

# Curriculum

## Paediatric Specialty Postgraduate Training

### Version 1

Approved by the GMC for implementation from 1st August 2018

This document outlines the curriculum to be used by trainees completing postgraduate training in paediatrics in the United Kingdom (UK). It accompanies the RCPCH Assessment Strategy and RCPCH Progress Syllabi.

This is Version 1.0. As the document is updated, version numbers will be changed, and content changes noted in the table below.

Version number	Date issued	Summary of changes

# Contents

.....

<b>Introduction to the Curriculum</b> .....	<b>3</b>
<b>Section 1: Purpose and Development</b> .....	<b>7</b>
Introduction to paediatric training.....	8
The purpose of the curriculum.....	9
RCPCH Progress and Shape of Training.....	12
Development of RCPCH Progress.....	17
RCPCH Progress philosophy.....	21
Incorporation of GMC standards.....	23
Ensuring fairness and supporting diversity.....	24
Quality assurance and continual improvement.....	26
<b>Section 2: How to use this Curriculum</b> .....	<b>29</b>
How to use the RCPCH Progress curriculum.....	30
Preparation for the ARCPs.....	31
Requirements for curriculum delivery.....	32
How to assess the RCPCH Progress curriculum.....	34
<b>Section 3: The RCPCH Progress Curriculum</b> .....	<b>35</b>
Components of the curriculum.....	36
Generic Learning Outcomes.....	38
Additional Level 3 Learning Outcomes.....	42
General Paediatrics.....	43
Paediatric Allergy, Immunology and Infectious Disease.....	44
Child Mental Health.....	46
Paediatric Clinical Pharmacology.....	47
Community Child Health.....	48
Paediatric Diabetes and Endocrinology.....	49
Paediatric Emergency Medicine.....	50
Paediatric Gastroenterology, Hepatology and Nutrition.....	51
Paediatric Inherited Metabolic Medicine.....	53
Paediatric Intensive Care Medicine.....	54
Neonatal Medicine.....	56
Paediatric Nephrology.....	57
Paediatric Neurodisability.....	58
Paediatric Neurology.....	59
Paediatric Oncology.....	60
Paediatric Palliative Medicine.....	61
Paediatric Respiratory Medicine.....	63
Paediatric Rheumatology.....	64
<b>Appendix A: Integrated care case studies</b> .....	<b>65</b>
<b>Appendix B: Glossary</b> .....	<b>68</b>

# Introduction to the Curriculum

## What is the RCPCH Progress curriculum?

RCPCH Progress is the curriculum for use by doctors undertaking postgraduate paediatric training from August 2018 onwards. The curriculum comprises:

**Learning Outcomes** to be achieved by trainees at each stage of specialty training; capturing the skills, knowledge and behaviours required, including the General Medical Council's (GMC) Generic Professional Capabilities for all doctors in training.

**Syllabi** that elaborate on the Learning Outcomes, with further requirements and guidance on how to demonstrate satisfactory achievement of the Outcomes.

A detailed **Programme of Assessment**, specifying the range of assessment instruments to be used by trainees to develop and demonstrate their knowledge and skills throughout their time in training.

**Trainees** will be able to develop their Personal Development Plans and chart their progress through training, ensuring they are gaining the appropriate experiences and continuing to develop towards becoming a consultant. This contributes to appraisal, self-assessment, self-directed learning and educational meetings, demonstrating achievement of the curriculum together with the use of the ePortfolio.

**Trainers** will be able to ensure their trainees are developing the required skills, knowledge and behaviours, and verify that their teaching covers the right areas. It will also help them complete their end-of-post review.

**Tutors** will be able to design structured learning programmes and ensure local teaching maps to the curriculum.

**Lay people** will be able to see what their paediatricians are working towards in their training and the standard required for the completion of training.

## What does this curriculum document include?

**Section 1** outlines the purpose of the curriculum, how it was developed and how the RCPCH monitors, quality assures, and reviews the curriculum.

**Section 2** provides detailed advice on how trainees and those supporting training and assessment should use the curriculum, syllabi, and assessment strategy.

