SPECIALTY TRAINING CURRICULUM

FOR

ENDOCRINOLOGY AND DIABETES MELLITUS

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Table of Contents

1 Introduction 3
2 Rationale 3
2.1 Purpose of the curriculum 3
2.2 Development 3
2.3 Training Pathway 3
2.4 Enrolment with JRCPTB 5
2.5 Duration of training 5
2.6 Less than Full Time Training (LTFT) 6
2.7 Dual CCT 7
3 Content of learning 7
3.1 Programme objectives 7
3.2 Good Medical Practice 7
3.3 Syllabus 8
4 Learning and Teaching 43
4.1 The training programme 43
4.2 Teaching and learning methods 43
4.3 Research 46
4.4 Academic Training 47
5 Assessment 48
5.1 The assessment system 48
5.2 Assessment Blueprint 49
5.3 Assessment methods 49
5.4 Decisions on progress (ARCP) 51
5.5 Penultimate Year Assessment (PYA) 54
5.6 Complaints and Appeals 54
6 Supervision and feedback 54
6.1 Supervision 54
6.2 Ensuring Safe Practice 55
6.3 Methods of Feedback and Supervision 55
6.4 Appraisal 55
7 Managing curriculum implementation 56
7.1 Intended use of curriculum by trainers and trainees 57
7.2 Recording progress 57
8 Curriculum review and updating 57
9 Equality and diversity 58
10 Appendix 1 - Glossary 59

1 Introduction

Endocrinology and diabetes is a broad ranging subject and therefore an enticing one for trainees and consultants alike since it encompasses basic mechanisms of physiology and pharmacology coupled with the ability to improve quality of life and long-term outcomes through effective disease control, and often cure. Endocrine and metabolic diseases are some of the most commonly encountered medical conditions in the UK population. They are increasing in prevalence and impact in terms of health of the nation, emphasising the need to continue to strive towards improved health care delivery in this speciality. Endocrine diseases and diabetes affect every physiological system of the body determining that specialists enjoy a wide range of skills and expertise and make a major contribution to general medicine in its broadest sense.

2 Rationale

2.1 Purpose of the curriculum

The purpose of this curriculum is to define the process of training and the competencies needed for the award of a certificate of completion of training (CCT) in Endocrinology and Diabetes Mellitus.

The curriculum covers training in all four nations of the UK.

2.2 Development

This curriculum was developed by a curriculum sub-group of the Specialty Advisory Committee (SAC) for Endocrinology and Diabetes Mellitus under the direction of the Joint Royal Colleges of Physicians Training Board (JRCPTB). The 2010 curriculum replaced the previous version dated May 2007 with changes to ensure the curriculum meets GMC's standards for Curricula and Assessment and to incorporate revisions to the content and delivery of the training programme. Major changes from the previous curriculum include the incorporation of common, leadership and health inequalities competencies. The key revision made in 2016 has been to revise section 3.7 of the syllabus with specific focus on weight management, including investigating for secondary causes of obesity, assessing psychological aspects of obesity and multi-disciplinary management of obesity. In addition generic updates have been made and the multiple consultant report (MCR) has been included in the assessment framework.

The curriculum contents were chosen by the sub group of the SAC in Endocrinology and Diabetes Mellitus after extensive consultation with Regional Specialty Advisors, trainees, local training committees, and specialist societies. The curriculum was agreed by the SAC, which comprises deanery training programme directors, specialist society representatives, trainee representatives and lay members. The curriculum builds upon core elements in the medical training programme for post foundation years and is appropriate for those doctors seeking specialty accreditation in endocrinology and diabetes.

2.3 Training Pathway

Specialty training in Endocrinology and Diabetes Mellitus consists of core and higher speciality training. Core training provides physicians with: the ability to investigate, treat and diagnose patients with acute and chronic medical symptoms; and with high quality review skills for managing inpatients and outpatients. Higher speciality training

then builds on these core skills to develop the specific competencies required to practise independently as a consultant in Endocrinology and Diabetes Mellitus.

Core training may be completed in either a Core Medical Training (CMT) or Acute Care Common Stem (ACCS) programme; this requires a minimum of 1 but typically 2 years of training following the F2 foundation year. The full curriculum for specialty training in Endocrinology and Diabetes Mellitus therefore consists of the curriculum for either CMT or ACCS plus this specialty training curriculum for Endocrinology and Diabetes Mellitus.

Further candidates may achieve this competence after a variable period in other training programmes in a different area of clinical practice, because of alteration of their career plans or failure to enter the programme at the first attempt.
Core Medical training programmes are designed to deliver core competencies as part of specialty training by acquisition of knowledge, skills and behaviours as assessed by the workplace-based assessments and the MRCP(UK). Programmes are usually for two years and are broad-based consisting of four to six placements in medical specialties. These placements over the two years must include direct involvement in the acute medical take. Trainees are asked to document their record of workplace-based assessments in an ePortfolio which will then be continued to document assessments in specialty training. Trainees completing core training will have a solid platform of common knowledge and skills from which to continue into Specialty Training at ST3, where these skills will be developed and combined with specialty knowledge and skills in order to award the trainee with a certificate of completion of training (CCT).

There are common competencies that should be acquired by all physicians during their training period starting within the undergraduate career and developed throughout the postgraduate career, for example communication, examination and history taking skills. These are initially defined for CMT and then developed further in the specialty. This curriculum supports the spiral nature of learning that underpins a trainee's continual development. It recognises that for many of the competences outlined there is a maturation process whereby practitioners become more adept and skilled as their career and experience progresses. It is intended that doctors should recognise that the acquisition of basic competences is often followed by an increasing sophistication and complexity of that competence throughout their career. This is reflected by increasing expertise in their chosen career pathway.

The approved curriculum for CMT is a sub-set of the Curriculum for General Internal Medicine (GIM). A "Framework for CMT" has been created for the convenience of trainees, supervisors, tutors and programme directors. The body of the Framework document has been extracted from the approved curriculum but only includes the syllabus requirements for CMT and not the further requirements for acquiring a CCT in GIM.

Completion of CMT or ACCS and acquisition of full MRCP (UK) will be required before entry into Specialty training at ST3 (2011 onwards).

Patients expect medical specialists to be highly competent, knowledgeable and intelligent, good communicators, professional, compassionate and committed to their speciality. For this reason, adequate evidence of successful completion of core training in accordance with the requirements of the JRCPTB is essential.

2.4 Enrolment with JRCPTB

Trainees are required to register for specialist training with JRCPTB at the start of their training programmes. Enrolment with JRCPTB, including the complete payment of enrolment fees, is required before JRCPTB will be able to recommend trainees for a CCT / Certificate of Completion of CMT. Trainees can enrol online at www.jrcptb.org.uk

2.5 Duration of training

Although this curriculum is competency based, the duration of training must meet the European minimum of 4 (four) years for full time specialty training adjusted accordingly for flexible training (EU directive 2005/36/EC). The SAC has advised that training from ST1 will usually be completed in 6 (six) years in full time training (2 years core plus 4 years specialty training) for trainees not wishing to obtain a dual CCT (see section 2.7) shown in figure 1.0. The majority of trainees will seek to acquire these additional competencies to enable them to achieve a dual CCT in Acute Internal Medicine or General Internal Medicine, and therefore in most cases training will be completed in 7 (seven) years.

Figure 1.0 shows the training pathway of an Endocrinology and Diabetes Mellitus CCT trainee

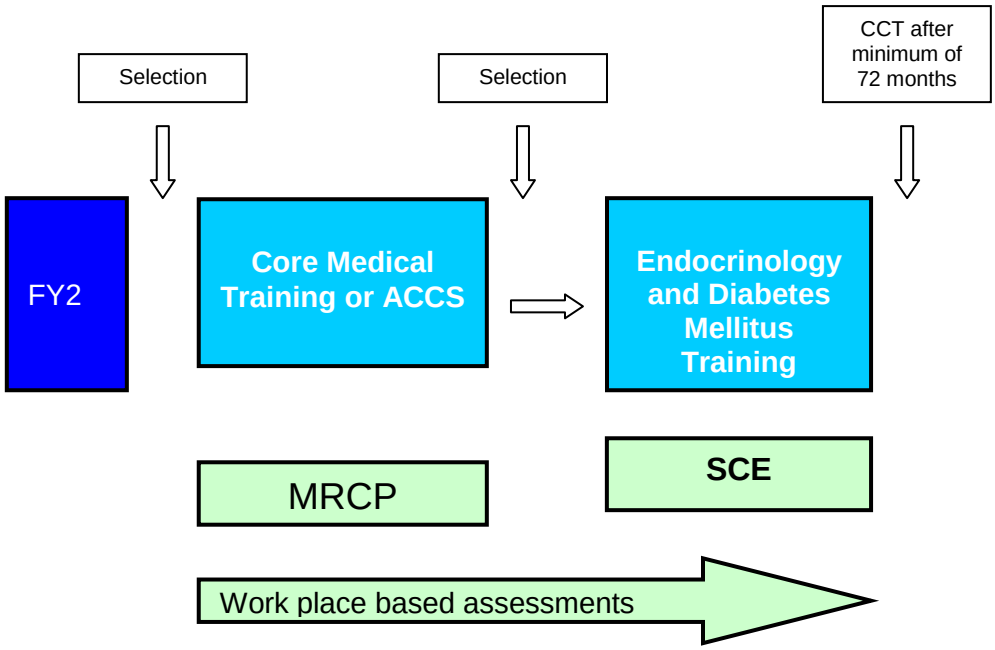
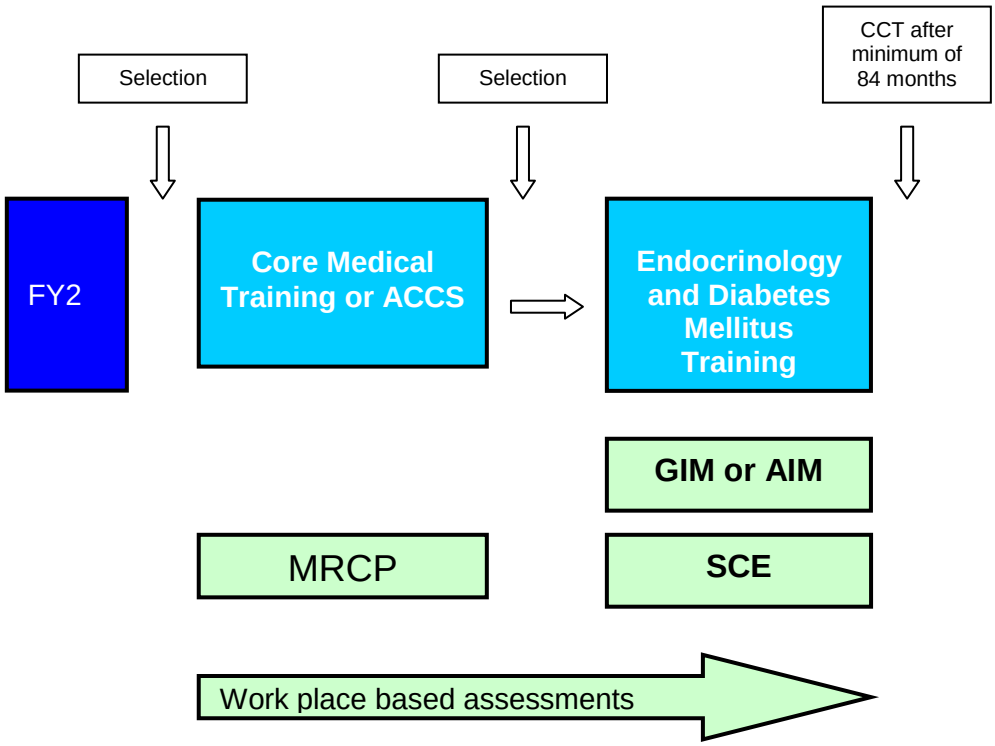


Figure 2.0 shows the training pathway of a dual CCT trainee



2.6 Less than Full Time Training (LTFT)

Trainees who are unable to work full-time are entitled to opt for less than full time training programmes. EC Directive 2005/36/EC requires that:

- LTFT shall meet the same requirements as full-time training, from which it will differ only in the possibility of limiting participation in medical activities.
- The competent authorities shall ensure that the competencies achieved and the quality of part-time training are not less than those of full-time trainees.

The above provisions must be adhered to. LTFT 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.

EC Directive 2005/36/EC states that there is no longer a minimum time requirement on training for LTFT trainees. In the past, less than full time trainees were required to work a minimum of 50% of full time. With competence-based training, in order to retain competence, in addition to acquiring new skills, less than full time trainees would still normally be expected to work a minimum of 50% of full time. If you are returning or converting to training at less than full time please complete the LTFT application form on the JRCPTB website www.jrcptb.org.uk .

Funding for LTFT is from deaneries and these posts are not supernumerary. Ideally therefore 2 LTFT trainees should share one post to provide appropriate service cover.

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

during annual appraisal by their TPD and chair of STC and Deanery Associate Dean for LTFT training. As long as the statutory European Minimum Training Time (if relevant), has been exceeded, then indicative training times as stated in curricula may be adjusted in line with the achievement of all stated competencies**.**

2.7 Dual CCT

Trainees who wish to achieve a CCT in Acute Internal Medicine (AIM) and/or General Internal Medicine (GIM) as well as Endocrinology and Diabetes Mellitus must have applied for and successfully entered a training programme, which was advertised openly as a dual training programme. Trainees will need to achieve the competencies, with assessment evidence, as described in both the Endocrinology and Diabetes Mellitus and AIM or GIM curricula. Individual assessments may provide evidence towards competencies from both curricula. Postgraduate Deans wishing to advertise such programmes should ensure that they meet the requirements of both SACs.

3 Content of learning

3.1 Programme objectives

The overall objectives of the training programme are to produce specialist practitioners who:

1 Show appropriate attitudes and communication skills in dealing with colleagues and patients;
2 Apply sound understanding of the biological and behavioural sciences and skill in diagnosis and management to ensure safe independent practice;
3 Establish a differential diagnosis for patients presenting with diabetes/endocrine disease by appropriate use of a clinical interview, physical examination and investigations;
4 Are competent in performing the core investigations of the specialty;
5 Can develop a management plan for ‘the whole patient’ and have sound knowledge of the appropriate treatments including health promotion, disease prevention and long-term management;
6 Use life-long learning skills to keep their expertise up to date;
7 Have the qualities of a teacher, team worker and leader;
8 Are able to manage and further develop integrated services in Endocrinology and Diabetes Mellitus;
9 Manage time and resources to the benefit of their patients and colleagues;
10 Practise medicine in accordance with the General Medical Council document ‘Good Medical Practice’;

In many parts of the country services for patients with diabetes are delivered in the community. This curriculum sets out the competencies appropriate to the management of endocrinology and diabetes irrespective of the setting where care is delivered.

