LANDSPÍTALI

SAk SJÚKRAHÚSIÐ Á AKUREYRI
AKUREYRI HOSPITAL

Curriculum for Internal Medicine Training in Iceland

Implementation: November 2020

ROYAL COLLEGE of PHYSICIANS of EDINBURGH
ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW
Royal College of Physicians
JRCPTB
Joint Royal Colleges of Physicians Training Board

Contents

1. Introduction

Training in Internal Medicine (IM) will take trainees who have completed Foundation Year training (Kandídatsár),or equivalent, to the level at which they have the capabilities required to acquire a certificate of completion of training (CCT) in Internal Medicine and are thereby deemed capable of working as independent practitioners in this specialty. On completion of Internal Medicine training (IMT) the trainee becomes eligible to be granted Evidence of Formal Qualification (EFQ) and to successfully apply for a license to practice as a consultant physician within Internal Medicine in Iceland and within the European Union and European Economic Area by the Directorate of Health in Iceland.

This curriculum is based on the curricula for Internal Medicine Stage 1 training (IMT1) and the curriculum for Internal Medicine Stage 2 training (IMT2) in the UK, which are managed by the Joint Royal Colleges of Physicians Training Board (JRCPTB) and agreed by the General Medical Council (GMC). Postgraduate Medical Training in Iceland is governed according to and delivered as described in the regulation on the education, rights and obligations of medical doctors and criteria for granting of licenses to practice medicine and specialist medical licenses, No. 467/2015[1]. As defined by this legal framework, training in Internal Medicine in Iceland can be completed within a minimum of 5 years as described in this curriculum.

This curriculum defines the purpose, content of learning, process of training and the programme of assessment for Internal Medicine training. It thereby includes the learning outcomes for a CCT and framework for the granting of EFQ in concordance with European regulations and a specialist licence in Internal Medicine in Iceland and the EU.

2. Purpose

2.1 Purpose of the curriculum

The purpose of the Internal Medicine curriculum is to produce doctors with the generic professional and clinical capabilities needed to take overall responsibility for management of patients presenting with a wide range of general medical symptoms and conditions. They will be particularly skilled in diagnostic reasoning, differential diagnosis, management of co-morbidities, dealing with uncertainty, recognising when specialist care would (or would not) be appropriate, and determining when care should be palliative.

Doctors who complete training satisfactorily will be eligible to apply for a specialist licence in Iceland, and for a CCT or a Certificate of Eligibility for Specialist Registration via the Combined Programme (CESR CP)[2] and can be recommended to the GMC for inclusion on the specialist register in the UK. At completion of training they will be capable of independent unsupervised practice and will be eligible for appointment as a consultant Physician in Iceland and the European Union, or as an NHS consultant in the UK.

Postgraduate Medical Training in Iceland has developed significantly over the last decade. In addition to the implementation of a more robust legislative framework in line with European law, with changing population- and patient demographics there was a recognised need to further advance the medical workforce with positive implications for over-all working conditions, workforce management and sustainability with an over-arching aim of improved quality of care and patient safety. For Internal Medicine, this has been achieved through collaboration with JRCPTB on the previous implementation of Core Medical Training and IM Stage 1 training for the first stages of Internal Medicine Training. The implementation of full IM training building on this same collaboration will hopefully help to further and secure this development in place.

The Shape of Training (SoT) review[3] reflects similar developments in the UK and was a catalyst for reform of postgraduate training of all doctors to ensure it is more patient focused, more general (especially in the early years) and with more flexibility of career structure. For physician training, the views and recommendations of SoT were similar to those of the Future Hospital Commission[4] and the Francis report[5]. With an ageing population, elderly patients exhibit co-morbidities and increasing complexity so acute medical services need a different approach to training the physician of the future.

A further driver for change in the UK was the GMC's review of the curricula and assessment standards[6] and introduction of the GMC's generic professional capabilities (GPCs) Framework[7]. From May 2017, all postgraduate curricula should be based on higher level learning outcomes and must incorporate the generic professional capabilities. A fundamental component of the GPCs is ensuring that the patient is at the centre of any consultation and decision making. To this end, communication skills are emphasised in the learning outcomes and evidenced through all work-based assessments (particularly multi-source feedback – MSF). The aim is to apply these same standards to the structure and delivery of Postgraduate Medical Education in Iceland, as evident from the adaptation of this curriculum

The IM curriculum will produce a workforce that reflects the current trends of increasing patient attendances to both Primary Care and Emergency Departments. This workforce will be trained to manage complex multi- morbidity in an ageing population and be able to manage many conditions in an ambulatory capacity. There is a growing need from a service perspective for specialists with generalist skills to manage the acute unselected take and care of acutely ill patients.

The curricula for IM Stage 1 and IM Stage 2, on which this comprehensive IM curriculum for Iceland is based, were developed with input of trainees, consultants actively involved in delivering teaching and training across the UK, service representatives and lay persons. This was through the work of the JRCPTB and the Internal Medicine Specialist Advisory Committee. The Icelandic adaptation was generated by the Training Programme Directors for Internal Medicine in Iceland, with active participation from medical specialists and trainee representatives. The curriculum meets the European Training Requirements in Internal Medicine.

The purpose of this curriculum is to ensure that the trainee develops the full range of generic professional capabilities and underlying knowledge and skills, specifically their application in the practice of internal medicine.

The objectives of the curriculum are:

- to set out a range of specific professional capabilities that encompass all knowledge, skills and activities needed to practise internal medicine at consultant level;
- to set expected standards of knowledge and performance of various professional skills and activities at each stage;
- to suggest indicative training times and experiences needed to achieve the required standards.

The model for physician training and the IM curriculum will:

- Ensure trainee physicians can provide safe and effective care for patients presenting with acute medical problems
- Ensure that internal medicine doctors develop and demonstrate the essential capabilities for ongoing management of patients with both acute and long-term conditions
- Ensure that trainee physicians can acquire and demonstrate all of the GPCs, including communication skills
- Allow flexibility between specialties through GPCs and higher-level learning outcomes
- Further develop the attributes of professionalism, particularly recognition of the primacy of patient welfare that is required for safe and effective care of those with both acute and long-term conditions, and develop physicians who ensure patients' views are central to all decision making
- Provide the opportunity to develop leadership, team working and supervisory skills in order to deliver care in the setting of a contemporary multidisciplinary team and to work towards making independent clinical decisions with appropriate support
- Build on the knowledge, skills and attitudes that were acquired during undergraduate and foundation training

In line with Icelandic and European law, full IM training can be completed within a minimum of 5 years in total, if the required capabilities for a CCT are achieved. The first three years of IM training in Iceland are based on IMT1 in the UK with a comparable assessment system, training, outcomes, and critical progression points. In this curriculum this earlier stage of training may be referred to as IMT1. This is followed by a minimum of two years dedicated IM training, which is based on the comparable IM2 curriculum. In this curriculum these latter two years of higher specialty training may be referred to as IMT2.

Competitive entry into IMT in Iceland will take place following Foundation Year training (or comparable), as defined in the Icelandic Reference Guide to Core Medical Training[8] and Human Resources Management[9]. Competitive entry into the later stages of IM training

(IMT2) can also take place following trainees successfully completing Core Medical Training (CMT) with adequate IMT1 equivalent outcomes, IMT1 or Acute Care Common Stem (Acute Medicine) with adequate IMT1 equivalent outcomes.