**Section 3** contains the core Learning Outcomes for all trainees, the supplementary supporting statements, and the Level 3 General Paediatric and sub-specialty Learning Outcomes.

## How should trainees use the curriculum?

There are several component parts of the curriculum, as shown in Figure 2 on page 36 of this document.

Paediatric trainees are required to demonstrate achievement of all core Learning Outcomes throughout their training period. For Level 1 and Level 2 trainees, there are 11 core Learning Outcomes for each level. At Level 3, there are a further 11 generic Learning Outcomes, and additional Learning Outcomes for General Paediatrics or their sub-specialty.

This curriculum must be used in conjunction with the syllabus for each level. The syllabus provides instructions and guidance on how each Learning Outcome can be achieved. For each Learning Outcome, there are a small number of Key Capabilities. These are mandatory Capabilities which must be evidenced by the trainees in their ePortfolio, to meet the Learning Outcome. Key Capabilities are mapped to the GMC's Generic Professional Capabilities (GPCs).

The syllabus also includes illustrations for each Learning Outcome. The illustrations are examples of evidence and give the range of clinical contexts which the trainees may use to support their achievement of the Key Capabilities. These are intended to provide a prompt to the trainee and trainer as to how the overall outcomes might be achieved. They are not intended to be exhaustive, and excellent trainees may produce a broader portfolio or include evidence that demonstrates deeper learning. It is not expected that trainees provide ePortfolio evidence against every individual illustration (or a set quota); the aim of assessment is to provide evidence against every Key Capability.

At the end of each syllabus document, an Assessment Grid indicates possible assessment methods for each Key Capability. The RCPCH Programme of Assessment provides further detail on the assessment instruments to be used throughout training.

## How will the curriculum outcomes be achieved?

Learning will take place in a variety of settings, with a range of approaches, such as:

- Acute settings
- Community settings
- Handover
- Ward rounds
- Multi-disciplinary meetings
- Audits and research
- eLearning
- Seminars
- Lectures
- Simulation
- External training courses
- Reflective practice
- Self-directed learning

Most events in the workplace will contribute to the learning process. Trainees are encouraged to utilise all these opportunities, as well as managing their study leave, to work towards achieving the Learning Outcomes and meeting the needs within their Personal Development Plan.

## How will the RCPCH Progress curriculum be implemented?

All trainees, except those soon to achieve their Certificate of Completion of Training (CCT), will be moved to this new curriculum at the start of the 2018–2019 training year. The RCPCH has undertaken a detailed mapping exercise from the old to the new curriculum, which will allow evidence in the ePortfolio that is already tagged against the old curriculum to be moved to sit under the new Learning Outcomes. No evidence already recorded by the trainee will be lost. More detailed guidance on how the transition will be implemented can be found on the RCPCH Progress page of the RCPCH website.

## How is the curriculum approved and reviewed?

The RCPCH Progress curriculum is approved by the GMC as the standard by which doctors will be judged in order to be awarded a CCT, allowing them to apply for a consultant post. The GMC require all postgraduate medical curricula to comply with their *Excellence by design: standards for postgraduate curricula* (2017) and to enable a trainee to demonstrate their Generic Professional Capabilities, supporting the flexibility and transferability of training.

Within the RCPCH, the Education and Training Quality Committee (ETQC) have responsibility for the curriculum. The Committee will consider proposed amendments to the curriculum and syllabi through a formal review process, as outlined in more detail within this document. The College seeks regular feedback on the content and operation of the curriculum, through the National Training Survey and RCPCH Committees.

## How can I find more information?

In addition to this curriculum document, trainees and all those supporting training must be familiar with the syllabus for their level of training. Level 3 trainees must also use the General Paediatrics or a sub-specialty syllabus to achieve the additional Learning Outcomes relevant for their training pathway. The Assessment Strategy document provides detailed information on the Programme of Assessment.

Additional guidance and supporting resources for training and assessment are available on the RCPCH website.

For any further queries related to training locally, please contact your Training Programme Director and/or Head of School.