3.2 Good Medical Practice

Good medical practice is the GMC’s core guidance for doctors. It sets out the values and principles on which good practice is founded.

The guidance is divided into the following four domains:

1. Knowledge, skills and performance

2. Safety and quality
3. Communication, partnership and teamwork
4. Maintaining trust

Good medical practice is supported by a range of explanatory guidance. The ‘GMP’ column in the syllabus defines which of the four domains of Good Medical Practice are addressed by each competency.

3.3 Syllabus

In the tables below, the “Assessment Methods” shown are those that are appropriate as **possible** methods that could be used to assess each competency. Whilst it is expected that all competencies will be achieved it is recognised that not all may be specifically assessed and where they are assessed not every method will be used. See section 5.2 for more details.

“GMP” defines which of the 4 domains of the Good Medical Practice Framework for Appraisal and Assessment are addressed by each competency. See section 3.2 for more details.

Syllabus Contents

1. Common Competencies 10
    1.1 The Patient as Central Focus of Care 10
    1.2 Prioritisation of Patient Safety in Clinical Practice 11
    1.3 Consultation 11
    1.4 Therapeutics and Safe Prescribing 13
    1.5 Time Management 13
    1.6 Personal Behaviour 14
    1.7 Team Working, Communication and Leadership 15
    1.8 Quality Improvement, Governance and Complaints 15
    1.9 Health Promotion and Public Health 17
    1.10 Health Inequalities 18
    1.11 Principles of Medical Ethics & Confidentiality and Consent 18
    1.12 Legal Framework for Practice 19
    1.13 Research 20
    1.14 Evidence and Guidelines 20
    1.15 Clinical Audit 21
    1.16 Teaching and Training 21
    1.17 Management and NHS Structure 22
2. Diabetes 24
    2.1 Diagnosis and General Management of Diabetes Mellitus 24
    2.2 Management of Delivery of Diabetes Care 25
    2.3 Diabetic Emergencies 26
    2.4 Management of Patients with Diabetes during Acute Illness or Surgery 26
    2.5 Conception and Pregnancy in Diabetes 27
  2.6 Age-related Conditions and Diabetes 29
    2.6.1 Young People 29
    2.6.2 Elderly People 29
  2.7 Complications of Diabetes 31
    2.7.1 Screening for the Complications of Diabetes 31
    2.7.2 Macrovascular Disease 31
    2.7.3 Eye Disease in Diabetes 32
    2.7.4 Renal Disease and Hypertension in Diabetes 32
    2.7.5 Neuropathy and Erectile Dysfunction in Diabetes 33
    2.7.6 Foot Disease 34
    2.7.7 Lipid Disease 35
3. Endocrinology 36
    3.1 Disorders of the Hypothalamus and Pituitary 36
    3.2 Disorders of Growth and Development 36
    3.3 Disorders of the Thyroid Gland 37
    3.4 Disorders of the Adrenal Glands 38
    3.5 Disorders of the Gonads 38
    3.6 Disorders of Parathyroid Glands, Calcium Disorders and Bone 39
    3.7 Disorders relating to weight 40
    3.8 Miscellaneous Endocrine and Metabolic Disorders 40
    3.9 Imaging Techniques in Endocrinology 42

1. Common Competencies

1.1 The Patient as Central Focus of Care

To pursue a collaborative approach to the planning and implementation of patient care in particular to identify and facilitate the patient's agenda encompassing their beliefs, concerns, expectations and needs

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Health needs of particular populations, e.g. ethnic minorities, and the impact of beliefs, culture and ethnicity in presentation of physical and psychological conditions	CbD, MSF, MCR	1
Quality improvement methodologies, including methods of obtaining feedback from patients, the public and staff to improve patient care	CbD, MSF, MCR	1
The concept of patient self-care and the role of the expert patient	CbD, mini-CEX, MCR	1
The effect of long term conditions on social interactions, behaviour and psychological health	CbD, mini-CEX, MCR	1
Use by patients of on-line health information and pharmaceutical purchasing	CbD, mini-CEX, MCR	1,2,4
Skills		
Encourage the health care team to respect the philosophy of patient focussed care	CbD, mini-CEX, MSF, MCR	3,4
Develop a self-management plan with the patient	CbD, mini-CEX, MSF, PS, MCR	1,3,4
Support patients, parents and carers to engage with management plans and voice preferences about their care	CbD, mini-CEX, MSF, PS, MCR	3,4
Develop and sustain supportive relationships with patients with whom care will be prolonged and potentially life long	CbD, mini-CEX, MCR	1,4
Behaviours		
Support patient self-management	CbD, mini-CEX, MSF, PS, MCR	3,4
Elicit beliefs, concerns and expectations of patients and carers	mini-CEX, MSF, MCR	1,3,4
Act as patient advocate	CbD, mini-CEX, MSF, PS, MCR	3,4
Take a holistic view to the management of the patient	CbD, mini-CEX, MCR	3,4
Show willingness and support for patients in their own advocacy, within the constraints of available resources and taking into account the best interests of the wider community	CbD, mini-CEX, PS, MCR	3,4
Listen to and reflect on the views of patients and carers	mini-CEX, PS, MCR	3,4

1.2 Prioritisation of Patient Safety in Clinical Practice

To understand that patient safety depends on safe systems not just individual competence and safe practice

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Principles of risk assessment and management	CbD, MCR	1,2
The hazards of medical equipment in common use	CbD, MCR	1,2,4
The investigation of significant events, serious untoward incidents and near misses	CbD, mini-CEX, MSF, MCR	1,2,4
Skills		
Recognise limits of own professional competence and when to seek help from other professionals	CbD, mini-CEX, MSF, MCR	1,2
Ensure the correct and safe use of medical equipment, ensuring faulty equipment is reported appropriately	CbD, MCR	1,2
Improve patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention	CbD, mini-CEX, MCR	1,2,3
Sensitively counsel a colleague following a significant untoward event, or near incident	MSF, MCR	2,3
Behaviours		
Maintain a high level of safety awareness at all times	CbD, mini-CEX, MSF, MCR	2,4
Encourage feedback from all members of the team on safety issues	CbD, mini-CEX, MSF, MCR	2,3,4
Report serious untoward incidents and near misses and co-operate with their investigation	CbD, mini-CEX, MSF, MCR	2,3,4
Show willingness to take action when concerns are raised about performance of members of the healthcare team, and act appropriately when these concerns are voiced to you by others	CbD, mini-CEX, MSF, MCR	2,3,4
Be aware of one's own limitations, and operate within them	CbD, mini-CEX, MCR	1,2,4

1.3 Consultation

To develop the ability to elicit a relevant focused history and perform an accurate examination and synthesise this to establish a problem list increasingly based on pattern recognition including differential diagnoses and formulate a management plan

To recognise the need, and develop the abilities, to communicate effectively and sensitively with patients, relatives and carers

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
How to structure a consultation appropriately	CbD, mini-CEX, PS, MCR	1
The basis for clinical signs and the relevance of positive and negative physical signs	CbD, mini-CEX, MCR	1

The principles of breaking bad news depending on individual, social and cultural circumstances	CbD, MCR	1,3
Skills		
Establish a rapport with the patient and relevant others (e.g. carers)	CbD, mini-CEX, PS, MCR	1,3
Listen actively and question sensitively to guide the patient and to clarify information	mini-CEX, PS, MCR	1,3
Identify and manage communication barriers, tailoring language to the individual patient and others and using interpreters when indicated	CbD, mini-CEX, PS, MCR	1,3
Recognise that effective history includes information from other sources and may require several discussions with the patient and other parties, over time	CbD, mini-CEX, MCR	1,3,4
Recognise that the patient's agenda and the history should inform appropriately targeted examination, investigation and management	CbD, mini-CEX, MCR	1
Recognise and respond appropriately to the use of non verbal communication from patients and carers	CbD, mini-CEX, MCR	1,3
Perform an examination relevant to the presentation and risk factors that is valid, targeted and time efficient	CbD, mini-CEX, MCR	1,3
Use interactive methods within the consultation (eg risk calculators, educational material) to improve patient understanding	CbD, mini-CEX, MCR	1,3
Deliver information compassionately, and appropriate to the patient's needs and level of understanding	CbD, mini-CEX, PS, MCR	1,3
Manage time and draw consultation to a close appropriately concluding with a summary and appropriate action plan	CbD, mini-CEX, MCR	1,3
Check the patient's/carer's understanding, encouraging questions and ensuring that all concerns/questions have been covered	CbD, mini-CEX, PS, MCR	1,3
Recognise influence of underlying psychosocial issues (e.g domestic violence) on the timing and manner of presentation	CbD, MCR	1,3,4
Manage follow-up effectively and safely, utilising a variety of methods (e.g. phone call, email, letter)	CbD, mini-CEX, MCR	1,3
Make accurate contemporaneous records of the discussion	CbD, mini-CEX, MCR	1,3
Recognise the impact of bad news on the patient, carer, supporters, staff members and self	CbD, mini-CEX, MSF, MCR	1,3
Behaviours		
Approach clinical encounters with compassion and professionalism, using appropriate behaviour and language	CbD, mini-CEX, MSF, PS, MCR	1,3,4
Recognise when the offer/ use of a chaperone is appropriate	CbD, mini-CEX, MCR	1
Ensure examination whilst clinically appropriate considers social, cultural and religious boundaries to examination and make alternative arrangements when appropriate.	CbD, mini-CEX, MSF, MCR	1,4
Take leadership and demonstrate to others good practice in breaking bad news	CbD, MSF, MCR	1
Show willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention	CbD, mini-CEX, MCR	2,3

1.4 Therapeutics and Safe Prescribing

To develop your ability to initiate, review and monitor appropriate therapeutic and preventive interventions relevant to clinical practice (including non – medication based treatments).

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Indications, contraindications, adverse reactions, interactions and dosage of commonly used drugs	CbD, mini-CEX, MCR	1,2
Tools to promote patient safety and prescribing, including electronic clinical record systems and other IT systems	CbD, mini-CEX, MCR	1,2
Roles of local and national regulatory agencies involved in drug use, monitoring and licensing	CbD, mini-CEX, MCR	1,2
Skills		
Advise patients (and carers) about use of medications prescribed, their benefits, important interactions and adverse drug effects	CbD, mini-CEX, MCR	1,2,3
Prescribe appropriately in pregnancy, and during breast feeding	CbD, mini-CEX, MCR	1,2
Make appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)	CbD, mini-CEX, MCR	1,2
Engage the patient / carer to optimise concordance with therapeutic regimens	CbD, mini-CEX. PS, MCR	2,3,4
Behaviours		
Appreciate the role of non-medical prescribers	CbD, mini-CEX, MSF,MCR	1,3
Ensure prescribing information is shared promptly and accurately amongst a patient's health providers, including between primary and secondary care	CbD, MCR	1,2,3
Participate in adverse drug event reporting mechanisms	CbD, mini-CEX, MCR	1,2,3,4

1.5 Time Management

To demonstrate increasing ability to prioritise and organise clinical and clerical duties in order to optimise patient care and clinical team resource.

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Effective organisation being key to time management	CbD, MCR	1
Prioritising work according to urgency and importance with some tasks having to wait or be delegated to others	CbD, MSF, MCR	1,2,3
Skills		
Regularly review and re-prioritise personal and team work load and reorganise	CbD, mini-CEX, MCR	1,3
Organise and manage workload effectively and flexibly	CbD, mini-CEX, MCR	1
Make appropriate use of other professionals and support workers according to competencies	CbD, mini-CEX, MSF, MCR	1,3
Behaviours		

Work flexibly and deal with tasks in an effective and efficient fashion	CbD, MSF, MCR	3
Recognise when you or others are falling behind and take steps to rectify the situation	CbD, MSF, MCR	3

1.6 Personal Behaviour

To develop the behaviours that will enable the doctor to become a senior leader who is trusted and able to deal fairly in all situations

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
The concept of modern medical professionalism	CbD, MCR	1
Skills		
Practise with professionalism including: • Integrity • Compassion • Altruism • Continuous improvement • Aspiration to excellence • Respect of cultural and ethnic diversity • Regard to the principles of equity	CbD, mini-CEX, MSF, PS, MCR	1,2,3,4
Be able to handle enquiries from the press and other media effectively	CbD, MSF, MCR	1,3,4
Recognise the manifestations of stress on self and others and now where and when to look for support	CbD, MSF, MCR	1,2,3
Use a reflective approach to practice with an ability to learn from previous experience	CbD, MSF, MCR	1,3
Apply creative thinking approaches (or methodologies or techniques) in order to propose solutions to service issues	CbD, MSF, MCR	1,3
Behaviours		
Recognise the need to improve clinical leadership and management skill	MSF mini-CEX, MCR	1,2,3
Recognise situations when it is appropriate to involve professional and regulatory bodies	MSF mini-CEX, MCR	1,2
Show willingness to act as a leader, mentor, educator and role model	CbD, MSF, MCR	1,3
Be willing to accept mentoring as a positive contribution to promote personal professional development	CbD, MSF, MCR	1
Participate in professional regulation and professional development	CbD, MSF, MCR	1
Recognise personal health as an important issue	mini-CEX, MSF, MCR	1,2,3
Respond constructively to the outcome of reviews, assessments or appraisals of performance	CbD, MSF, MCR	1,2,3

1.7 Team Working, Communication and Leadership

To develop the skills necessary to make teams more effective and better able to deliver better care

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
The components of effective collaboration and team working	CbD, MCR	1,3
The roles and responsibilities of members of the healthcare team	CbD, MCR	1,3
Ways in which individual behaviours impact on others: personality types, group dynamics, learning styles, leadership styles	CbD, MSF, MCR	1,3
The role of team dynamics in the way a group, team or department functions	CbD, MSF, MCR	1,3
Skills		
Demonstrate leadership and provide supervision in education and training of junior colleagues and other members of the healthcare team	CbD, mini-CEX , MSF, MCR	1,3,4
Effective handover of care between shifts and teams	CbD, mini-CEX, MCR	1,3
Lead and participate in interdisciplinary team meetings and understand your role within that team	CbD, mini-CEX, MSF, MCR	3
Prevent and resolve conflict within the team, providing feedback and rectify team dysfunction	CbD, MSF, MCR	2,3,4
Encourage staff to develop and exercise their own leadership skills	CbD, MSF, MCR	3
Behaviours		
Encourage an environment that is open to exploring concerns about the safe working of the team	CbD, MSF, MCR	3,4
Recognise the importance of induction for new members of a team	CbD, MSF, MCR	3,4
Recognise the importance of prompt and accurate information sharing with other team members including Primary Care	CbD, mini-CEX, MSF, MCR	3
Respect the skills and contributions of colleagues	CbD, MSF, MCR	3
Take full part in multidisciplinary meetings	CbD, MSF, MCR	3
Maintain confidentiality where appropriate within team discussions	CbD, MSF, MCR	3,4

