS@ncl.ac.uk. PARTNERS wishing to apply for a deferred entry must complete the Summer School within the Admission Cycle they originally applied.

All applicants must have taken the UKCAT, see below

Deferred Entry

We will consider applications from candidates who wish to defer entry by one year provided they use their time constructively.

Transfers

Due to the integrated nature of our medical degree programme, we do not normally consider students wishing to transfer from another medical school. Such students would be expected to apply to Stage 1 entry, via UCAS, provided they have not previously been considered and declined by us.

Late Applications and Clearing/UCAS Extra

Late applications are not normally considered. Clearing/UCAS Extra applicants will be considered by the Administrator (MBBS) and the Senior Tutor for MBBS Admissions should vacancies arise late in the admissions cycle. These applicants will be interviewed.

Extenuating Circumstances

Applicants with extenuating circumstances will be considered by the Senior Tutor for MBBS Admissions on an individual basis. All correspondence will be treated confidentially and applicants are encouraged to inform us of extenuating circumstances as prior knowledge ensures the correct level of support and advice.

Feedback

Feedback will be given to unsuccessful applicants upon written request, an e-mail request will not be sufficient. Applicants should note, however, that this cannot be provided until after March at the earliest. The Newcastle University and Durham University, Queen's Campus,

Stockton will not enter into discussions relating to the academic judgement underlying the scoring at interview.

Please note: In accordance with the Data Protection Act 1998 such feedback can only be given to the applicant. Specific feedback can only be provided to a third party when written consent has been provided by the applicant to the university.

Age

We do not impose an upper or lower age limit

Immigration Rules for Postgraduate Doctors

International students will be covered by the existing ('permit free') arrangements if appointed to a 2 year Foundation Programme after they have successfully completed their medical degree in the UK. For information on requirements after this time visit http://www.gmc-uk.org/doctors/work_permits/index.asp website for Doctors interested in working in the UK.

Appeals and Complaints

Applicants who feel they have grounds to Complain/Appeal about the administration of the MBBS Admissions Policy may obtain a copy of the Undergraduate Admissions Complaints and Appeals Procedure by contacting

Telephone: 0191 2225594

e-mail: enquiries@ncl.ac.uk

Non-standard Entry Requirements

Non-standard applications to the 5-year course (A106)

Applications to the standard five-year course (A106) from candidates who have followed an approved Access to Medicine will be considered. Applicants must achieve distinctions in each unit of study. Applicants who have followed an approved Access to Higher Education course (HEFC) will also be considered in which case modules in Biological Sciences, Chemistry and Quantitative Methods are essential at Distinction level.

For applicants offering Scottish Highers, the requirement is AAAAA at Higher Grade including Chemistry and/or Biology. Five passes at Standard Grade 3 or above (or Intermediate 2) are required.

For applicants offering International Baccalaureate qualifications, a minimum of 38 points. Applicants must have achieved grade 5 or above in all subjects, with grade 6 in Chemistry or Biology is required. A combination including 2 Sciences and Mathematics at Higher Level, and three other subjects including English are desirable but not essential.

For applicants offering the Irish Leaving Certificate, the requirement is AAAAAA at Higher Level, excluding Irish. Subjects at Higher Level should include Chemistry and Biology, along with Physics and English Language to at least Ordinary Level.

Additional Requirements

All applicants will be required to complete the UKCAT aptitude test. More information is available at www.UKCAT.ac.uk Those applicants with extenuating circumstances, who arrange to sit the extended test (UKCATSEN), will be required to provide the university with the relevant evidence to support their extenuating circumstances.

WARNING – The UKCAT results are only valid for the cycle in which you applied through the UCAS system therefore if you are reapplying you will need to resit the UKCAT. All applicants should register and book a UKCAT test as early as possible as applications will not be considered without the test. (Excluding exempt countries or applicants who hold an exemption from the UKCAT Administrator)

Level of English Language capability

All applicants required to provide an English Language qualification must have achieved/achieve a minimum score of 7 in each domain (IELTS) or equivalent qualification.