For any other queries related to:

- **Training:** please email [training@rcpch.ac.uk](mailto:training@rcpch.ac.uk)
- **ePortfolio:** please email [eportfolio@rcpch.ac.uk](mailto:eportfolio@rcpch.ac.uk)
- **Curriculum or Syllabi:** please email [progress@rcpch.ac.uk](mailto:progress@rcpch.ac.uk)

# Section 1:

## Purpose and Development

## Introduction to paediatric training

As a Paediatrician in training, the trainee doctor will learn and develop the required skills primarily in the practice environment, be that in the hospital or the community. With this in mind, high quality workplace-based formative assessment and supervision is vital.

At the start of their paediatric career, trainees will be closely supervised in their engagement with Infants, Children and Young People (ICYP) and their families, but as their skills grow they will be able to work with increasing independence and less direct supervision. It is essential that they learn the skills of reflection and self-awareness to enable the optimisation of learning events and recognition of their own achievements and limitations.

Self-directed learning is also a key element to the training programme; this could include activities such as reading around a subject, preparing for a teaching session, preparing for formal assessment activity or undertaking a literature review. This more informal learning activity should still form part of the trainee's ePortfolio, and will contribute towards their Personal Development Plan.

In addition to the activities outlined above, trainees will also be able to participate in local Deanery training and learning events such as workshops and seminars, lectures, case study presentations, and trainee-led events.

Trainees should also be vigilant for opportunities to learn from other health and social care professionals, for example General Practitioners (GPs), nurses, health visitors, social workers, and others. Working with and learning from these groups will add a richness and diversity to the training programme that would not be achieved otherwise. Examples of this could include working with a midwife in the antenatal clinic, with health visitors in a community clinic, or alongside a social worker to manage a complex family situation.

This curriculum will provide a strong foundation for lifelong learning as a paediatrician, and it is recognised that learning does not stop with the gaining of a paediatric consultant post. It will also support the drive towards excellence in practice, enabling learners to achieve far above the expected Learning Outcomes.

## The purpose of the curriculum

This purpose statement addresses the requirements of the GMC *Excellence by design: standards for postgraduate curricula*, to include a clear statement addressing patient and service needs, and the scope of practice and level expected of those completing training.

### **The curriculum has a clear and stated purpose based on the scope of practice, service, and the patient and population needs.**

The purpose of the paediatric curriculum is to train doctors who have and maintain detailed knowledge and understanding of diseases in babies, children and young people. The curriculum provides a framework for training, articulating the standard required to work at the consultant level, and at key progression points during their training, as well as encouraging the pursuit of excellence in all aspects of clinical and wider practice.

The need for doctors to follow this training programme is clear; the recent *State of Child Health* report<sup>1</sup> noted that at least 752 extra Whole Time Equivalent (WTE) consultants are required to meet the RCPCH's *Facing the Future* and specialist services standards, with high numbers of rota gaps within the paediatric workforce. This poses a clear risk to patient safety. In the year to September 2015, shortages of nurses and/or doctors led to periods of closure to new admissions at 31% on paediatric inpatient units and 41% of neonatal units. This curriculum seeks to provide a flexible, attractive training programme for doctors training in paediatrics, ensuring they have the opportunity to develop the full range of skills and knowledge they need to meet the standard required of a consultant paediatrician.

Their Generic Professional Capabilities and paediatric clinical skills and knowledge will be developed and evidenced through achievement of Learning Outcomes across eleven domains, which advance as they progress through the training programme. Trainees are exposed to a range of experiences throughout the Level 1 and Level 2 curricula, helping inform their choice of completing their training as a General Paediatrician or sub-specialist, and thus supporting recruitment into the areas most in need. The Learning Outcomes encourage holistic judgement as to the trainee's overall capability, and support the move away from a 'disease-based' structure to incorporate a Whole Population Approach<sup>2</sup> that prioritises the needs and complexities of each individual patient.

