The COLLEGE of PODIATRY

Paediatric Podiatry Clinical Framework

Podopaediatrics Special Advisory Group

Contents

Paediatric Podiatry Clinical Framework

Introduction

Podiatrists have a wide range of skills to successfully manage children experiencing foot and lower limb conditions. Children make up approximately ten percent of podiatry's caseload. It is relatively common for children to experience podiatry related conditions, one in four children experience musculoskeletal pain, one in a thousand children have arthritis, over five percent are born with a foot problem, over ten percent of children have conditions affecting movement, five percent of children walk on their toes and foot pain is the most common of all musculoskeletal problems in the teenage population.

The Paediatric Podiatry Special Advisory Group (PSAG) consists of podiatrists holding clinical and academic posts which enable them to develop and lead practice within paediatric podiatry. The PSAG identify paediatric podiatry as a specialist area and are committed to developing clinical standards to the benefit of the profession and patient care. To fulfil this aim, the PSAG have collectively drawn upon their clinical experiences forming a framework to share best practice at a national level.

Recommendations

Podiatrists can play a large role in the improvement of function and quality of life in paediatric gait and lower limb conditions, because of this working with children can be rewarding. It can also provide very different challenges to the adult population. It is recommended as minimum entry requirements into paediatric podiatry that podiatrists have an appropriate DBS check and have successfully completed training in safeguarding children, paediatric cardiopulmonary resuscitation and anaphylaxis.

To gain the principles of assessment, diagnosis and intervention, the Paediatric Podiatry Special Advisory Group (PSAG) recommends that mentorship and clinical supervision is accessed when practicing in paediatric podiatry.

PSAG are dedicated to offering support to podiatrists involved in the treatment of children, for the benefit of the children. PSAG organise an annual national conference supporting the content of this clinical framework and can further help in finding mentors, clinical supervisors and signposting to post graduate training.

For professional connections and support PSAG use social media PSAG manage a closed Facebook Group titled 'Podopaediatrics Special Advisory Group' for podiatrists and a Twitter account @podopaeds, both having national and international leaders in paediatric podiatry.

The Framework for Development in Paediatric Podiatry

The breadth of knowledge required to be an experienced practitioner in paediatric podiatry requires a progressive learning journey. It can take many years to experience the variety of presentations that can present.

This document proposes a framework that incorporates learning and development milestones for the podiatrist. The milestones are based on levels of supervision, mentorship, intervention, accountability and leadership.

In parallel to the milestones are study areas pertinent to paediatric podiatry. The depth of which the study areas are explored is dependent on the milestone. The framework and study areas cannot ensure clinical competency, therefore governance is required at local level, that being the place or organisation within which a podiatrist works.

The items within the milestones and the study areas are not exhaustive. The framework and study areas can be adjusted to suit working practice. This document is therefore a tool to help facilitate and progress paediatric podiatry at local level

Learning and Development Milestones

Milestone 1

- The person meets training requirements at local level, and is able to identify the fundamental differences in care between adults and children.
- The person can effectively communicate with children, parents/ carers and associated professionals to gather clinical information.
- The person can pass on enquiries and referrals to practitioners with appropriate experience to assess clinical need.
- The person accesses advice, supervision and or mentorship as required.

NB. *This level can include administrators, podiatry assistants and podiatrists not involved in the assessment of children.*

Milestone 2

- The podiatrist demonstrates a good clinical understanding of the differences between adults and children.
- The podiatrist can explain podiatry in the context of the paediatric multidisciplinary team at local level.
- The podiatrist can effectively communicate with children, parents/ carers and associated professionals to gather or deliver clinical information (including serious concern) following a standardised protocol
- Assessments follow standard protocols and occur in an environment of direct supervision i.e. the supervisor is at the same location.
- The podiatrist should be proficient in conducting a baseline assessment from the hip distally to enable the assessment of common lower limb paediatric conditions. Assessment skills should take on a holistic approach and include history taking, pGALS, pREMS, musculoskeletal, gait and neurological assessment.
- Common paediatric conditions assessed include: foot posture concerns (non-pathological, pathological, symptomatic, asymptomatic, rigid and flexible), lesser digital deformity (e.g. congenital: polydactyly, macrodactyly, syndactyly), metatarsus adductus, juvenile HAV, tailor's

bunions, accessory bones, frontal plane concerns (e.g. tibial varum, genu valgum/ varum), transverse plane concerns (e.g. tibial torsion, genicular position, femoral torsion, femoral position) and soft tissue imbalance.