1.8 Quality Improvement, Governance and Complaints

To recognise the desirability of monitoring performance, learning from mistakes and adopting no blame culture so as to ensure high standards of care and optimise patient safety

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
The elements of clinical governance	CbD, MSF, MCR	1,2
The fact that governance safeguards high standards of care and helps to improve clinical services	CbD, MSF, MCR	1,2
The features of a safe working environment	CbD, MCR	1,2
Procedures for handling complaints	CbD, MCR	1,2

The difference between system and individual errors (personal and organisational)	CbD, MSF, MCR	1
Principles of an effective apology	CbD, MSF, MCR	1,4
Sources of help and support for patients and yourself when a complaint is made about yourself or a colleague	CbD, MSF, MCR	1,4
Skills		
Deal appropriately with concerned or dissatisfied patients or relatives	CbD mini-CEX, MCR	1,2,3,4
Contribute to quality improvement processes, e.g: • Quality improvement project / audit of personal and departmental/directorate/practice performance • Errors / discrepancy meetings • Critical incident and near miss reporting • Unit morbidity and mortality meetings • Local and national databases	QIPAT, AA, CbD, MCR	2
Reflect regularly on your standards of medical practice in accordance with GMC guidance on licensing and revalidation	CbD, MCR	1,2,3,4
Explain clearly to the patient the events leading up to a medical error or serious untoward incident, and sources of support for patients and their relatives	CbD, MSF, PS, MCR	1,3
Deliver an appropriate apology and explanation	CbD, MSF, PS, MCR	1,3,4
Use assessment, appraisal, complaints and other feedback to discuss and develop an understanding of own development needs	CbD, MCR	1
Behaviours		
Show willingness to participate in safety improvement strategies such as critical incident reporting	CbD, MSF, MCR	2,3,4
Contribute to processes where complaints are learned from and acted upon	CbD, MSF, MCR	2,3,4
Demonstrate personal commitment to reflect on and improve performance in the light of feedback and assessment	CbD, MSF, MCR	2,3,4
Contribute to a fair and transparent culture around complaints and errors engaging with a no blame culture	CbD, MSF, MCR	1
Recognise the rights of patients, family members and carers to make a complaint	CbD, mini-CEX, MSF, MCR	1,2,3,4
Recognise the impact of a complaint upon self and other team members and seek appropriate help and support	CbD, MCR	3
Be prepared to accept leadership and responsibility with regard complaints and to admit errors	CbD, mini-CEX, MSF, MCR	2,3,4

1.9 Health Promotion and Public Health

To develop the ability to work with individuals and communities to reduce levels of ill health, remove inequalities in healthcare provision and improve the general health of a community.

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
The factors which influence the incidence and prevalence of diabetes – psychological, biological, social, cultural and economic especially poverty	CbD, SCE, MCR	1
Recognise the links between health and work, including the positive benefits of work on well-being, and develop skills to enable patients with illness to remain at work or return to work whenever appropriate	CbD, mini-CEX, MCR	1
The value of screening programmes and understand the positive and negative effects of screening on the individual	CbD, mini-CEX, MCR	1
The role and availability of barriers to community based health strategies on prevention and treatment of diabetes and obesity	CbD, MCR	1
Understand the factors which influence health – psychological, biological, social, cultural and economic especially work and poverty	CbD, mini-CEX, MCR	1
Skills		
Identify opportunities to promote changes in lifestyle and other actions which will positively improve health and/or disease outcomes	CbD, mini-CEX, MCR	
Identify opportunities to promote changes in lifestyle and other actions which will positively improve health, e.g. to encourage smoking cessation and / or weight reduction.	CbD, mini-CEX, MCR	1,3
Work collaboratively with other agencies, e.g. occupational health services, to improve the health of individual patients and communities, and help patients to remain at or return to work whenever appropriate.	CbD, mini-CEX, MCR	1,3
Encourage patients to remain at or return to work whenever appropriate	CbD, mini-CEX, MCR	1,3
Identify patient's ideas, concerns and health beliefs regarding screening and health promotion programmes and be capable of appropriately responding to these	CbD, mini-CEX, PS, MCR	
Work collaboratively with other agencies to improve the health of communities	CbD, mini-CEX, MCR	1,2
Provide information to an individual about mechanisms to support them remaining at work or returning to work, and offering encouragement that they should do so whenever possible	CbD, mini-CEX, MCR	1,3
Engage with local or regional initiatives to support patients remaining at or returning to work	CbD, mini-CEX, MCR	1,3
Behaviours		
Engage in effective team-working around the improvement of health	CbD, MSF, MCR	1,3
Encourage appropriate screening and facilitate early intervention	CbD, MCR	1

1.10 Health Inequalities

To positively influence health determinants and inequalities		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The fact that good health includes both mental and physical health	CbD, MCR	1, 2,4
The implications of disability discrimination legislation for healthcare	CbD, mini-CEX, SCE, MCR	1,4
How health systems can discriminate against patients from diverse backgrounds, and how to work to minimise this discrimination;	CbD, mini-CEX,PS, MCR	1,2,4
The stigmatising effect of some illnesses	CbD, mini-CEX, MCR	1,2,3
The range of agencies that can support the disabled worker and the disabled job-seeker	CbD, MCR	1
The influences of environment and behaviour on health	CbD, MCR	1,3
Skills		
Help to empower patients and negotiate complex systems to improve health and welfare including, where appropriate, the right to work	CbD, mini-CEX, MCR	1,2, 3,4
Assess the patient's ability to access various health services	CbD, mini-CEX, MCR	1,2,3
Assess community health needs in relation to demographic, socio-economic and health information and where appropriate apply these in practice	CbD, mini-CEX, MCR	1
Behaviours		
Respect diversity of status and values in patients and colleagues	mini-CEX, MSF, MCR	1,3,4
Respond to people in an ethical, honest and non-judgemental manner	MSF, PS, MCR	1,3,4

1.11 Principles of Medical Ethics & Confidentiality and Consent

To know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The principles of medical ethics	CbD, SCE, MCR	1,2,4
The principles of data protection, freedom of information and information governance	CbD, MCR	1,2,4
The problems posed by disclosure in the public interest, without patient's consent	CbD, mini-CEX, MCR	1,4
The role and legal standing of advance directives	CbD, mini-CEX, MCR	1
The importance of the patient's level of understanding and mental state (and also that of the parents, relatives or carers when appropriate) and how this may impair their capacity for informed consent	CbD, mini-CEX, MCR	1
Skills		
Use and share information with the highest regard for confidentiality,	CbD, mini-CEX,	1,2,3,4

and encourage such behaviour in other members of the team	MSF, MCR	
Outline and follow the guidance given by the GMC on confidentiality	CbD, mini-CEX, MCR	12,4
Counsel patients on the need for information distribution within members of the immediate healthcare team	CbD, MSF, MCR	1,3,4
Behaviours		
Encourage informed ethical reflection in others	CbD, MSF, MCR	1,3,4
Show willingness to seek advice of peers, legal bodies, and the GMC in the event of ethical dilemmas over disclosure and confidentiality	CbD, mini-CEX, MSF, MCR	1,2,3,4
Respect patient's requests for information not to be shared, unless this puts the patient, or others, at risk of harm	CbD, mini-CEX, PS, MCR	1,3,4
Show willingness to share information about their care with patients, unless they have expressed a wish not to receive such information	CbD, mini-CEX,PS, MCR	1,3,4
Respect a patient's rights of autonomy even in situations where their decision might put them at risk of harm	CbD, mini-CEX, PS, MCR	1,2,3,4
Not withhold information relevant to proposed care or treatment in a competent patient	CbD, mini-CEX, MCR	1,3,4
Seek to obtain consent only for those procedures, which the trainee is competent to perform, in accordance with advice of GMC	CbD, mini-CEX, MCR	1,3,4
Show willingness to obtain a second opinion, senior opinion, and legal advice in difficult situations of consent or capacity	CbD, mini-CEX, MSF, MCR	1,2,3
Inform a patient and seek alternative care where personal, moral or religious belief prevents a usual professional action	CbD, mini-CEX, PS, MCR	1,3,4

1.12 Legal Framework for Practice

To understand the legal framework within which healthcare is provided in the UK		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The legislative framework within which healthcare is provided in the UK	CbD, SCE, MCR	1,2
The NHS disciplinary processes	CbD, MSF, SCE, MCR	1
The role of the medical practitioner in relation to personal health and substance misuse, including understanding the procedure to be followed when such abuse is suspected	CbD, MSF, SCE, MCR	1
Skills		
Ability to cooperate in relevant circumstances with other agencies with regard to legal requirements and reporting	CbD, MCR	1,2,3, 4
Ability to prepare appropriate medical legal statements	CbD, MCR	1,2,3,4
Behaviours		
Show willingness to seek advice from the employer, appropriate legal bodies (including defence societies), and the GMC on medico-legal matters	CbD, MCR	1
Promote informed reflection on legal issues by members of the team;	CbD, mini-CEX, MCR	1,3

1.13 Research

To understand the principles of research and research governance		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The GMC guidance on good practice in research	CbD, MCR	1,2
The principles of research governance	CbD, SCE, MCR	1,2
The differences between audit and research	CbD, MCR	
Research principles	CbD, SCE, MCR	1
The principles of qualitative, quantitative, bio-statistical and epidemiological research methods	CbD, MCR	1
Skills		
Develop critical appraisal skills and apply these when reading literature	CbD, MCR	1
Demonstrate the ability to write a scientific publication	CbD, MCR	1
Demonstrate good verbal and written presentations skills	CbD, AA, MCR	1
Behaviours		
Follow guidelines on ethical conduct in research and consent for research	CbD, MCR	1

1.14 Evidence and Guidelines

To develop the ability to construct evidence based guidelines and protocols and make optimal use of best evidence in making decisions about the care of patients		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The application of statistics in scientific medical practice	SCE, CbD, MCR	1
The role and limitations of evidence in the development of clinical guidelines and protocols	SCE, CbD, MCR	1
The processes that result in nationally applicable guidelines (e.g. NICE and SIGN)	SCE, CbD, MCR	1
Skills		
Demonstrate the use of literature databases	AA, CbD, MCR	1
Appraise and apply retrieved evidence to address a clinical question	AA, CbD, MCR	1
Behaviours		
Keep up to date with national reviews and guidelines of practice (e.g. NICE and SIGN)	AA, CbD, MCR	1
Contribute to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence based medicine	CbD, MSF, MCR	1
Recognise the occasional need to practise outside clinical guidelines	CbD, mini-CEX,MSF, MCR	1

1.15 Clinical Audit

To develop the ability to perform an audit of clinical practice and to apply the findings appropriately and complete the audit cycle

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
The different methods of obtaining data for quality improvement project or audit	QIPAT, AA, CbD, MCR	1,2,3
The role of quality improvement and clinical audit	QIPAT, AA, CbD , MCR	1,2,3
The steps involved in completing the audit cycle	AA, CbD, MCR	1,2,3
The working and uses of national and local databases used for quality improvement, including audit	QIPAT, AA, CbD, MCR	1,2,3
Patient outcome reporting systems within the specialty and the organisation, and how these relate to national programmes	AA, CbD, MCR	1,2,3
Skills		
Design, implement and complete quality improvement projects and audit cycles	QIPAT, AA, CbD, MCR	1,2
Contribute to local and national quality improvement and audit projects as appropriate	QIPAT, AA, CbD, MCR	1,2
Support quality improvement and audit by junior medical trainees and encourage within the multi-disciplinary team	QIPAT, AA, CbD, MCR	1,2
Behaviours		
Recognise the need for quality improvement /audit in clinical practice to promote standard setting and quality assurance	QIPAT, AA, CbD, MCR	1,2
Contribute to local and national quality improvement /audit projects	QIPAT, AA, CbD, MCR	1,2

1.16 Teaching and Training

To develop the ability to teach or train a variety of different audiences in a variety of different ways with appropriate assessments

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Adult learning principles relevant to medical education	CbD, MCR	
Techniques for effective appraisal and performance review	CbD, MCR	1
Identification of learning methods and effective learning objectives and outcomes	MSF, MCR	1
The role of workplace-based assessments	CbD, MSF, MCR	1
The appropriate local course of action to assist a trainee experiencing difficulty in making progress within their training programme	CbD, MSF, MCR	1
Skills		
Provide effective after teaching, and promote learner reflection	CbD, MSF, MCR	1
Demonstrate effective lecture, presentation, small group and bed side	CbD, MSF, TO, MCR	1,3

teaching skills		
Provide appropriate career support, or refer trainee to an alternative effective source of career information	CbD, MSF, MCR	1,3
Participate in strategies aimed at improving patient education e.g. talking at support group meetings	CbD, MSF, MCR	1
Be able to lead departmental teaching programmes including journal clubs	CbD, TO, MCR	1
Recognise the trainee in difficulty and take appropriate action including where relevant referral to other services	CbD, MCR	1
Behaviours		
Balance the needs of service delivery with education	CbD, MSF, MCR	1
Demonstrate willingness to teach trainees and other health and social workers in a variety of settings to maximise effective communication and practical skills and to improve patient care	CbD, MSF, MCR	1
Maintain honesty and objectivity during appraisal and assessment	CbD, MSF, MCR	1
Show willingness to participate in workplace-based assessments and demonstrate a clear understanding of their purpose	CbD, MSF, MCR	1
Show willingness to take up formal training as a trainer and respond to feedback obtained after teaching sessions	CbD, MSF, MCR	1,3

1.17 Management and NHS Structure

To understand the structure of the NHS and the management of local healthcare systems		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The guidance given on management to doctors by the GMC	CbD, MCR	1
The local structure of NHS systems in your locality recognising the potential differences between the four countries of the UK	CbD, MCR	1
The changes that occur in the NHS including the political, economic and organisational aspects that can impact on provision of service	CbD, MCR	1
The principles of: • Clinical coding • European Working Time Regulations including rest provisions • National Service Frameworks • NHS Structure and relationships • NHS finance and budgeting, the contracting process and resource allocation • Consultant contract • The role of the Independent sector as providers of healthcare • Patient and public involvement processes and role	CbD, MCR	1
The principles of recruitment and appointment procedures	CbD, MCR	1,4
Processes of assessment of community needs pertaining to speciality	CbD, MCR	1,3
The duties, rights and responsibilities of an employer, and of a co-worker	CbD, MCR	1,3,4
Skills		

Participate in managerial meetings	CbD, MSF, MCR	1,3
Work with stakeholders to create and sustain a patient-centred service	CbD, mini-CEX, MCR	1
Behaviours		
Respond appropriately to health service objectives and targets and take part in the development of services	CbD, mini-CEX, MCR	1,2
Show willingness to improve managerial skills (e.g. management courses) and engage in management of the service	CbD, MSF, MCR	1
Commitment to the proper use of public money; showing a commitment to taking action when resources are not used efficiently or effectively	CbD, MCR	1