(see Newcastle University web site <http://www.ncl.ac.uk/langcen/els/elp/intro.htm> for further information)

14 Support for Student Learning

Induction

The five year programme commences in Stage 1 with a 3-week introductory unit: 'Molecules to Community'. During this first unit of the course students are introduced to the MBBS programme as a whole, details of Stage 1, introductions to C&IT, library and clinical skills resources, principles of 'Duties of a Doctor', personal welfare, tutorial and support services, and basic study skills. Similar sessions are provided within the first two weeks of the Accelerated MBBS Programme

Further orientation is given at key points, such as the beginning of each new Stage and at the transition between medical school and the Foundation Programme.

The International Office offers an additional induction programme for overseas students (see http://www.ncl.ac.uk/international/coming_to_newcastle/orientation.phtml)

Study skills support

In addition to the guidance received from personal tutors, all students receive a copy of the Study Skills Handbook, and sessions on the self-management of learning are included within Phase I of the Personal and Professional Development strand.

Furthermore, the Faculty of Medical Science's Study Skills Advisor is available to provide individual help and guidance. Students may make a request to a Curriculum Officer for a referral to see the Advisor at any time, if they think that they would benefit from professional advice.

Numeracy support is available through Maths Aid. Further details are available at:

http://www.ncl.ac.uk/library/news_details.php?news_id=159

Help with academic writing is available from the Writing Centre.

The Writing Development Centre is a new student support service based in the Learning Zone, King's Road Centre. The Centre offers advice, guidance and tuition for students who wish to improve their writing skills for study or employment purposes. If you have problems planning and structuring assignments, using reading sources in your writing without plagiarism, writing CVs and cover letters or simply using grammar and punctuation accurately, please visit the Centre to book an appointment. A drop-in service is also available. A timetable will be displayed outside the Centre in the Learning Zone.

Alicia.Cresswell@ncl.ac.uk

Academic support

General information on the aims, objectives, learning outcomes, organisation and content of the curriculum set out in this handbook is supplemented by the detailed guidance contained in the Stage/Phase Handbooks.

Study Guides and/or Logbooks are provided for each course unit and rotation. These indicate what should be learned, how it can be learned, and how students can recognise if they have achieved the desired goals. Study Guides and/or Logbooks provide learning outcomes, details of the programme of study, and guidance to support learning, including formative self-assessment. These are available in both paper and interactive, electronic form.

Course Directors serve as reference points for academic issues that arise in relation to individual units or rotations. The names of all Phase I & II Course Directors and Senior Medical Tutors/Group Facilitators, together with their email addresses, are given in the appropriate Study Guides.

Pastoral support

Personal tutors, drawn from across the Faculty and the Base Units, are teachers actively

involved in delivering the course and are responsible for providing first-line pastoral support and academic guidance.

In Stage 1 students are allocated to a Personal Tutor who is responsible for a small number of medical tutees from Stages 1 and 2, comprising a small 'family'. This has links with the 'peer parenting' scheme run by the Newcastle Medical and Dental Students' Council (see below). Phase I tutors are usually based in the Medical School. In Phase I of the Accelerated MBBS programme students are allocated to a Personal Tutor who is distinct from their Senior Medical Tutors/Group Facilitators.

Tutors hold both group and individual meetings with their tutees. A group meeting is timetabled at the beginning of each semester. From then on it is for the tutor and tutee to decide on the timing and frequency of further meetings, whether group or individual. However, students are advised to try and see their tutor individually at least once during each semester. In order to review progress, the most obvious time for this meeting is to coincide with publication of assessment results, particularly if they have not done as well as they might (for example, attained a 'Borderline' or 'Unsatisfactory'). Tutors may suggest additional meetings as necessary, and of course a student may request a meeting with their tutor at any time.

On entry into Stage 3 or Stage 5 each student is allocated a clinical tutor in the Clinical Base Unit to which they are attached. This tutor will provide a local point of contact during their clinical training. In addition each student will retain access to their Phase 1 tutor. This tutor will remain their personal tutor for the remainder of their Phase II experience. Students in Phase II may also contact Curriculum officers either centrally within the University or within their Base Unit for additional personal or academic support.

