Year 4 MBChB Curriculum Document 2017-18



Introduction

This document is intended as an information guide for students, placement coordinators and educators. It provides an overview of the expected learning for each clinical placement and additional core teaching. Year 3 and 4 is part of a spiraling curriculum, with most Year 4 placements already being encountered by students in their previous academic year. Please refer to the *Year 4 MBChB Handbook* for further information about the Year 4 programme.

Please note that all additional documents can be found in the *Year 4 Handbook & Administration* folder on VITAL.

Core Teaching and Learning

This document contains details of the core teaching sessions, which are to be delivered across each placement. These include trust CBL tutorials, pharmacist tutorials and clinical skills teaching. Additional learning outcomes are to be covered by the individual placement's method of choice e.g. additional tutorials, ward based teaching, outpatient clinics or student self-study.

Learning outcomes for the Year 4 core teaching sessions are listed at the end of this document.

Trust Case Based Learning (CBL) Tutorials

Students are advised to read the presentations on VITAL and also around the topic areas in advance, in order to promote high level learning and discussion of the clinical cases. In this way, students can develop a greater depth of knowledge and confidence in their clinical medical practice. Students are also advised not to solely rely on the content of the CBL tutorials for assessment purposes and to read around these topics widely. The CBL tutorials are listed under the placement that they are to be delivered and the learning outcomes can be found at the end of this document.

All CBL materials are available on VITAL for facilitators and students to view and access. Further information for facilitators can be found in the *Year 4 CBL Tutor Information Sheet* in the *Educator Administration* folder on VITAL.

Assessment

This document contains a description of the core learning for each clinical placement. All these areas can be included in assessment. Although all the content from the previous academic years can be assessed on, for the end of year (finals) examinations there will be greater focus on Year 4 content. Students are therefore encouraged to build on and to consolidate the learning from their previous academic years.

Successful completion of the E-portfolio is also an important part of summative assessment and progression into Year 5.

For further information please refer to the *Year 4 MBChB Handbook, Year 4 Assessment Requirements* and *Year 4 E-portfolio Requirements* documents.

Table of Contents

	Page
	_
Expectations of Student Competence in Clinical Settings	5
Year 4 Placement Overview and Lecture Days	7
Medicine	8
Trust Pharmacist Tutorials	9
Clinical Skills	9
Year 4 Simulation Training Day	10
Surgery (including Anaesthetics, ENT & Ophthalmology)	11
Child Health	13
Women's Health	14
Mental Health	15
Palliative Care (including Communication for Clinical Practice)	16
Oncology	19
General Practice	20
Community Clinical Teaching (CCT)	21
LEARNING OUTCOMES	
Trust CBL Tutorials	22
Lecture Days	28
Trust Pharmacist Tutorials	33
Community Clinical Teaching (CCT)	35
Clinical Skills	39

Expectations of Student Competence in Clinical Settings

Background Information from A100/ A101 Programme Specification MBChB

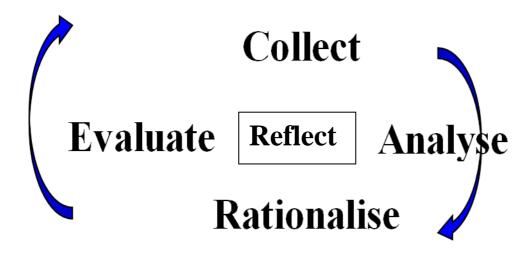
The model that underpins clinical learning is the CARE/CARER cycle:

- Collect case information
- Analyse and investigate
- Rationalise treatment options
- Evaluate the outcomes

The evaluation phase comes in two parts. The first asks students to reflect on clinical care/practice in the specific patient's case and in a second phase reflect on the use of best evidence with a view to improving patient care. This evolves to CARER with the addition of:

- Reflection as experience builds

Students are asked to reflect on where the case fits into their existing learning plan and map learning objectives that have been met, and to identify any areas of further personal development required as a result of their involvement with the case. Through this process students will learn how to diagnose and manage a particular problem, taking into account the circumstances of the individual, and evaluate (audit) their care of the patient in the light of current evidence, as well managing and documenting their professional development towards F1 training.



Year 4

By the end of Year 4, students should be able to:

С	Collect all information including a history from patients in a non-formulaic
	manner, using a focused history when appropriate
	Competently examine patients to the standard of a FY1 doctor and be able to
	identify abnormalities
	Select appropriate investigations and justify them
	Perform practical procedures under supervision both completely and safely
Α	Formulate the likely differential diagnoses incorporating a patient's
	demographic information, history, physical examination and investigation
	findings
R	Formulate management plans and involve patients in a discussion for
	immediate and long term management
	Consider the role of both primary and secondary care and the wider healthcare
	team
Е	Evaluate their own practice as a student doctor applying the principles of
	patient centred care, best evidence and guidelines
	Evaluate the patient's journey as per the principles described above
R	Reflect on evaluations of their training, experiences and feedback to develop
	and improve future performance as a lifelong learner
	Contribute to quality improvement within the NHS

Year 4 Placement Overview

All Year 4 students are to receive a full day of induction at their base hospital on Tuesday the 29th of August. Clinical placements begin on Wednesday the 30th of August.

Medicine	8 weeks	1 day per week CCT/study day
Surgery	6 weeks*	1 day per week CCT/study day
Child Health	4 weeks	1 day per week CCT/study day
Women's Health	4 weeks	1 day per week CCT/study day
Mental Health	4 weeks	1 day per week CCT/study day
General Practice	6 weeks	1 day per week CCT/study day
Palliative Care & Oncology	4 weeks**	

^{*}to include three weeks of general surgery and orthopaedics and one week each (or the equivalent) of anaesthetics, ENT and ophthalmology

CCT and student study days alternate on the same day each fortnight. These occur on a set day for each base hospital as follows:

Aintree	Tuesday
Arrowe Park	Friday
Blackpool	Tuesday
Chester	Friday
RLUH	Tuesday
Southport	Tuesday
Warrington	Tuesday
Whiston	Tuesday

Year 4 Lecture Days

These are compulsory full days which are held at the University of Liverpool. Each lecture day has a clinical focus and also contains teaching on some the non-clinical curriculum themes e.g. population perspective, professionalism and PSM. All students are expected to attend. There are no timetabled placement activities on these days.

Monday 11th September Lecture Day 1: Sexual Health

Monday 8th January Lecture Day 2: Rheumatology & MSK

Monday 28th March Lecture Day 3: Dermatology

The learning outcomes for each lecture days are listed at the end of this document.