2. Diabetes

2.1 Diagnosis and General Management of Diabetes Mellitus

Diagnosis and general management of people with, or at increased risk of, diabetes mellitus		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The diagnostic criteria for diabetes mellitus and identify the different types	CbD, mini-CEX, SCE, MCR	1,2
The diagnostic criteria for pre-diabetes and identify the different types	CbD, SCE, MCR	1,2
The underlying basis of metabolic disturbances and principles of management	CbD, SCE, MCR	1,2
The principles of lifestyle management including some knowledge of nutrition (including carbohydrate counting and healthy living)	CbD, mini-CEX, SCE, MCR	1,2
The characteristics of the range of oral hypoglycaemic drugs available and identify appropriate use in the clinical setting	CbD, mini-CEX, SCE, MCR	1,2
The characteristics of the range of insulins available and define their use in intensive insulin management	CbD, mini-CEX, SCE, MCR	1,2
The systems used to monitor blood glucose including continuous glucose monitoring systems	CbD, mini-CEX, SCE, MCR	1,2
The use of technology in diabetes such as diabetes databases and the use of meter / pump downloads	CbD, mini-CEX, MCR	1,2
The principles of structured education in the management of diabetes (such as DAFNE / DESMOND)	CbD, mini-CEX, MCR	1,2
Appropriate strategies for the prevention and detection of diabetes mellitus	CbD, SCE, MCR	1,2
Appropriate preventive strategies / treatments for micro and macrovascular complications of diabetes	CbD, mini-CEX, SCE, MCR	1,2
National (evidence based) therapeutic targets	CbD, mini-CEX, SCE, MCR	1,2
Skills		
Be able to elucidate an appropriate history and interpret tests done to differentiate different types of diabetes	CbD, mini-CEX, SCE, MCR	1,2,3,4
Be able to contribute to and support a programme or strategy designed to prevent or delay the onset of diabetes mellitus	CbD, SCE, MCR	1,2,3,4
Educate patients in the use of insulin delivery devices including syringes, pens and pumps	CbD, mini-CEX, PS, SCE, MCR	1,2,3,4
Educate people in the use of home blood glucose monitoring systems	CbD, mini-CEX, PS, SCE, MCR	1,2,3,4
Give advice on the indications for insulin therapy in type 2 diabetes	CbD, mini-CEX, MCR	1,2,3,4
Make appropriate insulin dose adjustments including different regimens for intermittent insulin therapy and insulin pump therapy	CbD, mini-CEX, MCR	1,2,3,4
Give appropriate advice about dose adjustment in response to blood glucose levels, exercise, alcohol etc	CbD, mini-CEX, SCE, MCR	1,2,3,4
Identify complications of diabetes and perform annual screening for complications	CbD, mini-CEX, SCE, MCR	1,2,3,4

Identify patients appropriate for psychological intervention	CbD, mini-CEX, MCR	1,2,3,4
Give appropriate advice about employment, driving, exercise, alcohol, weight management, smoking and family planning	CbD, mini-CEX, PS, SCE, MCR	1,2,3,4
Behaviours		
Ability to understand the implications and concerns arising from a diagnosis of diabetes and provide advice in a non-judgmental manner	CbD, mini-CEX, MSF, PS, MCR	1,2,3,4
Recognise the central role of the patient in the management of their diabetes	CbD, MSF, PS, MCR	1,2,3,4
Understand the cultural and educational barriers to good glucose control	CbD, MSF, PS, MCR	1,2,3,4
Recognise the impact of diagnosis of diabetes on carers and their role in the management of diabetes	CbD, mini-CEX, MSF, PS, MCR	1,2,3,4
Ability to understand and personalise treatments and targets to the individual patient's circumstances	CbD, mini-CEX, MSF, PS, MCR	1,2,3,4

2.2 Management of Delivery of Diabetes Care

Management of Delivery of Diabetes Care with regard to patients and carers, other health care professionals and relevant organisations		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The different settings in which diabetes care can be delivered and the different models of diabetes care delivery (i.e. primary care, intermediate care and secondary care)	CbD, SCE, MCR	1,2,3
The factors which influence commissioning diabetes care within the NHS	CbD, SCE, MCR	1,2,3
Which aspects of diabetes care can be appropriately delivered in different clinical settings	CbD, mini-CEX, MCR	1,2,3
The role of information technology in integrating care across different providers	CbD, mini-CEX, MCR	1,2,3
The role of diabetes networks and advisory groups in the organisation of care	CbD, mini-CEX, SCE, MCR	1,2,3
Skills		
Identify appropriately patients who can be managed in different settings such as primary care, intermediate care and multidisciplinary (sub-speciality) specialist care	CbD, mini-CEX, SCE, MCR	1,2,3,4
Interact with different providers of care to develop cohesive local pathways for delivery of care	CbD, mini-CEX, SCE, MCR	1,2,3,4
Ability to develop business cases to improve care delivery locally	CbD, mini-CEX, SCE, MCR	1,2,3,4
Behaviours		
Recognise the importance of multidisciplinary team working	CbD, mini-CEX, MCR	1,2,3,4
Recognise the importance of primary secondary care interface in management	CbD, MSF, MCR	1,2,3,4
Recognise the importance of PCT and hospital management support in care delivery	CbD, mini-CEX, MCR	1,2,3,4

Understand economic and cultural barriers to the delivery of integrated diabetes care	CbD, mini-CEX, MCR	1,2,3,4

2.3 Diabetic Emergencies

Manage hyperglycaemic metabolic emergencies and severe hypoglycaemia and advise about future prevention.

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Diagnosing and distinguishing between the types of diabetic hyperglycaemic metabolic emergency	CbD, mini-CEX, SCE, MCR	1,2
The underlying basis of metabolic disturbances and principles of management	CbD, SCE, MCR	1,2
Diagnosing and managing severe hypoglycaemia and advice about future prevention	CbD, mini-CEX, SCE, MCR	1,2,3,4
Identifying patients with hypoglycaemia unawareness and advising them appropriately	CbD, mini-CEX, SCE, MCR	1,2,3,4
Skills		
Identify and differentiate between different hyperglycaemic emergencies	CbD, mini-CEX, SCE, MCR	1,2
Formulate appropriate plan for investigation and management, including identifying appropriate patients for escalation of treatment to critical care	CbD, SCE, mini-CEX, SCE, MCR	1,2,3,4
Identify factors that may have contributed to hyper or hypoglycaemic emergencies	CbD, mini-CEX, SCE, MCR	1,2,3,4
Give advice about future prevention of hyper and hypoglycaemic emergencies	CbD, mini-CEX, MCR	1,2,3,4
Behaviours		
Recognise and judge the urgency and severity of the emergency	CbD, mini-CEX, MCR	1,2,3,4
Communicate with other health care professionals and convey management plans	MSF, MCR	1,2,3,4
Recognise the impact of hypoglycaemia unawareness on the lifestyle of patients, their families and their carers	CbD, mini-CEX, MSF, MCR	1,2,3,4

2.4 Management of Patients with Diabetes during Acute Illness or Surgery

Management of Patients with Diabetes During Acute Illness or Surgery

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
The impact of acute illness on glycaemia and its effects / implications on current management	CbD, mini-CEX, SCE, MCR	1,2
The impact of other treatments such as steroids / parenteral nutrition on glycaemia	CbD, SCE, MCR	1,2
The metabolic requirements of patients with diabetes during surgery	CbD, SCE, MCR	1,2

The implications of glucose control during other illnesses such as cardio- and cerebrovascular illnesses	CbD, SCE, MCR	1,2
Skills		
Adjust therapy in the short term to manage glucose control during acute illness	CbD, mini-CEX, SCE, MCR	1,2,3,4
Manage diabetes appropriately in patients on steroids or parenteral nutrition	CbD, mini-CEX, SCE, MCR	1,2,3,4
Manage diabetes appropriately in peri-operative patients	CbD, mini-CEX, SCE, MCR	1,2,3,4
Be able to supervise and advise other health care professionals in the management of patients with diabetes who are under their care	CbD, mini-CEX, MSF, MCR	1,2,3,4
Behaviours		
Recognise the importance of multidisciplinary team working	CbD, mini-CEX, MSF, MCR	1,2,3,4
Recognise the need for specialist diabetes care in different clinical environments	CbD, mini-CEX, MSF, MCR	1,2,3,4
Awareness of the importance of glucose control in patients who are acutely unwell	CbD, mini-CEX, MSF, MCR	1,2,3,4

2.5 Conception and Pregnancy in Diabetes

Manage pre-conception, conception and pregnancy in the diabetic woman in order to optimise outcome

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Discuss the importance of glucose control in pre-conception and during pregnancy and the need for family planning in fertile women of all ages	CbD, mini-CEX, SCE, MCR	1,2
The effect of diabetes on the pregnant woman and her foetus, and strategies for their amelioration	CbD, mini-CEX, SCE, MCR	1,2
The effect of pregnancy on diabetes management and glycaemia	CbD, mini-CEX, SCE, MCR	1,2
The risk factors for gestational diabetes and current diagnostic criteria and appropriate screening strategies	CbD, mini-CEX, SCE, MCR	1,2
Describe the different available methods of contraception	CbD, mini-CEX, SCE, MCR	1,2
Skills		
Discuss the importance of diabetes in pregnancy and the need for family planning in fertile women of all ages	CbD, mini-CEX, PS, MCR	1,2,3,4
Advise women about the importance of pre-conception care and potential risks of diabetic pregnancy, including progression of complications	CbD, mini-CEX, PS, SCE, MCR	1,2,3,4
Advise women with diabetes regarding contraception	CbD, mini-CEX, PS, SCE, MCR	1,2,3,4
Optimise glycaemic and blood pressure control prior to and throughout pregnancy	CbD, mini-CEX, SCE, MCR	1,2,3,4

Manage other aspects of pregnancy such as folate supplements and rubella vaccination	CbD, mini-CEX, SCE, MCR	1,2,3,4
Diagnose and manage gestational diabetes	CbD, mini-CEX, MCR	1,2,3,4
Deliver antenatal care in the setting of a joint obstetric clinic	CbD, mini-CEX, MSF, SCE, MCR	1,2,3
Manage glycaemia during labour and delivery	CbD, mini-CEX, SCE, MCR	1,2,3,4
Manage intercurrent illness and events such as administration of steroids in order to mature fetal lungs	mini-CEX, SCE, MCR	1,2,3,4
Behaviours		
Exhibit a non judgemental attitude to women who have difficulty in achieving glycaemic targets prior to conception or during pregnancy and support their efforts to do so.	CbD, MCR	4
Communicate and work with obstetric and midwifery colleagues in the joint management of diabetic pregnancy	CbD, MSF, MCR	2,3

2.6 Age-related Conditions and Diabetes

2.6.1 Young People

Ability to provide care to young people with diabetes in transition to adult services		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The effects of diabetes on normal growth and development in children	CbD, SCE, MCR	1,2
The physiological, psychological and social factors affecting glycaemic control in adolescence	CbD, mini-CEX, SCE, MCR	1,2,3,4
Awareness of ways in which individual behaviour can impact on young people	CbD, mini-CEX, MSF, MCR	1,2,3,4
Awareness of the rights of children and young people	CbD, SCE, MCR	1,3,4
Skills		
Provide care to young persons with diabetes in transition to the adult service	mini-CEX, CbD, MCR	1,2,3,4
Recognise common risk taking behaviour in young persons and its effects on diabetes	mini-CEX, CbD, MCR	1,2,3,4
Recognise the potentially negative effects of adolescent behaviour on diabetes and the impact it may have on family and personal relationships	CbD, mini-CEX, MSF, MCR	1,2,3,4
Behaviours		
Exhibit a non judgemental attitude in addressing the problems of a young patient with diabetes and demonstrate preparedness to change behaviour in response to feedback and reflection	mini-CEX, MSF, PS, MCR	3,4
Respond to the physiological, psychological and social problems of maintaining glycaemic control in adolescence and the concerns and anxieties of parents / carers	CbD, mini-CEX, MSF, MCR	1,2,3,4
Adopt a patient focussed approach that acknowledges values that may not be shared by the trainee	mini-CEX, MSF, PS, MCR	3,4

2.6.2 Elderly People

Provide care for and manage elderly patients with diabetes		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The potential effects of co-morbidities associated with ageing on diabetes treatments and control	CbD, mini-CEX, SCE, MCR	1,2
The effects of aging including associated disability on access to healthcare	CbD, mini-CEX, MCR	1,2,3,4
The diversity of agencies and healthcare workers that can support elderly patients living in the community	CbD, mini-CEX, SCE, MCR	1,2,3
Skills		
Adapt therapeutic targets and diabetes treatment regimens to the individual patient taking account of co-morbidities	CbD, mini-CEX, MCR	1,2,3,4

Manage the specific social and medical needs of elderly patients with diabetes in the community	CbD, mini-CEX, MCR	1,2,3,4
Advise about the care of older people in residential and nursing care taking into account appropriate utilisation of health service resources	CbD, mini-CEX, MCR	1,2,3,4
Assess and advise so as to minimise risk especially for elderly vulnerable patients	CbD, mini-CEX, MCR	1,2,3,4
Behaviours		
Adopt a patient centred approach recognising that diabetes management and therapeutic targets may need adjustment in elderly patients with disability, social isolation and co-morbidity	CbD, mini-CEX, PS, MCR	1,2,3,4
Adopt a team approach in co-ordinating, in some cases leading but always acknowledging, the efforts of agencies and individuals managing older patients with diabetes	CbD, mini-CEX, MSF, MCR	1,2,3,4

2.7 Complications of Diabetes

2.7.1 Screening for the Complications of Diabetes

Understand the principles and practice of screening for diabetic complications		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The principles and practice of screening	CbD, mini-CEX, SCE, MCR	1,2
Skills		
Practice effective strategies in the implementation of a screening programme for diabetes complications	CbD, MCR	1,2
Behaviours		
Recognise the criteria for urgent referral to appropriate services when diabetic complications are identified	CbD, MSF, MCR	1,2,3,4

2.7.2 Macrovascular Disease

Identify, investigate, treat and make appropriate referrals for patients with macrovascular disease		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The importance of hyperglycaemia as a risk factor for macroangiopathy	CbD, SCE, MCR	1,2
Other risk factors for macroangiopathy including elements of the so-called metabolic syndrome	CbD, SCE, MCR	1,2
The presenting features of cerebrovascular, cardiovascular and peripheral vascular disease	CbD, SCE, MCR	1,2
The available treatments for non glycaemic risk factors for macroangiopathy	CbD, SCE, MCR	1,2
Skills		
Identify and manage glycaemia and other modifiable risk factors for macroangiopathy	CbD, mini-CEX, MCR	1,2
Diagnose and manage heart failure in diabetes	CbD, mini-CEX, MCR	1,2
Investigate and manage diabetic patients with established macrovascular disease	CbD, mini-CEX, MCR	1,2
Manage diabetic patients suffering acute myocardial infarction and stroke	CbD, MCR	1,2
Behaviours		
Recognise when to refer patients for specialist investigation and treatment (e.g. Cardiology, Vascular surgery)	CbD, mini-CEX, MCR	1,2,3,4