- The podiatrist is able to refer on to appropriate professionals and or seek advice when necessary and act positively on the guidance of a mentor and or supervisor.

Milestone 3

- The podiatrist demonstrates a developed clinical understanding of the differences between adults and children.
- The podiatrist has developed experience working within the paediatric multidisciplinary team at local level.
- The podiatrist can effectively communicate with children, parents/ carers and associated professionals to gather or deliver clinical information (including serious concern) following a standardised protocol set at local level.
- Clinical cases are triaged and accepted as they are considered of increased complexity e.g. toe walking, out-toe walking, in-toe walking, juvenile idiopathic arthritis, tarsal coalition, hypermobility disorders and related conditions, neurogenic conditions, genetic disorders affecting musculoskeletal structure and function.
- Assessments follow standard protocols and occur in an environment of indirect supervision
- The podiatrist is able to refer on to appropriate professionals and or seek advice when necessary and act positively on the guidance of a mentor and or supervisor.

Milestone 4

- Works with indirect supervision
- Can assess and intervene without the guidance of a standardised protocols
- Contributes to triage and the production of clinical guidelines, advice and standardised assessment protocols for the paediatric podiatry patient.
- Works out of scope of standardised care pathways for paediatric conditions i.e. clinical presentations that do not have a formal diagnosis and or are a collection of clinical presentations of unknown cause.
- The podiatrist is able to refer on to appropriate professionals and or seek advice when necessary and act positively on the guidance of a mentor and or supervisor.
- Can suggest first line diagnostic investigations (e.g. imaging) appropriate for clinical case with direct or indirect supervision

- Provides clinical support to colleagues in the assessment of the paediatric patient.

Milestone 5

- Works independent of supervision e.g. holds a clinical lead post
- Establishes networks and relationships with the multidisciplinary team.
- Is accountable for producing triage guidelines, referral criteria, clinical guidelines, advice and standardised assessment protocols for the paediatric podiatry patient.
- Works out of scope of standardised care pathways of for paediatric conditions i.e. clinical presentations that do not have a formal diagnosis and or are a collection of clinical presentations of unknown cause.
- Seeks supervision when working out of care pathways of for paediatric conditions.
- Refers on to appropriate professionals and or seek advice (which may occur external to the workplace) when necessary and act positively on the guidance of the multi-disciplinary team.
- Can request advanced diagnostic investigations (e.g. bloods and imaging) appropriate for clinical case.
- Provides mentorship and supervision to colleagues.

Milestone 6

- Promotes the development of podiatrists and profession e.g. presenting at conferences.
- Demonstrates leadership
- Contributes towards the planning and management of a paediatric service
- Contributes towards national agendum in paediatric podiatry e.g. Paediatric Podiatry Special Advisory Group, provides expert opinion.
- Is research engaged and or research active e.g. involvement in clinical research, publishing work.

Study Areas

1. Principles of Paediatric Podiatry

Paediatric Podiatry and the Multi-Disciplinary Team

Practicing in paediatrics requires an understanding of the overlap of clinical presentations and in turn the services that may be involved in a child's care. To ensure safe and effective care is provided, paediatric podiatrists are required to have a sound understanding of the multi-disciplinary team along with the roles and responsibilities of these. An understanding of what dialogue is occurring in terms of child health and paediatric podiatry issues locally, nationally and internationally is also required, depending on the topic area.

Examples of learning and scope of learning could be evidenced in the following ways:

- Identifying key stakeholders within the working environment and forming professional networks e.g. in primary care services, secondary care services, charities, support groups, social media.
- Identifying practitioners who lead in the specialism and or those who have developed an interest in a particular area and forming links to enable clinical supervision.
- Demonstrating knowledge of local care pathways and referral routes
- Asking key questions to supplement and support a referral to a team.
- Adopting clinical intervention strategies that are congruent with other services e.g. health coaching, task and activity orientated care, goal setting, pacing, orthotic provision.
- Identifying and accessing appropriate clinical supervisors and or mentors
- Shadowing clinics of colleagues and members of the multidisciplinary team.
- Developing working relationships e.g. contributing to meetings, seeking feedback
- Providing feedback letters to referrers and or General Practitioners.
- Taking part in case conferences involving the multidisciplinary team.
- Signposting patients to relevant services, support groups or charities.
- Presenting case studies demonstrating the interrelationship between podiatric pathology and other areas of care e.g. juvenile idiopathic arthritis and uveitis, Di-George syndrome and the effects on organs and musculoskeletal system, Marfan syndrome and cardiac risks, the relationship between cognitive and behavioural development and movement patterns.
- Drafting referral guidelines, clinical care pathways and service information leaflets
- Identifying appropriate paediatric outcome measures for clinical setting

- Understanding the importance of relevant publications e.g.:
    - Children's Act 1989
    - Family Law Reform Act 1969
    - NICE Guidelines
    - World Health Organisation
        - International Classification of Functioning, Disability and Health (ICF)
        - Growth Charts

Gathering Clinical Information in a Paediatric Consultation

One key difference between adults and children's care is reflected in history taking. Additional information is typically required and this is dependent on the child's age and presenting concern. This may include pregnancy, conception issues, maternal health, birth details, genetic history, developmental history, immunisation history, growth, nutrition, paediatric specific indicators of concern, family structure, schooling, ability to perform tasks both in the upper and lower limb.

Additional skills and knowledge is also required in acquiring the information from parents, carers, the child and other family members. This includes consent, providing an appropriate assessment environment, adjusting communication requirements appropriately and being mindful of safeguarding issues.

Examples of learning and scope could be evidenced in the following ways:

- Referring to and reflecting on the content in core paediatric texts on assessment and history taking.
- Explaining the importance in taking a medical, pregnancy, birth, post-natal and family history. This could be reflected in the advice given to referrers or it could be demonstrated in case studies or clinical records.
- Explaining the influences on a child's development e.g. teratogens, medicines, nutrition, APGAR score, assisted delivery, delivery position, term, infections and illustrating learning with clinical cases (personal experience or published).
- Demonstrating an understanding of timings of development e.g. motor milestones, growth patterns, critical periods of development and ossification and relating this to possible or actual clinical scenarios.
- Demonstrating an understanding of how environment affects development by offering situations which could influence this e.g. encouraging play, nursery attendance, adjustments within education and schooling, ensuring appropriate living accommodation.

- Explaining the importance of growth and nutrition, how this is assessed and measured according to age and what situations would prompt clinical concern e.g. developmental delay, growth trajectories, functional impairment.
- Understanding how age can have pharmacological implications e.g. dosages and licensing and relating this to podiatric interventions and or advice.
- Having a basic understanding of inheritance and genetic disorders and how this has clinical relevance e.g. anticipation, de novo mutation, non-Mendelian, aneuploidy, single gene disorders.
- Understanding of and evidence of gaining consent in relation to the child e.g. general consent, Caldicott guardian and Gillick competence.

2. Paediatric Red Flags and Higher Level Intervention

Assessing and treating children carries great responsibility. Children can be considered a risk group to treat due to communication barriers and the changing nature of child development. This means that what is assessed as normal one day may be irregular later. Paediatric presentations are commonly subtle so what can appear benign on first appearance could be a serious concern. The rule in paediatrics is to first think of serious concern and then work back from this point.

It is important to acknowledge that serious conditions can masquerade as benign lower limb musculoskeletal presentations e.g. ‘growing pains’, leg length inequality, in-toeing and foot posture. Genetic anomalies, congenital malformation and movement disorders may also present in the lower limb and have a relationship with other systems for example the heart, kidneys, central or peripheral nervous system or endocrine system. Differences in cell division, gene expression, vasculature and homeostasis also present different risks and considerations for example: radiation exposure, infection, bone stress, hydration, fracture, temperature regulation and tumours.

Paediatric podiatrists are required to have vigilance for serious clinical concern as they may be the first to see the child. Podiatry referrals can also commonly get presentations presenting atypically, for example a painless Perthes. A sound understanding of when, how and when to refer on is essential for the safe care of the paediatric patient.