There will be a critical progression point at the end of higher specialist training to ensure trainees have the required capabilities for a CCT and EFQ in IM. On completion of training the trainee will be entrusted to manage the acute unselected take and all IM capabilities in practice (CiPs) unsupervised.

Scope of practice

The scope of Internal Medicine is broad, ranging from the management of acutely unwell patients in the hospital to providing chronic care in the outpatient setting. Physicians trained in Internal Medicine have the generic professional and specialty specific capabilities needed to take overall responsibility for management of patients presenting with a wide range of general medical symptoms and conditions. They are particularly skilled in diagnostic reasoning, differential diagnosis, management of co- morbidities, dealing with uncertainty, recognising when specialist care would (or would not) be appropriate, and determining when care should be palliative. They need the ability to work within, or as leaders of, teams and systems involving other healthcare professionals to effectively provide optimal patient care. They generally work primarily as hospital-based specialists, needing to integrate their work with community based primary care colleagues, other hospital-based services (including specialist medical and surgical services), and services based in the private sector. Demonstration of involvement with multidisciplinary and multi-professional working throughout training will be required.

Doctors in training will learn in a variety of settings using a range of methods, including workplace-based experiential learning, formal postgraduate teaching and simulation-based education. All aspects of the curriculum can be adapted to facilitate less than full time training.

2.2 High level curriculum outcomes - capabilities in practice

The IMT curriculum is spiral in nature. High level learning outcomes and knowledge, skills and behaviours are developed from the start of training to completion to achieve higher levels of entrustment, through comprehensive assessment and clearly defined progression points.

The capabilities in practice (CiPs) describe the professional tasks or work within the scope of Internal Medicine. These are articulated in six generic CiPs and eight clinical CiPs, which have been mapped to the relevant GPC domains and subsections to reflect the professional generic capabilities required.

Each CiP has a set of descriptors associated with that activity or task. Descriptors are intended to help trainees and trainers recognise the minimum level of knowledge, skills and

attitudes which should be demonstrated for an entrustment decision to be made. By the completion of training and award of CCT and EFQ, the doctor must demonstrate that they are capable of unsupervised practice in all generic and clinical CiPs.

Learning outcomes – capabilities in practice (CiPs)
Generic CiPs
1. Able to successfully function within Icelandic healthcare 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 focussed 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
1. Managing an acute unselected take
2. Managing an acute specialty-related take
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 inpatients in other specialties and special cases
6. Managing a multi-disciplinary 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

2.3 Interdependencies, flexibility and transferability

This curriculum will allow flexibility between specialties with similar outcome-based curriculums through GPCs and higher-level learning outcomes.

It will allow trainees to train in academic medicine alongside their acquisition of generic and clinical capabilities, and these skills will be transferable across other specialties

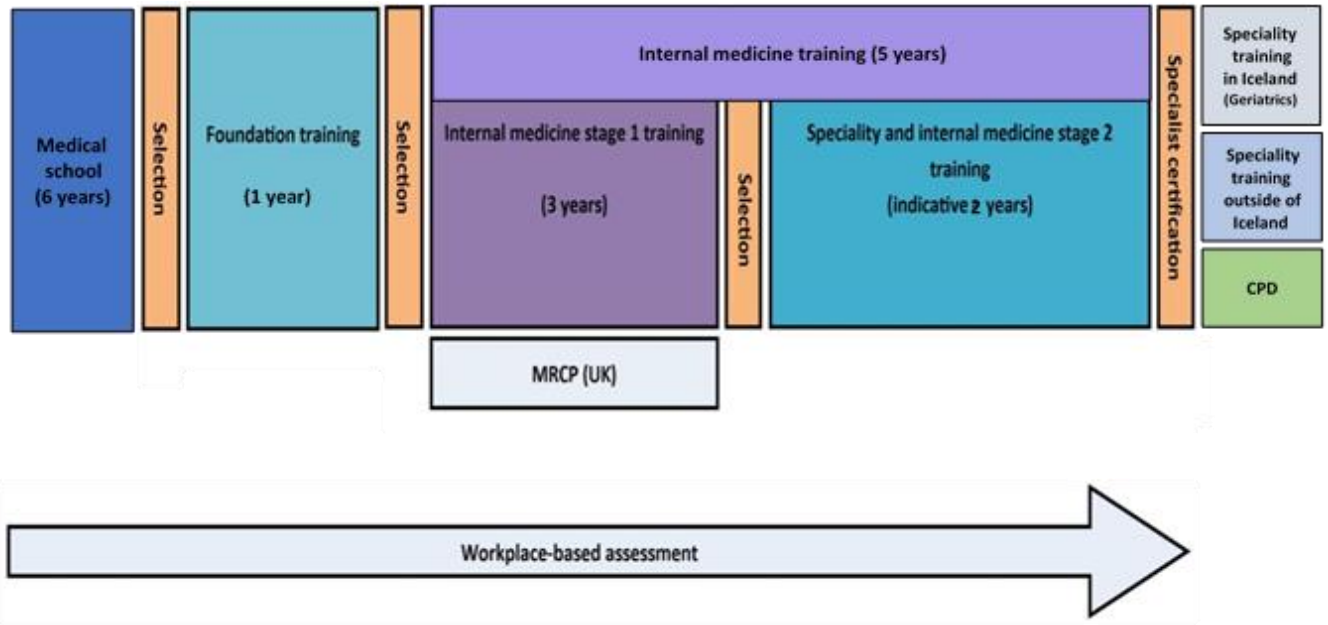
GPCs will promote flexibility in postgraduate training as these common capabilities can be transferred from specialty to specialty. The IM generic CiPs will be shared across all physician curricula and the clinical CiPs shared across all group 1 specialties in the UK, supporting flexibility for trainees to move between these specialties. The generic capabilities and mapping of the curriculum to the (GPCs) framework will facilitate transferability of learning outcomes across other related specialties and disciplines. Few other specialty curriculums in

Iceland currently follow the GPC framework, but this is anticipated to change in the coming years allowing the same flexibility.

2.4 Training pathway

Entry into IM training in Iceland requires successful completion of Foundation Year training (Kandídatsár), through a competitive recruitment process as defined in the Icelandic Reference Core Medical Training[7] and Human Resources Management[8]. There is a further possible selection point at the start of the last two years for trainees, who have chosen to complete Core Medical Training with IMT stage 1 capabilities, IMT stage 1 Training, or Acute Care Common Stem (Acute Medicine) prior to applying for full IM training. The minimum total length of training is 5 years, with a possible total extension to 6 years to achieve all capabilities through ARCP processes and critical progression points

The training pathway for Internal Medicine in Iceland:



2.5 Duration of training

IM Training alone will usually be completed in five years of full-time training. There may be a small number of trainees who develop more slowly and will require an extension of training in line with the Reference Guides for Postgraduate Specialty Training in the UK and Iceland (The Gold Guides)[7,9].

Less than full time training

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 (5 years) pro-rata with the time indicated/recommended, but this should be reviewed in accordance with the Gold Guide.