^{**}please note that the three week palliative care placement is a five day week and does not contain any CCT/study days

Medicine

Eight weeks

One day per week is either CCT or a student study day alternating each week

Trust CBL Tutorials

Medicine CBL 1	Cerebrovascular disease	
Medicine CBL 2	Imaging: skills in choosing wisely & interpretation	
Medicine CBL 3	Restrictive lung disease, pulmonary hypertension & oxygen	
	therapy	
Medicine CBL 4	ECG interpretation & tachyarrhythmias	
Medicine CBL 5	5 Venous thromboembolism	
Medicine CBL 6	dicine CBL 6 Nephrology: acute kidney injury & chronic kidney disease	

Other learning

- Be able to take a competent, focused history and examine all medical systems
- Discuss likely diagnoses and differentials
- Select appropriate investigations and justify them
- Develop immediate and longer term management plans (non-prescribing and prescribing), taking into account best evidence and the patient's wishes and context
- Heart murmurs: consolidation of learning from previous years
- Care of the elderly including falls, frailty, role of the social worker and MDT (also the elderly patient CCT session)
- Management of patients with alcohol and substance misuse in secondary care
- Rheumatology and musculoskeletal disorders. Joint examinations (also rheumatology & MSK lecture day and MSK CCT session)
- Dermatology: revision of Year 3 learning (also dermatology lecture day)
- Sexual health (also sexual health lecture day)

Other mandatory sessions

- Radiology: experience in imaging and reporting (e.g. one of x-ray and one of MRI/CT/Ultrasound). To take place during either the medicine or surgery placement
- Endoscopy: to take place during either the medicine or surgery placement
- Trust Pharmacist Tutorials are also to take place during the eight week medicine placement

Trust Pharmacist Tutorials

Eight sessions to be delivered each week of the medicine placement by trust pharmacists:

- IV Fluids
- Opioids
- Anticoagulants
- Insulin
- Surgery
- Acute Kidney Injury
- Prescribing Scenarios
- Ward Visit

Materials are available on VITAL for facilitators and students to view and access. Learning outcomes for each session are listed at the end of this document.

Clinical Skills

All Year 4 clinical skills teaching is to be delivered prior to the Christmas break:

- Wound care and basic wound dressing (ANTT)
- Paediatric Basic Life Support (BLS)
- Breast examination
- Catheterisation: male & female
- Cannulation and preparation of an intravenous (IV) fluid line
- Venepuncture
- Intramuscular injection
- Sub-cutaneous injection

Students are expected to view the preparatory materials on VITAL prior to attending these sessions. Learning outcomes are listed at the end of this document. Please refer to the separate *Year 4 E-portfolio Requirements* document for details of the Year 4 core Direct Observation of Procedural Skills (DOPS).

Simulation Training Day

A full day workshop to be delivered at each base hospital

These objectives form the basis of the simulation course. Students should also be supported in achieving these learning objectives throughout the rest of their medicine and surgery placements. The learning objectives build on those covered in the Year 3 Simulation Training Day.

Clinical

- Develop a framework for recognition, management, escalation and referral of an acutely ill patient
- Demonstrate procedural and decision making skills in managing an acutely unwell patients including working in a team, prioritizing, clinical decision making, leadership and followership
- Appreciate the roles of members of the team involved in managing an acutely unwell patient
- Describe principles of management of simple and common trauma episodes.
- Describe common oncological emergencies including neutropenic sepsis.
- Recognise deteriorating post-operative patients and initiate immediate management of such patients

Non-technical skills

- Understand the nature of clinical error- human factors and system errors
- Be able to use handover models: SBAR, ISBAR and ISOBAR appropriately
- Demonstrate the qualities and role of a leader and a follower
- Demonstrate ability to challenge and be challenged
- Be able to communicate effectively as a leader and a follower

Upon completion of the Simulation Training Day, students will receive a certificate to be attached to their E-portfolio.

Surgery

Six weeks to include three weeks of general surgery and orthopaedics and one week each (or the equivalent) of anaesthetics, ENT and ophthalmology

One day per week is either CCT or a student study day alternating each week

Trust CBL Tutorials

Surgery CBL 1	Urology: conditions of the prostate & testes	
Surgery CBL 2	Breast conditions	
Surgery CBL 3	T&O: upper limb fractures	
Surgery CBL 4	T&O: lower limb fractures	
Surgery CBL 5	ENT: hearing loss & vertigo	
Surgery CBL 6	Ophthalmology: visual loss	

Other learning

- Be able to take a competent, focused history and examine all surgical systems
- Discuss likely diagnosis and differentials
- Select appropriate investigations and justify them
- Develop immediate and longer term management plans (non-prescribing, prescribing and surgical), taking into account best evidence and the patient's wishes and context
- Describe the process of consent for surgical patients
- Urology: common benign and malignant conditions including renal calculi disease, erectile dysfunction and haematuria
- Orthopaedics: common fractures and orthopaedic conditions. Joint examinations (also rheumatology & MSK lecture day and MSK CCT session)
- Thyroid and neck lumps: consolidation of learning from previous years
- The surgical abdomen: consolidation of learning from previous years

Anaesthetics

Six specific theatre sessions; one of these sessions may include an acute pain round. Students should not be placed in ICU or in chronic pain clinics.

During their time in theatre, students should ask the anaesthetic team for discussions and practical experiences in order to achieve the following learning outcomes. The students should direct the consultants towards the Anaesthesia E-Learning for Health module and use this as a springboard for discussion in theatre.

Develop an understanding of the wider role of the anaesthetist and the
 Operating Department Practitioner in both planned and emergency care,

- including critical care, obstetrics, medical emergency teams, pain medicine etc.
- Demonstrate the measurement and recording of physiological observations e.g. Pulse, BP, O2 saturations, temperature
- Discuss the causes of abnormal physiological parameters
- Appreciate the importance of MEWS scores in identifying the rapidly deteriorating patient
- Discuss the principles of physiological support using an "airway, breathing, circulation, disability" framework
- Demonstrate effective bag-valve-mask ventilation
- Demonstrate the insertion of a venous cannula
- Understand the principles of advanced airway management including laryngeal mask airways and endotracheal tubes
- Complete the Anaesthesia E-Learning module on the E-Learning for Health website: https://portal.e-lfh.org.uk/Component/Details/423405 Students are required to attach the certificate of completion to their E-portfolio as evidence

Ear, Nose & Throat

- ENT examination
- The normal ear, nose and throat
- ENT infections e.g. acute otitis media, sinusitis, and tonsillitis (also infections & antibiotics CCT session)
- Tinnitus, vertigo and facial nerve palsy
- Cancers of the head and neck including cancer of the larynx
- ENT emergencies e.g. epistaxis, airway obstruction

Ophthalmology

- Ophthalmic examination including fluorescein, Snellen chart and the ophthalmoscope
- The normal eye
- The ageing eye: glaucoma, cataract, ARMD
- The red eye
- Ophthalmology in systemic disease incl. hypertension and diabetes

Other mandatory sessions

- Radiology: experience in imaging and reporting (e.g. one of x-ray and one of MRI/CT/Ultrasound). To take place during either the medicine or surgery placement
- **Endoscopy:** to take place during either the medicine or surgery placement