Examples of learning and scope could be evidenced in the following ways:

- Using common screening protocols for serious concern e.g. pGALS, rheumatology (articular and non-articular), orthopaedic, oncology red flags, Peterson growing pains criteria and demonstrating an understanding of why and what is being screened.
- Making decisions at triage or assessment e.g. referring on due to regression, muscle weakness, diurnal presentations, expediting referral due to limp, triaging to senior practitioner due to complexity.

- To be able to identify areas of clinical concern through clinical reasoning (which may not have been seen or experienced by the clinician before). Examples could be osteochondritis, juvenile idiopathic arthritis, osteogenesis imperfecta, osteochondral defect, epiphyseal problems, fracture, accessory bone problems, rigid flat foot, vertical talus, Blount's, Perthes, vitamin D deficiency, safeguarding.
- Explaining Salter Harris fractures and Ottawa ankle rules.
- Successfully completing safeguarding children and assimilating the information to clinical practice.
- Demonstrating an understanding of what would prompt higher level intervention and the importance of this; how red flags present in children and what would prompt a referral being expedited or referred on for second opinion (to include identification of appropriate timelines).
- Conducting a bone, joint and soft tissue assessment of the lower limb, describing normal joint range and the clinical features of the joint e.g. observations, temperature, swelling end range feel and, what would constitute an unusual presentation e.g. history, location, pain on rest, early morning stiffness and appearances that lend to higher level intervention.
- Conducting a neurological assessment including developmental history, age appropriate motor skills, muscle strength, tone, bulk, sensory, reflexes, gait and co-ordination.
- Demonstrating the necessary clinical tests or history when anomalies present e.g. severe cavus, severe pes planus foot, a sudden change in foot posture and or angle of foot, a unilateral foot presentation.
- Making onward referral following a clinical concern e.g. that did not meet normal development criteria or demonstrated an unusual symptom pattern.
- Seeking clinical supervision on challenging cases
- Detailing what clinical indicators would prompt concern and how they differ to adults referencing this to clinical cases (published or personal)
- Articulating how communication barriers in a paediatric assessment can pose a risk and hinder clinical reasoning and explaining how these can be mitigated.
- Demonstrating assessment of leg length difference weight bearing and non-weight bearing; differentiating functional from structural and the level at which it is occurring and what could be causing it, including serious concerns.
- Reading and reflecting on relevant articles on at risk pathologies e.g. symptoms of growing pains, bone lesions, juvenile idiopathic arthritis, Perthes, developmental dip dysplasia, slipped upper femoral epiphysis, leukaemia, cerebral palsy, neurological and neurogenic disorders.
- Making reference to government and local publications e.g. on growth and nutrition, child protection.

3. Neurology and Gait Assessment

Children take a number of years to develop neural maturity therefore the clinical presentation is continually changing. In parallel, there can be more serious events that can masquerade as normal development and or it may take time for neurological concerns to become apparent e.g. as genes fully express. Gait assessment is a key feature of neurological and biomechanical assessment. The challenges in assessment can be identifying whether a presentation is part of normal development or at what level a gait disturbance is occurring. This is what makes neurological assessment an important factor in paediatric podiatry. Podiatrists should be able to effectively conduct a holistic history, assessment and provide appropriate intervention. Paediatric podiatrists should be able to raise concerns and request higher-level intervention when required in relation to a neurological concern.

Examples of learning and scope could be evidenced in the following ways:

- Identifying an appropriate baseline neurological assessment and what would prompt advance tests.
- Demonstrating understanding through clinical assessment of the differences between normal and abnormal findings in a neurological assessment e.g.
    - History taking e.g. perinatal, development, behaviours, execution of upper and lower limb tasks, environment, safeguarding
    - Pain assessment e.g. pain syndromes, allodynia, pain scales, looking for facial expression to indicate pain, enquiring about a child who has stopped doing tasks, refusing to take part or self-selecting out of activities.
    - Foot posture and structural e.g. cavus foot, contractures, growth asymmetries
    - Tone and bulk e.g. spasticity, flaccidity, clonus, lead pipe, pseudohypertrophy.
    - Reflexes, e.g. lower limb, upper limb, hand saving, the amount of force necessary to obtain a reflex contraction; the velocity, strength, duration of a reflex contraction, the relaxation of reflex contraction and the trajectory of the limb and the response of other muscles not tested
    - Sensory e.g. dermatomes, light touch, vibration and temperature, sensory defensiveness
    - Strength e.g. myotomes, power, conditioning, heel and toe walking, Gower's from a lying position, bridging, Trendelenburg sign, scapular winging, breathing issues, eye complaints, determining cause as use/ disuse or a neurological reason.
    - Vascular