2.7.3 Eye Disease in Diabetes

Identify and prevent diabetic eye disease		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
How diabetes can affect different parts of the eye	CbD, mini-CEX, SCE, MCR	1,2
The pathogenesis and different stages of diabetic retinopathy	SCE, CbD, MCR	1,2
The importance of visual acuity testing and retinal screening	CbD, SCE, MCR	1,2
The available treatments for eye complications	CbD, SCE, MCR	1,2
The implications of eye complications on driving / employment	CbD, mini-CEX, SCE, MCR	1,2,4
The structure of a retinal screening programme	CbD, mini-CEX, SCE, MCR	1,2,3
Skills		
Diagnose cataract, and all grades of severity of retinopathy using direct ophthalmoscopy	mini-CEX, MCR	1,2
Interpret retinal photographs	CbD, mini-CEX, MCR	1,2
Identify other ocular disorders associated with diabetes	CbD, mini-CEX, SCE, MCR	1,2
Perform and interpret visual acuity testing	mini-CEX, MCR	1,2
Discuss the importance of glycaemic control and blood pressure management in diabetic eye disease	CbD, mini-CEX, MCR	1,2,3,4
Recognise the types of diabetic eye complications which need urgent ophthalmology referral	CbD, mini-CEX, MCR	1,2,3
Behaviours		
Practice primary prevention of diabetic eye disease	mini-CEX, MCR	1,2
Refer the appropriate patients for specialist ophthalmic assessment	CbD, mini-CEX, MSF, MCR	1,2,3
Communicate to patients and advise accordingly about the treatments available for eye complications and the implications of eye complications on driving / employment	mini-CEX, PS, MCR	1,2,3,4
Recognise the importance of retinal screening and contribute to local diabetic retinopathy screening programmes	CbD, MSF, MCR	1,3
Recognise the impact of diabetes eye complications on patients lifestyle	CbD, PS, MCR	1,3,4

2.7.4 Renal Disease and Hypertension in Diabetes

Prevent, identify and manage renal disease and hypertension in people with diabetes		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
How diabetes can affect different parts of the kidney	SCE, MCR	1

The pathogenesis and different stages of diabetic nephropathy	SCE, MCR	1
The effect of hypertension on diabetic nephropathy	CbD, SCE, MCR	1,2
The significance of proteinuria in the increased incidence of macroangiopathy	CbD, SCE, MCR	1,2
The treatment thresholds of blood pressure in patients with diabetes and nephropathy	CbD, mini-CEX, SCE, MCR	1,2
Describe the available tests for diagnosing nephropathy and explain the importance of screening for early nephropathy	CbD, mini-CEX, SCE, MCR	1,2
Describe the treatments available for diabetic nephropathy and hypertension	CbD, mini-CEX, SCE, MCR	1,2
Skills		
Manage hypertension according to current guidelines	CbD, mini-CEX, MCR	1,2
Manage glycaemia in patients with renal impairment	CbD, mini-CEX, MCR	1,2,3
Diagnose nephropathy and distinguish between its different stages (early / late)	CbD, mini-CEX, MCR	1,2
Evaluate other macrovascular risk factors in patients with diabetic nephropathy	CbD, mini-CEX, MCR	1,2
Advise/counsel patients about the significance of nephropathy	mini-CEX, PS, MCR	1,4
Behaviours		
Communicate to patients the importance of blood pressure and glycaemic management in the prevention and slowing of progression of nephropathy	mini-CEX, PS, MCR	2,3,4
Communicate the significance of a diagnosis of nephropathy to patients	mini-CEX, PS, MCR	2,3,4
Communicate with colleagues in specialist nephrology services and refer patients appropriately	CbD, MSF, MCR	2,3
Recognise the implications of a diagnosis of diabetic nephropathy on patients, their carers and families.	CbD, mini-CEX, PS, MCR	2,4

2.7.5 Neuropathy and Erectile Dysfunction in Diabetes

To understand principles of management of diabetic neuropathy and erectile dysfunction		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
How diabetes can affect different parts of the nervous system	CbD, SCE, MCR	1,2
The pathogenesis and different manifestations of diabetic neuropathy	CbD, SCE, MCR	1,2
Skills		
Diagnose the different patterns of autonomic and somatic poly- and mononeuropathies, including performance of appropriate examination	CbD, mini-CEX, MCR	1,2
Manage the neuropathies, including neurogenic pain and the manifestations of autonomic neuropathy	CbD, mini-CEX, SCE, MCR	1,2,4
Evaluate and manage erectile dysfunction in diabetic men	CbD, mini-CEX, MCR	1,2
Behaviours		

Select appropriate treatment particularly for neurogenic pain and manifestations of autonomic neuropathy	mini-CEX, SCE, MCR	1,2
Exhibit appropriate behaviours when discussing erectile dysfunction and communicating range of treatment options	mini-CEX, PS, MCR	1,3,4

2.7.6 Foot Disease

To understand principles of management of diabetes related foot disease		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The pathogenesis of diabetic foot ulceration	CbD, mini-CEX, SCE, MCR	1
The range of specialist investigations available to detect vascular insufficiency and neuropathy	CbD, mini-CEX, SCE, MCR	1
The principles of infection control	CbD, mini-CEX, SCE, MCR	1,2
Appropriate antibiotic regimens including local and national guidelines	CbD, SCE, MCR	1,2
The risks of antibiotic therapy and importance of prescribing policies	CbD, mini-CEX, SCE, MCR	1,2
Other conditions affecting feet such as tineal infection, skin cancer and causes of pain (e.g. simple fracture, tendonitis)	CbD, SCE, mini-CEX, MCR	1,2,
Skills		
Identify patients at risk of foot problems and advise on prevention recognising the importance of patient education.	CbD, mini-CEX, MCR	1,2,4
Use of specialist footwear and off-loading techniques	CbD, mini-CEX, MCR	1,2,4
Recognise the features of Charcot's neuroarthropathy	CbD, mini-CEX, MCR	1,2,4
Assess vascular supply and neurological status of the lower limb	CbD, mini-CEX, MCR	1,2
Use of appropriate imaging techniques in detection and management of bone infection in the diabetic foot	CbD, mini-CEX, SCE, MCR	1,2
Manage established diabetic foot problems including use of appropriate antibiotic treatment liaising appropriately with microbiological service	CbD, mini-CEX, SCE, MCR	1,2
Exercise judgment in the need for, and timing of, surgical referral	CbD, mini-CEX, MCR	2,3
Counsel patients on matters of infection risk, transmission and control	CbD, mini-CEX, PS, MCR	2,3
Recognise potential for cross-infection in clinical settings	CbD, mini-CEX, MCR	1,2
Behaviours		
Demonstrate effective management of established diabetic foot problems including communication of advice on prevention of foot ulceration	CbD, mini-CEX, MCR	1,2,4
Recognise the importance of the multidisciplinary team, including vascular and orthopaedic surgeons, in the prevention and management of diabetic foot problems	CbD, MSF, MCR	1,2,3
Recognise when to refer patients for specialist foot care and use of orthotic appliances	CbD, MCR	1,23

Engage in local infection control procedures and practice aseptic technique whenever relevant	MSF, MCR	1,2
Encourage all staff, patients and relatives to observe infection control principles	CbD, MSF, MCR	1,3
Recognise the impact of amputation on patients and their carers and the importance of effective rehabilitation	CbD, mini-CEX, MCR	3,4

2.7.7 Lipid Disease

To be able to diagnose and manage disorders of lipid metabolism

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
The pattern of lipid abnormalities seen in patients	CbD, mini-CEX, SCE, MCR	1,2
Range of treatments available for managing lipid abnormalities	CbD, mini-CEX, SCE, MCR	1,2
Skills		
Select appropriate patients to screen for dyslipidaemia	mini-CEX, MCR	1,2
Assess cardiovascular risk in relation to the patient's lipid profile	CbD, mini-CEX, MCR	1,2
Diagnose and manage patients with primary and secondary lipid disorders	CbD, mini-CEX, MCR	1,2
Communicate the cardiovascular risk of hyperlipidaemia to patients	mini-CEX, PS, MCR	1,2,4
Behaviours		
Select appropriate treatment for individual patients	CbD, mini-CEX, MCR	1,2
Explain the importance of screening for lipid abnormalities in diabetes	CbD, mini-CEX, PS, MCR	1,2,4
Recognise the need to refer patients with atypical or severe dyslipidaemia to specialist services	CbD, MSF, MCR	1,2,3,4

3. Endocrinology

3.1 Disorders of the Hypothalamus and Pituitary

To diagnose, manage and provide care for patients with disorders of the hypothalamus and / or the pituitary gland

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
The causes, investigations and treatments for disorders of the hypothalamus and pituitary	CbD, mini-CEX, SCE, MCR	1,2
Skills		
Perform and interpret basal and dynamic tests of pituitary function	CbD, mini-CEX, SCE, MCR	1,2,3
Demonstrate an ability to diagnose and provide first line management of functioning and non functioning pituitary tumours	CbD, mini-CEX, PS, MCR	1,2,3
Demonstrate an ability to diagnose and monitor optic nerve compression	CbD, mini-CEX, PS, MCR	1,2
Provide immediate and long term care to patients with mass effects from pituitary enlargement	CbD, mini-CEX, MCR	1,2,3,4
Demonstrate ability to diagnose and manage hypopituitarism	CbD, mini-CEX, MCR	1,2,3,4
Demonstrate ability to diagnose and manage diabetes insipidus	CbD, mini-CEX, MCR	1,2,3
Demonstrate ability to manage patients during and after surgery for pituitary tumours	CbD, mini-CEX, MCR	1,2,3,4
Demonstrate ability to diagnose and manage patients with SIADH, thirst dysregulation and other disorders of water balance.	CbD, mini-CEX, MCR	1,2,3
Behaviours		
Recognise the need for appropriate referrals for pituitary surgery and radiotherapy	CbD, mini-CEX, MCR	1,2,3
Recognise the role of the multidisciplinary team in the management of pituitary tumours	CbD, mini-CEX, MSF, MCR	1,2,3,4
Recognise the need for urgent referral of patients presenting with symptoms of optic nerve compression	CbD, mini-CEX, MCR	1,2,3
Recognise the impact of hypothalamic / pituitary disorders on patients and carers	CbD, mini-CEX, PS, MCR	1,2,3,4

3.2 Disorders of Growth and Development

To assess normal growth and development by the use of growth charts and assessment of pubertal stage, and to diagnose and treat growth disorders

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Methods of assessment of normal growth and development by the use of growth charts and assessment of pubertal stage	CbD, mini-CEX, SCE, MCR	1,2
Describe the diagnosis and management of endocrine growth disorders	CbD, mini-CEX, SCE, MCR	1,2

Skills		
Demonstrate ability to diagnose and manage disorders of growth and maturation, particularly constitutional delay in growth in puberty	CbD, mini-CEX, MCR	1,2,3
Behaviours		
Recognise the impact of growth and pubertal disorders on the patient and his / her family	CbD, mini-CEX, MSF, PS, MCR	1,2,3,4

3.3 Disorders of the Thyroid Gland

To understand the physiology and biochemistry of thyroid hormone, and to be competent to diagnose, manage and provide care for patients with thyroid disease, including thyroid eye disease and thyroid disorders during pregnancy

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Explain disease states in terms of disorders of physiology and biochemistry of thyroid hormones and TSH	CbD, mini-CEX, SCE, MCR	1,2
The Causes of thyroid dysfunction and goitre, their diagnosis and their management	CbD, mini-CEX, SCE, MCR	1,2
The regulations applicable to the use of radioactive iodine for benign thyroid disease	SCE, MCR	1,2
Methods of diagnosis and treatment of thyroid eye disease	CbD, mini-CEX, SCE, MCR	1,2
The Iinfluence of pregnancy on tests of thyroid function and their interpretation	CbD, mini-CEX, SCE, MCR	1,2
Describe the implications of pregnancy for the management of thyroid disease	CbD, mini-CEX, SCE, MCR	1,2
Skills		
Interpret thyroid function test results to diagnose and exclude thyroid disease and to recognise assay interferences	CbD, mini-CEX, SCE, MCR	1,2,3
Demonstrate ability to diagnose and manage simple non-toxic goitre and solitary thyroid nodules	CbD, mini-CEX, MCR	1,2,3
Perform and/or refer appropriately for fine needle aspiration cytology of the thyroid	CbD, mini-CEX, MCR	1,2,3
Use and/or refer for the use of radioisotopes to diagnose thyroid disorders	CbD, mini-CEX, MCR	1,2,3
Use and/or refer for the use of radioisotopes in the treatment of hyperthyroidism and goitre	CbD, mini-CEX, MCR	1,2,3
Demonstrate the ability to diagnose and manage primary and secondary hypothyroidism	CbD, mini-CEX, MSF, MCR	1,2,3,4
Demonstrate the ability to manage thyroid emergencies including thyroid patients in critical care	CbD, mini-CEX, MSF, MCR	1,2,3,4
Provide perioperative care for patients undergoing thyroid surgery (particularly preoperative preparation)	CbD, mini-CEX, MCR	1,2,3,4
Demonstrate the ability to investigate and manage patients with thyroid eye disease	CbD, mini-CEX, MCR	1,2,3,4

Demonstrate the ability to manage thyroid disorders during and after pregnancy	CbD, mini-CEX, MSF, MCR	1,2,3,4
Behaviours		
Refer appropriate patients with hyperthyroidism or benign goitre for treatment with radio-iodine or surgery	CbD, mini-CEX, MCR	1,2,3,4
Understand the role of multidisciplinary care in the management of patients with thyroid cancer	CbD, mini-CEX, MCR	1,2,3
Understand the need to refer selected patients for ophthalmological review	CbD, mini-CEX, MCR	1,2,3

