Appendix 1
Syllabic curriculum content:
Summary of Areas of Core Medical Knowledge Underpinning Specialist Training in Psychiatry

Last updated February 2021

1. Behavioural Science and Socio-cultural Psychiatry

The trainee shall demonstrate core knowledge in the key areas of behavioural science and socio-cultural psychiatry. This knowledge will include basic and social psychology.

1.1 Basic Psychology

1.1.1 Learning theory: classical, operant, observational and cognitive models. The concepts of extinction and reinforcement. Learning processes and aetiological formulation of clinical problems, including the concepts of generalisation, secondary reinforcement, incubation and stimulus preparedness. Escape and avoidance conditioning. Clinical applications in behavioural treatments: reciprocal inhibition, habituation, chaining, shaping, cueing. The impact of various reinforcement schedules. The psychology of punishment. Optimal conditions for observational learning.

1.1.2 Basic principles of visual and auditory perception: figure ground differentiation, object constancy, set, and other aspects of perceptual organisation. Perception as an active process. The relevance of perceptual theory to illusions, hallucinations and other psychopathology. The development of visual perception as an illustration of constitutional/ environmental interaction.

1.1.3 Information processing and attention. The application of these to the study of schizophrenia and other conditions.

1.1.4 Memory: influences upon and optimal conditions for encoding, storage and retrieval. Primary working memory storage capacity and the principle of chunking. Semantic episodic and skills memories and other aspects of long-term/secondary memory. The process of forgetting. Emotional factors and retrieval. Distortion, inference, schemata and elaboration in relation. The relevance of this to memory disorders and their assessment.

1.1.5 Thought: the possible relationship with language. Concepts, prototypes and cores. Deductive and inductive reasoning. Problem solving strategies, algorithms and heuristics.

1.1.6 Personality: derivation of nomothetic and idiographic theories. Trait and type approaches and elementary personal construct theory. Resume of principles underlying psychoanalytic, social learning, cognitive neuroscience and humanistic approaches. The interactionist approach. Construction and use of inventories, rating scales, grids and Q-sort.

1.1.7 Motivation: needs and drives. Extrinsic theories (based on primary and secondary drive reduction) and homeostasis. Hypothalamic systems and satiety. Intrinsic theories, curiosity and optimum levels of arousal. Limitations of approach and attempts to integrate.

Cognitive consistency. Need for achievement (nAch). Maslow's hierarchy of needs.

1.1.8 Emotion: components of emotional response. Critical appraisal of James-Lange and Cannon-Bard theories. Cognitive appraisal, differentiation and the status of primary emotions. Emotions and performance.

1.1.9 Stress: physiological and psychological aspects. Situational factors: life events, daily hassles/uplifts, conflict and trauma. Vulnerability and invulnerability, type A behaviour theory. Coping mechanisms. Locus of control, learned helplessness and learned resourcefulness. Resilience.

1.1.10 States and levels of awareness: levels of consciousness and evidence for unconscious processing. Arousal, attention and alertness. Sleep structure and dreaming. Parasomnias. Biorhythms and effects of sleep deprivation. Hypnosis and suggestibility. Meditation and trances.

1.2 Social Psychology

1.2.1 Attitudes: components and measurement by Thurstone, Likert and semantic differential scales. Attitude change and persuasive communication. Cognitive consistency and dissonance. Attitude behaviour relationships.

1.2.2 Self psychology: self-concept, self-esteem and self-image. Self-recognition and personal identity.

1.2.3 Interpersonal issues: person perception, affiliation and friendship. Attribution theory, 'naive psychology' and the primary (fundamental) attribution error. Social behaviour in social interactions. 'Theory of mind' as it might apply to pervasive developmental and personality disorders. Elemental linguistics as applied to interpersonal communication.

1.2.4 Leadership, social influence, power and obedience. Types of social power. Influence operating in small and large groups or crowds: conformity, polarisation and 'groupthink', deindividuation. Communicative control in relationships.

1.2.5 Intergroup behaviour: prejudice, stereotypes and intergroup hostility. Social identity and group membership.

1.2.6 Aggression: explanations according to social learning theory, operant conditioning, ethnology, frustration and arousal concepts. The influence of television and other media. Family and social backgrounds of aggressive individuals.

1.2.7 Altruism, social exchange theory and helping relationships. Interpersonal co-operation.

1.3 Social science & socio-cultural psychiatry

1.3.1 Descriptive terms: social class, socio-economic status and their relevance to psychiatric disorder and health care delivery.

1.3.2 The social roles of doctors. Sick role and illness behaviour.

1.3.3 Family life in relation to major mental illness (particularly the effects of high Expressed Emotion).

1.3.4 Social factors and specific mental health issues, particularly depression, schizophrenia and addictions. Life events and their subjective, contextual evaluation.

1.3.5 The sociology of residential institutions.

1.3.6 Basic principles of criminology and penology.

1.3.7 Stigma and prejudice.

1.3.8 Ethnic minorities, acculturation and mental health.

1.3.9 Ethics and philosophy in psychiatry

2. HUMAN DEVELOPMENT

The trainee should be knowledgeable about normal biological, psychological and social development from infancy to old age. This is in order to consider:

- **The stages of normal development in order to determine whether an individual's style of thinking, coping, feeling or behaviour is appropriate for that stage or may be an indication of illness**
- **How the stage of cognitive and emotional development may influence the aetiology, presentation and management of mental health problems**
- **Factors that may be associated with vulnerability to mental health problems and protective factors associated with resilience.**
- **Developmental issues in relation to the varied cultural and economic backgrounds of patients.**

In particular trainees should be able to demonstrate knowledge of:

2.1 Basic frameworks for conceptualising development: nature and nurture, stage theories, maturational tasks. Possible definitions of maturity. Examination of gene-environment interactions with specific reference to intelligence. Relative influence of early versus later adversities. The relevance of developmental framework for understanding the impact of specific adversities such as trauma. Historical models and theories: Freud and general psychoanalytic; social-learning, Piaget.