  - Proprioception and balance e.g. Romberg's, single leg star excursion, vestibular concerns
  - Co-ordination e.g. cerebellar tests, Fog test/ mirror movements, performing age appropriate tasks, battery of motor tests (upper limb coordination, bilateral coordination, combination of standing, jumping and hopping tasks), skill of performing a motor skill, hand-saving when falling.
  - Gait e.g. age appropriate milestones, gait cycle, functional reasons for gait patterns, patterns of pathological concern, Trendelenburg gait, causes of paediatric limp, timing, symmetry, angulations, coordination, direction, attention, strength, ability on surfaces, turning ability.
  - Neuro-cutaneous markers e.g. café au lait spots, shagreen patches, hair growth, skin tags, telangiectasia, acanthosis.
  - Facial signs e.g. dysmorphic features, palsy, exophthalmos, drooling, dental misalignment
  - Cognitive e.g. counting, reasoning, following instructions, motor planning, responding to visual stimulus in the environment, coping abilities.
  - Able to differentiate between upper and lower motor neurone assessment findings.

- Identifying the key clinical features of common neurological disorders e.g. cerebral palsy, toe walking, spina bifida, muscular dystrophy (and variants), spinal dysraphisms, Charcot Marie Tooth, developmental coordination disorder, sensory processing disorder and appreciating the prevalence.
- Articulating what would prompt concern for onward referral (including risk assessment and appropriate timescales)
- Demonstrating an understanding of referred pain patterns, neuro-dynamic testing and how this could relate to paediatric specific conditions.
- Explaining how safeguarding issues can affect neural development and how the multi-disciplinary team would be involved e.g. critical periods, plasticity.
- Demonstrating an understanding of how neurological challenges impact on activities and participation (to include inclusion at school).
- Demonstrating an understanding of computerised gait analysis for purposes of research and clinical assessment e.g.
    - In-shoe pressure systems e.g. pedar, Fscan.
    - Force Plates
    - Motion capture technology e.g. Vicon
    - Temporospatial gait analysis e.g. Gaitrite

4. Orthopaedics

The podiatrist should be able to effectively conduct a safe history and assessment in order to raise concerns and request higher-level intervention when required in relation to orthopaedics concerns.

Examples of learning and scope could be evidenced in the following ways:

- Demonstrating an understanding of how orthopaedic conditions present in children and what would indicate concern. Can explain the clinical picture which may present with the following:
    - Flat feet: age variation and implications on assessment and intervention of symptomatic and asymptomatic; pathological and non-pathological; rigid and non-rigid e.g. tarsal coalitions and the types, vertical talus, talipes equino varus, skewfoot
    - Pes cavus (including tarsal coalition variants)
    - Lesser digital deformity e.g. congenital, macrodactyly, syndactyly and acquired.
    - Metatarsus adductus
    - Juvenile bunions
    - Tailor's bunions
    - Accessory bones
    - Talipes Equino Varus
    - Osteochondritis
    - Apophysitis
    - Fracture
    - Tibial varum
    - Tibial torsion
    - Genicular position
    - Genu valgum/ varum
    - Femoral torsion
    - Femoral position
    - Hip position and integrity
    - Scoliosis/Kyphosis/Lordosis
    - Hip pathology e.g. slipped upper femoral epiphysis, Perthes, developmental hip dysplasia.
- Demonstrating clinical tests/ examinations and explain what would trigger these assessments, warrant second opinion and what would present normally at a given age:
    - Range of movement, end feel and position, normal and abnormal paediatric values at all ages for the hip, knee, ankle and foot
    - Tests outlined in pGALS and pREMS
    - Adam's test (scoliosis).
    - Rotational profiles at the femur and tibia (Staheli's rotational profiles and Craig's/ Ryder test)
    - Foot Posture Index
    - Location and closure of the epiphyseal/ apophysis ossification/ closure.
    - Locate tendons, muscles, ligaments, fascia, origins and insertions.