2.6 Generic Professional Capabilities and Good Medical Practice

The GMC has developed the Generic professional capabilities (GPC) framework[7] with the Academy of Medical Royal Colleges (AoMRC) of the UK 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 practice within the medical profession. The framework will be relevant at all stages of medical education, training and practice both in the UK and Iceland.

The nine domains of the GMC's Generic Professional Capabilities

Good medical practice (GMP)[11] (Icelandic translation “Góðir starfshættir lækna” published by the Directorate of Health)[12] 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 descriptors 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, EFQ or other equivalent qualifications.

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 essential to safe clinical practice that 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 deficit is identified during the final phases of training.

3. Content of Learning

The practice of Internal Medicine requires the generic and specialty knowledge, skills, attitudes and procedural skills to manage patients presenting with a wide range of medical symptoms and conditions. It involves particular emphasis on diagnostic reasoning, managing uncertainty, dealing with comorbidities, and recognising when specialty opinion or care is required.

The internal medicine 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 progress from ‘competent’ to ‘expert’.

3.1 Capabilities in practice

CiPs describe the professional tasks or work within the scope of internal medicine. CiPs are based on the concept of entrustable professional activities[13] which use the professional judgement of appropriately trained, expert assessors. This is as a key aspect of the validity of assessment and 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 by internal medicine doctors. 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 regard 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 eligible to apply for a specialist licence in Iceland or be recommended to the GMC for the award of 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 details the 14 generic and clinical CiPs for Internal Medicine with expected levels of performance, mapping to relevant GPCs and the evidence that may be used to make an entrustment decision. 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 the trainee can progress to the next part of the assessment and 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.

KEY

ACAT	Acute care assessment tool	ALS	Advanced Life Support
CbD	Case-based discussion	DOPS	Direct observation of procedural skills
GCP	Good Clinical Practice	MRCP (UK)	Membership of the Royal Colleges of Physicians Diploma
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 Icelandic healthcare organizational and management systems	
Descriptors	• Aware of and adheres to professional requirements published by the relevant institutions and the Directorate of Health. • 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 and processes for commissioning (Icelandic Health Insurance) • Aware of the role of and processes for operational structures within the Icelandic health care system • 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 medico 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 MRCP(UK) 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 (e.g. 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 MRCP(UK) End of placement reports ES report
Category 3: Safety and quality	
4. Is focussed 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 MRCP(UK) 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

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

	MRCP(UK) Logbook of cases Simulation training with assessment
2. Managing an acute specialty–related 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 • Demonstrates appropriate continuing management of acute medical illness inpatients admitted to hospital on an acute unselected take or selected take
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 MRCP(UK) 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 medial 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 MRCP(UK)

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 MRCP(UK) Letters generated at outpatient clinics
5. Managing medical problems inpatients 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 MRCP(UK)
6. Managing a multi-disciplinary 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 MRCP(UK) 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 knowledge of 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 MRCP(UK) 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 non complex symptom control including pain • 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 MRCP(UK) Regional teaching Reflection

3.4 Presentations and conditions

The scope of Internal Medicine is broad and cannot be encapsulated by a finite list of presentations and conditions. Any attempt to list all relevant presentations, conditions and issues would be extensive but inevitably incomplete and rapidly become out of date.

The table below details the key presentations and conditions of internal medicine. 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 bedside 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 (therefore the internal medicine physician must be familiar with them) or serious (having high morbidity, mortality and/or serious implications for treatment or public health).

Some presentations may be caused by conditions attributed to more than one system, or presenting to more than one specialty, and some conditions may be the rightful province of two or more specialties. Specifically, many if not most of these presentations and conditions will be highly relevant to the specialty of Acute Internal Medicine (AIM) but we have not listed AIM as a specialty because to do so would merely produce repetition of much of this list of presentations and conditions/issues, many of which have both acute and chronic disease implications.

The table of systems/specialties, presentations and conditions of Internal Medicine is to be interpreted with common sense. The number of times each condition and presentation appears in the syllabus has been limited to avoid repetition, e.g. chest pain is listed as a cardiology or respiratory medicine presentation. The fact that chest pain is not listed as a rheumatological presentation does not mean that the Internal Medicine curriculum does not

require that the trainee recognises that there can be musculoskeletal causes of chest pain. It is not felt necessary to document the specific attributes of each presentation and condition with which trainees need to be familiar as this will vary between conditions and presentations. However, for each condition/presentation, 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.

Presentations and conditions of Internal Medicine by system/specialty

System/Specialty and subspecialty	Presentations	Conditions/Issues
Emergency presentations	Cardiorespiratory arrest Shocked patient Unconscious patient Anaphylaxis	
Allergy	Acute and chronic allergic symptoms Anaphylaxis Angioedema Asthma Nose and sinus symptoms Urticaria	Allergy – food, latex, insect venom, transfusion Anaphylaxis Asthma Drug – allergy and intolerance Rhinitis / sinusitis / conjunctivitis Skin disorders Urticaria and angioedema
Cardiology	Breathlessness Chest pain Limb pain Limb swelling Palpitations Syncope and pre-syncope	Cardiac arrhythmias Cardiac failure Cardiac involvement in genetic disease Cardiac involvement in infectious disease Congenital heart disease in the adult Coronary heart disease Diseases of heart muscle Diseases of the arteries, including aortic dissection Diseases of the pulmonary circulation Heart valve disease Hypertension Hyperlipidaemia Oedema Pericardial disease Tumours of the heart Venous thromboembolism
Clinical genetics	Familial condition Interpretation of a genetic test Possibility of genetic diagnosis Request for genetic testing	Common single gene disorders in the adult
Clinical pharmacology and therapeutics	Poisoning Drug side effects Drug allergy Hypertension	Adverse drug reactions Practice safe / rational prescribing and medicines optimisation Use national or local guidelines on appropriate and safe prescribing
Dermatology	Mouth ulcer Pruritus Rash Skin lesions	Blood and lymphatic vessel disorders Cutaneous reactions to drugs Cutaneous vasculitis, connective tissue diseases and urticaria Dermatitis / eczema Disorders of pigmentation Hair and nail disorders

System/Specialty and subspecialty	Presentations	Conditions/Issues
		Infections of the skin and soft tissues Inherited skin diseases Papulosquamous diseases Photosensitivity Sebaceous and sweat gland disorders Skin in systemic disease Tumours of the skin Blistering disorders
Endocrinology and diabetes mellitus	Amenorrhoea Hirsutism Hyperglycaemia Hypoglycaemia Obesity Polydipsia Polyuria Sick day rules Weight gain Weight loss	Adrenal disorders Benign breast diseases Diabetes mellitus Disorders of growth Disorders of male reproduction Disorders of puberty Disorders of the anterior pituitary Disorders of the posterior pituitary Electrolyte disorders Ovarian disorders Pancreatic endocrine disorders (other) Parathyroid disorders Sexual dysfunction Thyroid disorders
Gastroenterology and Hepatology	Abdominal mass / hepatosplenomegaly Abdominal pain Abdominal swelling Anaemia (iron deficiency) Constipation Diarrhoea Dyspepsia Haematemesis and melaena Jaundice Nausea and vomiting Rectal bleeding Swallowing difficulties Weight loss	Acute abdominal pathologies Alcohol related liver disease including the withdrawal syndrome Chronic liver diseases Congenital abnormalities of the GI tract Diet and nutritional support Diseases of the colon Diseases of the gall bladder, pancreas and biliary tree Diseases of the mouth and salivary glands Diseases of the oesophagus Diseases of the small bowel Diseases of the stomach Functional bowel disorders Gastrointestinal infections Inflammatory bowel diseases Malabsorption Nutrition and malnutrition Refeeding The acute abdomen Vascular disorders of the GI tract
Genitourinary medicine	Genital discharge and ulceration Genital rash Erectile dysfunction, genital	HIV infection Prevention of conditions related to sexual behaviour Sexually transmitted infections and