Child Health

Four weeks

One day per week is either CCT or a student study day alternating each week

Trust CBL Tutorials

Child Health CBL 1	Mental health in children & adolescents	
Child Health CBL 2	L 2 Paediatric endocrinology including growth, puberty & obesity	
Child Health CBL 3	Child Health CBL 3 Paediatric musculoskeletal conditions	
Child Health CBL 4	hild Health CBL 4 Paediatric diabetes	

Other learning

- Competently take a full history for a range of common acute and long-term illnesses occurring in infancy and childhood. Also screen appropriately for family, social and developmental problems
- Be able to complete a physical examination of all systems on an infant or child including a developmental assessment
- Competently perform core practical procedures: measurement of height, weight, blood pressure, temperature, head circumference and urinalysis
- Understand the role of the health visitor and social worker
- Be able to discuss the prescription of paediatric drugs and the usage of paediatric formularies
- Paediatric behavioural problems including insomnia, anxiety, depression, autistic spectrum disorder, ADHD, eating disorders, conduct disorder. Consolidation of Year 3 learning (also see child & adolescent psychiatry podcast on VITAL)
- Paediatric respiratory conditions: consolidation of learning from previous years
- Paediatric surgery e.g. appendicitis, mesenteric adenitis, intussusception, Hirschsprung's disease, pyloric stenosis, constipation, recurrent abdominal pain
- Paediatric epilepsy: consolidation of Year 3 learning
- Childhood infectious diseases: consolidation of Year 3 learning

Women's Health

Four weeks

One day per week is either CCT or a student study day alternating each week

Trust CBL Tutorials

Women's Health CBL 1	Obesity in women's health	
Women's Health CBL 2	Fertility & subfertility	
Women's Health CBL 3	Gynaecological malignancies including CIN	
Women's Health CBL 4	Urogynaecology: urinary incontinence & prolapse	

Other learning

- Take a complete sexual, gynaecology and obstetric history including the assessment of high risk behaviours
- Attain competency in obstetric assessment and palpation
- Develop skills in vaginal, speculum examination and vaginal swab taking
- Recognise the normal changes of pregnancy
- Awareness of the role of the midwife in pregnancy, labour and postnatal care
- Awareness on the NICE ANC programme including pre-conceptual advice, antenatal screening and antenatal vaccinations
- Awareness of perinatal and maternal outcomes
- Early pregnancy bleeding: consolidation of Year 3 learning
- Identify, investigate and be aware of the management of common pregnancy complications including diabetes and hypertension
- Mental health, social problems, and drug and alcohol addiction in pregnancy
- Assessment of the baby at birth
- The puerperium
- Conditions of the vulva and vaginal discharge (also sexual health lecture day)
- The menopause, postmenopausal women and HRT (also contraception & HRT CCT session)
- Recognise women at risk of sexual exploitation and the appropriate procedures to follow in highlighting concerns
- Domestic Abuse. Students are required to register and complete the elearning module on the Independent Domestic Abuse Services (IDAS) website: https://www.idas.org.uk/training/ and to attach the certificate of completion to their E-portfolio as evidence
- Female Genital Mutilation. Students are required to complete the e-learning module on the E-Learning for Health website: www.elfh.org.uk and to attach the certificate of completion to their E-portfolio as evidence
- Understand the Abortion Act, ethics and law, and procedures of termination of pregnancy (see learning resources on VITAL)

Mental Health

Four weeks

One day per week is either CCT or a student study day alternating each week

Trust CBL Tutorials

Mental Health CBL 1	Schizophrenia	
Mental Health CBL 2	Depression	
Mental Health CBL 3	The Mental Health Act	
Mental Health CBL 4	Substance misuse	

Other learning

- Take a thorough mental health history and mental state examination
- Develop skills in risk assessment and recognise circumstances in which senior help is required
- Understand the role of the mental health team
- Identify and develop skills in discussing ethical and professional aspects of treating vulnerable individuals
- Mental Capacity Act: consolidation of learning from previous years
- Bipolar disorders
- Anxiety and panic disorders including post-traumatic stress disorder
- Obsessive-compulsive disorder
- Eating disorders
- Personality disorders
- Dementias: consolidation of Year 3 learning (also the elderly patient CCT session)
- Suicide and deliberate self-harm
- Child and adolescent mental health: consolidation of Year 3 learning. This is also covered in the Year 4 Child Health placement (also see child & adolescent psychiatry podcast on VITAL)

Palliative Care

Three weeks
No CCT or student study days
Includes three days of Communication for Clinical Practice (further information on the Year 4 CCP sessions can be found on VITAL)

Learning Outcomes

By the end of the palliative and end of life care placement, students will be able to:

Core Learning Outcomes	Specific Learning Outcomes
Elicit patients' and families' understanding of their condition and treatment options, and their views, questions, concerns, values and preferences. Apply psychological principles, methods and knowledge to explain the varied responses of individuals, groups and societies to palliative and end of life care.	 Elicit physical, psychological, social, financial and spiritual concerns. Recognise and respect that some patients may not wish to know their prognosis. Enable those patients who wish to do so to formulate advance care plans. Demonstrate understanding of appropriate hope and achievement of goals other than cure. Demonstrate appropriate attitudes towards psychological responses and emotions of patients and caregivers; fear, guilt, anger, sadness, despair, collusion and denial. Demonstrate understanding of the different responses and emotions expressed by patients and caregivers, including fear, guilt, anger, sadness,
	 despair, collusion and denial. Recognising unhelpful and potentially harmful psychological responses.
Discuss adaptation to advanced life limiting illness and bereavement, comparing and contrasting the abnormal adjustments that might occur in these situations.	 Demonstrate understanding of the social impact of life-limiting illnesses in relation to family, friends, work and other social circumstances. Demonstrate ability to recognise and support bereaved people
Provide explanation, advice, reassurance and support.	Demonstrate abilities to listen empathically and respond appropriately to patient and caregiver concerns.
Contribute to palliative and end of life for patients and their families, including management of	Discuss the pathophysiology of the common symptoms in palliative and end of life care

Demonstrate ability to communicate clearly, sensitively and effectively with patients, their	 Demonstrate understanding of signs indicating that a patient is dying. Demonstrate understanding of a range of drug and other options for symptom management, including; pain, gastrointestinal, cardiorespiratory, genitourinary, neurological and psychological symptoms. Demonstrate understanding of the management of palliative care emergencies including; cord compression, superior vena cava obstruction and hypercalcaemia. Demonstrate the ability to prescribe for and use a syringe driver in the management of common symptoms Formulate and review individualised management plans for current and potential future symptoms, including anticipatory prescribing. Deliver bad news sensitively and at an appropriate pace. Deal with difficult questions and
and effectively with patients, their relatives or other carers and colleagues.	 Deal with difficult questions and challenging conversations. Demonstrate their ability to communicate risk and uncertainty. Describe methods for sharing clinical information between services while
	maintaining patient confidentiality.
Recognise and respect the importance of cultural and social influences, religious practices, lifestyle choices, individual values and beliefs which relate to dying and bereavement and their impact on care before and after death.	Demonstrate understanding of the importance of not imposing personal beliefs, values and attitudes on patients or their families or letting them influence professional judgments.
Demonstrate knowledge of law and professional regulation relevant to palliative and end of life care, including the ability to complete relevant certificates and legal documents and liaise with the coroner where appropriate.	 Demonstrate understanding of the ethical frameworks of autonomy, beneficence non-maleficence and justice in relation to ethical issues at the end of life including; Double effect. Requests for euthanasia and assisted dying. DNACPR decisions. Withholding / withdrawing treatment. Withholding / withdrawing clinically assisted nutrition and hydration.