Any student may request a change of tutor if the tutor-tutee relationship breaks down or is not working properly. Students wishing to change their tutor should contact a Curriculum Officer. In addition the University offers a range of support services, including the Student Advice Centre, the Counselling and Wellbeing team, the Mature Student Support Officer, and a Childcare Support Officer, see <http://www.ncl.ac.uk/undergraduate/support/welfare.phtml>

Support for students with disabilities

The Senior Tutor for Student Support and Guidance is available at two surgery sessions each week. A student can make an appointment to attend a surgery session by contacting the Faculty Undergraduate Office. For particular areas of concern the student may be referred to another Curriculum Officer. Following discussion with their personal tutor or Curriculum Officer a student may be advised to contact other specialist support/welfare services offered by the University.

The University's Disability Support Service provides help and advice for disabled students at the University - and those thinking of coming to Newcastle. It provides individuals with: advice about the University's facilities, services and the accessibility of campus; details about the technical support available; guidance in study skills and advice on financial support arrangements; a resources room with equipment and software to assist students in their studies. For further details see <http://www.ncl.ac.uk/disability-support/>

Learning resources

The undergraduate MBBS programme is delivered by a partnership comprising the Universities of Newcastle and Durham and the NHS Trusts of the Northern Deanery of the Northern and Yorkshire NHS Executive. The academic and clinical facilities of the two Universities and their partner acute hospital, mental health and primary care NHS Trusts are used to support students' learning.

The overall learning resources strategy is designed to ensure that teaching and learning takes place within the contextual setting most appropriate to the students achievement and practice of the learning outcomes (i.e. experience in hospital medicine is gained in hospital, experience in primary care is gained in general practice and other community settings, etc).

In Phase I students are based principally in either the Medical School at Newcastle or

Durham University Queen's campus. In Phase II students spend the majority of their time in the various clinical settings of our NHS partners, often somewhat distant from either of the two university academic campuses.

No matter where a student is based, they have reciprocal access to the resources provided by all the partner institutions and to the Faculty of Medical Sciences' web-based managed learning environment (Learning Support Environment – LSE), which provides them with course and administrative information, subject-specific teaching and learning materials, and communication tools.

The Catherine Cookson and William Leech buildings of the Medical School, opened in 1984, provide well-equipped teaching accommodation comprising;

- 8 lecture theatres (seating 100-400);
- a number of smaller seminar/classrooms;
- five basic science laboratories (one with computer workstations);
- the Walton Library, and the Faculty of Medical Sciences Computing, comprising the Fell, Linn, Pool and Dene Cluster;
- The Ridley Building, 100 yds from the Medical School, comprises 16 'state of the art' seminar rooms of various capacities;
- The Anatomy & Clinical Skills Centre (ground floor, Cookson Building) provides an integrated interprofessional teaching area including dissection, clinical skills and microscopy laboratories and video facilities for communication skills teaching and practice;

The University's main learning resources are provided by the Robinson and Walton Libraries (for books, journals, online resources), and Information Systems and Services, which supports campus-wide computing facilities, see

<http://www.ncl.ac.uk/undergraduate/support/acfacilities.phtml>

All new students whose first language is not English are required to take an English Language Proficiency Test. This is administered by INTO Newcastle University Centre on behalf of Newcastle University. Where appropriate, in-session language training can be provided. The INTO Newcastle University Centre houses a range of resources which may be particularly appropriate for those interested in an Erasmus exchange. See

<http://ncl.ac.uk/langcen/index.htm>

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

The Faculty is committed to the provision of high quality teaching and learning in order to produce doctors capable of contributing to the present and future health needs of the nation. In recognition of this commitment, the Board of Medical Studies aspires to promote a total quality environment in which students and the staff reflect upon their practice as part of the Learning Agreement.