System/Specialty and subspecialty	Presentations	Conditions/Issues
	lumps, rectal discharge, post coital and intermenstrual bleeding, pelvic pain, dyspareunia	systemic complications Reproductive health (incl contraception)
Geriatric medicine	Delirium Deterioration in mobility Falls Fragility fractures Frailty Hypothermia Incontinence Memory loss Unsteadiness / balance disturbance	Continence – faecal and urinary Dementias Depression Malnutrition Movement disorders Osteoporosis Pharmacology Subarachnoid haemorrhage Stroke Transient ischaemic attack Pressure ulcers
Haematology	Anaemia Bruising and spontaneous bleeding Coagulation test abnormality Full blood count abnormality Lymphadenopathy Neutropenic fever Paraproteinaemia Splenomegaly Transfusion reactions	Anaemia Blood transfusion and alternatives Common haematological malignancies Bone marrow failure Haemoglobinopathies Haemolysis MGUS (monoclocal gammopathy of uncertain significance) Thrombosis and anticoagulant therapy
Immunology		Autoimmune systemic disorders Primary immunodeficiency disorders
Infectious diseases	Fever Genital discharge and ulceration Sepsis syndrome Weight loss	Anti-microbial drug monitoring Anti-microbial resistance and stewardship Bacterial infections Evaluation of the unwell returning traveller Fever of unknown origin Fungal infections Helminth infections HIV infection Infections in the immune-compromised host Protozoal infections Viral infections Traveller and migrant health
Medical ophthalmology	Diplopia Optic disc swelling Painful eye Red eye Vision loss	Cranial nerve palsy Glaucoma Inflammatory eye disease TIA/stroke Retinal vascular disease
Neurology	Abnormal sensation (paraesthesia and numbness)	Acute stroke and transient ischaemic attacks

System/Specialty and subspecialty	Presentations	Conditions/Issues
	Abnormal behaviour Acute confusion Bladder, bowel and sexual dysfunction Breathlessness Dizziness and vertigo Headache Hearing loss Involuntary movements Memory loss and intellectual decline Pain Seizures (epileptic and non-epileptic) Speech disturbance Swallowing difficulties Syncope and pre-syncope Unsteadiness Visual disturbance Weakness and paralysis	Chronic neurological disability Dementia and cognitive disorders Delirium Epilepsy Functional illness Head injury Meningitis and encephalitis Migraine and other headache syndromes Motor neurone disease Multiple sclerosis Myasthenia gravis Myopathies (acute and chronic) Parkinson's disease and other movement disorders Peripheral neuropathy (acute and chronic) Subarachnoid haemorrhage and cerebral venous sinus thrombosis Tumours involving the brain and spinal cord
Oncology	Weight loss	Common cancers Hypercalcaemia Neutropenic sepsis Paraneoplastic conditions Premalignant conditions Spinal cord compression SVC obstruction
Palliative medicine and end of life care	Pain Physical symptoms other than pain Psychosocial concerns including spiritual care and care of family The dying patient	Advanced malignancy End stage organ failure Frailty Multiple comorbidity
Public health and health promotion		Alcohol Exercise Mental health Non-communicable diseases Nutrition Obesity Occupation Sexual behaviour Smoking Social deprivation Substance abuse UK and global health
Psychiatry	Aggressive or disturbed behaviour	Alcohol and substance misuse Anxiety disorders

System/Specialty and subspecialty	Presentations	Conditions/Issues
	Alcohol and substance dependence Anxiety or panic Physical symptoms unexplained by organic disease Self-harm Treatment refusal	Bipolar disorder Delirium Dementias Depression Eating disorders Personality disorder Phobias Psychoses Schizophrenia Somatic symptom disorders Stress disorders Suicide and self-harm
Renal medicine	Dysuria Electrolyte abnormality Fluid balance abnormality Haematuria Hypertension Loin pain Micturition difficulties Polyuria Proteinuria Raised serum creatinine	Acute kidney injury Chronic kidney disease Drugs and the kidney Electrolyte disorders Fluid balance disorders Genetic disorders affecting the kidneys Glomerular diseases Malignant disease of the urinary tract Nephrotic syndrome Renal replacement therapy Renal tubular disorders Systemic disorders affecting the kidneys Tubulointerstitial diseases Urinary tract infection Urinary tract obstruction
Respiratory medicine	Breathlessness Pleuritic chest pain Cough Haemoptysis Hoarseness Stridor Pleural effusion Wheeze	Asthma Bronchiectasis Chronic obstructive pulmonary disease Cystic fibrosis Diseases of the pulmonary circulation Disorders of the thoracic cage and diaphragm Disorders of the upper respiratory tract Immune mediated respiratory diseases Interstitial lung diseases Malignant diseases of the respiratory system Pleural diseases including pneumothorax Occupational lung diseases Pulmonary embolism Sarcoidosis Sleep related breathing disorders

System/Specialty and subspecialty	Presentations	Conditions/Issues
		Respiratory infections Respiratory failure Tuberculosis
Rheumatology	Back pain Joint pain and swelling Neck pain Rash and weakness	Multisystem rheumatic disorders Spinal pain and regional disorders Crystal-related arthropathies Infection and arthritis Metabolic bone diseases Monitoring and toxicity of immunosuppressive drugs including biologics Osteoarthritis Osteoporosis Rheumatoid arthritis Spondyloarthritides
Other / all - clinical	Incidental findings Medical problems following surgical procedures Medical problems in pregnancy Physical symptoms unexplained by organic disease Pre-operative assessment	Chronic fatigue syndrome

3.5 Practical procedures

There are a number of Internal Medicine 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 ideally receive training in procedural skills in a clinical skills lab before performing these procedures clinically, but this is not mandatory if otherwise deemed appropriate by a competent supervisor. 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 at the end of each year of training in IM. Trainees are expected to maintain procedural competencies achieved during earlier stages of training throughout the programme of training. Obtaining independence in all of these practical procedures is desirable but not essential for the

completion of IM training. Sites that require trainees to be able to perform particular procedures independently for service reasons will need to put in place mechanisms to provide training and assure competence for independent practice. Trainees working in sites that do not provide such training are required to have skills lab training on a minimum of four occasions in Internal Medicine training to ensure skills are maintained.