3.4 Disorders of the Adrenal Glands

To be competent to diagnose, manage and provide care for patients with adrenal disease		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
The causes, investigations and treatments for disorders of the adrenal glands	CbD, mini-CEX, SCE, MCR	1,2
Skills		
Perform and interpret tests of adrenal function	CbD, mini-CEX, MCR	1,2,3
Demonstrate ability to investigate and provide first line management of Cushing's Syndrome	CbD, mini-CEX, MCR	1,2,3,4
Demonstrate ability to investigate suspected endocrine hypertension and provide first line management for phaeochromocytoma and adrenocortical hypertension	CbD, mini-CEX, MCR	1,2,3,4
Demonstrate the ability to diagnose and manage non classical congenital adrenal hyperplasia and provide first line management for classical CAH in adolescents and adulthood	CbD, mini-CEX, MCR	1,2,3,4
Demonstrate ability to investigate and manage patients with suspected adrenal tumours	CbD, mini-CEX, MCR	1,2,3,4
Provide perioperative care for patients with suspected or proven adrenal insufficiency	CbD, mini-CEX, MCR	1,2,3,4
Explain importance of steroid replacement during intercurrent illness	CbD, mini-CEX, MCR	1,2,3,4
Behaviours		
Recognise the urgency of managing adrenal insufficiency	CbD, mini-CEX, MSF, MCR	1,2,3,4
Recognise complex management issues in congenital adrenal hyperplasia especially in females and adolescents	CbD, mini-CEX, MCR	1,2,3,4
Recognise the role of referral to appropriate specialists of those with adrenal diseases	CbD, mini-CEX, MCR	1,2,3,4
Recognise the role of patient and carer education in the long term management of adrenal insufficiency	CbD, mini-CEX, MSF, PS, MCR	1,2,3,4

3.5 Disorders of the Gonads

Diagnose, manage and provide care for patients with gonadal disorders		
	Assessment	**GMP**

Knowledge	Methods	
Demonstrate Knowledge of:		
The causes of primary and secondary gonadal failure and menstrual irregularity	CbD, SCE, MCR	1,2
State treatment strategies for gonadal failure, hirsutism, virilism, gynaecomastia, polycystic ovarian syndrome and infertility	CbD, SCE, MCR	1,2
Skills		
Perform and interpret test of the hypothalamopituitary-gonadal axis	CbD, mini-CEX, SCE, MCR	1,2,3
Ability to investigate and manage primary and secondary gonadal failure	CbD, mini-CEX, SCE, MCR	1,2,3
Prescribe appropriately sex hormone replacement therapy to men and women	CbD, mini-CEX, SCE, MCR	1,2,3,4
Assess, investigate and manage women with hirsutism / virilism	CbD, mini-CEX, MCR	1,2,3
Assess, investigate and manage women with menstrual disturbance	CbD, mini-CEX, SCE, MCR	1,2,3
Manage polycystic ovarian syndrome	CbD, mini-CEX, MCR	1,2,3
Ability to investigate and manage men with gynaecomastia	CbD, mini-CEX, MCR	1,2,3
Ability to provide first line assessment and management to an infertile couple	CbD, mini-CEX, MCR	1,2,3
Ability to investigate and manage common chromosomal disorders such as Turner's and Klinefelter's syndromes	CbD, mini-CEX, MCR	1,2,3
Behaviours		
Recognise the role of MDTs and other services including genetic services in disorders of fertility and chromosome disorders	CbD, mini-CEX, MSF, MCR	1,2,3,4
Recognise the impact of infertility on the patient and their family	CbD, mini-CEX, MSF, MCR	1,2,3,4
Adopt non-judgemental approach to patients with gender dysphoria	PS, CbD, mini-CEX, MSF, MCR	1,2,3,4

3.6 Disorders of Parathyroid Glands, Calcium Disorders and Bone

Diagnose, manage and provide care for patients with disorders of the parathyroid glands, calcium metabolism and bone

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Causes of hypercalcaemia and hypocalcaemia and their treatments	CbD, SCE, MCR	1,2
Screening and treatment strategies for osteoporosis	CbD, mini-CEX, SCE, MCR	1,2,3
The endocrine and metabolic causes of renal stones	CbD, SCE, MCR	1,
Skills		
Ability to diagnose and manage hypercalcaemia including emergency presentations	CbD, mini-CEX, MCR	1,2,3
Ability to diagnose and manage hyperparathyroidism	CbD, mini-CEX, MCR	1,2,3
Provide peri operative care for patient undergoing parathyroid surgery	CbD, mini-CEX,	1,2,3

	MSF, MCR	
Ability to investigate and manage hypocalcaemia	CbD, mini-CEX, MCR	1,2,3
Risk factors for vitamin D deficiency including dietary factors and ethnicity	CbD, mini-CEX, SCE, MCR	1,2,3
Ability to diagnose and manage vitamin D deficient states	CbD, mini-CEX, SCE, MCR	1,2,3
Risk factors for osteoporosis	CbD, mini-CEX, SCE, MCR	1,2
Provide preventive care against osteoporosis	CbD, Mini-CEX, MSF, MCR	1,2,3
Assess and manage established osteoporosis	CbD, mini-CEX, MCR	1,2,3
Assess and manage Paget's Disease of bone	CbD, mini-CEX, MCR	1,2,3
Select appropriate patients for bone biopsy	CbD, mini-CEX, MSF, SCE, MCR	1,2,3
Behaviours		
Make appropriate referrals for bone densitometry and understand its value and limitations	CbD, mini-CEX, MSF, MCR	1,2,3,4
Recognise which patients with hyperparathyroidism require referral for parathyroid surgery	CbD, mini-CEX, MSF, MCR	1,2,3,4

3.7 Disorders related to weight

Diagnose, manage and provide care for patients with disorders related to weight		
Knowledge	**Assessment Methods**	**GMP**
Demonstrate Knowledge of:		
Epidemiology of obesity and its increasing prevalence	Mini-CEX, CbD, MCR	1,2
Classification of obesity and racial and ethnic variations in associated risks	Mini-CEX, CbD, MCR	1,2
Pathophysiology of morbid obesity and metabolic syndrome	Mini-CEX, CbD, MCR	1,2
Causes of obesity including lifestyle, endocrine causes and medications	Mini-CEX, CbD, SCE, MCR	1,2
Complications of obesity including metabolic syndrome and type 2 diabetes	Mini-CEX, CbD, SCE, MCR	1,2
Principles of management of obesity and morbid obesity including lifestyle, medications and bariatric surgery	Mini-CEX, CbD, SCE, MCR	1,2
Essential components of a bariatric service	Mini-CEX, CbD, MCR	1,2
The principles of peri-operative management of the obese patient including adjustment of anti-diabetes medication	Mini-CEX, CbD, MCR	1,2
The principles of long term management of the bariatric patient following surgery	Mini-CEX, CbD, MCR	1,2
The endocrine consequences of anorexia nervosa and bulimia	CbD, SCE, MCR	1,2
Skills		
Assess a patient with morbid obesity	Mini-CEX, CbD, MCR	1,2

Investigate for secondary causes of obesity	Mini-CEX, CbD, MCR	1,2
Investigate for complications of obesity including diabetes and metabolic syndrome, sleep apnoea, fatty liver disease	Mini-CEX, CbD, MCR	1,2
Understand what is required to work up a patient for referral for bariatric surgery based on current guidelines	Mini-CEX, CbD, MCR	1,2,3
Behaviours		
Recognise the effect that morbid obesity may have on the patient and their family	Mini-CEX, CbD, MCR	1,3,4
Recognise the complex underlying issues associated with morbid obesity and be willing to explore them	Mini-CEX, CbD, MCR	1,3,4
Recognition of psychological impact of obesity, and seeking appropriate support	Mini-CEX, CbD, MCR	3,4
Recognise the role of multi-disciplinary team in management of morbid obesity	Mini-CEX, CbD, MCR, MSF	3
Appreciation of racial and ethnic variations in BMI and varying thresholds in BMI for treatment	Mini-CEX, CbD, MCR	3
Recognise the importance of detailed evaluation before referring a patient for bariatric surgery	Mini-CEX, CbD, MCR	1,2,3,4
Recognise the need for special equipment for patients with morbid obesity, when in clinic or when admitted to hospital	Mini-CEX, CbD, MCR	1,2,3,4

3.8 Miscellaneous Endocrine and Metabolic Disorders

Diagnose and provide first line care for patients with rarer endocrine conditions such as hypoglycaemia, neuroendocrine tumours and ectopic hormone production.

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
Causes of and investigations of possible hypoglycaemia	CbD, SCE, MCR	1,2
Causes of and investigations of neuroendocrine tumours and ectopic hormone production	CbD, SCE, MCR	1,2
Causes and investigations of electrolyte disturbances	CbD, SCE, MCR	1,2
Features of multiple endocrine neoplasia syndromes	CbD, SCE, MCR	1,2
Possible long term endocrine consequences of treatments for cancer	CbD, SCE, MCR	1,2
Skills		
The ability to investigate patients with suspected hypoglycaemia	CbD, mini-CEX, MCR	1,2,3
The ability to diagnose and provide first line care for neuropeptide secreting tumours	CbD, mini-CEX, MCR	1,2,3
Ability to investigate and manage hypo and hypernatraemia	CbD, mini-CEX, MCR	1,2,3
Ability to investigate and manage disorders of potassium homeostasis	CbD, mini-CEX, MCR	1,2,3
Ability to investigate and manage disorders of magnesium homeostasis	CbD, mini-CEX, MCR	1,2,3
Ability to diagnose and manage syndromes of ectopic hormone production (e.g. PTHrP, ACTH, ADH)	CbD, mini-CEX, MCR	1,2,3

Ability to diagnose and manage syndromes of multiple endocrine neoplasia (MEN 1, 2a, 2b) - including an understanding of genetic testing and strategies for long term monitoring	CbD, mini-CEX, MCR	1,2,3
Ability to investigate and manage the 'late endocrine effects' of treatment for cancer	CbD, mini-CEX, MCR	1,2,3
Recognise, investigate and manage disorders of insulin resistance	CbD, mini-CEX, MCR	1,2,3
Behaviours		
Recognise the need to refer to specialist services for complex endocrine disorders	CbD, MSF, MCR	1,2,3,4
Recognise the role for genetic services in the management of potentially inherited endocrine disorders	CbD, MCR	1,2,3,4
Recognise the role of MDTs in managing complex endocrine disorders e.g. ectopic hormone production and neuroendocrine tumours	CbD, MSF, MCR	1,2,3,4

3.9 Imaging Techniques in Endocrinology

Demonstrate understanding of the role and interpretation of imaging techniques in the diagnosis and management of endocrine disease.

Knowledge	Assessment Methods	GMP
Demonstrate Knowledge of:		
The role imaging in the investigation and management of a wide spectrum of endocrine disorders	CbD, SCE, MCR	1,2
Skills		
Make appropriate referrals for CT and MR scans of pituitary, adrenals orbits and other organs	AA, CbD, MCR	1,2,3
Make appropriate referrals for ultrasonography of the ovaries, parathyroids and thyroid	AA, CbD, MCR	1,2,3
Make appropriate referrals for radionuclide scans of the adrenals, parathyroids and thyroid	AA, CbD, MCR	1,2,3
Make appropriate referrals for angiography with selective catheterisation and sampling from endocrine glands	AA, CbD, MCR	1,2,3
Behaviours		
Consult colleagues about the interpretation of radiological investigations	CbD, MSF, MCR	1,2,3,4
Act appropriately upon receipt of radiological results	CbD, mini-CEX, MCR	1,2,3,4

4 Learning and Teaching

4.1 The training programme

The organisation and delivery of postgraduate training is the statutory responsibility of the General Medical Council (GMC) which devolves responsibility for the local organisation and delivery of training to the deaneries. Each deanery oversees a "School of Medicine" which is comprised of the regional Specialty Training Committees (STCs) in each medical specialty. Responsibility for the organisation and delivery of specialty training in Endocrinology and Diabetes Mellitus in each deanery is, therefore, the remit of the regional Endocrinology and Diabetes Mellitus STC. Each STC has a Training Programme Director who coordinates the training programme in the specialty. Trainee involvement is incorporated at all stages of the provision of training. For each trainee the training programme director will ensure that clinical placements are appropriately suited to the training needs of that individual at that time. In each post the trainee will have a nominated educational supervisor with whom the trainee can chart out objectives of each post depending on their individual training needs.

Membership of associated bodies

Trainees will be expected to obtain professional membership of organisations involved with diabetes and endocrinology such as

- Diabetes UK (DUK)
- Society for Endocrinology (SfE)
- Association of British Clinical Diabetologists (ABCD)
- Young Diabetologists Forum (YDF)

Acting up as a consultant (AUC)

"Acting up" provides doctors in training coming towards the end of their training with the experience of navigating the transition from junior doctor to consultant while maintaining an element of supervision.

Although acting up often fulfills a genuine service requirement, it is not the same as being a locum consultant. Doctors in training acting up will be carrying out a consultant's tasks but with the understanding that they will have a named supervisor at the hosting hospital and that the designated supervisor will always be available for support, including out of hours or during on-call work. Doctors in training will need to follow the rules laid down by the Deanery / LETB within which they work and also follow the JRCPTB rules which can be found at www.jrcptb.org.uk/trainingandcert/Pages/Out-of-Programme.

4.2 Teaching and learning methods

The curriculum will be delivered through a variety of learning experiences. Trainees will learn from practice clinical skills appropriate to their level of training and to their attachment within the department.

Trainees will achieve the competencies described in the curriculum 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 encourages the formation of self-help groups and learning sets.

The majority of learning in this speciality will take place in the context of out-patient clinics and multi-disciplinary team meetings with nominated consultant supervision. There should be formal opportunities for the supervisor to review decisions made in the out-patient clinic and opportunity for the trainee to see patients along with the supervisor.

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

- **Outpatient clinics**. After initial induction, trainees will review patients in outpatient clinics, under direct supervision. The degree of responsibility taken by the trainee will increase as competency increases, trainees will have access to supervision to discuss new or review patients as and when required. These should include
    - General diabetes clinics with opportunities to see new and follow-up patients
    - Specialist diabetes clinics such as
        - Antenatal diabetes
        - Adolescent diabetes
        - Diabetes eye disease
        - Lipid management
        - Intensive insulin therapy (insulin pump therapy)

    - Diabetes foot clinics with input from podiatry, orthotics, vascular and orthopaedic surgery
    - General endocrine clinics with opportunity to see new and follow up cases
    - Specialist endocrine clinics such as
        - Medical Obstetrics
        - Reproductive Endocrinology
        - Paediatric/ Adolescent endocrine
        - Antenatal endocrine
        - Neuro-endocrine / endocrine malignancy
        - Thyroid nodule
        - Radioiodine
        - Metabolic bone

- **Personal ward rounds and provision of ongoing clinical care**: Every patient seen, on the ward, in out-patients or community care setting, 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.
    - Trainees should gain experience of managing
        - Diabetes and endocrine emergencies

        - Pre, peri and post surgical management of patients with endocrine conditions such as tumours of the pituitary, thyroid or adrenals
        - Patients with underlying diabetes or endocrine disease with an intercurrent illness that requires adjustment of their therapy
        - Patients with other conditions where their treatment causes diabetes or endocrine disturbance.
- **Consultant-led ward rounds**: Ward rounds, including those post-take, should be led by a consultant and include feedback on clinical and decision-making skills.
- **Multidisciplinary team meetings.** There are many situations where clinical problems are discussed with clinicians in other disciplines. These provide excellent opportunities for observation of clinical reasoning. Most trainees should have the opportunity of presenting and discussing cases in a multi-disciplinary forum such as meetings to discuss retinal findings in diabetes, or pituitary or endocrine MDT with surgeons, nurses and radiology input.
- **Endocrine Investigation units:** Trainees will be involved in assessment of endocrine disorders with basal and dynamic tests. Each test provides an opportunity to learn about reasons for investigation and also interpretation of results, under supervision of the consultant.
- **Interaction with diabetes specialist nurses and diabetes foot care teams:** Trainees will work in close collaboration with the diabetes and endocrine specialist nurses providing care to patients in both outpatient and inpatient settings. Trainees will work with the diabetes foot care team comprising podiatry and orthotics to understand the principles of foot care and management of the diabetic foot.
- **Structured Education Courses:** All trainees should have the opportunity to attend and observe structured education courses such as DAFNE / BERTIE / DESMOND etc.