Programme and teaching quality is monitored and enhanced via the following mechanisms:

- the quality of the medical degree programme is monitored by the Board of Medical which meets at least once every two weeks;
- student representatives are members of all key committees including the Board of Medical Studies;
- staff/student meetings are held at all stages of the curriculum;
- focus meetings are held where necessary
- on-line student evaluation questionnaires are used throughout the course;
- the External Examiner system provides individual feedback on the quality of provision as well as on the outcomes of Stage assessments.
- For every rotation and for subject strands Annual Quality Monitoring meetings are held annually which bring together teachers from Phase 1 and II and from

all Base Units to discuss course evaluation and student feedback and to produce an action plan for the next cycle of teaching

The Phase Staff/Student Committees make recommendations to the Board of Medical Studies, where student opinion, along with other internal monitoring data (e.g. assessment outcomes) and the views of External Examiners informs the development of appropriate action plans for change. These changes are reported back to the student representatives on the Staff/Student Committees. Student representatives are a key link in communication with the student body as a whole. The system depends upon informed input from the student representatives, who in turn depend on input from their colleagues; in similar fashion student representatives are expected to disseminate information back to other students in their group.

Focus groups and ad hoc working parties of students and staff are used regularly to further explore in depth specific problems or development issues, e.g. development of assessment methods. Commonly chaired by one of the Curriculum Officers or an independent facilitator, these groups report back to the Board of Medical Studies.

External examiner reports

The External Examiner reports are considered by the Board of Medical Studies and the Board's response to the comments are considered by FTLC, and then sent to the External Examiners. The External Examiners have consistently commended the standard of the programmes, the quality of the students and the level of support provided to students.

Accreditation reports

The programme was last reviewed by the General Medical Council (GMC) in 2005 and the Quality Assurance Agency (QAA) in 1998. The QAA awarded the MBBS programme 24 out of 24 for its provision, concluding that each of the six aspects on which the visit was based made a full contribution to the attainment of the stated objectives.

Student evaluations

The views of the students and their evaluation of the content and teaching received are sought through their membership of the Board of Medical Studies and Curriculum Committees, together with the student course evaluation questionnaires. Annual, systematic surveys of student opinion on each module/unit of the degree programme are conducted by the using standardised, anonymous on-line questionnaires. A number of the questions in these are aligned with those from the National Student Survey The collated data from these surveys are then discussed at regular meetings of the Phase Staff/Student Committees at the annual Quality Monitoring meetings for each unit of the course. Membership of the Phase Staff/Student Committees includes Course Directors and a wider cross-section of student members (e.g. one student from each of the student timetable groups). In addition any other student or member of staff is free to attend.

Feedback Mechanisms

Results of the student course evaluation are considered by Annual Quality Monitoring meetings and then the Board of Medical Studies. Recommendations for changes are made to the Board of Medical Studies where appropriate. Student representatives are asked to feedback to the students on changes that have been agreed in response to feedback received. Minutes of Staff Student Committee meetings are published on the Learning Support Environment for all students to access.

Faculty and University Review Mechanisms

All major changes to the existing programme must be approved by the GMC, FTLC and UTLC. The University operates a Degree Programme Review and Internal Subject Review to monitor the quality of the teaching provision. The Board of Medical Studies is involved in both review processes.

Faculty and University Review Mechanisms

The programme is subject to the University's Internal Subject Review process, see http://www.ncl.ac.uk/aqss/qsh/internal_subject_review/index.php

Accreditation reports

Additional mechanisms

16 Regulation of assessment

Board of Examiners

The Stage 5 Board of Examiners is the official degree awarding body for the MBBS degree. For the progress examinations at each of the other stages meetings of examiners are held at which external examiners are present to agree progression from each stage. The outcomes of these meetings are reported to the Board of Examiners and to the Board of Medical Studies.

Pass Marks

All Summative assessments in the 'Clinical and Communication Skills' and 'Knowledge and Critical Thought' domains are graded on a four-point scale: Merit, Satisfactory, Borderline, and Unsatisfactory. Students must achieve Satisfactory or Merit in order to pass an assessment. Professional Behaviour is assessed on a binary scale of 'Acceptable' or 'Needs Consideration'.

Course Requirements

All modules are compulsory.

Students are assessed in a way which reflects the domains of the curriculum:- Clinical and Communication Skills, Knowledge and Critical Thought, Professional Behaviour. Students are required to achieve Satisfactory or Merit or Acceptable in each strand in order to pass the Stage.

Students are required to pass each Stage in order to proceed to the next.

