JRCPTB

Joint Royal Colleges of Physicians Training Board

Curriculum for Neurology Training

Implementation August 2022

ROYAL COLLEGE of PHYSICIANS of EDINBURGH

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW

Royal College of Physicians

Contents

An application has been made to change the name of the specialty General Internal Medicine (GIM) to Internal Medicine (IM). These terms are used interchangeably in this document except where there is direct reference to the Certificate of Completion of Training (CCT). The curriculum will be referred to as GIM/IM stage 2.

1. Introduction

The burden of neurological disease in the United Kingdom is high and increasing. 12.2 million people in the United Kingdom live with a neurological disorder. One million are disabled by their condition, 350 000 of whom require help with activities of daily living. For 2.2 million, their condition worsens over time and for 7.4 million their deficits are intermittent (1).

In a patient survey published in 2019 (2), one in three patients waited over a year to see a neurologist and only 30% of patients felt involved in decision making about their care. The prevalence of neurological disease and the capricious nature of many of the conditions explains the associated 700,000 emergency admissions and 11 million bed-days each year. The very serious nature of these diseases is also reflected in the increasing mortality rate associated with neurological conditions in the UK, in contrast to all-cause mortality (3).

It is also of relevance that in the most recent WHO International Classification of Disease (ICD-11) stroke has been classified as a neurological disease, rather than a cardiovascular disease (4). This is of particular importance to patients who live with neurological disability after a stroke, the nature of which is the same or very similar to that caused by other diseases involving the brain.

The reforms associated with Shape of Training coupled with the needs of patients with neurological disease led the Neurology Specialist Advisory Committee (SAC) of the JRCPTB and the Association of British Neurologists (ABN) and the Association of British Neurologists Trainees (ABNT) to engage with the neurology community to determine how training in neurology should change to develop neurology consultants who can deliver the highest quality patient care.

This revision of the neurology curriculum reflects this burden of disease but also the dramatic developments in the diagnosis and management of acute and chronic neurological diseases to ensure patients, their families, and the doctors providing their care, are well served by neurology training in the future.

In the reforms of Shape of Training, neurology is joining the other major specialties in Group 1, incorporating into specialist training an additional year of internal medicine. Furthermore, the neurology curriculum will incorporate the three capabilities described in the new stroke curriculum, which will be necessary for doctors to contribute to the care of stroke patients.

2. Purpose of the curriculum

2.1 Purpose of the curriculum

The curriculum will outline the training required for neurologists to deal with the growing number of people with neurological diseases that can be treated and require long-term management, and those who present acutely to neurology, stroke, and general medical services.

This curriculum will ensure that trainees acquire the necessary capabilities by describing the skills and knowledge required at each stage of training, and indicate the likely duration of training in neurology, stroke and specialist clinical areas of the neurology curriculum. The curriculum will also describe the assessment tools (mini-CEX, CbD and MSF) to be used, to ensure that trainees acquire the necessary capabilities.

The curriculum will reflect the demand for trained neurologists in three distinct areas of practice: acute (including inpatients), outpatients, and ambulatory care.

The demands on acute neurology services are increasing in two contrasting areas: the acute general neurology and stroke services in secondary care, and the tertiary neurology services that deliver state-of-the-art complex treatment (which may also include stroke). As treatments for acute neurological diseases (particularly stroke) are so time critical, it seems highly likely that neurologists, who will be dual-trained in internal medicine, will be asked to take on more acute work, to help develop services which are focused on the acute presentations of all conditions involving the nervous system. The skills and knowledge required will be reflected in the new curriculum.

Currently the vast majority of people with neurological diseases present to Neurologists as outpatients. The breadth and complexity of neurological diseases means that periods of dedicated outpatient training in specialist clinical areas of neurology are of the utmost importance. As well as the more common diseases which now have complex treatments, there are many rare immune-mediated, paraneoplastic, infectious and metabolic diseases for which a delay in diagnosis can have profound implications.

The assessment and management of chronic disability is often best done in the community where an assessment of the patient can be combined with an evaluation of their psychosocial predicament, their environment and the suitability of their accommodation. In addition, there are many conditions that lend themselves to assessment in ambulatory care units and community clinics, including chronic headache, pain, Parkinson's disease and secondary progressive Multiple Sclerosis, to name just a few. The broad range of neurological and general medical training in the new curriculum will make neurologists of the future particularly well suited to work in the community.

The curriculum also needs to reflect the organisational skills needed to work effectively with colleagues from different specialties and allied healthcare professionals in order to run efficient patient-centred ambulatory care services.

Specialty training in Neurology will begin following completion of the Internal Medicine Stage 1 curriculum. Training will be provided in a variety of settings using a range of methods including workplace-based experiential learning, formal postgraduate teaching and simulation-based education.

There are a range of ways a trainee can meet an outcome, one of which may be attendance at a relevant course. Attendance at courses in locations across the United Kingdom, two or three each year tailored to the training requirements (neurology, stroke, internal medicine) of the doctor, will be an important part of training. Attendance at national or supra-regional general meetings (such as those of the Association of British Neurologists) are recommended as one of the ways in which learning outcomes can be demonstrated to ensure the trainee's engagement with important advances in research, clinical practice and in the management of complex ethical and legal matters. No subject-specific courses will be a mandatory requirement of the curriculum but attendance at two courses every year is proposed to ensure that training is completed in specialist areas of the neurology curriculum. Existing methods of assessment will be used to assess the effect of courses on a trainee's progress, including Case Based Discussions, Teaching Observations (in which highlights from courses are passed on in departmental teaching sessions), the Specialty Specific Exam, and reflections on courses as assessed by the Educational Supervisor.

The purpose statement for this curriculum has been endorsed by the GMC's Curriculum Oversight Group (COG) and was commended as meeting the needs of the health services of the countries of the UK.

2.2 High level learning outcomes – Capabilities in Practice (CiPs)

The specialty CiPs incorporate the core capabilities that all trainees must achieve in order to practice as a general neurologist in an acute (including inpatients), outpatient and ambulatory setting. Each neurology CiP refers to a group of neurological disorders with a combined estimated prevalence of more than 100,000 in the UK.

Following the successful completion of a training programme in neurology, a doctor will be able to do the following:

- Provide inpatient and outpatient services for patients presenting with neurological conditions, including stroke.
- Appropriately request and interpret diagnostic tests including structural and functional imaging techniques, neurophysiology, histopathology and gene analysis.
- Interpret psychological and neurological symptoms, including psychiatric complications of neurological disease and presentations with functional neurological symptoms.
- Work effectively with colleagues in allied medical specialties such as clinical genetics, neurosurgery, neuroradiology, neurorehabilitation, ophthalmology and

audiovestibular medicine and with professions allied to medicine such as physiotherapy, occupational therapy, speech and language therapy and psychology.

- Constructively engage with national, regional and local organisations in planning the management and prevention of neurological disease.
- Engage with university employees to promote academia and high quality research

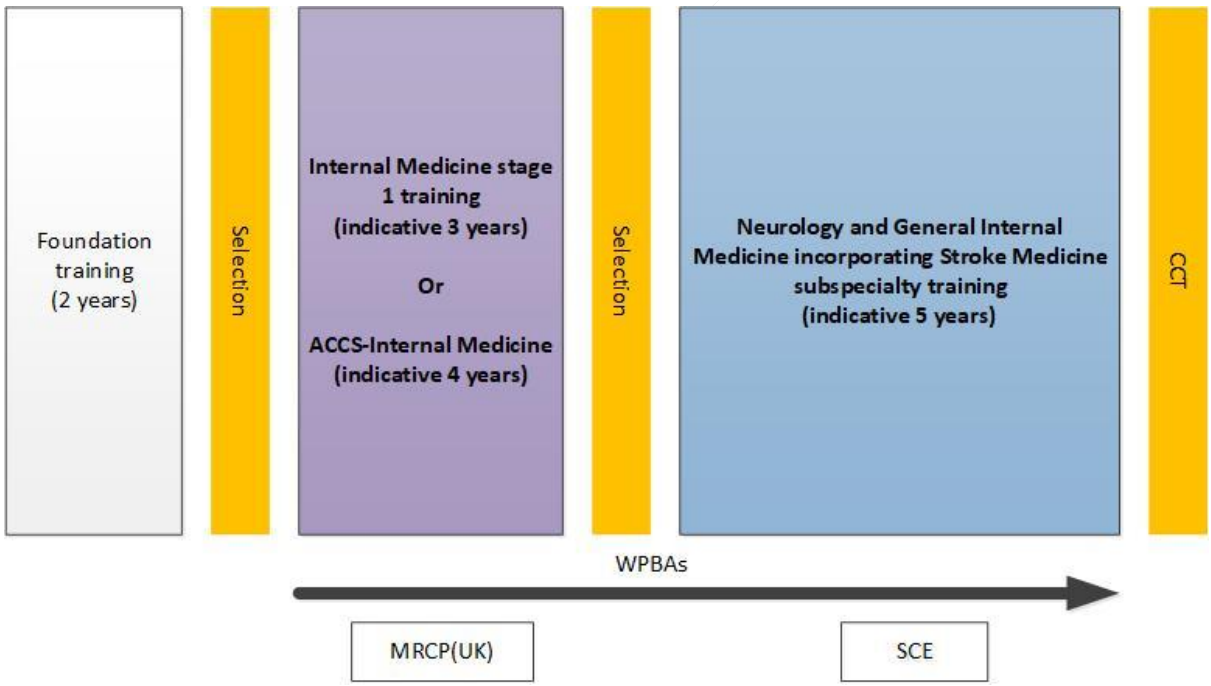
Learning outcomes – Capabilities in Practice (CiPs)
Generic CiPs
1. Able to successfully function within NHS organisational and management systems 2. Able to deal with ethical and legal issues related to clinical practice 3. Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement 4. Is focused on patient safety and delivers effective quality improvement in patient care 5. Carrying out research and managing data appropriately 6. Acting as a clinical teacher and clinical supervisor
Clinical CiPs (Internal Medicine)
1. Managing an acute unselected take 2. Managing the acute care of patients within a medical specialty service 3. Providing continuity of care to medical inpatients, including management of comorbidities and cognitive impairment 4. Managing patients in an outpatient clinic, ambulatory or community setting, including management of long term conditions 5. Managing medical problems in patients in other specialties and special cases 6. Managing a multidisciplinary team including effective discharge planning 7. Delivering effective resuscitation and managing the acutely deteriorating patient 8. Managing end of life and applying palliative care skills
Neurology Specialty CiPs
1. Managing disorders of cognition and consciousness 2. Managing headache and pain 3. Managing seizures and epilepsy 4. Managing inflammatory and infectious disorders 5. Managing movement disorders 6. Managing neuromuscular disorders 7. Managing traumatic brain injury and patients requiring neurorehabilitation

8. Managing neuropsychiatric disorders, and functional neurological disorders
Stroke Sub-specialty CiPs
1. Managing the care of acute stroke patients, including hyperacute care and cerebral reperfusion strategies. 2. Managing the primary and secondary prevention of stroke and Transient Ischaemic Attack 3. Managing early and late stroke rehabilitation in hospital and community settings

2.3 Training pathway

Training starts with stage 1 Internal Medicine Training (IMT), during which there will be a gradually increasing responsibility for the acute medical take, and during which the MRCP(UK) Diploma should be attained.

There will then be competitive entry into specialty training during which the Internal Medicine Stage 2 curriculum will be completed with an indicative duration of training of twelve months, three months of which will be in the final year of training, although depending on the rate of progression and acquisition of capabilities this may be longer, or shorter, for some trainees.



2.4 Duration of training

The new curriculum, with dual training in neurology and internal medicine and sub-specialty accreditation in stroke medicine will be organised over five years of training. As with other group 1 specialties, training in Neurology will comprise an indicative 3 years of IM Stage 1

followed by competitive selection for entry into specialist training. This will be followed by 5 years of specialty training incorporating IM Stage 2 and Stroke Medicine training.

There will be options for those trainees who demonstrate exceptionally rapid development and acquisition of capabilities to complete training more rapidly than the current indicative time although it is recognised that clinical experience is a fundamental aspect of development as a good physician (guidance on completing training early will be available on the JRCPTB website). There is also likely to be a number of trainees who for a number of different possible reasons will require an extension of training in accordance with the Reference Guide for Postgraduate Specialty Training in the UK (5)

2.5 Flexibility and accreditation of transferable capabilities

The curriculum incorporates and emphasises the importance of the Generic Professional Capabilities (GPCs). GPCs will promote flexibility in postgraduate training as these common capabilities can be transferred from specialty to specialty. In addition, the IM generic CiPs will be shared across all physicianly curricula and the IM clinical CiPs will be shared across all group 1 specialities, supporting flexibility for trainees to move between these specialties without needing to repeat all aspects of training. The curriculum supports the accreditation of transferable competencies (using the Academy framework).

The curriculum will allow trainees to train in academic medicine alongside their acquisition of clinical and generic capabilities, and these skills will be transferable across other specialties. Notwithstanding the fact that completion of the curriculum is based on the acquisition of capabilities there is no expectation that academic trainees will be able to complete the curriculum in a shorter clinical training programme, particularly as capabilities in internal medicine and stroke will be compulsory for completion of training.