<sup>1</sup> RCPCH, (2017). 'State of Child Health' Short report series: The Paediatric Workforce report 2017. [Online] Available from: [http://www.rcpch.ac.uk/sites/default/files/user31401/2015%20RCPCH%20State%20of%20Child%20Health%20The%20Paediatric%20Workforce%20v1.1\\_1.pdf](http://www.rcpch.ac.uk/sites/default/files/user31401/2015%20RCPCH%20State%20of%20Child%20Health%20The%20Paediatric%20Workforce%20v1.1_1.pdf) (Accessed: 21 June 2017).

<sup>2</sup> Klaber, R.E., Blair, M., Lemer, C., & Watson, M. (2007). Whole population integrated child health: moving beyond pathways. *Archives of Disease in Childhood*, 102, pp5-7

**The curriculum considers interdependencies across related specialties and disciplines. It demonstrates that it has addressed the expectations of the service and healthcare system.**

Within paediatrics there is a growing service need for integrated care to best meet the needs of the child. The curriculum specifically develops paediatricians to be able to lead and work in multi-disciplinary teams (MDTs) and with colleagues from a wide range of professional groups in a variety of hospital settings, general practice and in the community, for example in social care, schools and with the voluntary sector. The composition of these teams will vary according to the needs of the child and family.

As a run-through training programme Paediatrics has limited interdependencies with other specialties, with the exception of Paediatric Cardiology, Haematology and Dermatology. The skills and knowledge trainees develop and demonstrate in their early years of training have not changed in this new curriculum, and so those pathways should not be affected by the new curriculum. Throughout development the curriculum has undergone extensive consultation, including with colleagues in those specialties with the most interaction with paediatrics and paediatricians (such as the Royal College of General Practitioners), with Deans and Heads of Schools, and crucially also with children, young people and their parents or carers.

**The curriculum supports flexibility and the transferability of learning.**

By making the Generic Professional Capabilities so explicit within the curriculum design, ease of transfer between specialties as other curricula are reviewed to incorporate the Generic Professional Capabilities is assured. High level Learning Outcomes can be evidenced by experiences in a wide range of posts and environments, allowing flexibility to meet the needs of the service and the individual trainee.

Paediatricians are required to display a wide range of knowledge, skills, behaviours and attributes, reflecting the broad nature of this specialty in practice. This is reflected in the depth and breadth of the curriculum content. By the point of attaining the CCT, trainees will be skilled in looking at health and ill-health in babies, children and young people, and to the specific health issues, diseases and disorders related to these stages of growth and development. They will have expertise in practical procedures related to the clinical care of babies, children and young people, and will be expert communicators with strong interpersonal skills, strong emotional awareness and adept at the management of emotionally complex family situations. These core areas ensure that doctors in training and beyond the CCT can provide safe care whilst working on a range of challenging and diverse rotas, balancing acute and routine service provision, and encouraging trainees to experience a wide range of hospital and other environments.

Trainees using this curriculum will be able to develop and apply innovative approaches to teaching in child health and to research. They will place at the heart of their practice the principle that all decisions should be made in the best interests of the infant, child or young person in collaboration with their families or carers, reflecting the feedback from children and young people as to what they most value in a paediatrician. They will be committed to a policy of advocacy for a healthy lifestyle in children and young people, and for the protection of their rights.

Trainees using this curriculum will be required to ensure that they are up-to-date in their practice, and that they promote and implement research and evidence-based medicine for the benefit of children. They will be committed to the highest standards of care and of ethical and professional behaviour both within their specialty, and within the medical profession as a whole.

By achieving their CCT, all paediatricians regardless of their sub-specialty will have satisfactorily demonstrated achievement of the Learning Outcomes, inclusive of a number of Key (mandatory) Capabilities. These curriculum domains fully incorporate the Generic Professional Capabilities, thus also demonstrating that trainees have met the GMC's requirements.



# RCPCH Progress and Shape of Training

The RCPCH Progress curriculum has been designed with the requirements of the UK Shape of Training Review in mind. The implementation of this outcomes-based and capability-based curriculum will be the first step in moving towards a revised training pathway in Paediatrics. Although the RCPCH Progress curriculum will be implemented initially within the context of the existing three-level training pathway in Paediatrics, the new curriculum will enact the necessary changes to facilitate subsequent revision of the training pathway and meet the five key principles of the UK Shape of Training Review.