2.2 Methodology for studying development: cross sectional, cohort and individual studies. Identification and evaluation of influences.

2.3 Bowlby attachment theory and its relevance to emotional development, affect regulation and human relationships in childhood and later on. Conditions for secure attachment. Types and clinical relevance of insecure and disorganised attachment. Early separation and its consequences. Consequences of failure to develop selective attachments. Brief consideration of attachment, maternal 'bonding' parental sensitivity.

2.4 Other aspects of family relationships and parenting practices. The influence of parental attitudes compared with parenting practices. Systemic theory including supportive systems in development, and aspects of distorted family function: e.g. discord, overprotection, rejection, and enmeshment. The impact of bereavement, parental divorce and intra-familial abuse on subsequent development and mental health of the child. The relevance or otherwise of different family structures including cultural influences on family and stages of family.

2.5 Individual temperamental differences and their impact on parent-child relationships. Origins, typologies and stability of temperament and the evolution of character and personality. Childhood vulnerability and resilience with respect to mental health.

2.6 Cognitive development with critical reference to key models such as the bio-psychosocial model and Piaget's model. The impact of attributions and beliefs, and cultural, genetic and other influences. The relevance of preoperational and formal operational thought to communication with children and adults.

2.7 Basic outline of language development in childhood with special reference to environmental influences and communicative competence.

2.8 Development of social competence and relationships with peers:
acceptance, group formation, co-operation, friendships, isolation and rejection. The components of popularity.

2.9 Moral development with critical reference to Kohlberg's stage theory. Relationship to development of social perspective taking.

2.10 Development of emotion literacy and emotional regulation in childhood and adolescence including development of fears in childhood and adolescence with reference to age. Possible aetiological and maintenance mechanisms.

2.11 Sexual development including the development of sexual identity and preferences.

2.12 Adolescence as a developmental phase with special reference to pubertal changes, task mastery, conflict with parents and authority, affective stability and 'turmoil'. Normal and abnormal adolescent development.

2.13 Adaptations in adult life, such as pairing, parenting, illness, bereavement and loss.

2.14 Pregnancy and childbirth and their stresses both physiological and psychological.

2.15 The development of personal (ego-) identity in adolescence and adult life. Work, ethnic, gender and other identities. Mid-life 'crises'.

2.16 Normal ageing and its impact on physical, social, cognitive and emotional aspects of individual functioning. Social changes accompanying old age, importance of loss, personality changes with ageing. Social and economic factors in old age; attitude, status of the elderly, retirement, income, accommodation, socio-cultural differences.

2.17 Genetic influences on development including gene environment interactions.

2.18 Neuroimaging and its role in understanding development. Up to date findings in this field.

3. Neuroscience

The trainee shall demonstrate knowledge of the neuroscience that underpins the practice of clinical psychiatry. This will include: (1) elementary knowledge of the normal structure and functioning of the nervous system as it relates to psychiatry, i.e., the generation of normal mental states and behaviours, and of the dysfunction that leads to mental disorder; (2) ability to relate the symptoms and signs of mental disorder, and the examination of the nervous system, to underlying neural structures and their activity.

3.1 Basic Techniques in neuroscience:

3.1.1 Recording from the brain:
- **3.1.1.1** Single unit recordings
- **3.1.1.2** EEG (including frequency bands), normal findings, and evoked response techniques. Applications to investigation of cerebral pathology, seizure disorders, sleep and psychiatric disorders and effects of drugs on the EEG.
- **3.1.1.3** Neuroimaging and its role in understanding brain function (including structural MRI, DTI, fMRI, PET, MR spectroscopy)
- **3.1.1.4** Microdialysis

3.1.2 Perturbing brain function (including lesion studies, electrical stimulation, optogenetics, TMS, tDCS, deep brain stimulation, vagus nerve stimulation)

3.1.3 Animal models of psychiatric disease

3.1.4 Computational modelling and models, and data-analytic descriptions

3.2 Cells

3.2.1 The types of cell found within the nervous system and their anatomical and functional localisation in layers in different parts of the cortex.

3.2.2 Fundamental concepts in the physiology of neurones, synapses and receptors, including an understanding of resting potential, action potential, ion fluxes and channels, G-protein coupled receptors, allosteric modulation of receptors, synaptic plasticity and pruning etc.

3.2.3 Modelling single neurons and their combination in circuits.

3.3 Neurotransmitters and receptors

3.3.1 Transmitter synthesis, storage, release and uptake. Ion channels and calcium flux in relation to synaptic physiology.

3.3.2 Knowledge of receptor structure and function in relation to the transmitters listed below. Pre-synaptic and post-synaptic receptors.

3.3.3 Knowledge of the principle second messenger systems related to the transmitters listed below and those related to basic neuronal homeostasis and plasticity.

3.3.4 Basic pharmacology of noradrenaline, serotonin, dopamine, GABA, acetylcholine, excitatory amino acids.

3.3.5 Knowledge of neuropeptides, particularly corticotrophin releasing hormone, cholecystokinin, ghrelin, leptin, GLP-1, encephalins/endorphins, endocannabinoid system, orexins.

3.3.6 Links between neurotransmitter systems and findings from genetic association studies in psychiatry.

3.3.7 Effects of opioids and common recreational drugs on neurotransmission, and link to mental health symptoms

3.4. Neuroanatomy

3.4.1 The general anatomy of the brain and the functions of the lobes and some of the major gyri including the prefrontal cortex, cingulate gyrus and limbic system. A working knowledge of cranial nerve and spinal cord structure.