The frequency with which internal medicine problems manifest in the nervous system suggests that a period of training in neurology will lead to the acquisition of valuable and easily transferable skills in internal medicine

Finally, the frequency with which neurological problems occur in diseases of the heart, kidney, liver and lungs, either as a complication of the disease or of the treatment, means that skills learnt in neurology training will be of relevance to training in each of the major specialties, particularly the other Group 1 specialties.

2.6 Less than full time training (LTFT)

Trainees are entitled to opt for less than full time training programmes. Less than full time trainees should undertake a pro rata share of the out-of-hours duties (including on-call and other out-of-hours commitments) required of their full-time colleagues in the same programme and at the equivalent stage.

Less than full time trainees should assume that their clinical training will be of a duration pro-rata with the time indicated/recommended, but this should be reviewed in accordance with the Gold Guide.

2.6 Generic Professional Capabilities (GPCs) and Good Medical Practice (GMP)

The GMC has developed the Generic Professional Capabilities (GPC) framework (6) with the Academy of Medical Royal Colleges (AoMRC) to describe the fundamental, career-long, generic capabilities required of every doctor. The framework describes the requirement to develop and maintain key professional values and behaviours, knowledge, and skills, using a common language. GPCs also represent a system-wide, regulatory response to the most common contemporary concerns about patient safety and fitness to practise within the medical profession. The framework will be relevant at all stages of medical education, training and practice.

The nine domains of the GMC's Generic Professional Capabilities

Good Medical Practice (GMP,7) is embedded at the heart of the GPC framework. In describing the principles, duties and responsibilities of doctors the GPC framework articulates GMP as a series of achievable educational outcomes to enable curriculum design and assessment.

The GPC framework describes nine domains with associated descriptor outlining the 'minimum common regulatory requirement' of performance and professional behaviour for those completing a CCT or its equivalent. These attributes are common, minimum and generic standards expected of all medical practitioners achieving a CCT or its equivalent.

The nine domains and subsections of the GPC framework are directly identifiable in the IM curriculum. They are mapped to each of the generic and clinical CiPs, which are in turn mapped to the assessment blueprints. This is to emphasise those core professional capabilities that are essential to safe clinical practice and that they must be demonstrated at every stage of training as part of the holistic development of responsible professionals.

This approach will allow early detection of issues most likely to be associated with fitness to practise and to minimise the possibility that any deficits are identified only during the final phases of training.

3 Content of Learning

The curriculum is spiral, and topics and themes will be revisited to expand understanding and expertise. The level of entrustment for capabilities in practice (CiPs) will increase as an individual progresses from needing direct supervision to being entrusted to act without supervision.

3.1 Capabilities in Practice (CiPs)

CiPs describe the professional tasks or work within the scope of the specialty and internal medicine. CiPs are based on the concept of entrustable professional activities (8) which use the professional judgement of appropriately trained, expert assessors as a defensible way of forming global judgements of professional performance.

Each CiP has a set of descriptors associated with that activity or task. Descriptors are intended to help trainees and trainers recognise the knowledge, skills and attitudes which should be demonstrated. Doctors in training may use these capabilities to provide evidence of how their performance meets or exceeds the minimum expected level of performance for their year of training. The descriptors are not a comprehensive list and there are many more examples that would provide equally valid evidence of performance.

Many of the CiP-descriptors refer to patient-centred care and shared decision making. This is to emphasise the importance of patients being at the centre of decisions about their own treatment and care, by exploring care or treatment options and their risks and benefits and discussing choices available.

Additionally, the clinical CiPs repeatedly refer to the need to demonstrate professional behaviour with regards to patients, carers, colleagues and others. Good doctors work in partnership with patients and respect their rights to privacy and dignity. They treat each patient as an individual. They do their best to make sure all patients receive good care and treatment that will support them to live as well as possible, whatever their illness or

disability. Appropriate professional behaviour should reflect the principles of GMP and the GPC framework.

In order to complete training and be recommended to the GMC for the award of a CCT and entry to the specialist register, the doctor must demonstrate that they are capable of unsupervised practice in all generic and clinical CiPs. Once a trainee has achieved level 4 sign off for a CiP it will not be necessary to repeat assessment of that CiP if capability is maintained (in line with standard professional conduct).

This section of the curriculum gives details of the six generic CiPs, eight clinical CiPs for internal medicine (stage 2), eight specialty CiPs for Neurology and three CiPs for Stroke Medicine. The expected levels of performance, mapping to relevant GPCs and the evidence that may be used to make an entrustment decision are given for each CiP. The list of evidence for each CiP is not prescriptive and other types of evidence may be equally valid for that CiP.

3.2 Generic Capabilities in Practice

The six generic CiPs cover the universal requirements of all specialties as described in GMP and the GPC framework. Assessment of the generic CiPs will be underpinned by the descriptors for the nine GPC domains and evidenced against the performance and behaviour expected at that stage of training. Satisfactory sign off will indicate that there are no concerns. It will not be necessary to assign a level of supervision for these non-clinical CiPs.

In order to ensure consistency and transferability, the generic CiPs have been grouped under the GMP-aligned categories used in the Foundation Programme curriculum plus an additional category for wider professional practice:

- Professional behaviour and trust
- Communication, team-working and leadership
- Safety and quality
- Wider professional practice

For each generic CiP there is a set of descriptors of the observable skills and behaviours which would demonstrate that a trainee has met the minimum level expected. The descriptors are not a comprehensive list and there may be more examples that would provide equally valid evidence of performance.

Assessment tools

ACAT	Acute care assessment tool	ALS	Advanced Life Support
CbD	Case-based discussion	DOPS	Direct observation of procedural skills
GCP	Good Clinical Practice	Audit	Audit Assessment

Mini-CEX	Mini-clinical evaluation exercise	MCR	Multiple consultant report
MSF	Multi source feedback	PS	Patient survey
QIPAT	Quality improvement project assessment tool	TO	Teaching observation

Generic capabilities in practice (CiPs)

Category 1: Professional behaviour and trust	
1. Able to function successfully within NHS organisational and management systems	
Descriptors	• Aware of and adheres to the GMC professional requirements • Aware of public health issues including population health, social detriments of health and global health perspectives • Demonstrates effective clinical leadership • Demonstrates promotion of an open and transparent culture • Keeps practice up to date through learning and teaching • Demonstrates engagement in career planning • Demonstrates capabilities in dealing with complexity and uncertainty • Aware of the role of and processes for operational structures within the NHS • Aware of the need to use resources wisely
GPCs	Domain 1: Professional values and behaviours Domain 3: Professional knowledge • professional requirements • national legislative requirements • the health service and healthcare systems in the four countries Domain 9: Capabilities in research and scholarship
Evidence to inform decision	MCR MSF Active role in governance structures Management course End of placement reports
2. Able to deal with ethical and legal issues related to clinical practice	
Descriptors	• Aware of national legislation and legal responsibilities, including safeguarding vulnerable groups • Behaves in accordance with ethical and legal requirements • Demonstrates ability to offer apology or explanation when appropriate • Demonstrates ability to lead the clinical team in ensuring that medical legal factors are considered openly and consistently

GPCs	Domain 3: Professional knowledge • professional requirements • national legislative requirements • the health service and healthcare systems in the four countries Domain 4: Capabilities in health promotion and illness prevention Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	MCR MSF CbD DOPS Mini-CEX ALS certificate End of life care and capacity assessment End of placement reports
Category 2: Communication, teamworking and leadership	
3. Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement	
Descriptors	• Communicates clearly with patients and carers in a variety of settings • Communicates effectively with clinical and other professional colleagues • Identifies and manages barriers to communication (eg cognitive impairment, speech and hearing problems, capacity issues) • Demonstrates effective consultation skills including effective verbal and nonverbal interpersonal skills • Shares decision making by informing the patient, prioritising the patient's wishes, and respecting the patient's beliefs, concerns and expectations • Shares decision making with children and young people • Applies management and team working skills appropriately, including influencing, negotiating, re-assessing priorities and effectively managing complex, dynamic situations
GPCs	Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 5: Capabilities in leadership and teamworking
Evidence to inform decision	MCR MSF PS

	End of placement reports
Category 3: Safety and quality	
4. Is focused on patient safety and delivers effective quality improvement in patient care	
Descriptors	• Makes patient safety a priority in clinical practice • Raises and escalates concerns where there is an issue with patient safety or quality of care • Demonstrates commitment to learning from patient safety investigations and complaints • Shares good practice appropriately • Contributes to and delivers quality improvement • Understands basic Human Factors principles and practice at individual, team, organisational and system levels • Understands the importance of non-technical skills and crisis resource management • Recognises and works within limit of personal competence • Avoids organising unnecessary investigations or prescribing poorly evidenced treatments
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 3: Professional knowledge • professional requirements • national legislative requirements • the health service and healthcare systems in the four countries Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and teamworking Domain 6: Capabilities in patient safety and quality improvement • patient safety • quality improvement
Evidence to inform decision	MCR MSF QIPAT End of placement reports
Category 4: Wider professional practice	
5. Carrying out research and managing data appropriately	
Descriptors	• Manages clinical information/data appropriately • Understands principles of research and academic writing

	• Demonstrates ability to carry out critical appraisal of the literature • Understands the role of evidence in clinical practice and demonstrates shared decision making with patients • Demonstrates appropriate knowledge of research methods, including qualitative and quantitative approaches in scientific enquiry • Demonstrates appropriate knowledge of research principles and concepts and the translation of research into practice • Follows guidelines on ethical conduct in research and consent for research • Understands public health epidemiology and global health patterns • Recognises potential of applied informatics, genomics, stratified risk and personalised medicine and seeks advice for patient benefit when appropriate
GPCs	Domain 3: Professional knowledge • professional requirements • national legislative requirements • the health service and healthcare systems in the four countries Domain 7: Capabilities in safeguarding vulnerable groups Domain 9: Capabilities in research and scholarship
Evidence to inform decision	MCR MSF GCP certificate (if involved in clinical research) Evidence of literature search and critical appraisal of research Use of clinical guidelines Quality improvement and audit Evidence of research activity End of placement reports
6. Acting as a clinical teacher and clinical supervisor	
Descriptors	• Delivers effective teaching and training to medical students, junior doctors and other health care professionals • Delivers effective feedback with action plan • Able to supervise less experienced trainees in their clinical assessment and management of patients • Able to supervise less experienced trainees in carrying out appropriate practical procedures • Able to act a clinical supervisor to doctors in earlier stages of training
GPCs	Domain 1: Professional values and behaviours Domain 8: Capabilities in education and training
Evidence to inform decision	MCR MSF TO Relevant training course End of placement reports

3.3 Clinical Capabilities in Practice (CiPs)

The eight IM clinical CiPs describe the clinical tasks or activities which are essential to the practice of Internal Medicine. The clinical CiPs have been mapped to the nine GPC domains to reflect the professional generic capabilities required to undertake the clinical tasks.

Satisfactory sign off will require educational supervisors to make entrustment decisions on the level of supervision required for each CiP and if this is satisfactory for the stage of training, the trainee can progress. More detail is provided in the programme of assessment section of the curriculum.