Prior implementation of the RCPCH Progress curriculum will also allow trainees and trainers time to learn and adapt to the outcomes-based, capability-based approach to training before further changes are made to the pathway of training.

## The RCPCH vision for Shape of Training

The RCPCH is committed to introducing a new two-level 'run through' training programme by 2020-21 to meet the recommendations within the report from the UK Shape of Training Steering Group (published August 2017).

The two levels are Core Paediatrics and Specialty Paediatrics (see figure 1, page 16). Core Paediatric training can be achieved in an indicative time of 4 years, to include General Paediatrics and Neonatology, Integrated Care, Public Health and Child and Adolescent Mental Health. There will also be the option for placements in paediatric specialties, including Community Child Health and tertiary Neonatology. During Core Paediatrics, all trainees will carry out at least 12 months' paediatrics at tier 2 level (middle grade). It is anticipated that this period at tier 2 level (core) will predominantly be spent in General Paediatrics, although it could include Neonatology and/or Community Child Health placements outside of a tertiary centre. The MRCPCH theory exams must be achieved before moving onto the Tier 2 rota (currently FOP - Foundation of Practice, TAS – Theory and Science, AKP – Applied Knowledge in Practice); the full MRCPCH must be gained before the completion of Core Paediatrics.

Specialty Paediatrics will be an indicative time of 3 years, during which time all trainees will need to maintain generic capabilities in the parent specialty of Paediatrics and will therefore require continuing experience of acute unscheduled care, with participation in tier 2 rotas (for example, general paediatrics, paediatric emergency medicine, paediatric intensive care and neonatal intensive care).

Whilst the minimum length of training remains unchanged at 5 years, it is unlikely that many trainees would complete the programme in this timescale. It is anticipated that most trainees will require the indicative time of 7 years, particularly given the current service pressures affecting training.

## Meeting the key principles of the UK Shape of Training Review

Implementation of the RCPCH Progress curriculum, together with the ongoing work being undertaken by the RCPCH in reforming the paediatric training pathway, aims to meet the five key principles described in the UK Shape of Training Review.

### 1. How to support better the needs of patients and service providers.

The RCPCH Progress curriculum was developed with extensive input and representation from stakeholders, including a national network of children, young people, families and carers, education providers and NHS employers. This representation will continue in the various working groups involved in the RCPCH's ongoing Shape of Training reform (see below). The curriculum and training pathway will equip trainees with improved skills in liaising and coordinating patient care across the primary and secondary care interface, supporting the care of children at locations other than secondary care, i.e. closer to home. In addition, there will be an increased emphasis and training to equip trainees with skills to support children with mental health needs, as it is known that there is a significant mental health component to many of the presentations to child health services. The RCPCH Progress curriculum places the emphasis on learning outcomes, based on the GMC Generic Professional Capabilities, and equipping all paediatricians with these transferable capabilities will result in a more flexible, adaptable workforce.

### 2. Equipping doctors with the generic skills to participate in acute unscheduled care and to provide continuity of care thereafter.

All paediatricians in training will be required to participate in acute unscheduled paediatric services at all three current levels of training. Currently, trainees may opt to specialise in their final level of training, subject to availability of specialty training provision. The RCPCH Progress curriculum has been structured such that all trainees are required to develop and evidence capabilities in generic paediatrics (Level 3 Generic Curriculum), which includes those capabilities required to participate in acute unscheduled care, irrespective of whether they are also undertaking the Level 3 General Paediatric curriculum or one of the Level 3 Sub-specialty curricula. The requirement to participate in acute unscheduled care will not change following implementation of the future two-level paediatric training pathway.

### 3. How to support better delivery of care in the community.

The RCPCH Progress curriculum specifies the capabilities that are necessary to liaise and coordinate patient care across the primary and secondary care interface, supporting the care of children at locations other than secondary care, either at home, in primary care or in community settings. The proposed future paediatric training pathway further supports delivery of care in the community by giving due prominence to integrated care within Core Paediatrics, such that all trainees will acquire these capabilities early, with the ability to build upon them in the later stages of training.