Demonstrate understanding of and respect for the roles and expertise of health and social care professionals in the context of a multi-professional team in palliative and end of life care.	 Capacity to give consent; Mental Capacity Act. Demonstrate understanding of the law in relation to end of life care. Demonstrate understanding of the law concerning Advance Statement of Wishes, Advance Decisions to Refuse Treatment, Power of Attorney for Health and Welfare. Demonstrate understanding of Guidelines produced by the GMC, BMA and Royal Colleges in relation to end of life care. Demonstrate the ability to undertake procedures involved in death verification, death certification and cremation Demonstrate understanding of when to liaise with the Coroner's office. Demonstrate understanding of the range of multidisciplinary palliative care services available and when referral to them is appropriate. Demonstrate understanding of the importance of good and timely communication in and between team members in both primary and secondary care.
Recognise and deal effectively with uncertainty and change in palliative and end of life care.	 Demonstrate understanding of the importance and limitations of prognostication and prognostic indicators. Demonstrate the ability to discuss prognostic uncertainty with patients and lay caregivers
Demonstrate the appropriate attitude towards the emotional and psychological impact of palliative and end of life care on themselves, recognise their own limitations and be able to ask for help and support.	 Demonstrate understanding of the impact of stress and professional burnout Demonstrate understanding of professional limitations and boundaries Demonstrate understanding of the support available to clinicians

Oncology

One week

One day per week is either CCT or a student study day alternating each week

Learning Opportunities

During the oncology placement medical students will have the opportunity to work closely with oncologists, specialist oncology trainees and specialist oncology nurses. On the first day of the placement all students will attend Clatterbridge Cancer Care Centre for a day of teaching and will also be provided with an information handbook. Students will function as part of the oncology teams at their base units for the remaining week in order to gain exposure to the management of various cancers. During this time they will be timetabled to:

- Attend oncology new patient and follow-up clinics; observe consultation methods and decision making processes
- Attend chemotherapy clinics and observe the delivery of chemotherapy
- Attend oncology MDT meetings
- Have the opportunity to take an oncology history and perform clinical examination under supervision

Learning Outcomes

- History taking in oncology and the importance of assessing performance status
- The role of multi-disciplinary team management in oncology
- Understanding of the patient journey through cancer treatment
- Understand of indications, mode of action and toxicity of common chemotherapeutic agents, targeted agents and radiotherapy
- Understand the management of oncological emergencies
- Understand the essentials of consenting for oncological treatment and common complications of cancer treatment
- Recognising the balance between treatments with "intent to cure" versus "palliative care"
- Role of evidence based medicine, audit and research in oncology
- Psycho-social aspects of cancer
- Familiarisation with basic steps involved in delivering radiotherapy (initial evaluation, decision making, simulation, treatment planning and delivery, evaluation on treatment and follow-up after treatment)

Students will be provided with an evaluation form and attendance record card at the beginning of their placement. These are to be returned to the placement coordinator within two weeks of completion of the oncology placement. Once these have been received, the students will be emailed a certificate of completion. Students are required to attach this to their E-portfolio as evidence of successful placement completion.

General Practice

Six weeks: four week and two week placements at different GP practices (six weeks at the same GP practice for Blackpool students)

3.5 days per week

One day per week is either CCT or a student study day alternating each week

Learning Outcomes (combined for Year 3 & 4):

The GP Curriculum Learning Outcomes are over-arching and are to be achieved fully during the clinical academic years. They will be attained through both experiences during the Community Placements and also during CCT sessions (they have been linked to the CCT sessions to help students to identify where they can be fulfilled).

- 1) To identify at risk patients for common long-term conditions and stratify risk to implement appropriate management
- 2) To describe the concept of primary prevention and the management of secondary prevention in long-term conditions
- 3) To describe common conditions encountered in primary care and their management
- 4) To outline the processes of referral into secondary care and other care pathways and describe the role of primary care in the NHS
- 5) To adopt a patient-centred consultation model that explores patient's ideas, concerns and expectations
- 6) To communicate effectively with patients and provide information in a way they can understand
- 7) To apply the principles of consultation models to understand patients as a biopsycho-social 'whole'
- 8) To appraise the use of disease registers and data recording templates effectively for opportunistic and planned monitoring of long-term conditions, in order to ensure continuity of care between different healthcare providers
- 9) To apply the principles of managing co-morbidity, coordinating care of acute illness, long-term illness, health promotion and disease prevention in the general practice setting

Taught content:

Weekly GP Therapeutics Tutorials to be delivered over the six week GP placement. These can be covered in any order. Students are encouraged to agree upon the topic with their GP tutor in advance, so that they can prepare for the session. Topics include:

- Prescribing in special groups
- Drug monitoring in primary care
- Drug affecting the urinary system
- Cardiovascular drugs 1, 2 & 3

Community Clinical Teaching (CCT) Sessions

One full day each alternate week (except during the three week palliative care placement)

These are small group teaching sessions facilitated by a specialist teaching GP. Students will have the same tutor throughout the academic year. The student's CCT will also act as their Academic Advisor. Academic Advisor meetings occur on CCT days and are built into the timetable.

Session 1: Introduction Session 2: Red Flag Symptoms Session 3: The Breathless Patient Session 4: Contraception & HRT Session 5: The Elderly Patient Session 6: The GP on-call Session 7: **LOCAS Preparation** Session 8: **Group Determined Session** Session 9: Musculoskeletal Medicine in Primary Care Session 10: Managing Medical Complexity Session 11: Therapeutics & Polypharmacy Session 12: **Interpreting Blood Results**

There are also two sessions for Academic Advisor meetings

Group Determined Session

Infections & Antibiotics

Session 13:

Session 14:

Students are expected to complete preparatory work prior to each session. Resources used during these sessions are to be posted on VITAL. Learning outcomes for each session are listed at the end of this document.