Clinical CiPs – Internal Medicine

1. Managing an acute unselected take	
Descriptors	• Demonstrates professional behaviour with regard to patients, carers, colleagues and others • Delivers patient centred care including shared decision making • Takes a relevant patient history including patient symptoms, concerns, priorities and preferences • Performs accurate clinical examinations • Shows appropriate clinical reasoning by analysing physical and psychological findings • Formulates an appropriate differential diagnosis • Formulates an appropriate diagnostic and management plan, taking into account patient preferences, and the urgency required • Explains clinical reasoning behind diagnostic and clinical management decisions to patients/carers/guardians and other colleagues • Appropriately selects, manages and interprets investigations • Recognises need to liaise with specialty services and refers where appropriate
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 3: Professional knowledge • professional requirements • national legislation • the health service and healthcare systems in the four countries Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and teamworking

	Domain 6: Capabilities in patient safety and quality improvement • patient safety • quality improvement
Evidence to inform decision	MCR MSF CbD ACAT Logbook of cases Simulation training with assessment
2. Managing the acute care of patients within a medical specialty service	
Descriptors	• Able to manage patients who have been referred acutely to a specialised medical service as opposed to the acute unselected take (eg cardiology and respiratory medicine acute admissions • Demonstrates professional behaviour with regard to patients, carers, colleagues and others • Delivers patient centred care including shared decision making • Takes a relevant patient history including patient symptoms, concerns, priorities and preferences • Performs accurate clinical examinations • Shows appropriate clinical reasoning by analysing physical and psychological findings • Formulates an appropriate differential diagnosis • Formulates an appropriate diagnostic and management plan, taking into account patient preferences, and the urgency required • Explains clinical reasoning behind diagnostic and clinical management decisions to patients/carers/guardians and other colleagues • Appropriately selects, manages and interprets investigations • Demonstrates appropriate continuing management of acute medical illness in a medical specialty setting • Refers patients appropriately to other specialties as required
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills: • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 3: Professional knowledge • professional requirements • national legislation • the health service and healthcare systems in the four countries Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and teamworking

	Domain 6: Capabilities in patient safety and quality improvement • patient safety • quality improvement
Evidence to inform decision	MCR MSF CbD ACAT Logbook of cases Simulation training with assessment
3. Providing continuity of care to medical inpatients, including management of comorbidities and cognitive impairment	
Descriptors	• Demonstrates professional behaviour with regard to patients, carers, colleagues and others • Delivers patient centred care including shared decision making • Demonstrates effective consultation skills • Formulates an appropriate diagnostic and management plan, taking into account patient preferences, and the urgency required • Explains clinical reasoning behind diagnostic and clinical management decisions to patients/carers/guardians and other colleagues • Demonstrates appropriate continuing management of acute medical illness inpatients admitted to hospital on an acute unselected take or selected take • Recognises need to liaise with specialty services and refers where appropriate • Appropriately manages comorbidities in medical inpatients (unselected take, selected acute take or specialty admissions) • Demonstrates awareness of the quality of patient experience
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 3: Professional knowledge • professional requirements • national legislation • the health service and healthcare systems in the four countries Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and teamworking Domain 6: Capabilities in patient safety and quality improvement • patient safety • quality improvement

Evidence to inform decision	MCR MSF ACAT Mini-CEX DOPS
4. Managing patients in an outpatient clinic, ambulatory or community setting (including management of long term conditions)	
Descriptors	• Demonstrates professional behaviour with regard to patients, carers, colleagues and others • Delivers patient centred care including shared decision making • Demonstrates effective consultation skills • Formulates an appropriate diagnostic and management plan, taking into account patient preferences • Explains clinical reasoning behind diagnostic and clinical management decisions to patients/carers/guardians and other colleagues • Appropriately manages comorbidities in outpatient clinic, ambulatory or community setting • Demonstrates awareness of the quality of patient experience
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 3: Professional knowledge • professional requirements • national legislation • the health service and healthcare systems in the four countries Domain 5: Capabilities in leadership and teamworking
Evidence to inform decision	MCR ACAT mini-CEX PS Letters generated at outpatient clinics
5. Managing medical problems in patients in other specialties and special cases	
Descriptors	• Demonstrates effective consultation skills (including when in challenging circumstances) • Demonstrates management of medical problems in inpatients under the care of other specialties • Demonstrates appropriate and timely liaison with other medical specialty services when required
GPCs	Domain 1: Professional values and behaviours

	Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 7: Capabilities in safeguarding vulnerable groups
Evidence to inform decision	MCR ACAT CbD
6. Managing a multidisciplinary team including effective discharge planning	
Descriptors	• Applies management and team working skills appropriately, including influencing, negotiating, continuously re-assessing priorities and effectively managing complex, dynamic situations • Ensures continuity and coordination of patient care through the appropriate transfer of information demonstrating safe and effective handover • Effectively estimates length of stay • Delivers patient centred care including shared decision making • Identifies appropriate discharge plan • Recognises the importance of prompt and accurate information sharing with primary care team following hospital discharge
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 5: Capabilities in leadership and teamworking
Evidence to inform decision	MCR MSF ACAT Discharge summaries
7. Delivering effective resuscitation and managing the acutely deteriorating patient	
Descriptors	• Demonstrates prompt assessment of the acutely deteriorating patient, including those who are shocked or unconscious • Demonstrates the professional requirements and legal processes associated with consent for resuscitation

	• Participates effectively in decision making with regard to resuscitation decisions, including decisions not to attempt CPR, and involves patients and their families • Demonstrates competence in carrying out resuscitation
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills • practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 3: Professional knowledge • professional requirements • national legislation • the health service and healthcare systems in the four countries Domain 5: Capabilities in leadership and teamworking Domain 6: Capabilities in patient safety and quality improvement • patient safety • quality improvement Domain 7: Capabilities in safeguarding vulnerable groups
Evidence to inform decision	MCR DOPS ACAT MSF ALS certificate Logbook of cases Reflection Simulation training with assessment
8. Managing end of life and applying palliative care skills	
Descriptors	• Identifies patients with limited reversibility of their medical condition and determines palliative and end of life care needs • Identifies the dying patient and develops an individualised care plan, including anticipatory prescribing at end of life • Demonstrates safe and effective use of syringe pumps in the palliative care population • Able to manage pain, breathlessness, agitation and distress • Facilitates referrals to specialist palliative care across all settings • Demonstrates effective consultation skills in challenging circumstances • Demonstrates compassionate professional behaviour and clinical judgement
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills:

	• practical skills • communication and interpersonal skills • dealing with complexity and uncertainty • clinical skills *(history taking, diagnosis and medical management; consent; humane interventions; prescribing medicines safely; using medical devices safely; infection control and communicable disease)* Domain 3: Professional knowledge • professional requirements • national legislation • the health service and healthcare systems in the four countries
Evidence to inform decision	MCR CbD Mini-CEX MSF Regional teaching Reflection

3.4 Specialty Capabilities in Practice (CiPs)

The specialty CiPs describe the clinical tasks or activities which are essential to the practice of Neurology. The CiPs have been mapped to the nine GPC domains to reflect the professional generic capabilities required to undertake the clinical tasks.

Please note, neurology training also includes stroke. This curriculum should be read in conjunction with the Stroke Sub-specialty Curriculum. However, for convenience the Stroke sub-specialty CiPs are included here.

Satisfactory sign off will require educational supervisors to make entrustment decisions on the level of supervision required for each CiP and if this is satisfactory for the stage of training, the trainee can progress. More detail is provided in the programme of assessment section of the curriculum.

As with the generic CiPs there is a set of descriptors of the observable skills and behaviours which would demonstrate that a trainee has met the minimum level expected. The descriptors are not a comprehensive list and there may be more examples that would provide equally valid evidence of performance. The following is a list of those descriptors that may be appropriate.

Methods of assessment

ACAT	Acute care assessment tool	ALS	Advanced Life Support

CbD	Case-based discussion Logbook of cases Minutes of an MDT meeting	DOPS	Direct observation of procedural skills Log of procedures performed
GCP	Good Clinical Practice Evidence of application for ethical and R&D approval		
Mini-CEX	Mini-clinical evaluation exercise	MCR	Multiple consultant report End of placement reports Educational supervisor's report Clinical supervisor's report
MSF	Multi source feedback	PS	Patient survey
QIPAT	Quality improvement project assessment tool	TO	Teaching observation Student feedback Certificates and diplomas in teaching Teaching material e.g. slides, e-modules, and podcasts.
Mini-IPX	Mini Imaging Interpretation Tool	Reflective notes	Evidence of literature search and critical appraisal of research Use of clinical guidelines Quality improvement and audit Evidence of research activity Letters generated at outpatient clinics End of life care assessment Mental capacity assessment Safeguarding assessment Reflections on regional training days. Mortality and morbidity notes

Specialty CiPs	
1. Managing disorders of cognition and consciousness	
Descriptors	**Understands the anatomy and pathophysiology of** the clinical manifestations of disorders of cognition and consciousness, including the relevance of systemic and psychiatric comorbidity. **Able to write a history by consulting all relevant sources**, including relatives, witnesses and other healthcare professionals. **Able to examine patients** using appropriate techniques and rating scales. **Able to select, request and interpret relevant investigations** to inform diagnostic thinking and management, including neuropsychological

	assessments, genetic testing, brain imaging, electroencephalography, sleep studies, brain biopsy and the analysis of cerebrospinal fluid. **Able to work independently and as part of a multidisciplinary team** to implement appropriate treatments and interventions for patients with impaired cognition or consciousness, in accordance with national guidance. **Able to anticipate, recognise and manage complications** in accordance with legal principles including the monitoring of change over time and the effect of interventions, ceilings of care, and medical and psychosocial complications. **Able to work with and appropriately refer to other relevant professionals** with apposite expertise in medicine, nursing, professions allied to medicine, law and advocacy, at every stage of a patient's journey.
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	MCR ACAT Mini-IPX MSF Mini-CEX CbD Reflective notes
2. Managing headache and pain	
Descriptors	**Understands the anatomy and pathophysiology of** headache and pain, including the relevance of systemic disease and psychiatric comorbidity. **Able to write a history by consulting all relevant sources,** including relatives and witnesses and other healthcare professionals, in order to recognise common and rare headache and pain syndromes, including musculoskeletal disorders. **Able to examine patients** using appropriate techniques and rating scales.

	Able to select, request and interpret investigations including imaging of the brain and spine, neurophysiological investigations, visual fields and optical coherence tomography, and use them effectively to identify the common and rare causes of headache and pain and their response to intervention. **Able to work independently and as part of a multidisciplinary team** to implement appropriate treatments, monitor and record their effect, and institute changes when necessary, in accordance with national guidance. **Able to anticipate, recognise and manage complications** including the physical, psychosocial, vocational and domestic consequences of living with pain and the side effect of medication. **Able to work with and appropriately refer to other relevant professionals** including specialists from other medical and surgical disciplines and professions allied to medicine.
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	CbD Mini-IPX Mini-CEX MSF DOPS MCR PS Reflective notes
3. Managing seizures and epilepsy	
Descriptors	**Understands the underlying anatomy and pathophysiology of** seizures and epilepsy, including the relevance of physical, neurodevelopmental and psychiatric comorbidity. **Able to write a history by consulting all relevant sources** in order to distinguish epileptic seizures from syncope, dissociative attacks, cataplexy and parasomnias and to identify and localise different seizure types.

	Able to examine patients presenting with transient loss of consciousness, seizures and epilepsy. **Able to select, request and interpret investigations** including ECG, EEG and video EEG, polysomnography, genetic testing, MRI and functional imaging techniques, and use them effectively to identify the common and important epilepsy syndromes and their mimics. **Able to work independently and as part of a multidisciplinary team** to manage patients with epilepsy including the use of anti-epileptic drugs (AEDs) in acute and chronic presentations, switching AEDs and making personalised AED decisions that take into account co-morbidity, concomitant medication, and patient choice. **Able to anticipate, recognise and manage complications** including the physical and psychosocial consequences of living with epilepsy, drug side-effects on the patient and foetus, driving restrictions, safety advice and sudden unexpected death in epilepsy (SUDEP). **Able to work with and appropriately refer to other relevant professionals** during the course of the illness, in particular when managing epilepsy in women (including pregnancy), people with intellectual disability, teenagers transitioning from paediatric services, and those who may benefit from surgery.
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	CbD Mini-IPX Mini-CEX MSF MCR PS Reflective notes
4. Managing inflammatory and infectious disorders	
Descriptors	**Understands the underlying anatomy and pathophysiology of** inflammatory and infectious diseases of the nervous system, including

	the treatments and their side effects, and the relevance of comorbidity and a compromised immune system **Able to write a history by consulting all relevant sources to include** past medical history, lifestyle, travel, occupation and sexual activity. **Able to examine patients** using appropriate techniques and rating scales. **Able to select, request and interpret relevant investigations** including serology, genetic testing, imaging of the brain and spine, neurophysiology, tissue culture and histology in order to diagnose and manage infectious and inflammatory disorders of the nervous system. **Able to work independently and as part of a multidisciplinary team** to treat and implement appropriate interventions and monitoring for acute, persistent, and progressive presentations, in keeping with national guidance. **Able to anticipate, recognise and manage complications** of the disease process and its treatment, including secondary infectious, inflammatory and degenerative processes. **Able to work with and appropriately refer to other relevant professionals** during the course of the illness including specialists from other medical and surgical disciplines and professions allied to medicine.
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	ACAT Mini-IPX CbD Mini-CEX SCE MCR MSF Reflective notes
5. Managing movement disorders	

Descriptors	**Understands the underlying anatomy and pathophysiology of** movement disorders including the relevance of comorbidity. **Able to write a history by consulting all relevant sources** for patients presenting with Parkinsonism, tremor, chorea, dystonia, tics, myoclonus, drug-induced and sleep-related movement disorders. **Able to examine patients** using appropriate rating scales for patients presenting with Parkinsonism, tremor, chorea, dystonia, tics, myoclonus and drug-induced movement disorders. **Able to select, request and interpret relevant investigations** including genetic tests and brain imaging. **Able to work independently and as part of a multidisciplinary team** to manage and treat movement disorders including the motor and non-motor symptoms and the selection of patients for advanced therapies, in accordance with national guidance. **Able to anticipate, recognise and manage complications** including motor, cognitive and behavioural complications. **Able to work with and appropriately refer to other relevant professionals** to manage the cognitive and neuropsychiatric complications of movement disorders and contribute to planning palliative and advanced care.
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	ACAT Mini-IPX CbD Mini-CEX MSF MCR Reflective notes
6. Managing neuromuscular disorders	