3.4.2 The anatomy of the basal ganglia, i.e. caudate, putamen, the globus pallidus, ventral pallidum, substantia nigra, and subthalamic nucleus.

3.4.3 The internal anatomy of the temporal lobes, hippocampal formation and amygdala, neurogenesis and its possible role in mental health, temporal lobe epilepsy.

3.4.4 The internal anatomy of the frontal lobes and cingulate gyrus.

3.4.5 The major white matter pathways, e.g. corpus callosum, fornix, Papez's circuit and other pathways relevant to integrated behaviour.

3.4.6 The anatomical course of major neurochemical pathways, including the nigrostriatal, mesolimbic and mesocortical dopamine pathways, the ascending noradrenergic pathway from the locus coeruleus, the basal forebrain cholinergic pathway, the brain stem cholinergic pathway, the corticofugal glutamate system and serotonin pathways.

3.5. Neural circuits

3.5.1 The neural circuits involved in the following, and how these functions are disturbed in psychiatric disorders:

3.5.1.1 Appetite, hunger and thirst, including disturbance in eating disorders and mood disorders, medication side-effects

3.5.1.2 Sleep, arousal, effects of sleep deprivation, primary sleep disorders, role of sleep in other psychiatric disorders

3.5.1.3 Sex, including effects of hormonal treatments, gender identity, disturbances related to psychiatric disorder, and psychotropic-induced disturbance.

3.5.1.4 Aggression

3.5.1.5 Pain and chronic pain

3.5.1.6 Motor control, including neurobiology of extra-pyramidal side-effects

3.5.1.7 Learning, including computational models both in normal learning and in pathology (associative learning by Hebbian adaptation; unsupervised vs. supervised, reinforcement)

3.5.1.8 Habit formation, including neurobiology of obsessions and compulsions

3.5.1.9 Motivation, reward and pleasure, including relevance to mood disorders, psychosis and emotional instability

3.5.1.10 Emotion and its regulation, including relevance to mood disorders, psychosis and emotional instability

3.5.1.11 Perception

3.5.1.12 Attention, impairment in ADHD

3.5.1.13 Memory, including in dementia and PTSD

3.5.1.14 Executive function, hypofrontality, impulsivity

3.5.1.15 Empathy, theory of mind, including in autism and dissocial behaviour

3.5.2 Default mode and salience networks.

3.6. Modulators (hormones, inflammatory responses)

3.6.1 An understanding of the neuroendocrine system, in particular the control of the secretion of hypothalamic and pituitary hormones (by releasing factors and by feedback control) and posterior pituitary function.

3.6.2 The stress response, effects of glucocorticoids

3.6.3 The main hormonal changes and neuroendocrine changes in psychiatric disorders.

3.6.4 An understanding of the effects of inflammation and the immune response on neural function and the onset/maintenance of psychiatric illness.

3.7. Genetics

3.7.1 Brief explanations of methodologies for identifying genes. Basic concepts: chromosomes, cell division, gene structure, transcription and translation, structure of the human genome, patterns of inheritance. Traditional techniques: family, twin and adoption studies. Distinction between direct gene analysis and gene tracking. Genetic markers, linkage studies, lod scores. Genome wide association studies, genetic variants. Genetic influences on development including gene-environment interactions.

3.7.2 Types of genetic abnormalities. Conditions associated with chromosome abnormalities. Principal inherited conditions encountered in psychiatric practice and the genetic contribution to specific psychiatric disorders. Prenatal identification. Genetic counselling. The organisation of clinical genetic services, DNA banks.

3.7.3 Methods to identify genetic disorders. Techniques in molecular genetics: restriction enzymes, molecular cloning and gene probes, Southern blotting, restriction fragment length polymorphisms, recombination.

3.7.4 Molecular and genetic heterogeneity. Phenotype/genotype correspondence. Endophenotypes/Biotypes.

3.7.5 Epigenetics. The types, causes and effects of epigenetic modification and the transmission of these changes through generations. How drugs, psychotherapy, good and adverse experiences can modify epigenetics.

3.7.6 Gene modification/editing. The emerging techniques using CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) and CRISPR-associated (Cas) genes and similar tools for precision genome engineering.

3.8. Neurodevelopment and neuroplasticity

3.8.1 The development and localisation of cerebral functions throughout the lifespan from the foetal stages onwards

3.8.2 Neurodevelopmental models of psychiatric disorders

3.8.3 Neurobiology of attachment

3.8.4 Neuroplasticity including:

3.8.4.1 Neurobiological effects of stress: pre-, peri- and post-natally, developmentally and in adults.

3.8.4.2 Neurobiological effects of learning and psychological therapies.

3.8.5 Intelligence and learning disability

3.8.6 Effects of injury at different ages on the brain and mental function (including traumatic brain injury, inflammatory lesions e.g. multiple sclerosis, and neoplastic lesions)

3.9. Integrated Neurobiology of the following specific syndromes and states

3.9.1 Autism
3.9.2 ADHD
3.9.3 Drug use, addiction, tolerance, withdrawal, relapse
3.9.4 Anxiety Disorders
3.9.5 Post-Traumatic Stress Disorders
3.9.6 Obsessive Compulsive and related Disorders
3.9.7 Major Depressive Disorders
3.9.8 Bipolar Affective Disorders
3.9.9 Psychosis
3.9.10 Neurocognitive deficits in psychotic disorders
3.9.11 Self-harm and suicidality
3.9.12 Medically unexplained symptoms
3.9.13 Delirium