Trust Case Base Learning (CBL) Tutorials Learning Outcomes

Medicine CBL 1: Cerebrovascular disease

- To recognise and classify a stroke
- To describe the short and longer-term management of an acute stroke patient
- To understand the role of hyper-acute treatment in stroke
- To recognise and describe the management a deteriorating stroke patient
- To recognise, manage and appropriately refer a TIA patient

Medicine CBL 2: Imaging: skills in choosing wisely & interpretation

- To describe the different imaging options available
- To be able to select appropriate imaging based on clinical presentation and special patient factors
- To discuss the risk/benefit assessment involved in selecting appropriate imaging
- To develop and demonstrate skills in interpretation

Medicine CBL 3: Restrictive lung disease, pulmonary hypertension & oxygen therapy

- To describe the aetiology and the different types of restrictive lung disease (RLD)
- To recognise the clinical features of RLD and pulmonary hypertension
- To revise the pathophysiology of pulmonary hypertension
- To understand the difference between primary and secondary pulmonary hypertension
- To describe the investigations and management of RLD and pulmonary hypertension
- To recognise the radiological appearances and pulmonary function test abnormalities associated with RLD
- To be aware of the patient-related criteria for oxygen prescribing including target saturations

Medicine CBL 4: ECG interpretation & tachyarrhythmias

- To describe and interpret a normal ECG recording
- To recognise common and life-threatening tachyarrhythmias
- To identify patients at risk of sudden death or serious morbidity as a result of tachyarrhythmias
- To understand the treatment options available and the indications for different tachyarrhythmias
- To be aware of the indications for usage of cardiac pacemakers and Implantable Cardioverter Defibrillators (ICD)

Medicine CBL 5: Venous thromboembolism

- To recognise the risk factors for VTE (venous thromboembolism)
- To be able to suggest preventative management plans for patients at risk of VTE
- To diagnose and investigate for DVT (deep vein thrombosis) and differentials
- To diagnose and investigate for PE (pulmonary embolism) and differentials

• To understand the various therapies for DVT and PE

Medicine CBL 6: Nephrology: acute kidney injury & chronic kidney disease

- To be aware of the aetiology of AKI and CKD
- To understand the diagnosis and classification of AKI and CKD
- To recognise the clinical features and complications of AKI and CKD, including emergencies
- To describe the investigations indicated in AKI and CKD
- To be aware of the management of AKI and CKD, including monitoring, renal emergencies, renal replacement therapy (RRT) and renal transplantation

Surgery CBL 1: Urology: conditions of the prostate & testes

- To be aware of the epidemiology of benign prostatic hyperplasia (BPH) and prostate cancer
- To recognise the clinical features of BPH and prostate cancer
- To describe the modalities used for diagnosis and evaluation of BPH and prostate cancer
- To evaluate the usage of PSA as a screening tool
- To be aware of the management and outcomes of BPH and prostate cancer
- To describe the clinical features of the different types of testicular pain and swelling and be able to formulate differential diagnoses
- To be aware of the investigation and management of common testicular conditions

Surgery CBL 2: Breast conditions

- To describe the causes and clinical features of common breast conditions including mastalgia and be able to formulate differential diagnoses
- To be aware of the management of common benign breast conditions and mastalgia
- To evaluate the different risk factors for breast cancer
- To be aware of the NHS breast screening programme
- To describe the appropriate referral pathways and different components involved in the diagnosis of breast cancer
- To be aware of the different treatment options for breast cancer (surgical and non-surgical)
- To be aware of indications for screening patients with a family history of breast cancer

Surgery CBL 3 T&O: upper limb fractures

- To understand the mechanics causing different types of fractures
- To describe the different types of fractures e.g. transverse, spiral
- To describe the assessment of the injured upper limb
- To develop skills in recognising and describing the radiographic appearances of different types of upper limb fractures
- To understand the basic principles of upper limb fracture management

 To have an awareness of the common upper limb fractures: their mechanism, clinical features, diagnosis, management and complications (immediate and longer term)

Surgery CBL 4: T&O: lower limb fractures

- To describe the assessment of the injured lower limb
- To develop skills in recognising and describing the radiographic appearances of different types of lower limb fractures
- To understand the basic principles of lower limb fracture management
- To have an awareness of the common lower limb fractures: their mechanism, clinical features, diagnosis, management and complications (immediate and longer term)

Surgery CBL 5: ENT: hearing loss & other ENT conditions

- To describe the common causes, clinical features and management of hearing loss in children and adults
- To differentiate between sensorineural and conductive hearing loss
- To recognise and describe the features of a normal and abnormal tympanic membrane
- To be able to interpret tuning fork tests
- To be able to interpret an audiogram
- To be able to differentiate between the different causes of vertigo and describe the management options available

Surgery CBL 6: Ophthalmology: visual loss

- To revise the anatomy of the eye and the visual pathways
- To describe the components of the history and examination of a patient presenting with visual disturbance and be able to formulate differential diagnoses
- To recognise clinical features which require urgent referral
- To describe the clinical features (and risk factors) of conditions associated with visual loss and be able to select appropriate investigations
- To be aware of the management, complications and prognosis of the different causes of visual loss

Child Health CBL 1: Mental health in children & adolescents

- To define the term "mental health"
- To be aware of the epidemiology of mental health disorders in children and adolescents
- To be aware of the aetiological factors in the development of mental health disorders and consider the concept of resilience
- To be aware of the management of mental health disorders in children and adolescents and the roles of those involved
- To recognise different types of abuse (including sexual exploitation) and their risk factors

- To be able to apply the legal and ethical aspects of consent, confidentiality and refusal of treatment to mental health scenarios
- To be aware of the outcomes and the impact of mental health issues on patients and their families

Child Health CBL 2: Paediatric endocrinology including growth, puberty & obesity

- To define normal growth in children and to be aware of the factors which effect growth
- To define normal, early and late puberty and describe the causes of abnormal puberty
- To understand the difference between primary and secondary hypothyroidism and to be aware of the processes for detecting hypothyroidism in childhood
- To be aware of the causes of adrenal abnormalities in childhood
- To be aware of the factors which contribute to childhood obesity and how these can be addressed

Child Health CBL 3: Paediatric musculoskeletal conditions

- To describe the components of a paediatric MSK history and examination, and be able formulate differential diagnoses
- To recognise the clinical features and complications of common inflammatory, non-inflammatory and mechanical conditions
- To be aware of the investigations, management prognosis of the above conditions
- To recognise features which require urgent investigation and management (including non-accidental injury)
- To be aware of the malignant and unexplained causes of paediatric MSK conditions

Child Health CBL 4: Paediatric diabetes

- To describe the different types of diabetes in childhood
- To revise glucose homeostasis and the action of insulin
- To be aware of the epidemiology and be able to diagnose Type 1 Diabetes Mellitus (T1DM)
- To describe the management of T1DM including monitoring
- To understand the complications of T1DM (short and longer term) and be able to discuss "sick day rules"
- To describe the clinical features, diagnosis and management of hypoglycaemia and diabetic ketoacidosis