    - Tests to indicate common lower limb conditions e.g. Perthes, SUFE, developmental hip dysplasia, genu valgum, meniscal, ankle injury

- Justifying and requesting (directly or indirectly) for diagnostic imaging where appropriate and understands the risks to the child.
- Understanding common surgical procedures and the referral criteria e.g. bunion surgery, epiphysiodesis plates, de-rotation osteotomies.
- Setting appropriate review times for clinical presentations.
- Seeking clinical supervision on complex presentations.

5. Rheumatology

The podiatrist should be able to effectively conduct a pertinent history and assessment in order to raise concerns and request further opinion when required in relation to rheumatology concerns.

Examples of learning could be evidenced in the following ways:

- Explanation of the importance of history taking and the differentiation between inflammatory and mechanical presentations. e.g. number of joints affected, duration of problem, cause of onset (trauma, infection), characteristics (e.g. stiffness, joint gelling), diurnal patterns, joint distribution and pattern, rashes, swelling, limitation in activity, relationship between pain, symptoms, activity and wellness.
- Explaining the impact and importance of prompt referral in areas of clinical concern.
- Demonstrating an understanding and awareness of rheumatology concerns and management in the following areas:
- Areas of study could include:
    - Hypermobility Spectrum Disorder
    - Osteogenesis Imperfecta
    - Stickler Syndrome
    - Scleroderma
    - Systemic Lupus Erythematosus
    - Undifferentiated and Mixed Connective Tissue Disease
    - Hypermobility Ehlers Danlos Syndrome (EDS Society Criteria)
    - Marfan syndrome and Habitus (Ghent nosology)
    - Non-articular features (e.g. eyes, skin, bone growth)
- Juvenile Idiopathic Arthritis
    - Systemic
    - Oligoarticular (persistent, extended)
    - Polyarticular (rheumatoid negative)
    - Polyarticular (rheumatoid positive)
    - Enthesitis Related Arthritis

    - Psoriatic
    - Uveitis

- Pain and fatigue syndromes
- Haemophilia, in association with haemarthrosis
- Vasculitides presentations e.g.
    - Juvenile Dermatomyositis
    - Henoch Schönlein Purpura
    - Kawasaki Disease
    - Polyarteritis Nodosa
    - ANCA associated vasculitis (AAV)
    - Takayasu arteritis (TA)
- Acknowledging the applications of clinical screening tools such as pGALS and pREMS to identify upper body and lower limb involvement.
- Providing podiatry foot and ankle assessment and understanding the relevance in rheumatology conditions. e.g.
    - To provide a lower limb assessment that will identify soft tissue swelling within the foot, ankle, knee joints and hypermobile or hypomobile joint range of motion
    - Soft Tissue Assessment (to include an assessment of tenosynovitis affecting the main tendons in the foot).
    - Locating classic (insertion) and functional (pulley) enthesis
    - Foot deformity and its relationship to rheumatology concern
    - Neurological assessment
    - Vascular assessment
    - Dermatology assessment (including rheumatology and neurology indicators)
    - General, lower limb and foot growth assessment
- Understanding the interrelationship with autoimmune, endocrine and neurological disorders e.g. hypothyroidism.
- Understanding the role of the rheumatologists, their referral criteria and the processes of ordering diagnostic tests.
- Understanding the advanced therapeutic interventions e.g. DMARDS, biologics, steroid injections and pain management strategies.
- Signposting to clinical services and charities.
- Can demonstrate when it would be appropriate to refer on to rheumatology

6. Growth, Endocrine and General Development

Children are different to adults in many different ways, the striking one being they grow in length and increase in weight. Growth and weight is affected by a child's genetics, nutrition, physical activity, general health, psychological health, injury, issues associated with child protection and mechanical influence e.g. uterine space. Growth and weight is therefore an indicator of a child's health and wellbeing. Growth and weight patterns that cause concern are those that are early, delayed, accelerated, excessive or disproportional according to their age.

Podiatrists may come across an incidental endocrine concern through assessment e.g. growth anomaly, slow recovering reflexes, leg hair growth, acanthosis, peripheral neurovascular changes or they may be involved in the management following diagnosis e.g. diabetes. It is important to note that there can be cross over between endocrine disorders and autoimmune conditions e.g. hypothyroidism.

The clinician should be able to effectively conduct a safe history and assessment in order to raise concerns and request higher-level intervention when required in relation to growth and general development concerns.