3.10. Neurodegeneration

3.10.1 Controversies in the pathophysiology of neurodegeneration
3.10.2 Alzheimer's Disease
3.10.3 Vascular dementia
3.10.4 Pick's Disease and Fronto-temporal Dementias
3.10.5 Lewy Body diseases including Parkinson's Disease
3.10.6 Prion Diseases
3.10.7 HIV brain disease

4. Clinical Psychopharmacology

Trainees must be able to demonstrate knowledge of basic pharmacological principles and how these specifically relate to psychotropic drugs. This will include pharmacokinetics, pharmacodynamics in relation to modifications of brain function, especially neurotransmission, and therapeutics covering safe and effective use, including indications, doses, tolerability and safety, interactions and monitoring. As much knowledge of brain function emanates from the use of pharmacological probes, there is an inevitable overlap between 'psychopharmacology' and other aspects of brain sciences and the following should be linked to relevant parts of Section 3.

In relation to specifically 'psychopharmacology', trainees must demonstrate competence in terms of (*NB: lists comprising subheadings are illustrative but not to be taken as comprehensive*):

4.1 General

4.1.1 Outline knowledge of the history/evolution of psychotropic compounds.
4.1.2 Classification - major classes and intra-class groups.
4.1.3 The placebo effect.
4.1.4 Compliance/adherence – relevance and methods of maximisation.
4.1.5 Assessment methods and monitoring - efficacy and tolerability.
4.1.6 Basic principles of drug development and evaluation
4.1.6.1 Phases I – II
4.1.6.2 Phase III – the RCT in psychiatry: randomisation/endpoints (primary/secondary)/superiority vs non-inferiority/accounting for missing data
4.1.7 Drug regulation – the purposes and processes of licensing, 'approved' versus 'off-label' use, branded versus generic drugs
4.1.8 Principles of rational prescribing – the 'risk/benefit' appraisal

4.2 Pharmacokinetics

4.2.1.1 General principles of: absorption/distribution/metabolism/elimination
4.2.1.2 effect of mode of administration on kinetics
4.2.1.3 protein binding – consequences in health and disease
4.2.1.4 half-life (t½)/Tmax/Cmax)/volume of distribution (Vd)/area under the curve (AUC) – relevance to prescribing
4.2.1.5 Principle of kinetic modelling – linear versus zero-order kinetics: practical implications
4.2.1.6 the CYP450 system – major isoforms; substrates, inducers and inhibitors
4.2.2 Kinetic changes in health (e.g. pregnancy) and disease and across the life span
4.2.3 Psychotropics:
4.2.3.1 lipophilicity versus hydrophilicity
4.2.3.2 the blood-brain barrier – structure and function especially in relation to psychopharmacology
4.2.4 Principles of pharmacogenomics and pharmacogenetics
4.2.5 Principles of therapeutic drug monitoring – limitations with psychotropics

4.3 Pharmacodynamics

4.3.1.1 Main receptor subtypes in relation to psychotropic drug actions
4.3.1.2 Outline knowledge of receptor structure/function – 'superfamilies':

4.3.1.2.1 metabotropic – with emphasis on G protein-coupled receptors
4.3.1.2.2 ionotropic
4.3.1.3 Receptor binding mechanisms – concept of affinity and basic assessment methods
4.3.1.4 receptor binding profiles of commonly utilised agents
4.3.1.5 Major pharmacological actions at receptor sites:
4.3.1.5.1 concept of intrinsic activity
4.3.1.5.2 agonism/antagonism/partial agonism/inverse agonism
4.3.1.6 Intracellular effects of receptor activation signalling cascades/second messengers/gene networks

4.3.2 Putative mechanisms of action of major psychotropic/psychoactive classes ('target' actions) at molecular and systems levels.
4.3.2.1 Antipsychotics
4.3.2.2 Antidepressants
4.3.2.3 Mood stabilisers
4.3.2.4 Sedative hypnotics
4.3.2.5 Cognitive enhancers
4.3.2.6 Opioids
4.3.2.7 Psychostimulants
4.3.2.8 Cannabinoids
4.3.2.9 Hallucinogenics
4.3.2.10 Novel (new) psychoactive substances

4.3.3 Major aetiological theories underpinned by pharmacological mechanisms
4.3.3.1 the Dopamine Hypothesis
4.3.3.2 the Biogenic Amine Hypothesis
4.3.3.3 the Cholinergic Hypothesis (cognition)
4.3.3.4 the Cholinergic-Adrenergic (balance) Hypothesis (mood)
4.3.3.5 the Glutamatergic Hypothesis
4.3.3.6 the Amyloid Cascade Hypothesis

4.3.4 'Non-target' (off-target/adverse) actions of major psychotropic/psychoactive classes and their management
4.3.4.1 from general pharmacology: for example
postural hypotension/sedation/sexual dysfunction etc.
weight gain and metabolic dysfunction
QTc prolongation
4.3.4.2 from specific pharmacology: for example
extrapyramidal symptomatology/NMS
serotonin syndrome
4.3.4.3 idiosyncratic – toxic/allergic reactions: for example
blood dyscrasias
hepatotoxicity/allergic hepatitis
skin reactions – including outline knowledge of Stevens-Johnson syndrome/toxic epidermal necrolysis
myocarditis/cardiomyopathy

4.3.5 Teratogencity and developmental abnormalities associated with psychotropic drug use in pregnancy

4.3.6 Non-psychotropic medications in psychiatric practice and their use: for example
- **4.3.6.1** antimuscarinics
- **4.3.6.2** antiepileptics (non-mood stabilising)
- **4.3.6.3** analgesics: opioid/non-opioid
- **4.3.6.4** beta-blockers
- **4.3.6.5** dopamine agonists
- **4.3.6.6** adrenergic agonists