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. It is a matter of professional conduct and probity that all doctors maintain the appropriate skills to perform the practical procedures required by their scope of practice. In accordance with clinical governance the trust/health board should ensure that no doctor performs procedures that they are not competent to carry out. This also applies to procedures, which have been signed off during Foundation Year training (Kandídatsár) or as part of other approved training programmes (e.g. CMT, IMT1, ACCS)

Internal medicine practical procedures

	Minimum level of competence at the end of each training year				
Procedure	**IM1**	**IM2**	**IM3**	**IM4**	**IM5**
Advanced cardiopulmonary resuscitation (CPR)	Skills lab or satisfactory supervised practice	Participation in CPR team	Leadership of CPR team	Maintain	Maintain
Direct current (DC) cardioversion	Skills lab or satisfactory supervised practice	Competent to perform unsupervised	Maintain	Maintain	Maintain
Temporary cardiac pacing using an external device	Skills lab or satisfactory supervised practice	Skills lab or satisfactory supervised practice	Maintain	Maintain	Maintain
Central venous cannulation (internal jugular or subclavian)	Skills lab or satisfactory supervised practice	Maintain	Maintain	Maintain	Maintain
Access to circulation for resuscitation (femoral vein or intraosseous)[a]	Skills lab or satisfactory supervised practice	Maintain	Maintain	Maintain	Maintain
Pleural aspiration for fluid (diagnostic)[b]	Skills lab or satisfactory supervised practice	Competent to perform unsupervised	Maintain	Maintain	Maintain

Pleural aspiration (Pneumothorax)[c]	Skills lab or satisfactory supervised practice	Competent to perform unsupervised	Maintain	Maintain	Maintain
Intercostal drain for pneumothorax	Skills lab or satisfactory supervised practice	maintain	Maintain	Maintain	Maintain
Intercostal drain for effusion	Skills lab or satisfactory supervised practice	Competent to perform unsupervised	Maintain	Maintain	Maintain
Nasogastic (NG) tube	Skills lab or satisfactory supervised practice	Competent to perform unsupervised	Maintain	Maintain	Maintain
Ascitic tap	Skills lab or satisfactory supervised practice	Competent to perform unsupervised	Maintain	Maintain	Maintain
Abdominal paracentesis	Skills lab or satisfactory supervised practice	Skills lab or satisfactory supervised	Competent to perform unsupervised	Maintain	Maintain
Lumbar puncture	Skills lab or satisfactory supervised practice	Competent to perform unsupervised	Maintain	Maintain	Maintain

Notes:

[a] The requirement is for a minimum of skills lab training or satisfactory supervised practice in one of these two mechanisms for obtaining access to the circulation to allow infusion of fluid in the patient where peripheral venous access cannot be established.

[b] Pleural procedures should be undertaken in line with the British Thoracic Society guidelines. These state that thoracic ultrasound guidance is strongly recommended for all pleural procedures for pleural fluid, also that the marking of a site using thoracic ultrasound for subsequent remote aspiration or chest drain insertion is not recommended. Ultrasound guidance should be provided by a trained thoracic ultrasound practitioner.

[c] It can be assumed that a trainee who is capable of performing pleural aspiration of fluid is capable of introducing a needle to decompress a large symptomatic pneumothorax

4. Learning and Teaching

4.1 The training programme

The organisation and delivery of postgraduate training in Internal Medicine in Iceland is the responsibility of the Chief Medical Officer at Landspitali, The National University Hospital of Iceland (LUH). It is governed according to Regulation No. 467/2015[1] and delivered according to the Icelandic Reference Guides to Core Medical Training[7] and Human Resources Management[8]. In addition to LUH, trainees can also spend a maximum of 12 months at Akureyri Hospital (SAk), as described in an agreement between the two institutions[14].

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 IM ARCP decision aid for Iceland

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.

The following provides a guide on how training programmes should be focussed in each training year in order for trainees to gain the experience and develop the capabilities to the level required. The successful completion of Internal Medicine will be dependent on achieving the expected level in all CiPs, GPCs and procedural skills. The programme of assessment will be used to monitor and determine progress through the programme.

When training in IM all trainees will have an appropriate clinical supervisor (a senior member of the IM team) and an appropriate educational supervisor in IM. The clinical supervisor and educational supervisor may be the same person. It will be best practice for trainees in IM to have an educational supervisor who practises IM themselves. However, 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.

The following provides a guide on how training programmes should be focussed in each training year in order for trainees to gain the experience and develop the capabilities to the level required. Clearly, it is not intended that trainees in their first year of training (IMY1) will spend all their time in acute care, but it should be the central focus for the year. Similarly, trainees in their second year (IMY2) will continue to provide in-patient and acute care (including "on-call activities") but it just means that their primary focus is on acquiring essential out-patient consultation skills.

Irrespective of the year of training and its focus, each trainee will be attached to a "parent" team/firm and it is anticipated that their clinical supervisor will be a senior member of that team.

There has been much discussion about what is the optimum duration of any particular attachment. Longer attachments foster team relationships and ensure that trainees feel more involved and valued and develop enhanced support networks. However shorter attachments mean that a trainee may be exposed to more specialties. The exact pattern of individual rotations will remain a matter for Training Programme Director (TPD) as long as all the curricular objectives are fulfilled. However, attachments to the main specialties should be at least 4 months in IMY1 and IMY2 and a minimum of six months in IMY3.

Internal Medicine Training Programme:

Training year	Focus of training placements
IMY1	Assessment of the acutely ill patient and the management of the acute medical intake of patients
IMY2	Experience in out-patient clinics
IMY3	Primarily involved in the acute take and functioning as the senior IM trainee
IMY4	Leading the acute take and inpatient services with some outpatient responsibilities
IMY5	Increasing responsibility throughout, “acting up” to consultant level during the last 3 months

Mandatory training

All training should be conducted in institutions which have been accredited by the Icelandic Evaluation and Competence Committee on Clinical Training to be granted a licence to practise medicine and on specialist medical training according to regulation 467/2015 and meet the relevant JRCPTB Quality Criteria, GMC standards for training and education, the European Training Requirements in Internal Medicine, and the relevant Health and Safety standards. The teaching and learning methods section provides guidance on the learning experiences required.

Acute medical take

Trainees should be involved in the acute unselected medical take in each year of their training programme, but it is recognized that this will not be a feature of all attachments, and their greatest involvement will be from the third year onwards. In each of the first three years of training they should be actively involved (have sufficient input for their involvement to be recorded in the patient´s clinical notes) in the care of at least 100 patients presenting

with acute medical problems, and at least 500 patients in total by the end of the third year of training and 1250 patients by the end of the 5th year.

Trainees will furthermore need to demonstrate they have the required capabilities to manage the acute unselected take at completion of training, hence it is required that they are involved in the acute unselected take for at least an indicative month in the final year of training), during which time they must be involved in the care of at least 100 patients presenting with acute unselected medical problems.

Required number of patients seen on acute take during IM training

Training year	Minimum number of patients	
	Per annum	Total
IMY1	100	500
IMY2	100	
IMY3	100	
IMY4	300	750
IMY5	300	
End of training		1250

Acute specialty take

It is recognised that not all specialties will have an acute specialty take but all will receive patients in an unscheduled fashion. The trainee should be able to manage the specialty conditions with which the patient presents and provide management of co-existing acute medical illness.