Descriptors	**Understands the anatomy and pathophysiology of** neuromuscular disorders, including the relevance of comorbidity. **Able to write a history by consulting all relevant sources** including the patient, relatives and witnesses, and other healthcare professionals. **Able to examine patients** with neuromuscular disorders using appropriate techniques, including those with disorders of eye movement, swallowing, breathing, mobility, and autonomic function. **Able to select, request and interpret relevant investigations** for neuromuscular disorders, including neurophysiology, genetic tests, metabolic and antibody testing, imaging, and histopathology. **Able to work independently and as part of a multidisciplinary team** to implement appropriate treatment, interventions and standards of care for acute, persistent, and progressive presentations of neuromuscular disorders in accordance with national guidance. **Able to anticipate, recognise and manage complications** including the common medical, legal, vocational, and psychosocial consequences of neuromuscular disorders, and the transition from paediatric to adult services. **Able to work with and appropriately refer to other relevant professionals** during the course of neuromuscular illness, particularly regarding resuscitation, feeding, ventilation, advanced decisions and driving, with the involvement of patients and their families or their advocates.
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	ACAT Mini-IPX CbD GCP Mini-CEX MSF MCR

	PS Reflective notes SCE
7. Managing traumatic brain injury and patients requiring neurorehabilitation	
Descriptors	**Understands the anatomy and pathophysiology of** traumatic brain injury and other causes of acquired brain injury and the mechanisms of recovery during rehabilitation. **Able to write a history by consulting all relevant sources** including eye-witnesses, family and carers as well as information from healthcare professionals regarding previous treatment, interventions, complications and previous rehabilitation. **Able to examine patients** with complex neurological disability using appropriate rating scales and techniques, including assessment of behaviour, cognition, capacity, mobility, spasticity and sphincter function. **Able to select, request and interpret relevant investigations** including imaging, neurophysiology, urodynamics, diagnostic trials of intrathecal, intramuscular and oral therapy, and detailed clinical assessments of cognitive function and conscious level. **Able to work independently and as part of a multidisciplinary team** to provide informed diagnosis, prognosis and treatment, and implement appropriate intervention, set goals and plan follow-up using agreed pathways in accordance with national guidance. **Able to anticipate, recognise and manage complications** including medical, domestic, ethical, legal, vocational, behavioural and psychosocial complications of severe neurological disability. **Able to work with and appropriately refer to other relevant professionals** regarding resuscitation, comorbidities, bladder and bowel function, feeding, ventilation, pain control, management of the upper motor neurone syndrome, advanced decisions and palliation.
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship

Evidence to inform decision	ACAT Mini-IPX CbD Mini-CEX MSF DOPS MCR PS Reflective notes
8. Managing neuropsychiatric disorders, and functional neurological disorders	
Descriptors	**Understands how to identify and diagnose** functional neurological disorders on positive grounds. **Able to recognise that functional disorders commonly co-exist** with, or can be a precursor to, other neurological conditions and that psychological and social factors may affect the presentation and management of common neurological disorders. **Able to communicate a diagnosis** of a functional neurological disorder in a manner that contributes constructively to the management of the patient. **Able to describe the elements of further management of functional neurological disorders** and their comorbidities and refer appropriately to psychiatry, psychology, other medical disciplines and other professions allied to medicine. **Able to identify the main features of common psychiatric disorders** and describe how they interact with neurological disorders as comorbidities or intrinsic features of the disorder. **Able to identify the spectrum of psychosis** presenting in neurological and psychiatric conditions. **Able to initiate treatment of common psychiatric disorders** and acute confusion and demonstrate an understanding of how to use the mental health and mental capacity acts.
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training

	Domain 9: Capabilities in research and scholarship
Evidence to inform decision	CbD Mini-IPX Mini-CEX MSF MCR PS Reflective notes

Sub-specialty Stroke CiPs (reprinted from the Stroke Subspecialty Curriculum)

1. Managing the care of acute stroke patients, including hyperacute care and cerebral reperfusion strategies.	
Descriptors	• Demonstrates knowledge of anatomy, physiology, blood supply and pathophysiology as relevant to TIA, stroke (including its subtypes) and common stroke mimics • Able to conduct an up-to-date hyper-acute stroke clinical assessment efficiently (including face to face and virtually [e.g. telemedicine]) with appropriate use of imaging to safely deliver treatment including cerebral reperfusion strategies where indicated • Able to demonstrate a recognition and management of complications relating to cerebral reperfusion strategies • Able to perform a comprehensive, specialist assessment, investigate and treat patients with stroke or mimic syndromes relevant to the patient's age, comorbidities and clinical presentation • Able to manage comorbidities and risk factors relevant to stroke appropriately. • Able to apply principles of early multiprofessional assessment to understand the physical, psychological and social impact of stroke on patients and work collaboratively with the stroke unit multidisciplinary team to guide management strategies including positioning, hydration, nutrition, continence, risk factor modification and participation in rehabilitation • Able to use up-to-date knowledge of evidence, guidelines, appropriate monitoring and measurement scales (including NIHSS and mRS) to guide management and anticipate early complications e.g. malignant MCA syndrome • Able to recognise and manage the deteriorating stroke patient including the introduction of palliative care (e.g. communicating prognostic uncertainty)
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement

	Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	ACAT CbD Mini-CEX Mini-IPX MSF QIPAT DOPS-Cerebral Reperfusions MCR PS Educational Supervisor report
2. Managing the primary and secondary prevention of stroke and Transient Ischaemic Attack	
Descriptors	• Demonstrates knowledge of the different pathophysiological mechanisms, disease processes and causes that underlie the clinical syndrome of stroke (and its subtypes) • Able to conduct an urgent clinical evaluation and prioritise safely: initiating appropriate investigations in a timely manner, interpreting the results and communicating the management plan effectively (including face to face and virtually [e.g. telemedicine]) • Able to provide an accurate diagnosis and appropriate comprehensive management of patients with suspected TIA or stroke including identification of vascular risk factors and lifestyle modification • Able to identify conditions that mimic TIA and stroke and manage these effectively or make an appropriate referral • Able to manage comorbidities and risk factors relevant to TIA and stroke in an outpatient clinic (including tolerating uncertainty where investigation or intervention may not have high utility or benefit). • Awareness of up-to-date primary and secondary prevention treatment strategies for TIA and stroke (including knowledge and application of national guidance) • Able to prioritise referrals received through different mechanisms (e.g. electronic, telephone, in person) and by all healthcare professionals • Able to provide appropriate driving, vocational and social advice for patients with TIA or stroke working in partnership where necessary with the stroke multidisciplinary team
GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 4: Capabilities in health promotion and illness prevention Domain 5: Capabilities in leadership and teamworking

	Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	ACAT CbD Mini-CEX Mini-IPX MSF QIPAT MCR PS Educational Supervisor report
3. Managing early and late stroke rehabilitation in hospital and community settings	
Descriptors	• Understands the anatomy and pathophysiology of stroke with regard to patterns of recovery relevant to stroke subtypes and other factors to guide planning and expectations for an individual's recovery • Demonstrates an understanding of the diverse factors that can influence outcome including problems often associated with non-dominant hemisphere stroke (e.g. higher mental function), neuropsychiatric consequences, post stroke pain and spasticity • Appropriately manages common post stroke complications (seizures, thromboembolism, dysphagia, dehydration, shoulder girdle dysfunction, spasticity) and takes into account how these may affect participation in rehabilitation • Ensures rehabilitation is individualised, patient focused and recognises how the consequences of stroke disability can impact on participation in rehabilitation • Co-ordinates the multidisciplinary team to optimise post stroke recovery, participation in goal setting, measurement of rehabilitation outcome, and participation in national audit • Demonstrates good communication and understanding with patients and families and identifies carer's long-term needs and participation in goal planning • Demonstrates an understanding of medico-legal issues relating to clinically assisted nutrition and hydration in patients both with and without capacity • Contributes to and leads effective discharge planning to support transition to the community and facilitate life after stroke, including engaging with social services that may help optimise on-going recovery and/or provide support including impact on function, vocation and driving. • Understands the impact of cultural and socioeconomic patient backgrounds on stroke prognosis and rehabilitation outcomes. • Able to recognise and manage the deteriorating stroke patient including the introduction of palliative care (e.g. communicating prognostic uncertainty)

GPCs	Domain 1: Professional values and behaviours Domain 2: Professional skills Domain 3: Professional knowledge Domain 5: Capabilities in leadership and team working Domain 6: Capabilities in patient safety and quality improvement Domain 7: Capabilities in safeguarding vulnerable groups Domain 8: Capabilities in education and training Domain 9: Capabilities in research and scholarship
Evidence to inform decision	ACAT CbD GCP Mini-CEX MSF QIPAT MCR PS Educational Supervisor report

3.5 Presentations and Conditions

The table below details the key presentations and conditions of Neurology. Each of these should be regarded as a clinical context in which trainees should be able to demonstrate CiPs and GPCs. In this spiral curriculum, trainees will expand and develop the knowledge, skills and attitudes around managing patients with these conditions and presentations. The patient should always be at the centre of knowledge, learning and care.

Trainees must demonstrate core clinical skills, including information gathering through history and physical examination and information sharing with patients, families and colleagues.

Treatment care and strategy covers how a doctor selects drug treatments or interventions for a patient. It includes discussions and decisions as to whether care is focused mainly on curative intent or whether the main focus is on symptomatic relief. It also covers broader aspects of care, including involvement of other professionals or services.

Particular presentations, conditions and issues are listed either because they are common or serious i.e. high morbidity, mortality and/or serious implications for treatment or public health.

For each presentation and condition trainees will need to be familiar with such aspects as aetiology, epidemiology, clinical features, investigation, management and prognosis. Our

approach is to provide general guidance and not exhaustive detail, which would inevitably become out of date.

The table below lists common presentations and conditions which are of direct relevance to the Neurology and Stroke CiPs. Where important areas of clinical practice feature in the Internal Medicine Stage 2 curriculum or are specifically mentioned in the Neurology or Stroke CiPs, they will not necessarily be duplicated in this table. Important examples include Clinical Genetics, Clinical Pharmacology and Therapeutics, Psychiatry and Palliative Care, applied informatics and personalised medicine, which are in the table of presentations and conditions in the Internal Medicine Curriculum and/or the Neurology or Stroke CiPs.
Areas of practice of potential relevance to all of the Neurology CiPs which are not emphasised in the Internal Medicine Curriculum are included at the start of this table to highlight their importance to all eight of the Neurology CiPs.

Clinical area	Presentations	Conditions/Issues
	Examples of presentations are included in this column, listed in alphabetical order. Where possible duplication has been avoided. This is for illustrative purposes and is not an exhaustive list.	Examples of conditions are included in this column, listed in alphabetical order. Where possible duplication has been avoided. This is for illustrative purposes and is not an exhaustive list.
Neurological disorders during pregnancy	Headache New or worsening neurological deficits Seizures	Eclampsia and pre-eclampsia First presentation of a neurological condition Relapse of a neurological condition
Learning Disability	Behavioural change Seizures	Cognitive impairment Epilepsy
Disorders of sleep	Hypersomnia Insomnia Movement disorders during sleep	Narcolepsy Obstructive sleep apnoea REM and non-REM sleep disorders
Neurological complications of cancer	Focal, multifocal, or generalised neurological deficits Raised intracranial pressure Seizures Weight loss	Acute and delayed neurological complications of chemotherapy and radiotherapy Malignant meningitis Paraneoplastic syndromes Primary and secondary tumours of the brain, spinal cord and peripheral nerves
Disorders of CSF	Cognitive impairment Gait apraxia	Communicating hydrocephalus Idiopathic intracranial hypertension

Clinical area	Presentations	Conditions/Issues
	Headache Optic disc swelling	Intracranial hypotension Normal pressure hydrocephalus Non-communicating hydrocephalus
Disorders of lower cranial nerves	Dysarthria Dysphagia Dysphonia Orofacial pain and numbness	Glossopharyngeal Neuralgia Nuclear, fascicular and peripheral cranial nerve palsies Trigeminal Neuralgia
Disorders of spine, spinal cord and motor and sensory roots	Bowel and bladder dysfunction Immobility Limb or back pain Motor and sensory deficits	Autonomic dysreflexia Compressive, inflammatory, infectious and neoplastic conditions of the spinal cord and roots Neuropathic pain syndromes Syringomyelia
Disorders of the Autonomic Nervous system	Bowel, bladder and sexual dysfunction Postural hypotension	Amyloidosis Diabetes Mellitus Guillain-Barré syndrome Extrapyramidal disorders e.g. Multiple System Atrophy Paraneoplastic neuropathies Pure autonomic failure
Clinical Neurophysiology	Conditions requiring investigation	Normal and abnormal electroencephalography Normal and abnormal electromyography Normal and abnormal evoked potentials Normal and abnormal nerve conduction studies
Neuroradiology	Conditions requiring investigation	Normal and abnormal CT head scans Normal and abnormal MR scans of the head and spine Other imaging techniques e.g. angiography and PET imaging
Neuroendocrinology	Headache Visual failure	Diseases of the hypothalamus Diseases of the pituitary
Neuro-otology	Deafness Disequilibrium Dizziness Vertigo	Acoustic neuroma Benign Paroxysmal Positional Vertigo Cerebrovascular disease Labyrinthitis Ménières disease Vestibular neuritis
Neuro-ophthalmology	Balint's syndrome Diplopia	Cerebrovascular disease Cranial neuropathies

