MEDICINE

Bachelor of Medicine
and Bachelor of Surgery (MBBS)

Clinical Module Specification Paediatrics Year 4 2024-25

University of Central Lancashire
UCLan

Clinical Module Specification – Paediatrics

Contents:

General Information

A nine-week clinical module in Year 4 focussing on normal development and common acute and long term conditions of childhood. This builds on earlier learning from the paediatric elements of the Year 3 General Practice module.

The table below shows how this clinical module sits within Years 3 and 4. There are eight placement weeks plus an additional campus-based Teaching Week embedded within each clinical module so the total duration is 9 weeks overall.

<table>
<tr><th colspan="4">YEAR 3</th></tr>
<tr><th>General Medicine</th><th>Care and Community</th><th>Surgery</th><th>General Practice</th></tr>
<tr><td rowspan="3">8 weeks + 1 Teaching Week (Week 1)

Cardiology
Respiratory Medicine
Gastroenterology
Renal Medicine
Haematology</td><td>4 weeks

Health and Society</td><td rowspan="3">8 weeks + 1 Teaching Week (Week 2)

Upper and lower GI Surgery
Breast Surgery
Vascular Surgery
Anaesthetics
Ophthalmology
Ear, Nose and Throat</td><td rowspan="3">8 weeks + 1 Teaching Week (Week 3)

General Practice</td></tr>
<tr><td>1 Teaching Week</td></tr>
<tr><td>4 weeks

Acute and Emergency Care</td></tr>
<tr><th colspan="4">YEAR 4</th></tr>
<tr><th>Speciality Medicine and Surgery</th><th>Mind and Body</th><th>Women’s Health and Urology</th><th>Paediatrics</th></tr>
<tr><td rowspan="3">8 weeks plus 1 Teaching Week

Musculoskeletal
Medicine for the Older Person
Endocrinology
Neurology
Dermatology</td><td>4 weeks

Cancer Care and End of Life</td><td rowspan="3">8 weeks plus 1 Teaching Week

Women’s Health
Urology</td><td rowspan="3">8 weeks plus 1 Teaching Week

Paediatrics</td></tr>
<tr><td>1 Teaching Week</td></tr>
<tr><td>4 weeks

Mental Health</td></tr>
</table>

Students will attend campus for one day each week, plus a Teaching Week which for Speciality Medicine and Surgery is the first week in the nine-week module. There is also an additional scheduled campus teaching day towards the end of the module when the whole Year 4 cohort will be scheduled to attend.

Clinical Module Induction

In the first week of the placement, a half-day Clinical Module Induction should be provided. This may be timetabled at the convenience of the provider, although it is ideal if it can be scheduled for Day 1 or as soon as possible thereafter. This will be in addition to the usual 6 sessions of placement activity for that week (see next section). This should include:

- Orientation to the relevant clinical areas
- Introduction to key personnel
- Expectations for the clinical module
- Discussion of any timetable / supervision queries
- Any relevant local policies or procedures

Placement Activities

On placement, the students' weekly timetable will be as follows:

Clinical Placement Activity (CPA)	**Campus Day**	**Self-directed learning (SDL)**
6 half-day sessions, timetabled flexibly across the 7-day week (excluding Campus Days and Teaching Weeks).	Wednesday (Burnley and Westlakes campus)	2 half-day sessions, timetabled flexibly across the 7-day week (excluding Campus Days and Teaching Week).

The equivalent of six half days of clinical placement activity (CPA) should be provided each week (a half day being approximately 3.5 hours). If applicable, this should include delivery of any Enhanced Placement Activity which has been agreed between UCLan and the provider. CPA may be timetabled flexibly at the discretion of the placement provider across any day of the seven-day week excluding Campus Days and Teaching Weeks. Evenings may also be utilised. Long shifts the equivalent of up to 3 half-day sessions (approximately 12 hours) are acceptable, as this will mirror practice in Foundation Year 1. At least one weekend day should be left free of CPA each week.
Placements should not be timetabled for Bank Holidays. If the placement provider is able to offer an alternative placement day that week then they may do so, but this is at the discretion of the provider.