Trainees have supervised responsibility for the care of in-patients. 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 as learning outcomes are achieved (see Section 5: Feedback and Supervision).

Particularly in diabetes, care within community settings including primary care and intermediate care is increasing in volume and complexity and offers valuable training opportunities. There is significant variation in availability of this type of experience in different parts of the country, however trainers and trainees should ensure that these opportunities are utilised where appropriate.

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

Suggested activities include:
- A programme of formal bleep-free regular teaching sessions to cohorts of trainees (e.g. a weekly core training hour of teaching within a Trust)
- Case presentations
- Journal clubs
- Research and audit projects

- Lectures and small group teaching
- Grand rounds
- Clinical skills demonstrations and teaching
- Critical appraisal and evidence-based medicine
- Joint specialty meetings
- Attendance at training programmes organised on a deanery or regional basis, which are designed to cover aspects of the training programme outlined in this curriculum.

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
- Maintenance of personal portfolio (self-assessment, reflective learning, personal development plan)
- Audit and research projects
- Reading journals
- Achieving personal learning goals beyond the essential core curriculum
- Communication and consultation skills through supervision, observed consultations and formal training
- Collaborative education through participation in multidisciplinary team.
- Learning through teaching of students, other health care professionals and patient support groups
- Diabetes camps and other community health initiatives

Formal Study Courses - Time to be made available for formal courses is encouraged, subject to local conditions of service. By the end of their training, trainees will be expected to have attended the majority of

- Foundation course in diabetes
- Young Diabetologists Forum annual day
- Advanced Diabetes Course
- Diabetes UK Annual Professional Conference
- British Endocrine Society Annual Meeting
- Association of British Clinical Diabetologists meeting
- Society for Endocrinology Clinical Update
- International meeting such as EASD, ECE, AES, ADA
- Teaching the teachers course
- Management course
- National Obesity Forum or International Society for study of Obesity meeting

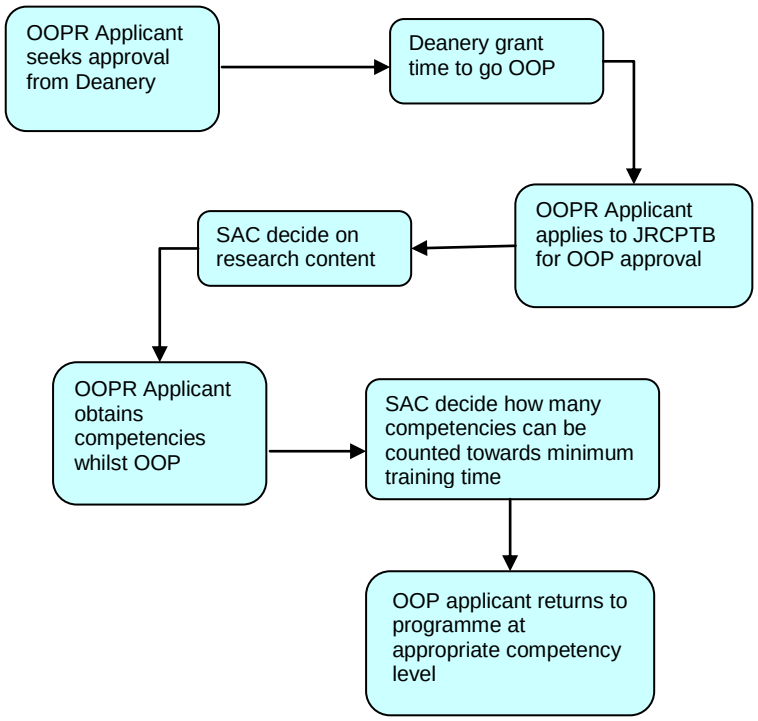
4.3 Research

Trainees who wish to acquire research competencies, in addition to those specified in their specialty curriculum, may undertake a research project as an ideal way of obtaining those competencies. For those in specialty training, one option to be considered is that of taking time out of programme to complete a specified project or research degree. Applications to research bodies, the deanery (via an OOPR form) and the JRCPTB (via a Research Application Form) are necessary steps, which are the responsibility of the trainee. The JRCPTB Research Application Form can be accessed via the JRCPTB website. It requires an estimate of the competencies that will be achieved and, once completed, it should be returned to JRCPTB together with a job description and an up to date CV. The JRCPTB will submit applications to the relevant SACs for review of the research content including an indicative assessment of the amount of clinical credit (competence acquisition) which might be achieved.

This is likely to be influenced by the nature of the research (eg entirely laboratory-based or strong clinical commitment), as well as duration (eg 12 month Masters, 2-year MD, 3-Year PhD). On approval by the SAC, the JRCPTB will advise the trainee and the deanery of the decision. The deanery will make an application to the GMC for approval of the out of programme research. All applications for out of programme research must be prospectively approved.

Upon completion of the research period the competencies achieved will be agreed by the OOP Supervisor, Educational Supervisor and communicated to the SAC, accessing the facilities available on the JRCPTB ePortfolio. The competencies achieved will determine the trainee's position on return to programme; for example if an ST3 trainee obtains all ST4 competencies then 12 months will be recognised towards the minimum training time and the trainee will return to the programme at ST5. This would be corroborated by the subsequent ARCP.

This process is shown in the diagram below:



Funding will need to be identified for the duration of the research period. Trainees need not count research experience or its clinical component towards a CCT programme but must decide whether or not they wish it to be counted on application to the deanery and the JRCPTB.

A maximum period of 3 years out of programme is allowed and the SACs will recognise up to 12 months towards the minimum training times.

4.4 Academic Training

For those contemplating an academic career path, there are now well-defined posts at all levels in the Integrated Academic Training Pathway (IATP) involving the National Institute for Health Research (NIHR) and the Academy of Medical Sciences (AMS). For full details see www.nccrcd.nhs.uk and www.academicmedicine.ac.uk. Academic trainees may wish to focus on education or research and are united by the target of a consultant-level post in a university and/or teaching hospital, typically starting as a senior lecturer and aiming to progress to readership and professor. A

postgraduate degree will usually be essential (see “out of programme experience”) and academic mentorship is advised (see section 6.1). Academic competencies have been defined by the JRCPTB in association with AMS and the Colleges and modes of assessment have been incorporated in the Gold Guide (http://specialtytraining.hee.nhs.uk).

Academic integrated pathways to CCT are a) considered fulltime CCTs as the default position and b) are run through in nature. The academic programmes are CCT programmes and the indicative time academic trainees to achieve the CCT is the same as the time set for non-academic trainees. If a trainee fails to achieve all the required competencies within the notional time period for the programme, this would be considered at the ARCP, and recommendations to allow completion of clinical training would be made (assuming other progress to be satisfactory). An academic trainee working in an entirely laboratory-based project would be likely to require additional clinical training, whereas a trainee whose project is strongly clinically oriented may complete within the “normal” time (see the guidelines for monitoring training and progress) http://www.academicmedicine.ac.uk/careersacademicmedicine.aspx. Extension of a CCT date will be in proportion depending upon the nature of the research and will ensure full capture of the specialty outcomes set down by the Royal College and approved by GMC.

All applications for research must be prospectively approved by the SAC and the regulator, see www.jrcptb.org.uk for details of the process.

5 Assessment

5.1 The assessment system

The purpose of the assessment system is to:

- enhance learning by providing formative assessment, enabling trainees to receive immediate feedback, measure 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;
- provide robust, summative evidence that trainees are meeting the curriculum standards during the training programme;
- ensure trainees are acquiring competencies within the domains of Good Medical Practice*;*
- assess trainees’ actual performance in the workplace;
- ensure that trainees possess the essential underlying knowledge required for their specialty;
- inform the Annual Review of Competence Progression (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.

The integrated assessment system comprises workplace-based assessments and knowledge – based assessment. Individual assessment methods are described in more detail below.

Workplace-based assessments will take place throughout the training programme to allow trainees to continually gather evidence of learning and to provide trainees with formative feedback. They are not individually summative but overall outcomes from a

number of such assessments provide evidence for summative decision-making. 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.

5.2 Assessment Blueprint

An assessment blueprint has been developed to map the assessment methods to the curriculum in a systematic way. The blueprint will ensure that there is appropriate sampling across the curriculum.

In the syllabus (3.3) the “Assessment Methods” shown are those that are appropriate as **possible** methods that could be used to assess each competency. It is not expected that all competencies will be assessed and where they are assessed not every method will be used.

5.3 Assessment methods

The following assessment methods are used in the integrated assessment system:

Examinations and certificates

- The Specialty Certificate Examination in Endocrinology and Diabetes Mellitus (SCE)

The Federation of Royal Colleges of Physicians of the UK, in association with the specialist societies has developed a Specialty Certificate Examination. The aim of this national assessment is to assess a trainee’s knowledge and understanding of the clinical sciences relevant to specialist medical practice and of common or important disorders to a level appropriate for a newly appointed consultant. The Specialty Certificate Examination is a prerequisite for attainment of the CCT.

Information about SCE, including guidance for candidates, is available on the MRCP(UK) website www.mrcpuk.org

Workplace-based assessments (WPBAs)

- Multiple Consultant Report (MCR)
- Multi-Source Feedback (MSF)
- mini-Clinical Evaluation Exercise (mini-CEX)
- Case-Based Discussion (CbD)
- Quality Improvement Project Assessment Tool (QIPAT)
- Patient Survey (PS)
- Audit Assessment (AA)
- Teaching Observation (TO)

These methods are described briefly below. More information about these methods including guidance for trainees and assessors is available in the ePortfolio and on the JRCPTB website www.jrcptb.org.uk. Workplace-based assessments should be recorded in the trainee’s ePortfolio. The workplace-based assessment methods include feedback opportunities as an integral part of the assessment process. This is explained in the guidance notes provided for the techniques.

Multiple Consultant Report (MCR)

The Multiple Consultant Report (MCR) captures the views of consultant supervisors on a trainee's clinical performance. The MCR year summary sheet summarises the

feedback received, outcomes for clinical areas and comments which will give valuable insight to how well the trainee is performing, highlighting areas of excellence and areas of support required. MCR feedback will be available to the trainee and included in the educational supervisor's report. Further guidance on the use of this tool and the number of MCR to be completed in each training year is available on the JRCPTB website [www.jrcptb.org.uk].

Multisource feedback (MSF)
This tool is a method of assessing generic skills such as communication, leadership, team working, reliability etc, across the domains of Good Medical Practice. This provides objective 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 include doctors (both senior and junior), nurses, administration staff, and other allied professionals. The trainee will not see the individual responses by raters. Feedback is given to the trainee by the Educational Supervisor.

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.

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 include discussion about 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.

Quality Improvement Project Assessment Tool (QIPAT)
The Quality Improvement Project Assessment tool is designed to assess a trainee's competence in completing a quality improvement project. The Quality Improvement Project Assessment 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.

Patient Survey (PS)*
Patient Survey address issues, including 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.

Audit Assessment Tool (AA)
The Audit Assessment Tool is designed to assess a trainee's competence in completing an audit. The Audit Assessment can be based on review of audit documentation or on a presentation of the audit at a meeting. If possible the trainee should be assessed on the same audit by more than one assessor.

Teaching Observation (TO)
The Teaching Observation form is designed to provide structured, formative feedback to trainees on their competence at teaching. The Teaching Observation 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).

*(Not a mandatory assessment method)

5.4 Decisions on progress (ARCP)

The Annual Review of Competence Progression (ARCP) is the formal method by which a trainee's progression through her/his training programme is monitored and recorded. ARCP is not an assessment – it is the review of evidence of training and assessment. The ARCP process is described in A Reference Guide for Postgraduate Specialty Training in the UK (the "Gold Guide" – available from www.mmc.nhs.uk). Deaneries are responsible for organising and conducting ARCPs. The evidence to be reviewed by ARCP panels should be collected in the trainee's ePortfolio.

In addition to the above, it is anticipated that assessment of trainee competence will require evidence to be produced of experience gained through;

1. An audit report and list of audit activities
2. A record of research training / completed research projects including a list of scientific publications either as abstracts and / or full papers
3. A list of meetings / conferences attended and / or at which presentations were made
4. A list of courses attended including those recommended in the curriculum.

The ARCP Decision Aid is included in section 5.5, giving details of the evidence required of trainees for submission to the ARCP panels.

5.5 ARCP Decision Aid

The ARCP decision aid sets out the targets expected at the end of each stage of training. Please refer to the JRCPTB website for the most up to date version (www.jrcptb.org.uk).

		ST3	ST4	ST5	ST6	ST7
Examinations				SCE attempted/passed	SCE attempted/passed	SCE passed
ALS Certificate		Valid	Valid	Valid	Valid	Valid
SLEs	**mini-CEX**	As required to cover the relevant competencies (a) (No less than 4)	As required to cover the relevant competencies (a) (No less than 4)	As required to cover the relevant competencies (a) (No less than 4)	As required to cover the relevant competencies (a) (No less than 4)	As necessary to cover any deficiencies identified at PYA
	CBD	As required to cover the relevant competencies (a) (No less than 4)	As required to cover the relevant competencies (a) (No less than 4)	As required to cover the relevant competencies (a) (No less than 4)	As required to cover the relevant competencies (a) (No less than 4)	As necessary to cover any deficiencies identified at PYA
MSF		Satisfactory			Satisfactory	
QIPAT/AA				Satisfactory		
TO			Satisfactory		Satisfactory	
PS*			Satisfactory			Satisfactory
Acquisition of common competencies evidenced by WPBAs and ES report		20%	50%	70%	85%	100%
Acquisition of specialty competences evidenced by WPBAs and ES report		20%	50%	70%	85%	100%

Attendance at meetings, courses	Attendance 65% of regional specialty study days	Attended a specialist training course (b) Attendance 65% of regional specialty study days	Attended a specialist training course (b) Attended both an annual DUK and BES meeting. Attendance 65% of regional specialty study days	Attended an appropriate meeting (c) By this stage, attended specialist training courses in both Endocrinology and Diabetes Mellitus. Attendance 65% of regional specialty study days	Continued attendance at national meeting and regional specialty study days Management course
Supportive evidence	Documentary evidence of additional courses, research and audit activity	Documentary evidence of additional courses, research and audit activity	Documentary evidence of additional courses, research and audit activity	Documentary evidence of additional courses, research and audit activity	
Educational Supervisor's Report	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Multiple Consultant Report (MCR)	4 - 6	4 - 6	4 - 6	4 - 6	4 – 6

Notes:

(a) By this stage, most sub-specialty areas should have been covered, with evidence demonstrated of competence across the majority of common areas of practice in both Endocrinology and Diabetes Mellitus.
(b) Attended a specialist training course in Endocrinology or Diabetes Mellitus, run by one of the Royal Colleges of Physicians or Specialist Societies
(c) Attended either annual DUK or BES meeting (or alternatively a major international Endocrinology or Diabetes Mellitus meeting) during previous year.