4.3.7 Putative neurochemical changes associated with ECT.

4.4 Therapeutics

4.4.1.1 Establishing goals of treatment.
4.4.1.2 Rational prescribing in the context of:
- **4.4.1.2.1** specific psychiatric diagnoses (disorders and severities of disorder)
- **4.4.1.2.2** phases of illness (acute/subacute/maintenance)
- **4.4.1.2.3** physical health status/co-prescribed medications
- **4.4.1.2.4** age

4.4.1.3 Tailored prescribing and the individual risk-benefit appraisal.

4.4.2.1 Knowledge of dose ranges, minimum effective doses, time scales for evaluating efficacy
4.4.2.2 strategies for managing non-/poor-response : standardised definitions of 'treatment resistance' (schizophrenia/major depression) and systematic strategies for management. 'treatment resistance'
4.4.2.3 Recommendations for switching within major classes and across compounds.

4.4.3 Monitoring – efficacy and tolerability, including knowledge of commonly utilised standardised schedules.

4.4.4 Dependency and withdrawal – including management.
- **4.4.4.1** with substances of abuse
- **4.4.4.2** with prescribed psychotropics

4.4.5 Prescribing in special circumstances:
- **4.4.5.1** children and adolescents
- **4.4.5.2** the elderly
- **4.4.5.3** eating disorders
- **4.4.5.4** physical co-morbidities: hepatic failure/renal failure/cardiovascular disease
- **4.4.5.5** pregnancy

4.4.6 Controlled substances: drugs used in management of addictions - putative modes of action and safety/tolerability issues
4.4.7 The pharmacological management of psychiatric emergencies
4.4.8 Adverse event reporting
4.4.9 Advice on driving and other complex behaviours
4.4.10 Drug-drug interactions:
- **4.4.10.1** Pharmacokinetically mediated

4.4.10.2 Pharmacodynamically mediated

4.4.11 Major **(**non-psychotropic**)** drugs associated with adverse actions on mental state.

5. CLASSIFICATION AND ASSESSMENT IN PSYCHIATRY

Trainees shall demonstrate knowledge of the assessment and classification of the major psychiatric disorders. This includes:

5.1 Classification systems

5.1.1 a working knowledge of ICD and DSM classification and diagnostic systems

5.1.2 WHO classification of impairments, disabilities, and handicaps. A working knowledge of "statementing" for special needs education.

5.2 Assessment of the various biological, psychological and social factors involved in the predisposition to and onset, and maintenance of psychiatric disorder

5.2.1 history taking and examination of the mental state

5.2.2 Descriptive Psychopathology

5.2.2.1 Disorders of self

5.2.2.2 Disorders of emotion

5.2.2.3 Disorders of speech and thought

5.2.2.4 Disorders of perception

5.2.2.5 Movement disorders

5.2.2.6 Disorders of cognition

5.2.2.7 Uncommon psychiatric syndromes

5.2.3 Dynamic Psychopathology

5.2.4 assessment of physical factors, including investigations

5.2.5 imaging of the nervous system.

5.2.6 a working knowledge of medicine including physical examination, diagnosis, investigation and treatment of common conditions.

5.2.7 Rating Scales in Psychiatry

5.2.8 Risk assessment

5.2.8.1 Understanding the principles of risk assessment.

5.2.8.2 Working knowledge of at least one recognised risk assessment tool used to assess risk.

6. ORGANISATION AND DELIVERY OF PSYCHIATRIC SERVICES

Trainees shall demonstrate knowledge of the core aspects of service delivery. This knowledge shall include:

6.1 the nature and process of managing psychiatric cases, including the application of multidisciplinary approaches, the special role of the psychiatrist in treatment and the co-ordination of the various treatment processes involved. Physical, psychological and social treatments and their relevance to the management and treatment of psychiatric disorders

6.2 preventative strategies in psychiatric disorder, where these exist;

6.3 the provision of specific treatments

6.3.1 the indications, benefits, risks and outcomes of ECT.

6.3.2 the practical aspects of ECT administration.

6.3.3 the indications, benefits, risks and outcomes of DBS, rTMS and psychosurgery

6.4 the assessment of need for psychiatric services within a community and how to set up and administer such services, including some idea of the costs of major elements of such service provision;

6.5 the essential components of a rehabilitation service and the specific patient needs and disabilities that can be assisted by psychiatric rehabilitation.

6.6 the relationship between psychiatric disorder and civil rights including marriage, divorce, custody of children and management of property and affairs. Ethical issues including use of seclusion, confidentiality and the implications of 'duty to warn'.

6.7 medico legal issues in psychiatry including abuse of vulnerable adults, management of finance and property, driving and mental disorder, and the assessment of capacity to make health, social care and civil decisions.

6.8 the presentation of psychiatric disorder in a range of cultural settings, especially those likely to be encountered in the United Kingdom or the Republic of Ireland;

7. GENERAL ADULT PSYCHIATRY

Trainees shall demonstrate a general knowledge of General Adult Psychiatry. This includes knowledge of the assessment and treatment of disorders presenting in adulthood including subspecialist areas. In particular:

7.1 The prevalence/incidence, aetiology, presentation, treatment and outcome of psychiatric disorder in adulthood:

	Prevalence	Aetiology	Presentation	Treatment	Outcome
Unipolar Depression	7.1.1.1	7.1.1.2	7.1.1.3	7.1.1.4	7.1.1.5
Bipolar Disorder	7.1.2.1	7.1.2.2	7.1.2.3	7.1.2.4	7.1.2.5
Schizophrenia	7.1.3.1	7.1.3.2	7.1.3.3	7.1.3.4	7.1.3.5
Anxiety Disorders	7.1.4.1	7.1.4.2	7.1.4.3	7.1.4.4	7.1.4.5
OCD	7.1.5.1	7.1.5.2	7.1.5.3	7.1.5.4	7.1.5.5
Hypochondriasis	7.1.6.1	7.1.6.2	7.1.6.3	7.1.6.4	7.1.6.5
Somatisation Disorder	7.1.7.1	7.1.7.2	7.1.7.3	7.1.7.4	7.1.7.5
Dissociative Disorders	7.1.8.1	7.1.8.2	7.1.8.3	7.1.8.4	7.1.8.5
Personality Disorders	7.1.9.1	7.1.9.2	7.1.9.3	7.1.9.4	7.1.9.5
Organic psychoses	7.1.10.1	7.1.10.2	7.1.10.3	7.1.10.4	7.1.10.5
Other psychiatric disorders	7.1.11.1	7.1.11.2	7.1.11.3	7.1.11.4	7.1.11.5

7.2 assessment and management of disorders related to pregnancy and childbirth

7.3 General Hospital Psychiatry

7.3.1 psychiatric assessment of patients with physical illness

7.3.2 advice to special medical services

7.3.3 the psychiatric consequences and aspects of brain disease, damage (including stroke) and dysfunction.

7.3.4 clinical and theoretical psychiatric aspects of pain and its management.

7.3.5 care of the dying and the bereaved.

7.4 Emergency Psychiatry

7.4.1 all aspects of suicide, attempted suicide, and self harm including risk assessment and risk management

7.4.2 knowledge of the theory and practice of crisis intervention/home treatment

7.4.3 differential diagnosis in emergency situations

7.4.4 treatment methods in emergency situations including the use of appropriate legislation

7.5 The prevalence/incidence, aetiology, presentation, treatment and outcome of eating disorders

	Prevalence	Aetiology	Presentation	Treatment	Outcome
Anorexia Nervosa	7.5.1.1	7.5.1.2	7.5.1.3	7.5.1.4	7.5.1.5
Bulimia Nervosa	7.5.2.1	7.5.2.2	7.5.2.3	7.5.2.4	7.5.2.5

7.6 Psycho-sexual disorders

7.6.1 Non-Organic sexual dysfunction, including lack or loss of sexual desire, lack of sexual enjoyment, and failure of genital response

7.6.2 Gender Identity Disorders, including transsexualism and transvestism

8. OLD AGE PSYCHIATRY

Trainees will demonstrate knowledge of the particular aspects of psychiatric disorders, their presentation and treatment in late life. This will include:

8.1 Demographic population changes in the UK and worldwide.

8.2 District service provision; need for specialisation, principles of service provision, multidisciplinary working with reference to needs of an older population, relationships with and provision by social services and voluntary bodies. Liaison with geriatricians. Attention to the needs of carers.

8.3 Specialist aspects of assessment of mental health in older people.

8.4 Psychological aspects of physical disease; particular emphasis on possible psychiatric sequelae of Parkinson's disease, cerebrovascular disease, sensory impairment. Emotional reaction to illness and to chronic ill health. Secondary and reversible dementias.

8.5 Prevalence/incidence, clinical features, differential diagnosis, aetiology, management and prognosis of the following disorders occurring in late life:

	Prevalence	Aetiology	Presentation	Treatment	Outcome
Alzheimer's disease	8.5.1.1	8.5.1.2	8.5.1.3	8.5.1.4	8.5.1.5
Vascular Dementia	8.5.2.1	8.5.2.2	8.5.2.3	8.5.2.4	8.5.2.5
Dementia with Lewy Bodies, Parkinsons Disease Dementia	8.5.3.1	8.5.3.2	8.5.3.3	8.5.3.4	8.5.3.5
Frontotemporal Dementia	8.5.4.1	8.5.4.2	8.5.4.3	8.5.4.4	8.5.4.5
Delirium	8.5.5.1	8.5.5.2	8.5.5.3	8.5.5.4	8.5.5.5
Depression	8.5.6.1	8.5.6.2	8.5.6.3	8.5.6.4	8.5.6.5
Bipolar Disorder	8.5.7.1	8.5.7.2	8.5.7.3	8.5.7.4	8.5.7.5
Late Life Psychosis	8.5.8.1	8.5.8.2	8.5.8.3	8.5.8.4	8.5.8.5
Anxiety Disorders	8.5.9.1	8.5.9.2	8.5.9.3	8.5.9.4	8.5.9.5
Substance Misuse	8.5.10.1	8.5.10.2	8.5.10.3	8.5.10.4	8.5.10.5
Other Mental Disorders	8.5.11.1	8.5.11.2	8.5.11.3	8.5.10.4	8.5.11.5

8.6 Suicide and attempted suicide in old age.

8.7 Psychiatric aspects of personality in old age.

8.8 Psychotherapy with older adults: adaptations and difference in therapy. Transference - counter-transference issues. Common themes.

8.9 Bereavement and adjustment disorders.

8.10 Sleep disorder in later life.

8.11 Psychosexual disorders in old age; including sexuality in physically ill/disabled people, sexuality in institutionalised elderly.

9. PSYCHOTHERAPY

Trainees will be able to understand the principles and techniques of psychosocial therapies sufficient to treat patients using brief and supportive therapies and to know when and how to make a referral that is indicated. Further to this they will be able to explain to a patient prospective treatment if a referral is made. Thus they will be able to:

- State the characteristics and techniques of, and common indications for psychodynamic psychotherapy, psychoanalysis, supportive psychotherapy, cognitive and behavioural therapies, group therapies, couples and family therapies and psychoeducational interventions.
- State the indications for and techniques of combining psychotherapy with psychopharmacology
- Describe behavioural interventions (e.g. relaxation training, assertiveness training, relapse prevention) and know for which problems they are indicated or contraindicated.