The student should be based in appropriate medical settings as their main base for the eight weeks, with sufficient opportunities available to them to enable them to complete their learning outcomes.

Placement activities are at the discretion of the placement provider but must be appropriate to allow completion of the learning outcomes. Suggested activities may include:

- Access to an acute assessment unit
- Access to Paediatric wards for attendance at ward rounds and clerking patients
- Paediatric outpatient clinics in secondary care or community settings
- NICU
- Neonatal unit
- Procedure lists such as theatre or radiology appropriate to the placement
- Multidisciplinary team meetings

- Child development centre
- Bedside teaching of clinical examination skills

Learning outcomes

Learning outcomes are clearly defined for the placement and are classified according to the three themes of the MBBS programme, namely:

- Medicine in Clinical Practice
- Medical Skills and Quality Care
- Evidence Informed Practice of Medicine

The learning outcomes are supported by the **Core Presentations and Core Clinical Conditions Lists**, and these must be taken in conjunction as a number of the learning outcomes make direct reference to these lists. Students should become familiar with all of these regarding their symptoms, differential diagnosis, investigation and management, either through formal teaching, placement activities, or via self-study. These lists can be found later in this Specification, in the Clinical Module Guide and on BlackBoard space UM4010. Not all topics will be covered in detail in formal teaching, and the case mix seen on placement will vary from student to student. Students should therefore ensure that their studies are comprehensive, as all conditions may be tested in the assessments. During the Clinical Module students must log their own progress against the Core Clinical Presentations and Conditions.

Supervision

Each student should have a named Educational Supervisor who should meet with the student as per the requirements of the Standards for Clinical Placements. Clear arrangements should be made for absence of the supervisor. Each student must meet with their supervisor in the final days of their placement to complete their Final Meeting Placement Form which forms part of summative assessment. This is available via the student's e-portfolio.

Campus-based teaching

Campus Days and Teaching Week during this block will include a wide range of teaching and is detailed in the table at the end of this document.

Handbooks and Guides

The following handbooks and guides are available to support this module:

- Year 4 Course Handbook
- Clinical Module Guide – specific to this nine-week block
- Educational Supervisor Guidance Notes
- Phase 2 Work-place-Based Assessment Guides - for students and assessors

Appendix 1 - Summary of campus-based teaching

Case-Based Learning	
Paediatrics 1	The unwell neonate – including meningitis and urinary tract infection
Paediatrics 2	The older baby / toddler with shortness of breath
Paediatrics 3	The child with bleeding and bruising – childhood leukaemia and thrombocytopenia
Paediatrics 4	The older child with abdominal pain

Expert Half Days	
Paediatrics 1	Paediatric history and examination
Paediatrics 2	Neonatal medicine, growth and feeding
Paediatrics 3	Recognition of the seriously unwell child
Paediatrics 4	Neurodevelopmental and musculoskeletal paediatrics
Paediatrics 5	Paediatric haematology and oncology
Paediatrics 6	Common childhood illnesses; allergy; asthma; eczema
Paediatrics 7	Paediatric gastroenterology and renal medicine
Paediatrics 8	Growth, puberty and endocrine problems in children
Note – an additional Expert Half Day is delivered in Year 3 as part of the General Practice module. This covers the essential components of paediatric history and examination and the assessment of the unwell child	

Additional resources	
Essentials of Paediatrics	This is a self-study resource provided in Year 3 as part of the General Practice module and available for revision in Year 4. It covers child development and vaccination
Genomics	This is a self-study resource revising family trees, genetic terminology and modes of inheritance
Paediatric Neurology	This is a self-study resource covering common conditions in Paediatric Neurology

Additional Teaching
Clinical skills
Communication skills
Prescribing workshop
Professionalism / portfolio teaching
Inter-Professional Education
Social Sciences Seminar

Appendix 2 - Learning Outcomes

Paediatrics – Year 4

For all Learning Outcomes, particular reference should be made to the Core Clinical Presentations and Core Clinical Conditions Lists.
Individual teaching sessions such as Case-Based Learning and Expert Half days will also have their own set of detailed Learning Outcomes for the session.