Women's Health CBL 1: Obesity in women's health

- To define obesity and its different classes
- To list the complications of obesity
- To describe the management of an obese woman during the pre-conceptual, antenatal, labour and postnatal periods
- To identify high risk patients and diagnose gestational diabetes
- To describe the different types of hypertension in pregnancy

- To identify and describe the management of patients at high risk of preeclampsia
- To be aware of the impact of obesity on contraception choices

Women's Health CBL 2: Fertility & subfertility

- To define the terms subfertility and infertility
- To describe the different causes of subfertility and infertility
- To describe the history, examination and investigations used in the diagnosis of subfertility and be able to formulate differential diagnoses
- To be aware of the management options of subfertility
- To be aware of the ethical and emotional issues relating to subfertility

Women's Health CBL 3: Gynaecological malignancies including CIN

- To be aware of the screening and management of premalignant conditions of the cervix and vulva
- To describe the clinical features, differential diagnoses, investigations and management of the common gynaecological cancers to include vulva, vaginal, endometrial and ovarian
- To describe the indications for urgent referral to a gynaecology clinic (2ww)
- To be aware of important risk factors and the indications for screening family members

Women's Health CBL 4: Urogynaecology: urinary incontinence & prolapse

- To be aware of the aetiology and risk factors of urogynaecology conditions
- To be able to take a urogynaecological history and formulate differential diagnoses
- To be aware of the relevance of the abdominal and vaginal examination and how these can assist in making a diagnosis
- To be aware of the investigations used in the diagnosis of bladder conditions
- To describe the different types (and recognise the clinical features) of urinary incontinence and urogenital prolapse
- To describe of the management (non-prescribing, prescribing and surgical) of the above conditions

Mental Health CBL 1: Schizophrenia

- To be aware of the epidemiology and aetiology of schizophrenia
- To describe the diagnostic classification, clinical features and different types of schizophrenia
- To describe the differential diagnoses of schizophrenia and other causes of psychosis
- To understand the different treatment options (pharmacological and nonpharmacological) and any associated side effects and monitoring
- To be aware of the outcome and prognosis of schizophrenia (including the impact on the patient and their family)

Mental Health CBL 2: Depression

- To be aware of the epidemiology, aetiological factors and risk factors of depression
- To describe the symptoms and presenting features of depression
- To be able to screen for depression and identify high risk individuals
- To be aware of the diagnostic classification of depression
- To describe the management of mild, moderate and severe depression and be able to formulate a management plan (short, medium and long term)
- To know the main classes of antidepressant medications and their side effects

Mental Health CBL 3: The Mental Health Act

- To describe the different sections of the MHA
- To understand the indications for using the MHA
- To be aware of the process of detaining patients under the MHA and the roles of those involved
- To appreciate the impact to both the patient and their families of being detained under the MHA
- To understand when to consider a Community Treatment Order and what this process involves
- To understand the main components of the Mental Capacity Act (MCA) and be able to assess capacity

Mental Health CBL 4: Substance misuse

- To define the terms dependency and misuse
- To be aware of the incidence, risk factors and associations of the main substances of misuse and be able to identify high risk individuals
- To describe the components of a substance misuse history, including consequences of misuse and motivation to change
- To describe the medical, psychological and social complications of the main substances of misuse
- To be aware of the treatment options available for the above and outcomes (short and long term)

Lecture Day 1 Learning Outcomes: Sexual Health 11th September 2017

Sexual history taking

- To be able to elicit information regarding the presenting complaint and other aspects of a sexual history in a sensitive manner
- To be able to ask relevant questions regarding sexual practices, number of partners and identify high risk behaviour
- To appreciate the impact of diverse patient factors and to adjust history taking appropriately

Genital ulceration & lumps

- To recognise the clinical presentation of genital warts, molluscum, herpes and syphilis
- To be aware of the aetiology and risk factors of the above conditions
- To describe the investigations, management and complications of the above conditions
- To appreciate the importance of contact tracing and the treatment of contacts

Vaginal & urethral discharge

- To recognise the clinical features and presentations of gonococcal and nongonococcal urethritis, candida and bacterial vaginosis
- To be aware of the aetiology and risk factors of the above conditions
- To be able to formulate differential diagnoses and select appropriate investigations of vaginal and urethral discharge
- To be aware of the management and potential complications of the above conditions

Contraception

- To appreciate the physiology of the menstrual cycle
- To understand the mechanisms of action and effectiveness of different contraceptive methods
- To describe the components of a contraception discussion
- To appreciate different patient factors when considering different methods of contraception
- To be aware of the common complications and referral pathways for further advice

HIV & other blood bourne viruses

- To appreciate the importance of screening for blood bourne viruses (BBVs)
- To recognise patients at risk of BBVs and offer screening for sexually transmitted infections in relevant situations
- To be aware of the epidemiology of HIV, Hepatitis B and Hepatitis C
- To describe the clinical features and complications of the above conditions and the methods used for their investigation
- To be aware of the management (short, medium and long-term) and prognosis
 of the above conditions

Lecture Day 2 Learning Outcomes: Rheumatology & MSK 8th January 2018

Common musculoskeletal presentations: part I (spine) & II (upper & lower limb)

- To take a focused history for common musculoskeletal presentations
- To perform a focused regional musculoskeletal examination, appropriately tailored to the patient's presenting symptoms, relating the findings to the functional anatomy of the region in question
- To assimilate information from the clinical history and examination and construct a relevant differential diagnosis in response to this
- To describe appropriate investigations, if any, that should be undertaken in response to clinical findings
- To formulate an initial management plan for patients presenting with regional musculoskeletal symptoms
- To counsel a patient regarding self-management strategies, including selfmanagement of non-specific lower back pain
- To identify 'red flags' in the history of a patient presenting with back pain

Inflammatory arthritis

- To undertake a clinical assessment, including focused history and clinical examination for a patient presenting with polyarthralgia
- To identify key clinical features that help differentiate between inflammatory and mechanical joint disease
- To identify a patient presenting with inflammatory-sounding back pain
- To identify a patient that requires urgent referral to rheumatology out-patient services
- To formulate an appropriate strategy to investigate a patient with suspected inflammatory arthritis, including appropriate use of immunological, genetic and radiological tests
- To formulate a plan for the short-term management of a patient presenting with suspected inflammatory arthritis
- To describe the holistic management of a patient with inflammatory arthritis in the medium to long term
- To describe the pathophysiology of rheumatoid arthritis, relating this to the clinical course of the disease
- To describe the key similarities and differences between psoriatic arthritis and rheumatoid arthritis, including clinical presentation, prognosis and management
- To describe the complications and disease associations of inflammatory arthritides