The knowledge to be demonstrated will include a variety of therapies and their cultural appropriateness:

9.1.1 Dynamic Psychotherapy

Development of psychodynamic concepts by Freud, the Neo-Freudians Klein, Jung and Winnicott. An understanding of the following: therapeutic alliance; transference; countertransference; resistance; negative therapeutic reaction; acting out; interpretation; insight; working through defence mechanisms. Indications for brief, long-term and supportive psychotherapy. Therapeutic factors in groups.

9.2 Family Therapy

Influence of General Systems Theory. Different models of family therapy: dynamic; structural; strategic; psychoeducational; behavioural. Goals of treatment.

9.3 Cognitive-Behavioural Therapies

9.3.1 Behaviour Therapy. Understanding of systematic desensitisation, operant conditioning, graded and cue exposure, habituation and social skills training. How to conduct a functional analysis, formulate a treatment plan and use measurement to assess change.

9.3.2 Cognitive Therapy. The cognitive model for non-psychotic disorders. The importance of schema, negative automatic thoughts and maladaptive assumptions. These will need to be considered in appropriate cultural contexts.

9.4 Other Therapeutic Models

Awareness of Interpersonal Therapy, Cognitive Analytical Therapy, Dialectic Behaviour Therapy, Gestalt Therapy, Client Centred Therapy, Transactional Analysis, and Mentalisation.

9.5 Effectiveness of Psychotherapy

Difficulties in defining outcome, understanding of effect size and metaanalysis, specific and non-specific effects in psychotherapy and be aware of contemporary guidelines. Research on outcomes in psychotherapy.

9.6 Group Therapy

Psychodynamic. Historical roots of group therapy; group process; different models of analytic/dynamic group therapy (e.g. Bion, Foulkes, Yalom). Therapeutic factors in groups.

9.6.1 Other therapeutic group models. Cognitive Behavioural groups, Expressive therapies, Support groups, Psychoeducational groups, and Skills groups.

10. CHILD AND ADOLESCENT PSYCHIATRY

Trainees shall demonstrate a general knowledge of Child and Adolescent Psychiatry. This includes knowledge of the assessment and treatment of children and adolescents, knowledge of disorders that are usually first diagnosed in infancy, childhood or adolescence and developmental disabilities. In particular:

10.1 The effects of adult mental illness on children including the effects of maternal mental health on children and young people at different developmental stages. As an exemplar the effect of depression on parental functioning and interactions, and the impact of this on child development and functioning. An understanding of cultural variations in aetiology and management.

10.2 Short and long-term effects of negative life events on development and functioning e.g. maternal loss, child abuse, chronic or life-threatening illness.

10.3 Description of a typical child mental health service, the role within this service of the psychiatrist and multidisciplinary team members. Basic information on different agencies involved in the care of children and their function.

10.4 Child protection. The needs of developing children and how these change with time. Types of child abuse and their aetiology and recognition. An understanding of what to do if child protection concerns are raised.

10.5 Interaction between psychiatric disorder and physical illness in children and adolescents. Physical presentation of psychiatric disorder and psychiatric presentation of physical disorder.

10.6 Aetiological influences in child and adolescent psychiatry, including individual, familial and social and environmental influences and their interactions

10.7 Evidence based interventions child mental health and developmental conditions (as defined in ICD and DSM) and the care pathways that enable access to those interventions

10.8 Knowledge of the prevalence/incidence, aetiology, presentation, treatments and outcome of the following conditions including an understanding of how conditions relate to behaviours (e.g. self-harm, refusal to attend school etc.) and contexts (e.g. pre-school behaviours):

	Prevalence	Aetiology	Presentation	Treatment	Outcome
Attachment disorders	10.8.1.1	10.8.1.2	10.8.1.3	10.8.1.4	10.8.1.5
Conduct disorder	10.8.2.1	10.8.2.2	10.8.2.3	10.8.2.4	10.8.2.5
ADHD	10.8.3.1	10.8.3.2	10.8.3.3	10.8.3.4	10.8.3.5
Anxiety disorders including OCD	10.8.4.1	10.8.4.2	10.8.4.3	10.8.4.4	10.8.4.5
Affective Disorders	10.8.5.1	10.8.5.2	10.8.5.3	10.8.5.4	10.8.5.5
Psychosis	10.8.6.1	10.8.6.2	10.8.6.3	10.8.6.4	10.8.6.5
Eating disorders	10.8.7.1	10.8.7.2	10.8.7.3	10.8.7.4	10.8.7.5
Autism Spectrum disorders	10.8.8.1	10.8.8.2	10.8.8.3	10.8.8.4	10.8.8.5
Substance misuse	10.8.9.1	10.8.9.2	10.8.9.3	10.8.9.4	10.8.9.5
Tic disorders	10.8.10.1	10.8.10.2	10.8.10.3	10.8.10.4	10.8.10.5
Other childhood disorders	10.8.11.1	10.8.11.2	10.8.11.3	10.8.11.4	10.8.11.5

10.9 Continuities and transitions of child mental health conditions into adult life.

10.10 Indications and contra-indications for different treatment interventions. Indications for in-patient care.

OTHER CLINICAL SPECIALTIES

Trainees are expected to be knowledgeable and competent to a basic degree in sub-specialties of psychiatry. The level of knowledge and practice is to enable the individual doctor to deal with the majority of routine cases and emergencies that may be referred, not the level required to practice as a specialist in the given field

11 Substance Misuse/Addictions

11.1 Basic pharmacology and epidemiology of: alcohol; cannabis: the stimulants (amphetamine, cocaine, phentermine, diethylpropion, pemoline etc.); hallucinogens; solvents and nitrites; Ecstasy and related substances, benzodiazepines and barbiturates; opiates.