Clinical area	Presentations	Conditions/Issues
	Headache Internuclear ophthalmoplegia Optic disc swelling Optic neuropathy Pupil and lid abnormalities Retrochiasmal field defects	Demyelination Disorders of higher visual function Idiopathic Intracranial Hypertension Ischaemic optic neuropathy Ocular Myasthenia Gravis Oculosympathetic paresis Optic neuritis
CiP 1: Managing disorders of <u>cognition</u> and consciousness	Acalculia Amnesia Anxiety Apathy Aphasia Apraxia Delirium Delusional misidentification Depression Dyslexia Personality and behavioural change Visual inattention and neglect	Alcohol-related cognitive impairment Alzheimer's disease and its variants Autoimmune encephalopathy Cerebrovascular disease Chronic traumatic encephalopathy Extrapyramidal disorders Frontotemporal dementia Intracranial hypotension Lewy Body disease Prion disease Toxic and metabolic states Transient Epileptic Amnesia Transient Global Amnesia
CiP 1: Managing disorders of cognition and <u>consciousness</u>	Behavioural change Brainstem death Coma Disorders of vigilance Hypersomnia Insomnia Locked-in syndrome Minimally conscious state Prolonged disorders of consciousness (PDOC)	Encephalitis Hypoxic encephalopathy Narcolepsy Neurodegenerative disease Non-convulsive status epilepticus Prion disease Raised intracranial pressure Toxic and metabolic states Traumatic brain injury
CiP 2: Managing <u>headache</u> and pain	Acute headache Chronic headache Episodic headache Facial pain Periorbital pain	Atypical facial pain Autonomic cephalgias Cerebrovascular disease Cluster headache Giant Cell Arteritis Glaucoma Glossopharyngeal neuralgia Headache of musculoskeletal origin

Clinical area	Presentations	Conditions/Issues
CiP 2: Managing headache and <u>pain</u>	Back pain Limb pain Neuropathic pain	Hypnic headache Low pressure headache Idiopathic Intracranial hypertension Malignant meningitis Medication overuse headache Migraine Pituitary tumours Primary brain tumours Secondary brain tumours Temperomandibular joint dysfunction Trigeminal Neuralgia Cancer-related pain Cervical myeloradiculopathy Lumbar disc disease Peripheral neuropathy Post-stroke pain syndromes Secondary pain syndromes Spinal cord disorders Thoracic outlet syndrome
CiP 3: Managing seizures and epilepsy	Atonic seizures Dissociative seizures Drop attacks Episodic focal neurological symptoms Focal seizures Myoclonus Paroxysmal nocturnal events Peri-partum seizures Post-ictal psychosis Post-operative seizures Pre-ictal psychosis Syncope Tonic seizures Tonic-clonic seizures Transient amnesia Transient loss of consciousness	Autoimmune encephalitides Degenerative diseases associated with epilepsy Developmental conditions associated with epilepsy Eclampsia Focal epilepsy Generalised epilepsy Genetic causes of epilepsy Mitochondrial diseases Narcolepsy with or without cataplexy Non-convulsive status epilepticus Status epilepticus SUDEP Syncope Toxic and metabolic states
CiP 4: Managing <u>inflammatory</u> and infectious disorders	Abnormal behaviour Abnormal sensation Acute confusion Ataxia	Acute Disseminated Encephalomyelopathy Antibody mediated disorders Autoimmune encephalitis Behçet's syndrome

Clinical area	Presentations	Conditions/Issues
	Bladder, bowel and sexual dysfunction Cognitive impairment Diplopia Disequilibrium Dysarthria and dysphagia Encephalopathy Headache Hypomania and mania Immobility Intractable vomiting Tonic seizures Vertigo Visual loss Weakness	Chronic relapsing inflammatory optic neuropathy (CRION) Collagen vascular disorders Complications of cancer therapy Complications of immune suppression Connective tissue disorders Disorders of eye movement Histiocytosis and related conditions IgG4 disease Immune reconstitution conditions MOG antibody disease Multiple Sclerosis and related disorders Neuromyelitis optica and related disorders Optic Neuritis Paraneoplastic conditions Primary CNS vasculitis Sarcoidosis
CiP 4: Managing inflammatory and <u>infectious</u> disorders	Cognitive decline Delirium Diplopia Facial weakness Fever Focal weakness Headache Paraparesis Pyrexia of unknown origin Seizures Weight loss	Bacterial meningitis Cerebral/epidural abscess Chronic viral infections including HIV Complications of HIV infection Complications of immune suppression Complications of treatments Fungal infections Hydrocephalus Parasitic infection Syphilis Tuberculous meningitis Viral encephalitis Viral meningitis
CiP 5: Managing movement disorders	Behavioural change Cerebellar Ataxia Chorea Constipation Disorders of balance Disorders of gaze Dystonia	Cerebrovascular disease Corticobasal syndrome Drug-induced movement disorders Essential Tremor Functional movement disorders Genetic causes of ataxia

Clinical area	Presentations	Conditions/Issues
	Myoclonus Parkinsonism Sexual dysfunction Tics Tremor	Genetic causes of movement disorders Huntington's disease Multiple System Atrophy Parkinson's disease Progressive Supranuclear Palsy Tourette's syndrome Toxic and metabolic states
CiP 6: Managing neuromuscular disorders	Changes in posture Contractures Dysarthria Dysphagia Dysphonia Falls Fasciculations Focal weakness Global weakness Immobility Kyphoscoliosis Malignant Hyperthermia Myokymia Myotonia Ophthalmoplegia Pain Ptosis Rhabdomyolysis Sensory disturbance Type 2 Respiratory failure	Acquired myopathy Acquired neuropathy Autonomic neuropathy Congenital muscle syndromes Critical care neuromyopathy Degenerative myeloradiculopathies Drug induced neuropathies Guillain-Barré syndrome Immune mediated neuropathy and myopathy Infectious neuropathy and myopathy Inherited myopathies Inherited neuropathies Lambert-Eaton Myasthenic syndrome Metabolic myopathy Mitochondrial myopathy Mitochondrial neuropathy Motor Neurone Disease Myasthenia Gravis Nerve and muscle injuries Paraneoplastic neuropathies Spinal Muscular Atrophy Vasculitis
CiP 7: Managing <u>traumatic brain injury</u> and patients requiring neurorehabilitation	Affective and behavioural change Altered consciousness Episodic depression Episodic dyscontrol Frontal lobe paradox Hearing loss and vertigo Post traumatic amnesia Post-concussion syndrome Post-traumatic amnesia Post-traumatic cognitive impairment	Chronic Traumatic Encephalopathy (CTE) Diffuse axonal injury Epilepsy Hypopituitarism Intracerebral haemorrhage Subdural/extradural haemorrhage Traumatic cranial nerve palsies Traumatic subarachnoid haemorrhage

Clinical area	Presentations	Conditions/Issues
	Post-traumatic headache Post-traumatic sleep disorder Raised/reduced intracranial pressure	
CiP 7: Managing traumatic brain injury and patients requiring <u>neurorehabilitation</u>	Bowel, bladder and sexual dysfunction Cognitive impairment Conduct disorder Contractures Deafness Disequilibirum Gait disorders Pain Proprioceptive disorders Spasticity Visuospatial disorders	Acquired brain injury Cerebral palsy Multiple Sclerosis Neuromuscular weakness Polyneuropathy Post infectious disorders Rehabilitation following neurosurgery Spinal cord injury
CiP 8: Managing <u>neuropsychiatric disorders</u>, and functional neurological disorders	Anxiety Behavioural disorders Depression Panic Attack Psychosis Suicidal ideation	Autoimmune encephalitis Cerebrovascular disease Dementia Dissociative seizures Movement disorders Schizophrenia
CiP 8: Managing neuropsychiatric disorders, and <u>functional neurological disorders</u>	Chronic pain Cognitive impairment Dizziness Dysarthria Dysphagia Dysphonia Fatigue Unexplained blackouts Visual impairments	Functional cognitive disorder Functional movement disorder Functional sensory loss Functional visual loss Functional weakness Persistent posture-perceptual dizziness (PPPD)

System/Specialty and specialist clinical area	Presentations	Conditions/Issues
Acute Stroke or Mimic	Weakness unilateral or bilateral Inattention Dysarthria Dysphasia Dysphagia Vertigo Unsteadiness Monocular Visual loss Visual Field impairment Altered sensation Sudden unconsciousness	Acute Cerebral Infarction Acute Intracerebral Haemorrhage TIA Cerebral Amyloidosis Transient Amnesias Acute and remote seizure(s) Cerebral Venous Thrombosis Migraine Syncope Subdural Haemorrhage Subarachnoid Haemorrhage Amaurosis Fugax Space Occupying Lesion Bell's Palsy Functional Neurological Disorder Facial mononeuropathy Peripheral neuropathy Vestibular disorders Systemic / Metabolic disorders
Primary or Secondary Prevention of Stroke, Transient Ischaemic Attack or Mimic	Weakness unilateral or bilateral Inattention Dysarthria Dysphasia Dysphagia Vertigo Unsteadiness Visual Loss Altered sensation Cognitive decline	Acute Cerebral Infarction Acute Intracerebral Haemorrhage TIA Central retinal artery occlusion Cerebral Amyloidosis Transient Amnesias Acute and remote seizure(s) Migraine Syncope Subdural Haemorrhage Space Occupying Lesion Bell's Palsy Atrial Fibrillation Cervical Arterial disease Cardiac disease Vascular cognitive impairment
Medical Care and Rehabilitation following stroke	Incontinence of urine Incontinence of faeces Oral feeding failure Immobility, including problems with standing and transfers Communication problems	Cerebral infarction Intracerebral haemorrhage Pneumonia Incontinence Post Stroke Pain Post Stroke Depression Post Stroke Epilepsy

System/Specialty and specialist clinical area	Presentations	Conditions/Issues
	Disorders of conduct and behaviour Spasticity Pain Seizures Disorders of mood Musculoskeletal complications of neurological disease Visual Loss Disorders of perception and visuospatial neglect Abnormal Sensation Disorders of cognition Fatigue Complications of immobility	Vascular cognitive impairment Venous thromboembolic disease Upper motor neurone syndrome

3.6 Practical procedures

There are a number of procedural skills in which a trainee must become proficient.

Trainees must be able to outline the indications for these procedures and recognise the importance of valid consent, aseptic technique, safe use of analgesia and local anaesthetics, minimisation of patient discomfort, and requesting help when appropriate. For all practical procedures the trainee must be able to recognise complications and respond appropriately if they arise, including calling for help from colleagues in other specialties when necessary.

Trainees should receive training in procedural skills in a clinical skills lab if required. Assessment of procedural skills will be made using the direct observation of procedural skills (DOPS) tool. The table below sets out the minimum competency level expected for each of the practical procedures.

When a trainee has been signed off as being able to perform a procedure independently, they are not required to have any further assessment (DOPS) of that procedure, unless they or their educational supervisor think that this is required (in line with standard professional conduct).

Procedure	ST3	ST4	ST5	ST6	ST7
Minimum level required					
Lumbar Puncture (Diagnostic and therapeutic)	Able to perform the procedure with limited supervision	Competent to perform the procedure unsupervised	Maintain	Maintain	Maintain

Procedure	ST3	ST4	ST5	ST6	ST7
Botulinum toxin injection (hemifacial spasm, cervical dystonia, spasticity, migraine)	Able to perform the procedure under direct supervision	Maintain	Maintain	Maintain	Maintain
Greater Occipital nerve injections	Able to perform the procedure under direct supervision	Maintain	Maintain	Maintain	Maintain

4 Learning and Teaching

4.1 The training programme

The organisation and delivery of postgraduate training is the responsibility of the Health Education England (HEE), NHS Education for Scotland (NES), Health Education and Improvement Wales (HEIW) and the Northern Ireland Medical and Dental Training Agency (NIMDTA) – referred to from this point as 'deaneries'. A training programme director (TPD) will be responsible for coordinating the specialty training programme. In England, the local organisation and delivery of training is overseen by a school of medicine.

Progression through the programme will be determined by the Annual Review of Competency Progression (ARCP) process and the training requirements for each indicative year of training are summarised in the ARCP decision aid (available on the JRCPTB website).

The sequence of training should ensure appropriate progression in experience and responsibility. The training to be provided at each training site is defined to ensure that, during the programme, the curriculum requirements are met and also that unnecessary duplication and educationally unrewarding experiences are avoided.

Trainees will have an appropriate Clinical Supervisor (CS) and a named Educational Supervisor (ES). The clinical supervisor and educational supervisor may be the same person. It will be best practice for trainees to have an educational supervisor who practises internal medicine for periods of IM stage 2 training. Educational supervisors of IM trainees who do not themselves practise IM must take particular care to ensure that they obtain and consider detailed feedback from clinical supervisors who are knowledgeable about the trainees' IM performance and include this in their educational reports.