Inpatients

IM trainees must be entrusted to provide continuity of care to medical inpatients without supervision by completion of training (clinical CiP 3). Trainees should have extensive experience and training in this capability during the first three years of training (IMY1 – IMY3); when they should be involved in the day-to-day management of acutely unwell medical inpatients for at least 24 months. During the last two years (IMY4-IMY5) they should build on this by undertaking a minimum of 12 months further experience and training in continuing ward care of patients admitted with acute medical problems. In order to confirm that trainees are confident and capable of unsupervised practice at the time of CCT/FEQ a minimum of three months of inpatient care should occur in the last year of training.

The inpatient setting should provide trainees with experience of the following:

- Assessment of patients during the course of acute medical illness

- Decision making during the course of acute medical illness
- Discussion with patients and relatives during the course of acute medical illness
- Management of the patient who is deteriorating, including decisions about and implementation of plans for escalation of care (to HDU, ICU) or move to palliative care
- Planning discharge of patients along with other members of the MDT.

In addition to the minimum total of 36 months experience of inpatient care, trainees will acquire relevant skills, knowledge and behaviours (as detailed above and in the CiP descriptors) in specialty settings such as the acute take, outpatients, hospices, community and ambulatory care.

Outpatients

Trainees should attend and be actively involved in a minimum of 80 clinics over the first three years of training (IMY1-IMY3) and 20 clinics during the last two years (IMY4-IMY5). It is accepted that there may be some attachments (e.g. ICU, acute medicine) where there is little scope to attend out-patient clinics but there are other attachments where it should be a regular weekly or twice weekly commitment. It is expected that trainees will do clinics in all five years of IM training, but as noted above the main focus on clinics will be in the second year of training (IMY2). These may be in the parent specialty of their attachment but also in other departmental clinics and it will be up to TPDs, the relevant clinical leads (yfirlæknar), and Educational Supervisors to construct imaginative clinic attendances in order to the trainee to have a satisfactory educational experience (see teaching and learning methods section below for guidance on clinics).

Reflecting changes in clinical practice, some of this training could be provided as community experience, virtual clinics and work in ambulatory settings. The choice of clinic / experience should be driven by the educational needs of the trainee, as identified by the trainee and their educational supervisor, with the educational objectives as set out in the teaching and learning methods section.

Minimum number of clinics attended in IM training

Training year	Minimum clinics attended	
	Per annum	Total
IMY1	20	80
IMY2	20	
IMY3	20	
IMY4	10	20
IMY5	10	
End of training		100

Geriatric medicine

With an increasing elderly population, it is essential that all trainees in IM have adequate exposure to and experience of Geriatric Medicine. It is expected that this experience will be gained through collaborative work with consultant geriatricians within the acute services, in addition to a minimum of a four-month attachment to a team led by a consultant geriatrician during IM training.

Critical care experience

It is accepted that for a trainee physician to be able to recognise, assess and care for an acutely unwell patient they need a significant experience in a critical care environment and the learning objectives for such an experience are detailed below. Discussions with trainees and the Faculty of Intensive Care Medicine would suggest that the optimum method of achieving these learning objectives would be by a 3-month attachment to an intensive care unit (ICU) where the trainee is fully integrated within all aspects of the ICU team's work including the delivery of out of hours care. Ideally this attachment should occur within the second year of training as the trainee will have acquired an appropriate level of medical skills to maximise their learning opportunities and will be able to enter the third year of training, taking on increasing level of responsibility with the confidence to manage acutely unwell patients.

It is recognised that such an ideal experience may not be immediately implementable at LUH and SAk and therefore the curriculum mandates a 10 week minimum period of placement in critical care (ICU or HDU) settings over the first 3 years in not more than two separate blocks. This will be achieved through placements within ICU, HDU and Emergency Medicine, however, it is recommended that the TPDs for General Internal Medicine and Anaesthesia collaborate to implement the 3 month blocks as soon as possible.

Simulation

All practical procedures in the Internal Medicine curriculum should be taught by simulation as early as possible in the first year of training. Procedural skills should be maintained through simulation training where appropriate as defined by the ARCP decision aid.

Simulation teaching involving human factors and scenarios training should be carried out at least twice during the total length of the training programme. Trainees should attend such training at least once in the first three years of training and once in the last two years, where their roles and real-life responsibilities are reflected. Refresher training for procedural skills should be provided where necessary. Simulation can underpin assessment of the GPCs, for example, leadership and teamworking, communication skills and time management.

Recommended training

Palliative and end of life care experience

Trainees should be involved in the management of patients who are approaching the end of their lives and be able to demonstrate that they can recognise such patients and care for them and their families appropriately. Attachments with or experience of working with a palliative care team are strongly recommended.

Working with primary care and the community

Trainees will need to demonstrate that they have an understanding of primary care and community services, and they should be able to interact with them appropriately and effectively. Experience of and training in working across the primary-secondary care divide (e.g. rapid access outpatient clinics, admission avoidance clinics, and ambulatory care, and urgent care services) will be markers of good practice.

Working in the manner of a consultant

At the completion of CCT/EFQ doctors need to be able to function as independent consultant practitioners. It will be a marker of good practice for trainees in their final year to be given up to 3 months of experience 'acting up' (with appropriate supervision) as a consultant in Internal Medicine.

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.

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. Examination preparation during the earlier stages of training encourages the formation of self-help groups and learning sets.

Work-based experiential learning - 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
- Be able to assess a patient in a defined timeframe
- 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 acceptable 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.

Unselected and specialty-specific takes

Trainees will be involved in the acute unselected take on a regular basis throughout the five-year training programme. The skills learnt and developed throughout the training programme will form the fundamental basis for managing the specialty-specific unselected take. Most trainees will not experience specialty-specific take until in the latter stages of training and it is not mandatory for them to do so.

Reviewing patients with consultants

It is important that trainees have an opportunity to present the majority of the patients they have admitted to their consultant in order to obtain immediate feedback on 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.

Multi-disciplinary 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.

Critical care

Trainees should have significant experience of critical care, preferably in a level 3 ICU or in a level 2 HDU. Ideally this should be completed by the time they take on greater responsibility at IMY4-IMY5 or consultant level. The educational objectives of this are:

- To become better able to recognise the very sick or rapidly deteriorating patient
- To be able to work in the multi-disciplinary teams that run critical care units
- To recognise the limited resource of critical care and gain an understanding of how admission to critical care should be prioritised.
- To recognise the ceiling of care and when escalation is appropriate
- To develop enhanced procedural skills such as placement of chest drains and central venous catheters
- To understand the additional responsibilities and mechanisms of out of hours working in critical care units
- To experience the way that critical units operate in terms of human factors and technology

- To develop confidence in being involved with critical care units.

In addition to these objectives, critical care experience will facilitate acquisition of other capabilities such as communication (particular discussion with family members) and palliative care skills.