Medicine in Clinical Practice (MICP)	Code
Describe the physiological adaptations to the infant which take place at the time of birth	PD-1
Describe the normal development of the infant and child from birth through to puberty	PD-2
Demonstrate how development is assessed, recognising when this falls outside of expected milestones and how this should be addressed	PD-3
Consider the pathological impact of prematurity on key body systems	PD-4
Appreciate the effect that illness may have on normal growth and development in childhood and adolescence	PD-5
Understand the role that genetics and chromosomal abnormalities may have on normal development; apply the common patterns of Mendelian and chromosomal inheritance	PD-6
Recognise the clinical presentation of common conditions presenting at birth, during infancy, childhood and adolescence, utilising basic sciences knowledge to relate the presentation to the underlying pathological mechanisms	PD-7
Select and correctly interpret appropriate investigations of common conditions relevant to the placement, considering potential risks, benefits, diagnostic validity and economics of such investigations	PD-8
Using clinical reasoning, synthesise information gathered from history, examination and investigations to formulate an appropriate differential diagnosis list and problem list for the paediatric patient	PD-9
Formulate an appropriate management plan for the paediatric patient	PD-10

Describe and safely prescribe appropriate pharmacological and non-pharmacological treatments for infants and children, considering mechanism of action, side effects, interactions and economics; also consider patient factors including those affecting concordance and compliance	PD-11
Recognise the role that factors such as nutrition, education and exercise have on child health and development; describe the requirements for normal development	PD-12
Describe the roles of the different members of the multidisciplinary team in the care of the paediatric patient; consider in particular the role of the health visitor and the community paediatrician	PD-13
Understand the role of NICU in providing care for sick children	PD-14
Identify signs of abuse, neglect or non-accidental injury, understand the psychosocial, ethical and legal implications of this, and what actions should be taken to safeguard children	PD-15
Understand the provision of NHS services in primary, secondary and tertiary care settings for the treatment of acute and chronic disease relevant to the placement, considering principles of health economics, equity, and sustainable healthcare	PD-16

Medical Skills and Quality Care (MSQC)	Code
Adapt and apply communication skills in order to communicate effectively, openly and honestly with paediatric patients, their relatives, carers or other advocates, and with colleagues, applying confidentiality appropriately	PD-17
Take a developmental history from a child or from their parents or carers	PD-18
Perform a competent and detailed physical examination of the neonate, infant, child and adolescent; utilise basic sciences knowledge to interpret the findings of this	PD-19
Perform a developmental assessment of a child with an understanding of normal developmental milestones and recognition of whether these are being met	PD-20
Plot and interpret growth charts	PD-21

Competently perform and interpret those diagnostic and therapeutic procedures listed in Outcomes for Graduates Appendix 1 relevant to the paediatric patient	PD-22
Measure, record and interpret physiological parameters relating to the paediatric patient such as blood pressure, pulse, peak flow and oxygen saturation, relating this to basic sciences knowledge of homeostatic mechanisms	PD-23
Provide immediate care for a paediatric emergency, in particular effectively institute basic life support	PD-24
Apply and demonstrate appropriate ethical and professional behaviours and responsibilities with respect to paediatric patients, within a clinical governance framework	PD-25
Apply and demonstrate appropriate ethical and professional behaviours and responsibilities with respect to one's own health, learning and behaviours, recognising and addressing limitations	PD-39

Evidence Informed Practice of Medicine (EIPOM)	Code
Outline the epidemiology of common childhood diseases and how this data may be utilised to improve health of the individual and the community, evaluating the clinical and cost effectiveness of any interventions	PD-26
Describe the UK immunisation schedule for children, the evidence for its use, and the difficulties regarding ensuring uptake of immunisations	PD-27
Describe the principles behind the neonatal screening programme including hip, metabolic and genetic disease	PD-28
Describe the Child Health Surveillance Programme	PD-29
Recognise the role of the family unit in the physical, mental and psychological development of the child from birth through to adolescence	PD-30
Outline the psychosocial effects of disease on the child and their family	PD-31