Examples of learning and scope could be evidenced in the following ways:

Demonstrating an understanding of the following:

- Diabetes
- Thyroid Disorders
- Precocious Puberty
- Obesity
- Cushing's
- Turner Syndrome
- Noonan Syndrome
- Foetal Alcohol Syndrome
- Anorexia and Variants
- Self-harm
- Mental Health
- Bone Health and vitamin D
- Written evidence of learning of different clinical presentations of common endocrine disorders
- Evidence of understanding of the endocrine system
- Understanding of the function and action of hormones and the role they play in growth, development and homeostasis.

- Awareness of weight management: NICE publications (PH47, NG7, QS94)
- Demonstrate diabetic foot assessment and demonstrate understanding and application of risk classification in accordance with NICE guidelines (NG18, NG19).
- Demonstrating knowledge and understanding of the physiological effects of diabetes and its impact on the neurovascular, skeletal systems and clinical significance.
- Evidence diabetic foot education appropriate to risk categories in accordance with NICE guidelines.
- Evidence appropriate communication with the multidisciplinary team and paediatric consultants in relation to patient ongoing management.
- Understanding the importance of growth and weight charts and how they can be used clinically to monitor growth, development and indicate potential for disrupted growth and guide referral.
- Seeking clinical supervision on complex presentations
- Arranging referral for further investigation to specialist services e.g. CAMHS team

7. Interventions

Podiatrists have a valuable role in improving the lives of children through the interventions they provide. Paediatric podiatrists focus on what is important to the child and their family; this may include helping to maintain participation in a sport they enjoy, an activity that is important to them and ensuring they are socially included in daily activities. Podiatrists will evaluate how a child's medical condition interacts with the body's form and function and in turn how this influences a child's ability to position, move and take part in activities.

Paediatric podiatrists will work to a child's strengths, abilities and preferences to help improve their function, activity and participation levels, and reduce their pain. This can include working through activities that are meaningful to the child, providing advice on healthy footwear choices for activities, home exercises, training strategies to improve fitness and health, pacing or modifying activities, foot orthoses and health coaching to explore lifestyle choices. Timely access to paediatric podiatry services is essential to ensure that children get the right care at the right time.

Interventions are provided for the benefit of the child and should be informed, goal orientated and measurable. To support this ideal, the World Health Organisation has developed a framework called the International Classification of Function and Disability (Child Youth Version).

Clinicians should be able to effectively conduct provide interventions to benefit the child with a measurable outcome.

Examples of learning and scope could be evidenced in the following ways:

Demonstrates an understanding of:

- The importance of identifying, utilising and analysing the results of an appropriate outcome measure to support the outcomes of intervention in practice.
- The framework and interconnectivity of the domains within the World Health Organisation's International Classification of Function and Disability Child Youth Version.
- Evidence based practice within paediatrics and concepts gained through research that can provide clinical reasoning for podiatric intervention in a child.
- Common presentations and the intervention evidence base (and level):
    - Calcaneal apophysitis
    - Foot posture concerns
    - Achilles tendinopathy
    - In-toe walking
    - Gait concern
    - Digital deformity
    - Bunions
    - Toe walking
    - Forefoot adductus
- The factors that could affect the outcome or prognosis of an intervention.
- Intervention outcomes i.e. documenting outcome measures with appropriate anchors.
- Imaging modalities the uses, safety considerations, timelines for use and requesting appropriate imaging.
- The importance of the role of feedback to referrers
- Footwear assessment and how the choice of footwear style may vary for different foot types and clinical presentations.
- Orthoses i.e. when to intervene based on best evidence and measurable outcomes, when to choose casted or prefabricated, how to write a prescription.
- Manufacturing process for the types of devices provided to children.
- Exercise and advice e.g. stretching, strengthening, movement exercise, activity modification, pacing, balance and proprioceptive, conditioning, motor planning, technique of activity and the role of play.
- Taping
- Pain management strategies
- Nutrition and weight management
- Advice and onward referral
- Communicating to the multidisciplinary team through written correspondence e.g. corroborating patient histories, safeguarding
- Serial casting and lower limb splinting
- Methods of offloading pressure and changing forces
- Care pathways for the use of ankle foot orthotics
- Promoting paediatric podiatry interventions and the outcomes they can provide.

Editor

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Supporting Texts and Links

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