Weighting of Stages

Only successful completion of Stage 5 (Finals) can lead to the award of the degree of MBBS.

In order to pass the degree with Honours, students must pass the Final Qualifying Examination with Distinction **and** achieve an academic rating of at least 27 (from a possible 40) points.

[Note that for direct Stage 3 entrants this threshold is 18 points.] The maximum points available at each Stage are:

Stage 1	4
Stage 2	8
Stage 3	12
Stage 4	16

Common Marking Scheme

In-course assessments are graded against pre-published criteria on the M, S, B, U scale.

Thresholds for unseen examinations are determined by an appropriate standards setting methodology, i.e. the modified Anghoff method for written and practical examinations or the borderline method for clinical examinations.

Role of the External Examiner

External examiners are distinguished members of the academic community and are appointed by FTLC on the recommendation of the Board of Studies.

External examiners are invited to comment on draft exam papers at all Stages; moderate examination scripts at all stages; invited to observe clinical examinations for all Stages; observe Student Selected Component Oral Presentations; attend the Board of Examiners meetings; and report to the University of the comparability of standards.

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

The University Prospectus (see <http://www.ncl.ac.uk/undergraduate/>)

The School Brochure (contact enquiries@ncl.ac.uk)

The University Regulations (see <http://www.ncl.ac.uk/calendar/university.regs/>)

The Degree Programme Handbook

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. The accuracy of the information contained is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.

Five Year Programme	What the doctor is able to do							How the doctor approaches practice			The doctor as a professional member of the healthcare team	
	Clinical skills	Practical procedures	Patient investigation	Patient management	Health promotion & disease prevention	Communication	Information and data handling skills	Knowledge and understanding of basic, social & clinical sciences	Appropriate attitudinal, ethical & legal responsibilities	Decision making, clinical reasoning & judgement	Professional development	Personal development
Stage 2, Semester 1												
Thought, Senses and Movement	x		x		x	x		x	x	x	x	x
Personal & Professional Development 3	x	x				x	x	x	x	x	x	x
Medicine in Community 3	x				x	x	x	x	x	x	x	x
Student-Selected Component 1						x	x					

Five Year Programme	What the doctor is able to do							How the doctor approaches practice			The doctor as a professional member of the healthcare team	
	Clinical skills	Practical procedures	Patient investigation	Patient management	Health promotion & disease prevention	Communication	Information and data handling skills	Knowledge and understanding of basic, social & clinical sciences	Appropriate attitudinal, ethical & legal responsibilities	Decision making, clinical reasoning & judgement	Professional development	Personal development
Stage 2, Semester 2												
Clinical Sciences and Investigative Medicine 2	x		x	x	x	x		x	x	x		x
Life Cycle 3	x				x	x		x	x	x	x	x
Medicine in Community 4					x	x	x	x	x	x	x	x
Personal & Professional Development 4	x	x		x		x	x	x	x	x	x	x

Four and Five Year Programme	What the doctor is able to do							How the doctor approaches practice			The doctor as a professional member of the healthcare team	
	Clinical skills	Practical procedures	Patient investigation	Patient management	Health promotion & disease prevention	Communication	Information and data handling skills	Knowledge and understanding of basic, social & clinical sciences	Appropriate attitudinal, ethical & legal responsibilities	Decision making, clinical reasoning & judgement	Professional development	Personal development
Stage 4												
Clinical Sciences and Investigative Medicine 3 - IDHD	x	x	x			x	x	x	x	x	x	x
Clinical Sciences and Investigative Medicine 3 - CPT				x		x	x	x		x	x	x
Clinical Sciences and Investigative Medicine 3 - IPPD	x		x			x			x		x	x
Student Selected Components 2						x	x		x	x	x	x
Student Electives										x	x	x

Stage 4, Year 5 (old curriculum)

Essential Senior Rotation	Learning Process	Knowledge	Clinical Skills	Clinical Reasoning
Surgery	x	x	x	x
Medicine	x	x	x	x
Child Health	x	x	x	x
Obstetrics & Gynaecology	x	x	x	x
Mental Health	x	x	x	x
General Practice	x	x	x	x
Special Medicine	x	x	x	x