Each training programme will include placements to cover the Neurology CiPs. All trainees will also complete the three stroke CiPs, therefore this curriculum should be read in conjunction with the most up-to-date stroke subspecialty curriculum

Recommended training
Trainees will be encouraged to engage with a range of healthcare professionals who diagnose and treat patients with neurological conditions including amongst many others Neuroradiologists, Neurosurgeons, Neurophysiologists, Neuropsychiatrists, Urologists, Clinical Psychologists, Physiotherapists and Speech Therapists.

4.2 Teaching and learning methods

The curriculum will be delivered through a variety of learning experiences and will achieve the capabilities described in the syllabus through a variety of learning methods. There will be a balance of different modes of learning from formal teaching programmes to experiential learning 'on the job'. The proportion of time allocated to different learning methods may vary depending on the nature of the attachment within a rotation.

This section identifies the types of situations in which a trainee will learn.

The content of work-based experiential learning is decided by the local faculty for education but includes active participation in:

Medical clinics including specialty clinics
The educational objectives of attending clinics are:

- To understand the management of chronic diseases and the prevention of avoidable disability
- Be able to assess a patient in a defined time-frame
- To interpret and act on the referral letter to clinic
- To propose an investigation and management plan in a setting different from the acute medical situation
- To review and amend existing investigation plans
- To write an informative letter back to the referrer
- To communicate with the patient and where necessary relatives and other health care professionals.

These objectives can be achieved in a variety of settings including hospitals, day care facilities and the community. The clinic might be primarily run by a specialist nurse (or other qualified health care professionals) rather than a consultant physician. After initial induction, trainees will review patients in clinic settings, under direct supervision. The degree of responsibility taken by the trainee will increase as competency increases. Trainees should see a range of new and follow-up patients and present their findings to their clinical supervisor. Clinic letters written by the trainee should also be reviewed and feedback given.

The number of patients that a trainee should see in each clinic is not defined, neither is the time that should be spent in clinic, but as a guide this should be a minimum of two hours.

Clinic experience should be used as an opportunity to undertake supervised learning events and reflection.

Reviewing patients with consultants

It is important that trainees have an opportunity to present at least a proportion of the patients whom they have admitted to their consultant for senior review in order to obtain immediate feedback into their performance (that may be supplemented by an appropriate WBA such as an ACAT, mini-CEX or CBD). This may be accomplished when working on a take shift along with a consultant, or on a post-take ward round with a consultant.

Personal ward rounds and provision of ongoing clinical care on specialist medical ward attachments

Every patient seen, on the ward or in outpatients, provides a learning opportunity, which will be enhanced by following the patient through the course of their illness. The experience of the evolution of patients' problems over time is a critical part both of the diagnostic process as well as management. Patients seen should provide the basis for critical reading and reflection on clinical problems.

Ward rounds by more senior doctors

Every time a trainee observes another doctor seeing a patient or their relatives there is an opportunity for learning. Ward rounds (including post-take) should be led by a more senior doctor and include feedback on clinical and decision-making skills.

Multidisciplinary team meetings

There are many situations where clinical problems are discussed with clinicians in other disciplines. These provide excellent opportunities for observation of clinical reasoning.

Trainees have supervised responsibility for the care of inpatients. This includes day-to-day review of clinical conditions, note keeping, and the initial management of the acutely ill patient with referral to and liaison with clinical colleagues as necessary. The degree of responsibility taken by the trainee will increase as competency increases. There should be appropriate levels of clinical supervision throughout training, with increasing clinical independence and responsibility.

Telephone clinics and video consultations.

The changes in the delivery of healthcare associated with the COVID epidemic has led to the increased use of remote consultations, particularly for follow-up consultations and for the triage of new referrals. Training in the appropriate use of these techniques will be required.

Palliative and end of life care

The palliative care needs of patients with diseases of the nervous system are importantly different to those of patients with advanced malignancy. The ability to communicate may be compromised at an early stage, and pain may be only a minor symptom compared to breathlessness, confusion, agitation, seizures and oral feeding failure.
Trainees undertaking a palliative medicine attachment (this will not be obligatory for Neurology trainees but could with planning be included in a placement on an appropriate training programme) will see palliative care patients with a range of life-limiting illnesses, including cancer, frailty, multimorbidity, dementia and organ failure. They will gain expertise in:

- Managing difficult physical symptoms;

- Managing psychological, spiritual and existential distress for patients and those close to them.
- Addressing complex social issues for patients at the end of life (including facilitating preferences for place of care and death).
- Managing challenging symptoms in the dying patient.
- Identifying those in need of proactive or enhanced bereavement support.
- Managing palliative care patients out of hours, including in non-acute settings (hospice and community).

Trainees will also have the opportunity to:

- Enhance skills in recognising the patient with limited reversibility of their medical condition and the dying patient.
- Improve understanding of the range of interventions that can be delivered in acute and non-acute settings (e.g. community, hospice or care home);
- Increase confidence in developing and communicating appropriate advance care plans, including DNACPR and treatment escalation decisions.
- Increase confidence in providing a senior opinion where there is conflict regarding a patient's goals of care.
- Increase confidence in working in an advisory/liaison role, e.g. in hospital or community, providing advice to other multiprofessional teams.

Formal postgraduate teaching

The content of these sessions are determined by the local faculty of medical education and will be based on the curriculum. There are many opportunities throughout the year for formal teaching in the local postgraduate teaching sessions and at regional, national and international meetings. Many of these are organised by the Royal Colleges of Physicians.

Suggested activities include:

- a programme of formal bleep-free regular teaching sessions to cohorts of trainees (e.g. a weekly training hour for IM teaching within a training site)
- case presentations
- research, audit and quality improvement projects
- lectures and small group teaching
- Grand Rounds
- clinical skills demonstrations and teaching
- critical appraisal and evidence based medicine and journal clubs
- joint specialty meetings
- attendance at training programmes organised on a deanery or regional basis, which are designed to cover aspects of the training programme outlined in this curriculum.

Learning with peers - There are many opportunities for trainees to learn with their peers. Local postgraduate teaching opportunities allow trainees of varied levels of experience to come together for small group sessions.

Independent self-directed learning

Trainees will use this time in a variety of ways depending upon their stage of learning. Suggested activities include:

- reading, including web-based material such as e-Learning for Healthcare (e-LfH)
- maintenance of personal portfolio (self-assessment, reflective learning, personal development plan)
- audit, quality improvement and research projects
- reading journals
- achieving personal learning goals beyond the essential, core curriculum

Formal study courses

Time to be made available for formal courses is encouraged, subject to local conditions of service. Examples include management and leadership courses and communication courses, which are particularly relevant to patient safety and experience.

4.3 Academic training

The four nations have different arrangements for academic training and doctors in training should consult the local deanery for further guidance.

Trainees may train in academic medicine as an academic clinical fellow (ACF), academic clinical lecturer (ACL) or equivalent.

Some trainees may opt to do research leading to a higher degree, without being appointed to a formal academic programme. This new curriculum supports doctors who wish to apply for the opportunity to take time out of programme to do research (OOPR) but, as now, this will require discussion between the trainee and the Training Programme Director, and all applications will need the support of the Postgraduate Dean and the SAC to ensure that the proposed period –usually a maximum of three years - and the scope of the research is appropriate, and that time out of programme is justified.

4.4 Taking time out of programme

There are a number of circumstances when a trainee may seek to spend some time out of specialty training, such as undertaking a period of research or taking up a fellowship post. All such requests must be agreed by the postgraduate dean in advance and trainees are advised to discuss their proposals as early as possible. Full guidance on taking time out of programme can be found in the Gold Guide.

4.5 Acting up as a consultant

A trainee coming towards the end of their training may spend up to three months “acting-up” as a consultant, provided that a consultant supervisor is identified for the post and satisfactory progress is made. As long as the trainee remains within an approved training programme, the GMC does not need to approve this period of “acting up” and their original CCT date will not be affected. More information on acting up as a consultant can be found in the Gold Guide.

5 Programme of assessment

5.1 Purpose of assessment

The purpose of the programme of assessment is to:

- assess trainees' actual performance in the workplace
- enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, understand their own performance and identify areas for development
- drive learning and enhance the training process by making it clear what is required of trainees and motivating them to ensure they receive suitable training and experience
- demonstrate trainees have acquired the GPCs and meet the requirements of GMP
- ensure that trainees possess the essential underlying knowledge required for their specialty
- provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme
- inform the ARCP, identifying any requirements for targeted or additional training where necessary and facilitating decisions regarding progression through the training programme
- identify trainees who should be advised to consider changes of career direction.

5.2 Programme of Assessment

Our programme of assessment refers to the integrated framework of exams, assessments in the workplace and judgements made about a learner during their approved programme of training. The purpose of the programme of assessment is to robustly evidence, ensure and clearly communicate the expected levels of performance at critical progression points in, and to demonstrate satisfactory completion of training as required by the curriculum.

The programme of assessment is comprised of several different individual types of assessment. A range of assessments is needed to generate the necessary evidence required for global judgements to be made about satisfactory performance, progression in, and completion of, training. All assessments, including those conducted in the workplace, are linked to the relevant curricular learning outcomes (e.g. through the blueprinting of assessment system to the stated curricular outcomes).

The programme of assessment emphasises the importance and centrality of professional judgement in making sure learners have met the learning outcomes and expected levels of performance set out in the approved curricula. Assessors will make accountable, professional judgements. The programme of assessment includes how professional judgements are used and collated to support decisions on progression and satisfactory completion of training.

The assessments will be supported by structured feedback for trainees. Assessment tools will be both formative and summative and have been selected on the basis of their fitness for purpose.

Assessment will take place throughout the training programme to allow trainees continually to gather evidence of learning and to provide formative feedback. Those assessment tools

which are not identified individually as summative will contribute to summative judgements about a trainee's progress as part of the programme of assessment. The number and range of these will ensure a reliable assessment of the training relevant to their stage of training and achieve coverage of the curriculum.

Reflection and feedback should be an integral component to all SLEs and WBPAs. In order for trainees to maximise benefit, reflection and feedback should take place as soon as possible after an event. Every clinical encounter can provide a unique opportunity for reflection and feedback and this process should occur frequently. Feedback should be of high quality and should include an action plan for future development for the trainee. Both trainees and trainers should recognise and respect cultural differences when giving and receiving feedback.

5.3 Assessment of CiPs

Assessment of CiPs involves looking across a range of different skills and behaviours to make global decisions about a learner's suitability to take on particular responsibilities or tasks.

Clinical supervisors and others contributing to assessment will provide formative feedback to the trainee on their performance throughout the training year. This feedback will include a global rating in order to indicate to the trainee and their educational supervisor how they are progressing at that stage of training. To support this, workplace based assessments and multiple consultant reports will include global assessment anchor statements.

Global assessment anchor statements

- Below expectations for this year of training; may not meet the requirements for critical progression point
- Meeting expectations for this year of training; expected to progress to next stage of training
- Above expectations for this year of training; expected to progress to next stage of training

Towards the end of the training year, trainees will make a self-assessment of their progression for each CiP and record this in the eportfolio with signposting to the evidence to support their rating.

The educational supervisor (ES) will review the evidence in the eportfolio including workplace based assessments, feedback received from clinical supervisors (via the Multiple Consultant Report) and the trainee's self-assessment and record their judgement on the trainee's performance in the ES report, with commentary.

For **generic CiPs**, the ES will indicate whether the trainee is meeting expectations or not using the global anchor statements above. Trainees will need to be meeting expectations for the stage of training as a minimum to be judged satisfactory to progress to the next training year.

For **clinical and specialty CiPs**, the ES will make an entrustment decision for each CiP and record the indicative level of supervision required with detailed comments to justify their entrustment decision. The ES will also indicate the most appropriate global anchor statement (see above) for overall performance.

Level descriptors for clinical and specialty CiPs

Level	Descriptor
Level 1	**Entrusted to observe only** – no provision of clinical care
Level 2	**Entrusted to act with direct supervision**: The trainee may provide clinical care, but the supervising physician is physically within the hospital or other site of patient care and is immediately available if required to provide direct bedside supervision
Level 3	**Entrusted to act with indirect supervision**: The trainee may provide clinical care when the supervising physician is not physically present within the hospital or other site of patient care, but is available by means of telephone and/or electronic media to provide advice, and can attend at the bedside if required to provide direct supervision
Level 4	**Entrusted to act unsupervised**

The ARCP will be informed by the ES report and the evidence presented in the eportfolio. The ARCP panel will make the final summative judgement on whether the trainee has achieved the generic outcomes and the appropriate level of supervision for each CiP. The ARCP panel will determine whether the trainee can progress to the next year/level of training in accordance with the Gold Guide. ARCPs will be held for each training year. The final ARCP will ensure trainees have achieved level 4 in all CiPs for the critical progression point at completion of training.

5.4 Critical progression points

There will be a key progression point on entry and on completion of specialty training. Trainees will be required to be entrusted at level 4 in all CiPs in order to achieve an ARCP outcome 6 and be recommended for a CCT.