Recognise the challenges of performing research in children, considering the importance of such work to ensure evidence-based practice, but the ethical difficulties of such work in particular younger children	PD-32
Recognise the role that lifestyle factors such as diet and exercise may have on child development and childhood illness, and how patients may be supported and motivated in behaviour change	PD-33
Define how the wider determinants of health, occupational, environmental and cultural factors may influence child development and illness and its outcomes and the inequalities in health outcomes that may result	PD-34
Explain how national health-related policy regarding issues such as diet, smoking or alcohol may impact directly or indirectly on child health	PD-35
Describe legislation surrounding safeguarding and protection of children and how this impacts on the practice of professionals	PD-36
Understand the role of national bodies such as the National Institute for Clinical Excellence and how guidance from bodies such as these should be utilised in the management of paediatric patients	PD-37
Find, critically appraise and apply evidence gained from current literature to the management of common paediatric conditions; utilise research evidence in communications with patients to reached shared decisions	PD-38

Appendix 3 - Core Clinical Presentations and Conditions Lists

Paediatrics – Year 4

These Core Clinical Presentations and Conditions Lists have been drawn up to ensure all relevant topics within the speciality are covered and are aligned to the Curriculum Content Map for the Medical Licensing Assessment.

Students should ensure they are conversant with the signs, symptoms, differential diagnosis (which may include conditions not on this list), investigation and management of all items, including clinical imaging where applicable. They should also be familiar with other relevant patient-related issues such as social and population health, research methods, medical ethics and law. This may be achieved via attendance on placement, at campus teaching, or through self-study. Not all items will be formally taught; some may rely on placement exposure which will of course vary from student to student. Students are responsible for monitoring their own progress against all the items on the lists.

All Presentations and Conditions may be included in the assessments.
Note that there may be overlap with other Clinical Modules.

CORE CLINICAL PRESENTATIONS	CORE CLINICAL CONDITIONS
Abdominal mass	Achondroplasia
Abdominal pain	Acute kidney injury
Acutely ill infant	Anaemia
Acute kidney injury	Anaphylaxis
Allergies	Appendicitis
Behavioural difficulties	Asthma
Bruising	Attention deficit hyperactivity disorder
Child abuse	Autism spectrum disorder
Congenital abnormalities	Atopic dermatitis and eczema
Decreased level of consciousness	Biliary atresia
Developmental delay	Bell's palsy
Dysmorphic child	Bronchiolitis
Dysuria	Candidiasis
Early / delayed puberty	Cellulitis
Enuresis	Cerebral palsy / hypoxic-ischaemic encephalopathy
Failure to thrive	Chicken pox
Family history of possible genetic disorder	Chronic kidney disease
Fever	Cleft lip / palate
Haematuria	Coeliac disease
Headache	Congenital heart disease
Gastrointestinal symptoms	Conjunctivitis
Immunisation request	Constipation
Inhaled / ingested foreign body	Contact dermatitis
Jaundice	Croup
Joint pain / swelling	Cutaneous warts
Learning disability	Cystic fibrosis