The hot joint

- To take a relevant, focused history from a patient presenting with an acute hot ioint
- To construct an appropriate differential diagnosis for a patient presenting with an acute hot joint in response to the clinical findings

- To formulate an appropriate plan to investigate a patient presenting with an acute hot joint
- To interpret the findings of commonly performed investigations in the context of a presentation with an acute hot joint
- To describe the pathophysiology of and risk factors for developing septic arthritis and relate this to the clinical features of this condition
- To formulate a plan for the immediate management of septic arthritis
- To explain the pathophysiology of and risk factors for the development of gout
- To describe the acute and long-term management of crystal arthropathies
- To describe the classical clinical presentation of, risk factors for and disease course in reactive arthritis
- To explain the immediate management of a patient with suspected reactive arthritis

Rheumatology: the weird & wonderful

- To describe the role of autoantibody testing in non-specialist clinical practice
- To identify the classical clinical presentations and important complications of the most common connective tissue diseases
- To identify and investigate a patient presenting with suspected giant cell arteritis
- To formulate a plan for the immediate management of giant cell arteritis
- To describe the long-term management of giant cell arteritis
- To explain the implications of long-term steroid use
- To describe the classical clinical presentation and important complications of small vessel vasculitides (GPA/EGPA)

Lecture Day 3 Learning Outcomes: Dermatology 28th March 2018

Introduction & eczema

- Revise commonly used dermatological terminology
- Recognise the potential psychosocial impact of skin disease
- Understand the concept of skin failure
- Recognise the features of an eczematous eruption
- Appreciate the different types of eczema
- Recognise the infective complications of eczema
- Formulate a treatment plan for a patient with eczema, including appropriate use of topical corticosteroids

Psoriasis & acne

- Recognise the features of psoriasis and its different patterns
- Formulate a topical treatment plan for a patient with psoriasis
- Know the treatment options available for more severe psoriasis and their main adverse effects
- Diagnose acne and differentiate it from rosacea
- Relate the pathophysiology of acne to the options for its treatment
- Formulate a treatment plan for a patient with acne

Cutaneous infection & infestation

- Recognise infections that are commonly due to staphylococci or streptococci
- Recognise cutaneous infections that are commonly due to viruses
- Diagnose necrotising fasciitis
- Recognise the features of dermatophyte infection
- Recognise the features of scabies infestation
- Formulate an initial management plan for patients with any of the above conditions, including diagnosis and treatment

Benign & malignant skin lesions

- Describe the epidemiology of the commonest types of skin cancer
- Compare and contrast the features of benign moles versus melanoma
- Identify other common benign lesions
- Compare and contrast the features of basal cell carcinoma and squamous cell carcinoma
- Recognise the features of pre-malignant lesions
- Know the principles of treatment of the above conditions (where necessary)
- Know how to advise a patient on sun protection

Other inflammatory skin diseases

- Recognise the features of urticaria and be able to commence treatment for it
- Recognise the features of a drug eruption including a typical exanthem and Stevens-Johnson syndrome/toxic epidermal necrolysis
- Appreciate the need for urgent management of severe drug eruptions

- Diagnose and investigate cutaneous vasculitis
- Review some other cutaneous manifestations of systemic disease

Trust Pharmacist Tutorials Learning Outcomes

IV fluids

- Apply current NICE guidance on IV fluid therapy in adults to optimise patient outcomes
- Assess a patient's fluid status and whether IV fluids are indicated
- Identify a patient's fluid and electrolyte requirement
- Prescribe IV fluids safely and appropriately

Opioids

- Recognise different opioid formulations and interpret their potency in relation to morphine
- Convert between different opioids and preparations
- Calculate appropriate breakthrough doses of opioids
- Identify and manage the potential side effects of opioids
- Prescribe controlled drugs safely and appropriately, considering legal requirements

Anticoagulants

- Classify the pharmacology of different anticoagulants
- Demonstrate the ability to safely recommend and prescribe new and existing anticoagulant therapy (parenteral and oral) for different patient groups
- Discuss the risks and benefits of oral anticoagulants with patients and health care practitioners
- Identify and manage the adverse effects of anticoagulants
- Demonstrate the ability to therapeutically monitor patients prescribed anticoagulants

Insulin

- Recognise best practice to ensure the safe use of insulin
- Differentiate between different types of insulin and devices
- Interpret patient clinical parameters to safely adjust insulin doses
- Prescribe insulin safely and appropriately
- Recognise and treat hypoglycaemia

Surgery

- Assess and manage common pharmaceutical issues in the pre and peri-operative period
- Review the prescription for patients in the pre and peri-operative period
- Demonstrate how to manage the pharmaceutical needs of a patient who is nil by mouth (NBM)
- Classify the pharmacology of commonly used anti-emetics and analgesics in the post-operative period and demonstrate ability to prescribe appropriately

Acute Kidney Injury

- Identify medicines that can cause acute kidney injury and recognise the importance of dose adjustment in renal impairment
- Identify and interpret the methods used to assess renal function
- Recognise patients who are at risk of an acute kidney injury and identify measures to manage their pharmaceutical needs
- Assess and manage hyperkalaemia in acute renal impairment
- Review the prescription for patients with an acute kidney injury

Prescribing scenarios

- Prescribe safely and appropriately according to current national guidance, taking into consideration patient factors and clinical parameters
- Review the prescription for patients based on their presenting condition

Ward visit

- Review the pharmaceutical needs of a patient and write an appropriate pharmaceutical care plan
- Consider monitoring issues and patient factors when prescribing medication
- Consider pharmaceutical issues when planning for discharge

Community Clinical Teaching (CCT) Learning Outcomes

These are also linked to the GP curriculum learning outcomes

Session 1: Introduction

- 1. To discuss professionalism in the medical profession and be able to relate this to being a medical student.
- 2. To evaluate principals of group working reflecting on previous experiences.
- 3. To be instructed in the components of year 4 CCT and GP course requirements.
- 4. To establish learning needs for the group for future sessions.
- 5. To develop skills in taking a focused clinical history by applying clinical reasoning to formulate a differential diagnosis.

GP Outcomes 5

Session 2: Red flag symptoms

- 1. To list important red flag symptoms and signs relating to associated malignancy.
- 2. To discuss the common cancers and their demographics in the UK.
- 3. To choose appropriate initial investigations in primary care for a patient presenting with suspected cancer.
- 4. To discuss referral pathways from primary to secondary care in cancer management.
- 5. To evaluate the cancer fast track system and its impact on the patient, primary and secondary care.

GP Outcomes 3,4,6,9

Session 3: The breathless patient

- 1. To form a differential diagnosis for a patient presenting in primary care with dyspnoea.
- 2. To formulate a management plan for common cardiac and respiratory conditions seen in primary care.
- 3. To consider metabolic and psychological causes of dyspnoea.
- 4. Develop an understanding of basic consultation models used in primary care, including addressing ideas/concerns/expectations and the appropriate use of safety netting.
- 5. To recognise clinical indicators for a patients with dyspnoea for admission to secondary care.