Palliative and end of life care

Trainees should have significant experience of palliative care with the objective of:

- Enhancing skills in recognising the patient with limited reversibility of their medical condition and the dying patient
- Enhancing ability to recognise the range of interventions that can be delivered in acute and non-acute settings (eg community, hospice or care home)
- Increasing confidence in managing physical symptoms inpatients and psychosocial distress inpatients and families
- Increasing confidence in developing appropriate advance care plans, including DNACPR decisions

These learning objectives and experience of end of life care can be achieved during attachments to routine medical teams (eg geriatric medicine, oncology, respiratory medicine) and ICU, which will allow a trainee to acquire and demonstrate the necessary capabilities to comply with clinical CiP 8. An attachment with a specific palliative care team and/or consultant would give a broader perspective in this complex and important area, hence training programme directors and those managing both acute medical and palliative care services are encouraged to consider how this might be achieved.

Formal postgraduate teaching

The content of these sessions are determined by the TPDs 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 national and international meetings. These may be organised by the Head of Postgraduate Education, the Icelandic Medical Association, the Icelandic Society for Internal Medicine, the Royal College of Physicians or other professional organisations.

Suggested activities include:

- a programme of formal bleep/phone-free regular teaching sessions to cohorts of trainees (e.g. a weekly training afternoon for IM teaching within LUH/SAk)
- 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 national, which are designed to cover aspects of the training programme outlined in this curriculum.
- Suitable educational conferences in Iceland
- Suitable educational conferences abroad

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) in the UK or material provided through educational portals at LUH and SAk
- 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

Trainees are encouraged to participate in research during their training. Paid research leave can be applied for according to local guidelines, which includes a written application detailing an achievable research plan. Trainees may also wish to train in academic medicine through applying for an academic training post. Such posts are partially funded by a collaborating University. A successful applicant for an academic post should have an agreed doctoral study programme in place prior to application. Progress through clinical training is co-dependent on adequate progress through the relevant PhD degree, as defined in the Icelandic Reference Guide to Core Medical Training[8].

Some trainees may opt to do research leading to a higher degree without being appointed to a formal academic programme. This new curriculum should not impact in any way on the facility to take time out of programme for research but as now, such time requires discussion between the trainee, the TPD and the University as to what is appropriate together with

guidance from the Head of Postgraduate Education that the proposed period and scope of study is sensible.

4.4 Leadership training

There is a need to further develop and strengthen training in medical management and leadership in Iceland. With this aim in mind, specific training programmes, based on the UK Chief Registrar programme, are being implemented. Successful applicants will have the appropriate time allocated during IM training to complete this training. Successful participation should not impact progression through training and does provide valuable benefits for both the trainee and the health care system.

4.5 Training in Medical Education

Trainees may choose to further their career within Medical Education. Participation in teaching and supervision of junior colleagues and other health care staff is an important part of every trainees work and responsibilities. In addition, senior trainees (IMY4-IMY5) can apply for formal supervision training and participation in other educational work organised by the Faculty of Medical Education in Iceland (Faghópur um handleiðslu) Successful participation should not impact progression through training and does provide valuable benefits for both the trainee and the health care system.

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 assessment programme 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 defined in the curriculum 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. These include the MRCP(UK) Diploma examination, which must be completed before entering the last two years of training, in addition to a variety of both summative and formative assessments. 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 (eg 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 describes 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 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.

Entrustability scales are behaviourally anchored ordinal scales based on progression to competence and reflect a judgment that has clinical meaning for assessors.[13]

Level descriptors for clinical 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. Decisions of progress will be of particular importance for the critical progression points at the end of IMY2, IMY3 and at the final ARCP, where it is ensured 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 three key progression points during Internal Medicine training. The outline grid below sets out the expected levels of supervision and entrustment for the clinical CiPs and the critical progression points for the whole of IM training.

Critical progression point 1: End of IMY2

The first critical progression point will be from IMY2 to IMY3 as the trainee will be 'stepping up' to take on a more senior role (IMY3-IMY5). It is essential that educational and clinical supervisors are confident that the trainee has the ability to perform in this role.

Trainees will normally be expected to complete all parts of MRCP(UK) Diploma examination by the end of year 2 of training (IMY2) but not holding MRCP(UK) will not in itself be a barrier for progression into IMY3. Passing MRCP(UK) is neither necessary nor sufficient to take on the relevant increasing responsibility. If a trainee holds MRCP(UK) by the end of IM2

but in the opinion of their supervisors is not capable of taking on a more senior role they should not progress or should only do so with enhanced supervision. Equally there may be a number of trainees who are performing very well and in whom their supervisors have every confidence but they have not (for a variety) of reasons yet passed MRCP(UK).

The ARCP at the end of IMY2 will play an important role in determining individualised, supportive plans for transition to the senior IM trainee role. Some trainees may require a period of time in a supportive training environment with the supervising physician readily available.

Trainees applying to group 2 or non-physician specialties in the UK after two years of IM training should ensure they have the MRCP(UK) full diploma by the published deadline if it is a requirement for entry to the specialty.

Critical progression point 2: End of IMY3

The second critical progression point will be at the end of the third year of training (IMY3) when the trainee must be signed off for all generic and specialty outcomes and practical procedures and must have all parts of the MRCP(UK) diploma in order to complete the first stage of training(IMT1). A satisfactory ARCP outcome will be required for entry to further Internal Medicine training

Doctors in training will be required to reach level 4 in all CiPs by the completion IM training. They will need to meet the appropriate level of entrustment for each CiP for the key progression point between IMY2 and IMY3 and at completion of IMY3 and entry to IMY4 as set out in the levels of entrustment grid.

The ES 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 and where relevant, the critical progression points. 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

Critical progression point 3: End of IMY5

There will be a key progression point on completion of IM 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/EFQ in IM and thereby able to apply for a full license to practice the specialty in Iceland, the European Union and work as a Consultant Physician within an NHS hospital in the UK

Table 1: Outline grid of levels expected for Internal Medicine clinical CiPs at the end of each year of training in Iceland

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

	Internal Medicine Stage 1				Possible Selection	Internal Medicine Stage 2		EFQ
Clinical CiP	**IMY1**	**IMY2**	**CRITICAL PROGRESSION POINT**	**IMY3**	**CRITICAL PROGRESSION POINT**	**IMY4**	**IMY5**	**CRITICAL PROGRESSION POINT**
1. Managing an acute unselected take		**3**		**3**			**4**	
2. Managing an acute specialty-related take		**2**		**2**			**4**	
3. Providing continuity of care to medical inpatients		**3**		**3**			**4**	
4. Managing outpatients with long term conditions		**2**		**3**			**4**	
5. Managing medical problems in inpatients in other specialties and special cases		**2**		**3**			**4**	
6. Managing an MDT including discharge planning		**2**		**3**			**4**	
7. Delivering effective resuscitation and managing the deteriorating patient		**3**		**4**			**4**	
8. Managing end of life and applying palliative care skills		**2**		**3**			**4**	

5.5 Evidence of progress

The following methods of assessment will provide evidence of progress in the training programme. The requirements for each training year/level are stipulated in the ARCP decision aid..

Summative assessment

Examinations and certificates

- Advanced Life Support Certificate (ALS)
- The MRCP(UK) Diploma examinations: Part 1, Part 2 Written and Part 2 Clinical (PACES). Full MRCP(UK) must be achieved before entry to IMY4 or IMT2 training.