The educational supervisor report will make a recommendation to the ARCP panel as to whether the trainee has met the defined levels for the CiPs and acquired the procedural competence required for each year of training. The ARCP panel will make the final decision on whether the trainee can be signed off and progress to the next year/level of training [see section 5.6].

The outline grids below set out the expected level of supervision and entrustment for the IM clinical CiPs and the specialty CiPs and include the critical progression points across the whole training programme.

Table 1: Outline grid of levels expected for Internal Medicine clinical capabilities in practice (CiPs)

Level descriptors
Level 1: Entrusted to observe only – no clinical care
Level 2: Entrusted to act with direct supervision
Level 3: Entrusted to act with indirect supervision
Level 4: Entrusted to act unsupervised

IM Clinical CiP	ST4	ST5	ST6	ST7	CRITICAL PROGRESSION POINT
1. Managing an acute unselected take				**4**	
2. Managing the acute care of patients within a medical specialty service		**3**		**4**	
3. Providing continuity of care to medical inpatients				**4**	
4. Managing outpatients with long term conditions				**4**	
5. Managing medical problems in patients in other specialties and special cases				**4**	
6. Managing an MDT including discharge planning				**4**	
7. Delivering effective resuscitation and managing the deteriorating patient				**4**	
8. Managing end of life and applying palliative care skills				**4**	

Table 2: Outline grid of levels expected for Neurology specialty capabilities in practice (CiPs)

Levels to be achieved by the end of each training year for specialty CiPs

Level descriptors
Level 1: Entrusted to observe only – no clinical care
Level 2: Entrusted to act with direct supervision
Level 3: Entrusted to act with indirect supervision
Level 4: Entrusted to act unsupervised

Neurology CiPs	ST4	ST5	ST6	ST7	ST8	CRITICAL PROGRESSION POINT
1. Managing disorders of cognition and consciousness	2	2	3	3	4	
2. Managing headache and pain	2	2	3	3	4	
3. Managing seizures and epilepsy	2	2	3	3	4	
4. Managing inflammatory and infectious disorders	2	2	3	3	4	
5. Managing movement disorders	2	2	3	3	4	
6. Managing neuromuscular disorders	2	2	3	3	4	
7. Managing traumatic brain injury and patients requiring neurorehabilitation	2	2	3	3	4	
8. Managing neuropsychiatric disorders, including functional disorders	2	2	3	3	4	

The Stroke sub-specialty CiPs are included here for information and clarity

Stroke sub-specialty CiPs	ST4	ST5	ST6	ST7	ST8	CRITICAL PROGRESSION POINT
1. Managing the care of acute stroke patients, including hyperacute care and cerebral reperfusion strategies	2	2	2	2	4	
2. Managing the primary and secondary prevention of stroke and Transient Ischaemic Attack	2	2	2	2	4	
3. Managing early and late stroke rehabilitation in hospital and community settings	2	2	2	2	4	

5.5 Evidence of progress

The following methods of assessment will provide evidence of progress in the integrated programme of assessment. The requirements for each training year/level are stipulated in the ARCP decision aid (www.jrcptb.org.uk).

Summative assessment

Examinations and certificates

- Advanced Life Support Certificate (ALS)
- Specialty Certificate Examination (SCE)

The Specialty Certificate Examination has been developed by the Federation of Royal Colleges of Physicians in conjunction with Association of British Neurologists. The examination tests the extra knowledge base that trainees have acquired since taking the MRCP(UK) diploma. The knowledge base itself must be associated with adequate use of such knowledge and passing this examination must be combined with satisfactory progress in workplace based assessments for the trainee to successfully reach the end of training and be awarded the CCT in Neurology. Information is available on the MRCPUK website

Workplace-based assessment (WPBA)

- Direct Observation of Procedural Skills (DOPS) – summative

Formative assessment

Supervised Learning Events (SLEs)

- Acute Care Assessment Tool (ACAT)
- Case-Based Discussions (CbD)
- mini-Clinical Evaluation Exercise (mini-CEX)
- mini-Imaging Interpretation Exercise (mini-IPX)

WPBA

- Direct Observation of Procedural Skills (DOPS) – formative
- Multi Source Feedback (MSF)
- Patient Survey (PS)
- Quality Improvement Project Assessment Tool (QIPAT)
- Teaching Observation (TO)

Supervisor reports

- Multiple Consultant Report (MCR)
- Educational Supervisor Report (ESR)
- Clinical Supervisor Report (CSR)

These methods are described briefly below. More information and guidance for trainees and assessors are available in the eportfolio and on the JRCPTB website (www.jrcptb.org.uk).

Assessment should be recorded in the trainee's eportfolio. These methods include feedback opportunities as an integral part of the programme of assessment.

Acute Care Assessment Tool (ACAT)
The ACAT is designed to assess and facilitate feedback on a doctor's performance during their practice on the acute medical take. It is primarily for assessment of their ability to prioritise, to work efficiently, to work with and lead a team, and to interact effectively with nursing and other colleagues. It can also be used for assessment and feedback in relation to care of individual patients. Any doctor who has been responsible for the supervision of the acute medical take can be the assessor for an ACAT.

Case-based Discussion (CbD)
The CbD assesses the performance of a trainee in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by trainees. The CbD should focus on a written record (such as written case notes, out-patient letter, and discharge summary). A typical encounter might be when presenting newly referred patients in the out-patient department.

Direct Observation of Procedural Skills (DOPS)
A DOPS is an assessment tool designed to evaluate the performance of a trainee in undertaking a practical procedure, against a structured checklist. The trainee receives immediate feedback to identify strengths and areas for development. DOPS can be undertaken as many times as the trainee and their supervisor feel is necessary (formative). A trainee can be regarded as competent to perform a procedure independently after they are signed off as such by an appropriate assessor (summative).

mini-Clinical Evaluation Exercise (mini-CEX)
This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The trainee receives immediate feedback to aid learning. The mini-CEX can be used at any time and in any setting when there is a trainee and patient interaction and an assessor is available.

mini-Imaging Interpretation Exercise (mini-IEX)
This tool evaluates a trainee's skills in interpreting an imaging study and is designed to provide rapid and prompt feedback to a trainee in a particular area of diagnostic imaging.

Multi Source Feedback (MSF)
This tool is a method of assessing generic skills such as communication, leadership, team working, reliability etc, across the domains of Good Medical Practice. This provides systematic collection and feedback of performance data on a trainee, derived from a number of colleagues. 'Raters' are individuals with whom the trainee works, and includes doctors, administrative staff, and other allied professionals. Raters should be agreed with the educational supervisor at the start of the training year. The trainee will not see the

individual responses by raters. Feedback is given to the trainee by the Educational Supervisor.

Patient Survey (PS)
A trainee's interaction with patients should be continually observed and assessed. The Patient Survey provides a tool to assess a trainee during a consultation period. The Patient Survey assesses the trainee's performance in areas such as interpersonal skills, communication skills and professionalism.

Quality Improvement Project Assessment Tool (QIPAT)
The QIPAT is designed to assess a trainee's competence in completing a quality improvement project. The QIPAT can be based on review of quality improvement project documentation or on a presentation of the quality improvement project at a meeting. If possible the trainee should be assessed on the same quality improvement project by more than one assessor.

Teaching Observation (TO)
The TO form is designed to provide structured, formative feedback to trainees on their competence at teaching. The TO can be based on any instance of formalised teaching by the trainee which has been observed by the assessor. The process should be trainee-led (identifying appropriate teaching sessions and assessors).

Reflective notes
Reflections on courses attended, audit meetings, morbidity and mortality meetings, encounters with relatives, assessments of capacity and personal interactions with colleagues are valuable sources of learning.

Supervisors' reports

Multiple Consultant Report (MCR)
The MCR captures the views of consultant supervisors based on observation on a trainee's performance in practice. The MCR feedback and comments received give valuable insight into how well the trainee is performing, highlighting areas of excellence and areas of support required. MCR feedback will be available to the trainee and contribute to the educational supervisor's report.

Educational Supervisors Report (ESR)
The ES will periodically (at least annually) record a longitudinal, global report of a trainee's progress based on a range of assessment, potentially including observations in practice or reflection on behaviour by those who have appropriate expertise and experience. The ESR will include the ES's summative judgement of the trainee's performance and the entrustment decisions given for the learning outcomes (CiPs). The ESR can incorporate commentary or reports from longitudinal observations, such as from supervisors or formative assessments demonstrating progress over time.

5.6 Decisions on progress (ARCP)

The decisions made at critical progression points and upon completion of training should be clear and defensible. They must be fair and robust and make use of evidence from a range of assessments, potentially including exams and observations in practice or reflection on behaviour by those who have appropriate expertise or experience. They can also incorporate commentary or reports from longitudinal observations, such as from supervisors or formative assessments demonstrating progress over time.

Periodic (at least annual) review should be used to collate and systematically review evidence about a doctor's performance and progress in a holistic way and make decisions about their progression in training. The annual review of progression (ARCP) process supports the collation and integration of evidence to make decisions about the achievement of expected outcomes.

Assessment of CiPs involves looking across a range of different skills and behaviours to make global decisions about a learner's suitability to take on particular responsibilities or tasks, as do decisions about the satisfactory completion of presentations/conditions and procedural skills set out in this curriculum. The outline grid in section 5.4 sets out the level of supervision expected for each of the clinical and specialty CiPs. The table of practical procedures sets out the minimum level of performance expected at the end of each year or training. The requirements for each year of training are set out in the ARCP decision aid (www.jrcptb.org.uk).

The ARCP process is described in the Gold Guide. Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP panels should be collected in the trainee's eportfolio.

As a precursor to ARCPs, JRCPTB strongly recommend that trainees have an informal eportfolio review either with their educational supervisor or arranged by the local school of medicine. These provide opportunities for early detection of trainees who are failing to gather the required evidence for ARCP.

There should be review of the trainee's progress to identify any outstanding targets that the trainee will need to complete to meet all the learning outcomes for completion training approximately 12-18 months before CCT. This should include an external assessor from outside the training programme.

In order to guide trainees, supervisors and the ARCP panel, JRCPTB has produced an ARCP decision aid which sets out the requirements for a satisfactory ARCP outcome at the end of each training year and critical progression point. The ARCP decision aid is available on the JRCPTB website www.jrcptb.org.uk.

Poor performance should be managed in line with the Gold Guide.

5.7 Assessment blueprint

The tables below show the possible methods of assessment for each CiP. It is not expected that every method will be used for each competency and additional evidence may be used to help make a judgement on capability.

ACAT	Acute care assessment tool	ALS	Advanced Life Support
CbD	Case-based discussion Logbook of cases Minutes of an MDT meeting	DOPS	Direct observation of procedural skills Log of procedures performed
GCP	Good Clinical Practice Evidence of application for ethical and R&D approval		
Mini-CEX Simulation	Mini-clinical evaluation exercise Simulation training with assessment	MCR	Multiple consultant report End of placement reports Educational supervisor's report Clinical supervisor's report
MSF	Multi source feedback	PS	Patient survey
QIPAT	Quality improvement project assessment tool	TO	Teaching observation Student feedback Certificates and diplomas in teaching Teaching material e.g. slides, e-modules, and podcasts.
		Mini-IPX	Mini Imaging Interpretation Tool
		Reflective notes	Evidence of literature search and critical appraisal of research Use of clinical guidelines Quality improvement and audit Evidence of research activity Letters generated at outpatient clinics End of life care assessment Mental capacity assessment Safeguarding assessment Reflections on regional training days. Mortality and morbidity notes

Blueprint for WPBAs mapped to CiPs

Learning outcomes	ACAT	CbD	DOPS	MCR	Mini -CEX	MSF	PS	QIPAT	TO	Mini-IPX
Generic CiPs										
Able to function successfully within NHS organisational and management systems				√		√				
Able to deal with ethical and legal issues related to clinical practice		√	√	√	√	√				
Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement				√		√	√			
Is focused on patient safety and delivers effective quality improvement in patient care				√		√		√		
Carrying out research and managing data appropriately				√		√				
Acting as a clinical teacher and clinical supervisor				√		√			√	
Clinical CiPs										
Managing an acute unselected take	√	√		√		√				
Managing the acute care of patients within a medical specialty service	√	√		√		√				
Providing continuity of care to medical inpatients, including management of comorbidities and cognitive impairment	√		√	√	√	√				
Managing patients in an outpatient clinic, ambulatory or community setting, including management of long term conditions	√			√	√		√			
Managing medical problems in patients in other specialties and special cases	√	√		√						
Managing a multidisciplinary team including effective discharge planning	√			√		√				
Delivering effective resuscitation and managing the acutely deteriorating patient	√		√	√		√				
Managing end of life and applying palliative care skills		√		√	√	√				
Practical procedural skills			√							
Neurology CiPs										
Managing disorders of cognition and consciousness	√	√		√	√	√				√

Learning outcomes	ACAT	CbD	DOPS	MCR	Mini -CEX	MSF	PS	QIPAT	TO	Mini-IPX
Managing headache and pain		√	√	√	√	√	√			√
Managing seizures and epilepsy		√		√	√	√	√			√
Managing inflammatory and infectious disorders	√	√	√	√	√	√				√
Managing movement disorders	√	√	√	√	√					√
Managing neuromuscular disorders	√	√		√	√	√				√
Managing traumatic brain injury and patients requiring neurorehabilitation	√	√		√	√	√	√			√
Managing neuropsychiatric disorders, including functional disorders		√		√	√	√	√			√

Learning outcomes	ACAT	CbD	DOPS	MCR	Mini -CEX	MSF	PS	QIPAT	TO	Mini-IPX
Stroke Specialty CiPs										
Managing the care of acute stroke patients, including hyperacute care and cerebral reperfusion strategies	√	√	√	√	√	√				√
Managing the primary and secondary prevention of stroke and Transient Ischaemic Attack	√	√	√	√	√	√	√			√
Managing early and late stroke rehabilitation in hospital and community settings	√	√	√	√	√	√				

Knowledge based assessment (SCE)
The 100 questions of the Specialty Specific Exam will cover the 8 Neurology CiPs and the 3 Stroke CiPs.