GP Outcomes 3,4,5,6,7,8,9

Session 4: Contraception & HRT

- 1. To describe different modes of contraception.
- 2. To describe the modes of emergency contraception.
- 3. To recognise the ethical issues in prescribing contraception in adolescence.
- 4. To diagnose the menopause through history and investigation.
- 5. To define primary ovarian failure and manage appropriately.
- 6. To describe the risks and benefits of HRT.

GP Outcomes 3, 5,6,8,9

Session 5: The elderly patient

- 1. To diagnose and manage long-term conditions in elderly patients with comorbidities and complex needs.
- 2. To recognise the challenges of increasing frailty, risk of falls, osteoporosis and cognitive function: the effects on the individual and society.
- 3. To recognise the roles of the extended primary care team in an elderly patients' care.
- 4. Demonstrate the skills required to manage patients with long term conditions including critical thinking, shared decision making and communication skills.
- 5. Recognise the clinical challenges and ethical dilemmas when managing the physical, social and psychological aspects of elderly patients and their family or carers.

GP Outcomes 1, 2, 3,4,5,6,7,8,9

Session 6: The GP on-call

- 1. To manage common urgent scenarios that present in primary care.
- 2. Recognise the variety of patients that GPs see in an urgent clinic and common clinical challenges that are encountered.
- 3. To be able to formulate a management plan for common emergencies seen in primary care and when urgent referral to secondary care is needed.
- 4. To describe the provision of 'unplanned care' in the NHS and the variety of services that patients can access.

GP Outcomes 3, 4

Session 7: LOCAS preparation

- 1. To outline the format of the LOCAS examination.
- 2. To demonstrate and focus on the clinically relevant aspects of history taking and examination within an appropriate time limit.
- 3. To revisit clinical reasoning skills to formulate a differential diagnosis.
- 4. To summarise the significant aspects of a clinical history.
- 5. To reflect on learning from role play and the benefits from receiving / giving peer feedback.

Session 8: Group determined session

- 1. To develop skills in self-directed learning.
- 2. To revise and reflect on topics determined by the group.

Session 9: Musculoskeletal medicine in primary care

- 1. To conduct a focussed joint examination of shoulder, hip, knee, wrist, spine and foot.
- 2. To formulate a differential diagnosis for MSK presentations, including inflammatory and degenerative causes, based on history and examination findings.
- 3. To formulate a management plan for common musculoskeletal problems seen in primary care including, shoulder pain, hip pain, knee pain, wrist pain, spinal pain and foot pain.

- 4. To request appropriate radiological investigations in a patient presenting with MSK symptoms.
- 5. To assess a patient presenting in primary care with back pain, form a differential diagnosis and recognised red flag/yellow flag symptoms and signs.

GP Outcomes 3, 4,

Session 10: Managing medical complexity

- 1. To recognise and manage patients with multiple morbidities, polypharmacy and complex needs.
- 2. Outline the roles of health care teams in the management of people with long-term conditions including the role of the GP, multi-disciplinary teams, and palliative care teams.
- 3. Identify the management options and ethical issues in complex clinical scenarios such as, over diagnosis, communicating uncertainty, medically unexplained symptoms, poor compliance, health damaging behaviour and complex social problems.
- 4. Adopt a patient-centred consultation model that explores patient's ideas, concerns and expectations.
- 5. Revisit consultation models used in primary care, including the appropriate use of safety netting.

GP Outcomes 1, 2, 3,4,5,6,7,8,9

Session 11: Therapeutics & polypharmacy

- 1. To evaluate the potential risks and benefits of polypharmacy.
- 2. Recognise the side effect profile and drug interactions of common drugs used in primary care.
- 3. To discuss external factors influencing prescribing and be able to select appropriate resources to guide prescribing in primary care.
- 4. Recognise the therapeutic options in the management of long term conditions.
- 5. To apply knowledge of therapeutics and safe prescribing in the context of the Prescribing Skills Assessment.
- 6. To use the electronic resources as an aid to the safe prescribing of common medications.

GP Outcomes 1, 2,3,8,9

Session 12: Interpreting blood results

- 1. To apply pathophysiological knowledge to interpret pathology results seen by students in clinical practice.
- 2. To recognise the importance of interpreting blood results in clinical context and the challenges of interpreting blood results in isolation.
- 3. To formulate a differential diagnosis and management plan based on patients pathology results.

GP Outcomes 3,4,6,8

Session 13: Infections & antibiotics

1. To recognise and manage common infections in primary care.

- 2. To apply principals of microbiology to choose an appropriate antibiotic to treat common infections seen in primary care.
- 3. To select an appropriate antibiotic based on local and national guidelines.
- 4. To recognise to impact of the inappropriate use of antibiotics for both the patient and public health.

GP Outcomes 3, 4, 6

Session 14: Group determined session

- 1. To develop skills in self-directed learning
- 2. To revise and reflect on topics determined by the group

Clinical Skills Sessions Learning Outcomes

Wound care and basic wound dressing (ANTT)

- To understand the basic principles of wound cleaning
- To understand the principles of ANTT (Aseptic non touch technique)
- To be able to apply a basic adhesive dressing and within Trust guidelines

Paediatric Basic Life Support (BLS)

 To be able to perform paediatric basic life support on a paediatric manikin competently

Breast examination

- To revise anatomy and physiology of breast and axillary lymph nodes
- To link anatomy and physiology to practical skill
- To demonstrate the ability to perform the examinations and describe their findings

Catheterisation: male & female

- To understand indications for catheterisation
- To understand hazards of catheterisation
- To understand the principles of ANTT (Aseptic non touch technique)
- To be able to carry out catheterisation safely and within Trust guidelines

Cannulation

- To understand reasons for undertaking cannulation
- To understand hazards of cannulation including needle stick guidelines
- To understand the principles of ANTT (Aseptic non touch technique) and management of a cannula
- To be able to carry out cannulation safely and within Trust guidelines

Preparation of an intravenous (IV) fluid line

- To understand the principles of ANTT (Aseptic non touch technique) and its application in relation to preparing intravenous fluids.
- To be able to run through an IV fluid line without contamination and within Trust guidelines.

Venepuncture

- To understand reasons for undertaking venepuncture
- To understand hazards of venepuncture including needle stick guidelines
- To understand the principles of ANTT (Aseptic non touch technique)
- To be able to carry out venepuncture safely and within Trust guidelines

Intramuscular injection sub-cutaneous injection

- To understand reasons for different routes of administration
- To understand hazards of injection including needle stick guidelines

- To understand the principles of ANTT (Aseptic non touch technique)
- To be able to carry out IM and S/C injection safely and within Trust guidelines
- To be able to draw up insulin using a sliding scale