11.2 Awareness of the arguments for and against the various types of prescribing and treatment modalities. Legal restrictions on prescribing.

11.3 Cause, consequences and recognition of heavy drinking: the concept of 'problem drinking'; the components of the alcohol dependence syndrome; the nature of alcohol-related disabilities; detoxification procedures for in-patients and out-patients.

11.4 Who uses which drugs and why; reasons for initiating and continuing drug use; how to recognise drug use; the concept of problem drug use; patterns of dependence on different drugs; detoxification procedures for inpatients and outpatients. An understanding of cultural factors in the use and abuse of drugs. Basics of the biological, psychological and socio-cultural explanations of drug and alcohol dependence.

11.5 The interaction of drug and alcohol use with psychiatric illness. Dual diagnosis and co-morbidity (classificatory systems). Recognition of substance misuse related medical, psychiatric and social complications and their impact on Public Health.

11.6 The assessment and management of drug and misusers, including symptoms and signs of substance use, and withdrawal phenomena.

11.7 The assessment and management of alcohol misusers, including symptoms and signs of substance use, and withdrawal phenomena.

11.8 Culturally appropriate strategies for the prevention of drug and alcohol abuse.

11.9 The assessment and management of non-substance addictive behaviours and related syndromes.

11.10 Motivational Interviewing. Fundamental concepts and approaches; general approaches; adaptations of motivational interviewing.

12 Forensic Psychiatry

12.1 Relationship between crime and mental disorder

12.1.1 Knowledge of the range of offences committed by mentally disordered offenders. Specific crimes and their psychiatric relevance particularly: homicide; other crimes of violence (including infanticide); sex offences; arson; and criminal damage.

12.1.2 The relationship between specific mental disorders and crime: substance misuse; epilepsy; schizophrenia; bipolar affective disorder; neuro-developmental disorders; personality disorders.

12.1.3 Special syndromes: morbid jealousy, erotomania, Munchausen and Munchausen by proxy.

12.1.4 Mental disorders and offending in special groups: young offenders; female offenders; offenders from ethnic minorities; offenders who are deaf or have other physical disabilities.

12.1.5 Effect of victimisation and vulnerability: anxiety states including post-traumatic stress disorder; suggestibility; anger and aggressive behaviour. Effect of compensation on presentation.

12.2 Psychiatry and the criminal justice system

12.2.1 The role of the psychiatrist is the assessment of mentally disordered offenders: during arrest; prior to conviction; prior to sentencing.

12.2.2 Psychiatric defences: Fitness to plead; mutism and deafness; criminal responsibility; diminished responsibility; amnesia and automatism.

12.2.3 Psychiatric disposals following conviction.

12.2.4 Skills to write a court report in relation to a criminal case.

12.2.5 Skills to provide oral evidence in court as an expert witness and as a professional witness.

12.3 Practicing psychiatry in a secure setting

12.3.1 The role of security in a therapeutic environment.

12.3.2 The essential components of a forensic service and the specific patient needs and disabilities that can be assisted by such a service provision

12.3.3 Knowledge of the prevalence of psychiatric disorder in prison populations, suicide in prisoners, psychiatric treatment in prison settings.

12.3.4 Risk management planning in forensic psychiatric practice

12.3.5 Managing mentally disordered offenders discharged into the community

12.4 Human rights legislation as it effects patients and psychiatric practice.

13 Learning Disability

The topics suggested should complement those topics which will be covered in other areas of psychiatry, particularly neuropsychiatry and child psychiatry.

13.1 Services

13.1.1 Normalisation and related social theories and their influence on service development for people with a intellectual disability The change from an institutional to an individualised, needs led approach.

13.1.2 The provision of specialist psychiatric services for people with intellectual disability.

13.2.1 Epidemiology

The prevalence/incidence of intellectual disability in the general population. The prevalence/incidence of superadded behavioural, psychiatric and other impairments within this group. The factors which might account to the observed high rates of psychiatric behavioural disorders in this group.

13.2.2 Aetiology

Biological causes of intellectual disability, including genetic and environmental effects, and the clinical characteristics of reasonably common biological conditions associated with intellectual disability such as Down Syndrome, fragile-X syndrome and foetal alcohol syndrome. The influence of psychological and social factors on intellectual and emotional development in people with intellectual disability, including the concept of secondary handicap.

13.3 Clinical

13.3.1 Assessment and communication with people with intellectual disability.

13.3.2 The presentation and diagnosis of psychiatric illness and behavioural disorder in people with intellectual disability, including the concept of diagnostic overshadowing

13.3.3 Psychological methods of assessment and an understanding of psychological theories as to the cause of problem behaviours. An understanding of relevant behavioural modification techniques.

13.3.4 The application of psychiatric methods of treatment in intellectual disability including psychotherapy, drug treatments, behaviour therapy and cognitive therapy.

The application of a multidisciplinary approach to the management of mental health problems in people with intellectual disability

13.3.5 Specific syndromes and their association with particular psychiatric or behavioural disorders (behavioural phenotypes).

13.3.6 The impact of disability on the family and the psychological consequences of having a child with a disability.

13.3.7 The assessment, management and treatment of offenders with Intellectual disability

14. RESEARCH METHODS, STATISTICS, CRITICAL REVIEW AND EVIDENCE-BASED PRACTICE

The Trainee shall demonstrate knowledge of the principles of research methods, statistics, epidemiology and evidence-based practice. This section is published as a separate syllabus -