The order in which competencies are gained will depend on the individual training programme and will be determined by the programme director for each trainee.
* Not a mandatory assessment method

5.5 Penultimate Year Assessment (PYA)

The penultimate ARCP prior to the anticipated CCT date will include an external assessor from outside the training programme. JRCPTB and the deanery will coordinate the appointment of this assessor. This is known as “PYA”. Whilst the ARCP will be a review of evidence, the PYA will include a face-to-face component.

5.6 Complaints and Appeals

The MRCP(UK) office has complaints procedures and appeals regulations documented on its website which apply to all examinations run by the Royal Colleges of Physicians including the SCE.

All workplace-based assessment methods incorporate direct feedback from the assessor to the trainee and the opportunity to discuss the outcome. If a trainee has a complaint about the outcome from a specific assessment this is their first opportunity to raise it.

Appeals against decisions concerning in-year assessments will be handled at deanery level and deaneries are responsible for setting up and reviewing suitable processes. If a formal complaint about assessment is to be pursued this should be referred in the first instance to the chair of the Specialty Training Committee who is accountable to the regional deanery. Continuing concerns should be referred to the Associate Dean.

6 Supervision and feedback

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 personally discuss all cases if required. As training progresses the trainee should have the opportunity for increasing autonomy, consistent with safe and effective care for the patient.

Trainees will at all times have a named Educational Supervisor and Clinical Supervisor, responsible for overseeing their education. Depending on local arrangements these roles may be combined into a single role of Educational Supervisor

The responsibilities of supervisors have been defined by GMC in the document “Operational Guide for the PMETB Quality Framework”. These definitions have been agreed with the National Association of Clinical Tutors, the Academy of Medical Royal Colleges and the Gold Guide team at MMC, and are reproduced below:

Educational supervisor
A trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a specified trainee’s educational progress during a training placement or series of placements. The Educational Supervisor is responsible for the trainee’s Educational Agreement.

Clinical supervisor
A trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee’s clinical work and providing constructive feedback during a training

placement. Some training schemes appoint an Educational Supervisor for each placement. The roles of Clinical and Educational Supervisor may then be merged.

Educational supervisors will have attended updates on their role, responsibilities and techniques that are approved in content and frequency by their regional postgraduate dean. They will be active in the relevant clinical area.

6.2 Ensuring Safe Practice

The Educational / clinical Supervisor, when meeting with the trainee, should discuss issues of clinical governance, risk management and any report of any untoward clinical incidents involving the trainee. The Educational Supervisor should be part of the clinical specialty team. Thus if the clinical directorate (clinical director) has any concerns about the performance of the trainee, or there were issues of doctor or patient safety, these would be discussed with the Educational Supervisor. 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.

6.3 Methods of Feedback and Supervision

The Educational / Clinical supervisor will meet regularly with the trainee in order to discuss progress and to feed back assessment. This will ensure the trainee understands what development is required. An important component of this will be the evaluation of work-based assessments as documented in Section 5.3.

Educational supervisors are expected to enable trainees to achieve their educational objectives as defined in the curriculum and in accordance with the extent of training completed. Supervisors will fulfil an ongoing role in providing formal and informal training opportunities, as well as assessment and feedback. Supervisors will provide constructive feedback throughout training in both formal and informal settings. Supervisors will provide feedback on learning in line with the standards outlined in the curriculum, will deliver relevant assessment methods described below and will provide formative interaction and feedback on those assessments.

Academic trainees are encouraged to identify an academic mentor, who will not usually be their research supervisor and will often be from outside their geographical area. The Academy of Medical Sciences organises one such scheme (see www.acmedsci.ac.uk) but there are others and inclusion in an organised scheme is not a pre-requisite. The Medical Research Society organises annual meetings for clinician scientists in training (see www.medres.org.uk) and this type of meeting provides an excellent setting for trainees to meet colleagues and share experiences.

Opportunities for feedback to trainees about their performance will arise through the use of the workplace-based assessments, regular appraisal meetings with supervisors (Section 6.3), other meetings and discussions with supervisors and colleagues, and feedback from ARCP.

6.4 Appraisal

A formal process of appraisals and reviews underpins training. This process ensures adequate supervision during training provides continuity between posts and different supervisors and is one of the main ways of providing feedback to trainees. All appraisals should be recorded in the ePortfolio

Induction Appraisal

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

Mid-point Review

This meeting between trainee and educational supervisor is mandatory (except when an attachment is shorter than 6 months), but is encouraged particularly if either the trainee or educational or clinical supervisor has training concerns or the trainee has been set specific targeted training objectives at their ARCP. At this meeting trainees should review their PDP with their supervisor using evidence from the e-portfolio. Workplace-based assessments and progress through the curriculum can be reviewed to ensure trainees are progressing satisfactorily, and attendance at educational events should also be reviewed. The PDP can be amended at this review.

End of Attachment / End of Year Appraisal

This appraisal should be held in time to provide appropriate considered input into the ARCP. For programmes with attachments lasting longer than 12 months this appraisal should be at 12 monthly intervals throughout training, so that the ARCP can be appropriately informed. Where an attachment is shorter than 12 months, it may be appropriate to hold an appraisal at the end of that attachment to inform the ARCP.

Trainees should review the PDP and curriculum progress with their educational supervisor using evidence from the e-portfolio. Specific concerns may be highlighted from this appraisal. The end of attachment / end of year 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 / end of year appraisal then the programme director should be informed.

7 Managing curriculum implementation

It is intended that the curriculum shall form the basis of the educational and training process for all trainees in the specialty pre CCT. It will therefore be an important driver for trainees and trainers in terms of accessing educational opportunities, especially in the workplace setting. Coverage of the curriculum will be ensured through the assessment methods described as well as through feedback from educational supervisors. Local training committees will play an important role in implementing the curriculum and ensuring curriculum coverage by arranging rotation through posts providing experiential training in different aspects of the specialty and in assessing access to those educational opportunities at annual appraisals. It is expected that all trainees shall be proactive in maximising their educational opportunities and curriculum coverage through discussion with trainers and other members of the team. Curriculum management in posts and attachments within programmes will be directed by interactive discussions between trainees, trainers, assessors and the local training committee and regional specialty adviser.

Deaneries are responsible for quality management GMC will quality assure the deaneries and educational providers are responsible for local quality control, to be managed by the deaneries. The role of the Colleges in quality management remains important and will be delivered in partnership with the deaneries. The College role is one of quality review of deanery processes and this will take place within the SAC on a regular basis.

7.1 Intended use of curriculum by trainers and trainees

This curriculum and ePortfolio are web-based documents which are available from the Joint Royal Colleges of Physicians Training Board (JRCPTB) website www.jrcptb.org.uk.

The educational supervisors and trainers can access the up-to-date curriculum from the JRCPTB website and will be expected to use this as the basis of their discussion with trainees. 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 a portfolio. The trainee will use the curriculum to develop learning objectives and reflect on learning experiences.

Both the trainers and trainees are expected to have a good knowledge of the curriculum and use it as the blueprint for their training.

Feedback from trainees and trainers on curriculum management will be sought at a local level, at programme level, and nationally, through interaction with regional specialty advisers. This interactive process will drive changes in local delivery of training opportunities and inform future curriculum revisions.

7.2 Recording progress

On enrolling with JRCPTB trainees will be given access to the ePortfolio for Endocrinology and Diabetes Mellitus. 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.

8 Curriculum review and updating

The specialty curriculum will be reviewed and updated with minor changes on an annual basis. The curriculum should be regarded as a fluid, living document and the SAC will ensure it responds swiftly to new clinical and service developments. In addition, the curriculum will be subject to three-yearly formal review within the SAC. This will be informed by curriculum evaluation and monitoring. The SAC will have available:

- The trainees' survey, which will include questions pertaining to their specialty (GMC to provide)
- Specialty-specific questionnaires (if applicable)
- Reports from other sources such as educational supervisors, programme directors, specialty deans, service providers and patients.
- Trainee representation on the Deanery STC and the SAC of the JRCPTB
- Informal trainee feedback during appraisal.

Evaluation will address:

- The relevance of the learning outcomes to clinical practice
- The balance of work-based and off-the-job learning
- Quality of training in individual posts
- Feasibility and appropriateness of on-the-job assessments in the course of training programmes
- Availability and quality of research opportunities
- Current training affecting the service

Evaluation will be the responsibility of the JRCPTB and GMC. These bodies must approve any significant changes to the curriculum.

Interaction with the NHS will be particularly important to understand the performance of specialists within the NHS and feedback will be required as to the continuing needs for that specialty as defined by the curriculum. It is likely that the NHS will have a view as to the balance between generalist and specialist skills, the development of generic competencies and, looking to the future, the need for additional specialist competencies and curricula. In establishing specialty issues which could have implications for training, the SAC will produce a summary report to discuss with the NHS employers and ensure that conclusions are reflected in curriculum reviews.

Trainee contribution to curriculum review will be facilitated through the involvement of trainees in local faculties of education and through informal feedback during appraisal and College meetings.

The SAC will respond rapidly to changes in service delivery. Regular review will ensure the coming together of all the stakeholders needed to deliver an up-to-date, modern specialty curriculum. The curriculum will indicate the last date of formal review monitoring and document revision.

9 Equality and diversity

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

The Federation of the Royal Colleges of Physicians believes that equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the Colleges, either as members of staff and Officers; as advisers from the medical profession; as members of the Colleges' professional bodies or as doctors in training and examination candidates. Accordingly, it warmly welcomes contributors and applicants from as diverse a population as possible, and actively seeks to recruit people to all its activities regardless of race, religion, ethnic origin, disability, age, gender or sexual orientation.

LETB quality assurance will ensure that each training programme complies with the equality and diversity standards in postgraduate medical training as set by GMC.

Compliance with anti-discriminatory practice will be assured through:

- monitoring of recruitment processes;
- ensuring all College representatives and Programme Directors have attended appropriate training sessions prior to appointment or within 12 months of taking up post;
- LETBs must ensure that educational supervisors have had equality and diversity training (for example, an e learning module) every 3 years
- LETBs must ensure that any specialist participating in trainee interview/appointments committees or processes has had equality and diversity training (at least as an e module) every 3 years.
- ensuring trainees have an appropriate, confidential and supportive route to report examples of inappropriate behaviour of a discriminatory nature. LETBs and Programme Directors must ensure that on appointment trainees are made aware of the route in which inappropriate or discriminatory behaviour can be reported and supplied with contact names and numbers. LETBs must also ensure contingency mechanisms are in place if trainees feel unhappy with the response or uncomfortable with the contact individual.
- monitoring of College Examinations;
- ensuring all assessments discriminate on objective and appropriate criteria and do not unfairly disadvantage trainees because of gender, ethnicity, sexual orientation or disability (other than that which would make it impossible to practise safely as a physician). All efforts shall be made to ensure the participation of people with a disability in training.

10 Appendix 1 - Glossary

AA	Audit Assessment
ABCD	Association of British Clinical Diabetologists
ACAT	Acute Care Assessment Tool
ACCS	Acute Care Core Stem
ACTH	AdrenoCorticoTropic Hormone
ADA	American Diabetes Association
ADH	Anti Diuretic Hormone
AES	American Endocrine Society
ALS	Advanced Life Support
AMS	Academy of Medical Sciences
ARCP	Annual Review of Competence Progression
BERTIE	Modified version of DAFNE (see below)
CAH	Congenital Adrenal Hyperplasia
CBD	Case Based Discussion
CCDC	Consultants in Communicable Disease Control
CCT	Certificate of Completion of Training
CEX	Clinical Evaluation Exercise
CME	Continuing Medical Education
CMT	Core Medical Training
CSII	Continuous Subcutaneous Insulin Infusion
CT	Computed Tomography

CV	Curriculum Vitae
DAFNE	Dose Adjustment for Normal Eating – Type 1
DESMOND	Diabetes Education & Self Management for Ongoing and Newly Diagnosed Type 2
DOPS	Direct Observation of Procedural Skills
DUK	Diabetes UK
EASD	European Association for the Study of Diabetes
ECE	European Congress of Endocrinology
F2	Foundation Year Two
GMC	General Medical Council
GMP	Good Medical Practice
GP	General Practitioner
IATP	Integrated Academic Training Pathway
IRMER	Ionising Radiation (Medical Exposure) Regulations
JRCPTB	Joint Royal Colleges of Physicians Training Board
MCR	Multiple Consultant Report
MDT	Multi Disciplinary Team
MEN	Multiple Endocrine Neoplasia
MIBG	Iodine 131 MetaIodoBenzylGuanidine
mini-CEX	Mini Clinical Evaluation Exercise
MMC	Modernising Medical Careers
MRCP (UK)	Membership of the Royal Colleges of Physicians of the United Kingdom
MRI	Magnetic Resonance Imaging
MRS	Medical Research Society
MSF	Multi Source Feedback
NHS	National Health Service
NIHR	National Institute for Health Research
OOPE	Out of Programme Experience
PACES	MRCP UK Part 2 Clinical Examination
PDP	Personal Development Plan
PG	Post Graduate
PS	Patient Survey
PTHrP	Parathyroid Hormone related Protein
PYA	Penultimate Year Assessment
QA	Quality Assurance
QC	Quality Control
QM	Quality Management
RITA	Record of In-Training Assessment
RSI	Repetitive Strain Injury
SAC	Specialty Advisory Committee

SCE	Specialty Certificate Examination
SFE	Society for Endocrinology
SIADH	Syndrome of Inappropriate Anti-Diuretic Hormone Secretion
SIGN	Scottish Intercollegiate Guidelines Network
ST1/2/3	Specialty Training Year One/Two/Three
STC	Specialty Training Committee
TO	Teaching Observation
TSH	Thyroid Stimulating Hormone
UK	United Kingdom of Great Britain & Northern Ireland
WPBA	Work-Place Based Assessment
YDF	Young Diabetologists Forum