6 Supervision and feedback

This section of the curriculum describes how trainees will be supervised, and how they will receive feedback on performance. For further information please refer to the AoMRC guidance on Improving feedback and reflection to improve learning (9).

Access to high quality, supportive and constructive feedback is essential for the professional development of the trainee. Trainee reflection is an important part of the feedback process and exploration of that reflection with the trainer should ideally be a two way dialogue. Effective feedback is known to enhance learning and combining self-reflection to feedback promotes deeper learning.

Trainers should be supported to deliver valuable and high quality feedback. This can be by providing face to face training to trainers. Trainees would also benefit from such training as they frequently act as assessors to junior doctors, and all involved could also be shown how best to carry out and record reflection.

6.1 Supervision

All elements of work in training posts must be supervised with the level of supervision varying depending on the experience of the trainee and the clinical exposure and case mix undertaken. Outpatient and referral supervision must routinely include the opportunity to discuss all cases with a supervisor if appropriate. As training progresses the trainee should have the opportunity for increasing autonomy, consistent with safe and effective care for the patient.

Organisations must make sure that each doctor in training has access to a named clinical supervisor and a named educational supervisor. Depending on local arrangements these roles may be combined into a single role of educational supervisor. However, it is preferred that a trainee has a single named educational supervisor for (at least) a full training year, in which case the clinical supervisor is likely to be a different consultant during some placements.

The role and responsibilities of supervisors have been defined by the GMC in their standards for medical education and training (10)

Educational supervisor
The educational supervisor is responsible for the overall supervision and management of a doctor's educational progress during a placement or a series of placements. The educational supervisor regularly meets with the doctor in training to help plan their training, review progress and achieve agreed learning outcomes. The educational supervisor is responsible for the educational agreement, and for bringing together all relevant evidence to form a summative judgement about progression at the end of the placement or a series of placements. Trainees on a dual training program may have a single educational supervisor responsible for their internal medicine and specialty training, or they may have two educational supervisors, one responsible for internal medicine and one for specialty.

Clinical supervisor
Consultants responsible for patients that a trainee looks after provide clinical supervision for that trainee and thereby contribute to their training; they may also contribute to assessment of their performance by completing a 'Multiple Consultant Report (MCR)' and other WPBAs. A trainee may also be allocated (for instance, if they are not working with their educational supervisor in a particular placement) a named clinical supervisor, who is responsible for reviewing the trainee's training and progress during a particular placement. It is expected that a named clinical supervisor will provide a MCR for the trainee to inform the Educational Supervisor's report.

The educational and (if relevant) clinical supervisors, when meeting with the trainee, should discuss issues of clinical governance, risk management and any report of any untoward clinical incidents involving the trainee. If the service lead (clinical director) has any concerns about the performance of the trainee, or there are issues of doctor or patient safety, these would be discussed with the clinical and educational supervisors (as well as the trainee). These processes, which are integral to trainee development, must not detract from the statutory duty of the trust to deliver effective clinical governance through its management systems.

Educational and clinical supervisors need to be formally recognised by the GMC to carry out their roles (11). It is essential that training in assessment is provided for trainers and trainees in order to ensure that there is complete understanding of the assessment system, assessment methods, their purposes and use. Training will ensure a shared understanding and a consistency in the use of the WPBAs and the application of standards.

Opportunities for feedback to trainees about their performance will arise through the use of the workplace-based assessments, regular appraisal meetings with supervisors, other meetings and discussions with supervisors and colleagues, and feedback from ARCP.

Trainees
Trainees should make the safety of patients their first priority and they should not be practising in clinical scenarios which are beyond their experience and capability without supervision. Trainees should actively devise individual learning goals in discussion with their trainers and should subsequently identify the appropriate opportunities to achieve said learning goals. Trainees would need to plan their WPBAs accordingly to enable their WPBAs to collectively provide a picture of their development during a training period. Trainees should actively seek guidance from their trainers in order to identify the appropriate learning opportunities and plan the appropriate frequencies and types of WPBAs according to their individual learning needs. It is the responsibility of trainees to seek feedback following learning opportunities and WPBAs. Trainees should self-reflect and self-evaluate regularly with the aid of feedback. Furthermore, trainees should formulate action plans with further learning goals in discussion with their trainers.

6.2 Appraisal

A formal process of appraisals and reviews underpins training. This process ensures adequate supervision during training, provides continuity between posts and different

supervisors and is one of the main ways of providing feedback to trainees. All appraisals should be recorded in the eportfolio

Induction Appraisal
The trainee and educational supervisor should have an appraisal meeting at the beginning of each post to review the trainee's progress so far, agree learning objectives for the post ahead and identify the learning opportunities presented by the post. Reviewing progress through the curriculum will help trainees to compile an effective Personal Development Plan (PDP) of objectives for the upcoming post. This PDP should be agreed during the Induction Appraisal. The trainee and supervisor should also both sign the educational agreement in the e-portfolio at this time, recording their commitment to the training process.

Mid-point Review
This meeting between trainee and educational supervisor is not mandatory (particularly when an attachment is shorter than 6 months) but is encouraged particularly if either the trainee or educational or clinical supervisor has training concerns or the trainee has been set specific targeted training objectives at their ARCP). At this meeting trainees should review their PDP with their supervisor using evidence from the e-portfolio. Workplace-based assessments and progress through the curriculum can be reviewed to ensure trainees are progressing satisfactorily, and attendance at educational events should also be reviewed. The PDP can be amended at this review.

End of Attachment Appraisal
Trainees should review the PDP and curriculum progress with their educational supervisor using evidence from the e-portfolio. Specific concerns may be highlighted from this appraisal. The end of attachment appraisal form should record the areas where further work is required to overcome any shortcomings. Further evidence of competence in certain areas may be needed, such as planned workplace-based assessments, and this should be recorded. If there are significant concerns following the end of attachment appraisal then the programme director should be informed. Supervisors should also identify areas where a trainee has performed about the level expected and highlight successes.

7 Quality Management

The organisation of training programs is the responsibility of the deaneries. The deaneries will oversee programmes for postgraduate medical training in their regions. The Schools of Medicine in England, Wales and Northern Ireland and the Medical Specialty Training Board in Scotland will undertake the following roles:

- oversee recruitment and induction of trainees into the specialty
- allocate trainees into particular rotations appropriate to their training needs
- oversee the quality of training posts provided locally
- ensure adequate provision of appropriate educational events
- ensure curricula implementation across training programmes
- oversee the workplace-based assessment process within programmes
- coordinate the ARCP process for trainees
- provide adequate and appropriate career advice
- provide systems to identify and assist doctors with training difficulties

- provide flexible training.

Educational programmes to train educational supervisors and assessors in workplace based assessment may be delivered by deaneries or by the colleges or both.

Development, implementation, monitoring and review of the curriculum are the responsibility of the JRCPTB and the SAC. The committee will be formally constituted with representatives from each health region in England, from the devolved nations and with trainee and lay representation. It will be the responsibility of the JRCPTB to ensure that curriculum developments are communicated to heads of school, regional specialty training committees and TPDs.

The JRCPTB has a role in quality management by monitoring and driving improvement in the standard of all medical specialties on behalf of the three Royal Colleges of Physicians in Edinburgh, Glasgow and London. The SACs are actively involved in assisting and supporting deaneries to manage and improve the quality of education within each of their approved training locations. They are tasked with activities central to assuring the quality of medical education such as writing the curriculum and assessment systems, reviewing applications for new posts and programmes, provision of external advisors to deaneries and recommending trainees eligible for CCT or Certificate of Eligibility for Specialist Registration (CESR).

JRCPTB uses data from six quality datasets across its specialties and subspecialties to provide meaningful quality management. The datasets include the GMC national Training Survey (NTS) data, ARCP outcomes, examination outcomes, new consultant survey, external advisor reports and the monitoring visit reports.

Quality criteria have been developed to drive up the quality of training environments and ultimately improve patient safety and experience. These are monitored and reviewed by JRCPTB to improve the provision of training and ensure enhanced educational experiences.

8 Intended use of curriculum by trainers and trainees

This curriculum and ARCP decision aid are available from the Joint Royal Colleges of Physicians Training Board (JRCPTB) via the website www.jrcptb.org.uk.

Clinical and educational supervisors should use the curriculum and decision aid as the basis of their discussion with trainees, particularly during the appraisal process. Both trainers and trainees are expected to have a good knowledge of the curriculum and should use it as a guide for their training programme.

Each trainee will engage with the curriculum by maintaining an eportfolio. The trainee will use the curriculum to develop learning objectives and reflect on learning experiences.

Recording progress in the eportfolio

On enrolling with JRCPTB trainees will be given access to the eportfolio. The eportfolio allows evidence to be built up to inform decisions on a trainee's progress and provides tools to support trainees' education and development.

The trainee's main responsibilities are to ensure the eportfolio is kept up to date, arrange assessments and ensure they are recorded, prepare drafts of appraisal forms, maintain their personal development plan, record their reflections on learning and record their progress through the curriculum.

The supervisor's main responsibilities are to use eportfolio evidence such as outcomes of assessments, reflections and personal development plans to inform appraisal meetings. They are also expected to update the trainee's record of progress through the curriculum, write end-of-attachment appraisals and supervisor's reports.

Deaneries, training programme directors, college tutors and ARCP panels may use the eportfolio to monitor the progress of trainees for whom they are responsible.

JRCPTB will use summarised, anonymous eportfolio data to support its work in quality assurance.

All appraisal meetings, personal development plans and workplace based assessments (including MSF) should be recorded in the eportfolio. Trainees are encouraged to reflect on their learning experiences and to record these in the eportfolio. Reflections can be kept private or shared with supervisors.

Reflections, assessments and other eportfolio content should be used to provide evidence towards acquisition of curriculum capabilities. Trainees should add their own self-assessment ratings to record their view of their progress. The aims of the self-assessment are:

- to provide the means for reflection and evaluation of current practice
- to inform discussions with supervisors to help both gain insight and assists in developing personal development plans.
- to identify shortcomings between experience, competency and areas defined in the curriculum so as to guide future clinical exposure and learning.

Supervisors can sign-off and comment on curriculum capabilities to build up a picture of progression and to inform ARCP panels.

9 Equality and Diversity

The Royal Colleges of Physicians will comply, and ensure compliance, with the requirements of equality and diversity legislation set out in the Equality Act 2010 (12).

The Federation of the Royal Colleges of Physicians believes that equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the Colleges, either as members of staff and Officers; as advisers from the medical profession;

as members of the Colleges' professional bodies or as doctors in training and examination candidates.

Deaneries quality assurance will ensure that each training programme complies with the equality and diversity standards in postgraduate medical training as set by GMC. They should provide access to a professional support unit or equivalent for trainees requiring additional support.

Compliance with anti-discriminatory practice will be assured through:

- monitoring of recruitment processes
- ensuring all College representatives and Programme Directors have attended appropriate training sessions prior to appointment or within 12 months of taking up post
- Deaneries ensuring that educational supervisors have had equality and diversity training (for example, an e-learning module) every three years
- Deaneries ensuring that any specialist participating in trainee interview/appointments committees or processes has had equality and diversity training (at least as an e-module) every three years
- ensuring trainees have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature. Deaneries and Programme Directors must ensure that on appointment trainees are made aware of the route in which inappropriate or discriminatory behaviour can be reported and supplied with contact names and numbers. Deaneries must also ensure contingency mechanisms are in place if trainees feel unhappy with the response or uncomfortable with the contact individual
- providing resources to trainees needing support (for example, through the provision of a professional support unit or equivalent)
- monitoring of College Examinations
- ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly advantage or disadvantage a trainee with any of the Equality Act 2010 protected characteristics. All efforts shall be made to ensure the participation of people with a disability in training through reasonable adjustments.

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JRCPTB

Joint Royal Colleges of Physicians Training Board

ROYAL COLLEGE of PHYSICIANS of EDINBURGH

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW

Royal College of Physicians