Limp	Developmental delay
Loss of red reflex	Diabetic ketoacidosis
Neonatal or cot death	Diabetes mellitus types 1 and 2
Oedema	Disseminated intravascular coagulation
Polydipsia	Epididymitis / orchitis
Poor feeding	Epiglottitis
Prematurity	Epilepsy
Rash – acute and chronic	Febrile convulsions
Respiratory symptoms	Gastro-oesophageal reflux disease
Seizures	Genetic conditions (Klinefelter, Marfan, Angelman and Fragile X syndromes)
Small stature	Glomerulonephritis
Squint	Hernias
Stridor	Herpes simplex virus
Testicular pain	Hypoglycaemia
Trauma	Hypopituitarism
Urinary incontinence	Hypothyroidism
Urinary symptoms	Idiopathic arthritis
Vomiting	IgA vasculitis (formerly Henoch-Schonlein purpura)
Weight loss	Inflammatory bowel disease
	Impetigo
	Influenza
	Intestinal obstruction and ileus
	Intussusception
	Juvenile chronic arthritis
	Kawasaki disease
	Lactose intolerance
	Leukaemia
	Lower respiratory tract infection
	Lymphoma
	Malnutrition
	Measles
	Meningitis
	Mesenteric adenitis
	Metabolic disorders
	Migraine
	Mumps
	Muscular dystrophies
	Necrotising enterocolitis
	Non-accidental injury
	Orbital / periorbital cellulitis
	Osteomalacia
	Otitis media
	Pancytopenia
	Peptic ulcer disease and gastritis
	Peripheral nerve injuries/palsies
	Pituitary tumours
	Pyloric stenosis
	Raised intracranial pressure
	Reactive arthritis

	Retinoblastoma
	Rhesus haemolytic disease
	Routine immunisation
	Rubella
	Septic arthritis
	Sickle cell disease
	Spina bifida
	Surfactant deficient lung disease
	Testicular torsion
	Thyrotoxicosis
	Tonsillitis
	Toxic shock syndrome
	Trisomy 13, 18 and 21
	Upper respiratory tract infection
	Urinary tract infection
	Urticaria
	Viral exanthema
	Viral gastroenteritis
	Volvulus
	Wilm's tumour

Appendix 4 - Standards for Clinical Placements – Years 3 & 4

Clinical placement standards must be provided to all supervisors / firms taking students on placement and will form the basis of the quality assurance processes for those attachments.

1. Induction

- Staff in clinical area aware in advance of student's name and impending arrival
- Introduction to the team and orientation to the clinical area including any relevant health and safety procedures
- Particular focus on introduction to key teaching personnel and provision of relevant contact details
- Provision of timetable with venues, dates and times
- Timetable discussed in detail with the student
- Access to IT resources as needed for the placement including laboratory and imaging access if required

2. Supervision

- Each student must have a named, accessible supervisor and deputy.
- Regular meetings should take place between student and supervisor to ensure learning needs are being met and objectives revised. For a placement of 3 weeks or longer, at minimum meetings should take place between student and supervisor at start, mid-point and end of placement. Meetings should occur at minimum every 2 weeks. If an individual acts as supervisor for multiple students on the same placement, then the final meeting must be on a 1:1 basis but other meetings may be group meetings at the discretion of the supervisor up to a maximum group size of four students.
- Responsibility for arrangement of meetings lies with the student but the supervisor must ensure they are available.
- Relevant documents such as placement forms must be completed by the supervisor by the end of the placement
- Clear and appropriate arrangements must be made for the student in the event of absence of the supervisor and communicated to all parties.
- Concerns regarding student performance or attendance (95% minimum) must be raised in a timely manner and mechanisms must be in place to ensure attendance is noted.

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3. Teaching

- An educational climate should be fostered which encourages learning and student questions.
- 6 sessions of clinical placement activity should be provided each week relevant to the learning outcomes of the placement
- Clinics and lists should allow sufficient time for interaction between student, clinician and patient, ideally allowing students the opportunity students to interview patients independently and present their findings
- Teaching ward rounds should be included in the programme
- Opportunities for informal teaching should be taken wherever possible

4. Access to patients

- Students should have access to a range of patients relevant to the learning objectives of the placement
- Students should have sufficient opportunities to clerk, examine, present and discuss patients
- Support should be provided from ward staff to facilitate patient access

5. Other Learning Opportunities

- Students should have the opportunity to interact with multidisciplinary teams in the clinical setting
- Additional learning opportunities should be available to facilitate learning around the Core Clinical Presentations and Conditions Lists and allow achievement of the placement learning objectives

6. Feedback

- Detailed constructive feedback should be provided, both verbal and written, on all aspects of the student's performance
- Feedback should be incorporated into the relevant placement forms
- Opinions should be sought when necessary from other team members with whom the student has had contact