Information about MRCP(UK), including guidance for candidates and how to receive feedback, is available on the MRCP(UK) website www.mrcpuk.org

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)

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)

These methods are described briefly below. More information and guidance for trainees and assessors are available in the ePortfolio, on the website for postgraduate medical education in Iceland 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.

Assessment Methods

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, but may be used in other settings, including outpatient clinic. 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 senior doctor who has supervised the trainee during the appropriate patient interaction (as described above) 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.

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.

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). It is the trainee's responsibility to

maintain those skills appropriately and to seek additional training should they feel it is necessary. This is a matter of probity and clinical governance.

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/Góðir starfshættir lækna. 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)

The PS addresses issues, including the behaviour of the doctor and effectiveness of the consultation, which are important to patients. It is intended to assess the trainee's performance in areas such as interpersonal skills, communication skills and professionalism by concentrating solely on their performance during one consultation.

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).

Multiple Consultant Report (MCR)

The MCR captures the views of consultant supervisors based on observation of 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 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 CiPs. The table of practical procedures sets out the minimum level of performance expected at the end of each year of training. The requirements for each year of training are set out in the ARCP decision aid (https://www.landspitali.is/fagfolk/menntun/sernam-laekna/)

The ARCP process is described in the Icelandic Gold Guide. The Head of Postgraduate Medical Education is responsible for organizing the ARCP process. The evidence to be reviewed by ARCP panels should be collected in the trainee's eportfolio.

As a precursor to ARCP, it is strongly recommended that trainees have an informal eportfolio review either with their educational supervisor or arranged by the Training Programme Director. These provide opportunities for early detection of trainees who are failing to gather the required evidence for ARCP.

In order to guide trainees, supervisors and the ARCP panel, an ARCP decision aid, based on the JRCPTB decision aids for IMT1 and IMT2 has been produced. This 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 website for Postgraduate Medical Education in Iceland (https://www.landspitali.is/fagfolk/menntun/sernam-laekna/)

5.7 Assessment blueprint

The table 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.

KEY

ACAT	Acute care assessment tool	CbD	Case-based discussion
DOPS	Direct observation of procedural skills	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		

Blueprint of MRCP(UK) Diploma examinations mapped to CiPs

Learning outcomes	**Part 1**	**Part 2 Written**	**PACES**
Generic Outcomes			
Able to function successfully within Icelandic Health Care 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 outcomes			
Managing an acute unselected take	×	×	×
Managing an acute specialty related take	×	×	×
Providing continuity of care to medical in-patients, 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 multi-disciplinary team including effective discharge planning			×
Delivering effective resuscitation and managing the acutely deteriorating patient	×	×	×
Managing end of life and applying palliative care skills	×	×	×

Blueprint of WPBAs mapped to CiPs

Learning outcomes	ACAT	CbD	DOPS	MCR	Mini-CEX	MSF	PS	QIPAT	TO
Generic Outcomes									
Able to function successfully within Icelandic healthcare 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 outcomes									
Managing an acute unselected take	×	×		×		×			
Managing an acute specialty related take	×	×		×		×			
Providing continuity of care to medical in-patients, 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 multi-disciplinary 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			×						

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[15].

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.

Teaching institutuions 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 the UK in their standards for medical education and training[16].

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.

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 clinical-or service lead (yfirlæknir)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 should have attended appropriate supervision training, such as the training provided by the Faculty of Medical Education (Faghópur um handleiðslu) in Iceland in collaboration with the Education Department at the Royal College of Physicians of London according to national and GMC standards[16]. 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 experiences and competencies 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 eportfolio 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 eportfolio. 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 eportfolio. 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 above the level expected and highlight successes.

7. Quality Management

The organisation and delivery of training programmes for Internal Medicine in Iceland is the responsibility of the Chief Medical Officer at LUH, in collaboration with SAk. The Head of Postgraduate Medical Education is responsible for the following roles on behalf of the Chief Medical Officer, which are executed on a local level by the Training Programme Director:

- oversee recruitment and induction of trainees into IM training at any stage.
- 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 are delivered at least biannually for newly appointed supervisors, in addition to more frequent refresher courses for previously trained supervisors.

Development, implementation, monitoring and review of the curriculum are the responsibility of the Head of Postgraduate Education with support from JRCPTB via the SAC responsible for IM stage 1 and stage 2 training in the UK. The committee will be formally

constituted with representatives from Iceland, 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 the Head of Postgraduate Medical Education in Iceland and the relevant Training Programme Directors.

Postgraduate Medical Education in Iceland is delivered and governed according to Regulation No. 467/2015 and accredited by the Icelandic Ministry of Health through the work of the Evaluation and Competence Committee on Clinical Training to be granted licence to practise medicine and on specialist medical training. In addition to this over-arching governance structure, the Office for Postgraduate Medical Education at LUH has defined local quality criteria and produces extensive datasets to inform meaningful quality management. These include an annual survey for trainees and supervisors, based on the GMCs National Training Survey (NTS), ARCP outcomes, MRCP(UK) exam outcomes and review of external ARCP reports.

Similarly, and more extensively JRCPTB uses data from six quality datasets across its 30 medical specialties and three subspecialties to provide meaningful quality management. The datasets include the GMC National Training Survey (NTS) data, ARCP outcomes, MRCP(UK) exam outcomes, New Consultant Survey, Penultimate Year Assessments (PYA)/External Advisor reports and the monitoring visit reports.

The aim by developing these comparable and robust quality criteria is to drive up the quality of training environments and ultimately improve patient safety and experience through active monitoring and comparison. The principles of the quality criteria for CMT and GIM will be transferred to the IM curriculum to ensure this continues.

8. Intended use of curriculum by trainers and trainees

This curriculum and ARCP decision aid are available from the Office for Postgraduate Medical Education in Iceland (https://www.landspitali.is/fagfolk/menntun/sernam-laekna/)website

Clinical and educational supervisors should use the curriculum and decision aid as the basis for 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 in the training programme, trainees will be given access to the eportfolio for IM training. 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.

The Office for Postgraduate Medical Education, the Head of Medical Education, Training Programme Directors, and ARCP panels may use the eportfolio to monitor the progress of trainees for whom they are responsible.

The 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 assist 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. References:

1. Regulation on the education, rights and obligations of medical doctors and criteria for granting of licences to practice medicine and specialist medical licences No. 467/2015, amended by Regulation No. 29/2017
2. Specialist and general practice certificates in the UK
3. Shape of Training: Securing the future of excellent patient care
4. Future hospital: Caring for medical patients
5. Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry
6. Standards and guidance for postgraduate curricula
7. Generic professional capabilities framework
8. A reference Guide to Core Medical Training in Iceland
9. A reference Guide for Human Resources Management for Postgraduate Medical Training in Iceland
10. A Reference Guide for Postgraduate Foundation and Specialty Training in the UK
11. Good Medical Practice
12. Góðir starfshættir lækna
13. Nuts and bolts of entrustable professional activities
14. Samstarfssamingur Landspítala og Sjúkrahússins á Akureyri um sérnám í læknisfræði
15. Improving feedback and reflection to improve learning. A practical guide for trainees and trainers
16. Promoting excellence: standards for medical education and training
17. Recognition and approval of trainers