**4. Supporting a more flexible approach to training.**

The RCPCH Progress curriculum (and thus the assessment strategy) is capability-based and clearly describes the outcome required of a CCT-holder in paediatrics. Therefore progression will depend upon capability, rather than time, facilitating the ability to complete training earlier. The assessment strategy has been designed to support trainees through the transition (critical progression) points and therefore highlight the support required at a much earlier stage in training than currently. The requirement for all postgraduate medical curricula to be aligned to the GMC Generic Professional Capabilities framework will, in time, facilitate transfer between training pathways, with credit given to capabilities achieved in other training pathways. Work being undertaken by the RCPCH, in reforming the training pathway, will include a specific work strand on flexibility (see below) and will also include methods to facilitate return to training for Specialty and Associate Specialist (SAS) doctors. The future two-level training pathway will be more flexible as it removes the current transition point between levels 2 and 3. One of the reasons for its removal was that it is not a critical progression point; currently level 2 trainees work alongside, and carry similar acute clinical responsibility to, level 3 trainees.

The RCPCH Progress curriculum learning outcomes will therefore reflect the training pathway changes; the level 1 learning outcomes (Core Paediatrics) will remain and the level 2 outcomes will be subsumed into the current level 3 outcomes (as the latter define the required outcomes for CCT and completion of Specialty Paediatrics).

**5. The role of credentialing in delivering the specialist and sub-specialist components of the curriculum.**

The UK Shape of Training Review identified credentialing as one of the key ways in which the medical workforce can acquire specialist skills (post-CCT and throughout professional careers) in response to changing health care needs. RCPCH Progress allows trainees to develop specialist skills in paediatrics during level 3 training by following either the Level 3 General Paediatric curriculum or one of the Level 3 Sub-specialty curricula, in addition to acquiring generic skills (by following the Level 3 Generic curriculum).

The RCPCH recognises the clear need to develop a post-CCT credentialing pathway that would support the acquisition of new specialist skills throughout paediatricians' professional careers. It is clear that pre-CCT specialisation is preferable to meet patient need in some specialty areas and that post-CCT credentialing is likely to be more appropriate in other specialty areas. One of the work strands for implementing the future training pathway is to look at which clinical areas would benefit from which pathway (see below). This will also depend upon the establishment of a legal and regulatory framework for credentialing. In those specialty areas where training remains pre-CCT, the RCPCH will collaborate with employers and patient voice to determine methods of regulating trainee numbers thorough the training pathways that would be most responsive to employer and patient need.

**Future work**

A Shape of Training Implementation Group was established in September 2017 to undertake the work required to plan and implement the reformed training pathway within two to three years. The group's membership is drawn from our previous Shape of Training working group and the Curriculum Review Core group.

**There are four work strands:**

**Core Paediatrics:** mapping RCPCH Progress curriculum to include access to integrated care, public health and mental health.

**Speciality Paediatrics:** mapping RCPCH Progress curriculum; the structure of, and entry criteria into general paediatrics and specialty paediatrics; modelling credentialing frameworks to replace special interest (SPIN) modules.

**Transition and flexibility:** assessment of trainees at key transition points (i.e. tier 2 rotas, entry to Specialty paediatrics and CCT); entry points, accreditation of other specialty training programmes, out of programme opportunities, academic training pathway.

**Stakeholder engagement, communication and transition:** workforce needs, employers' and users' needs; consultation and communications strategy; transition plan for trainees to move onto the two-level training programme.

Four working groups have been formed to take forward each work strand. Paediatric trainees are involved in all four working groups. Children and young people, education providers, employers each have input into the relevant working group(s). The Shape of Training Implementation Group will oversee and coordinate the work of all groups.

**The timescales are:**

2017-18	Completion of the four work strands and consultation with relevant stakeholders
2018-19	Training programme model (populated with RCPCH Progress and assessment strategy) agreed and finalised Submission to the GMC for approval
2019-20	Early adopters Pilot and Evaluation
2020-21	Roll out of training programme to all trainees

## Core and Specialty training model

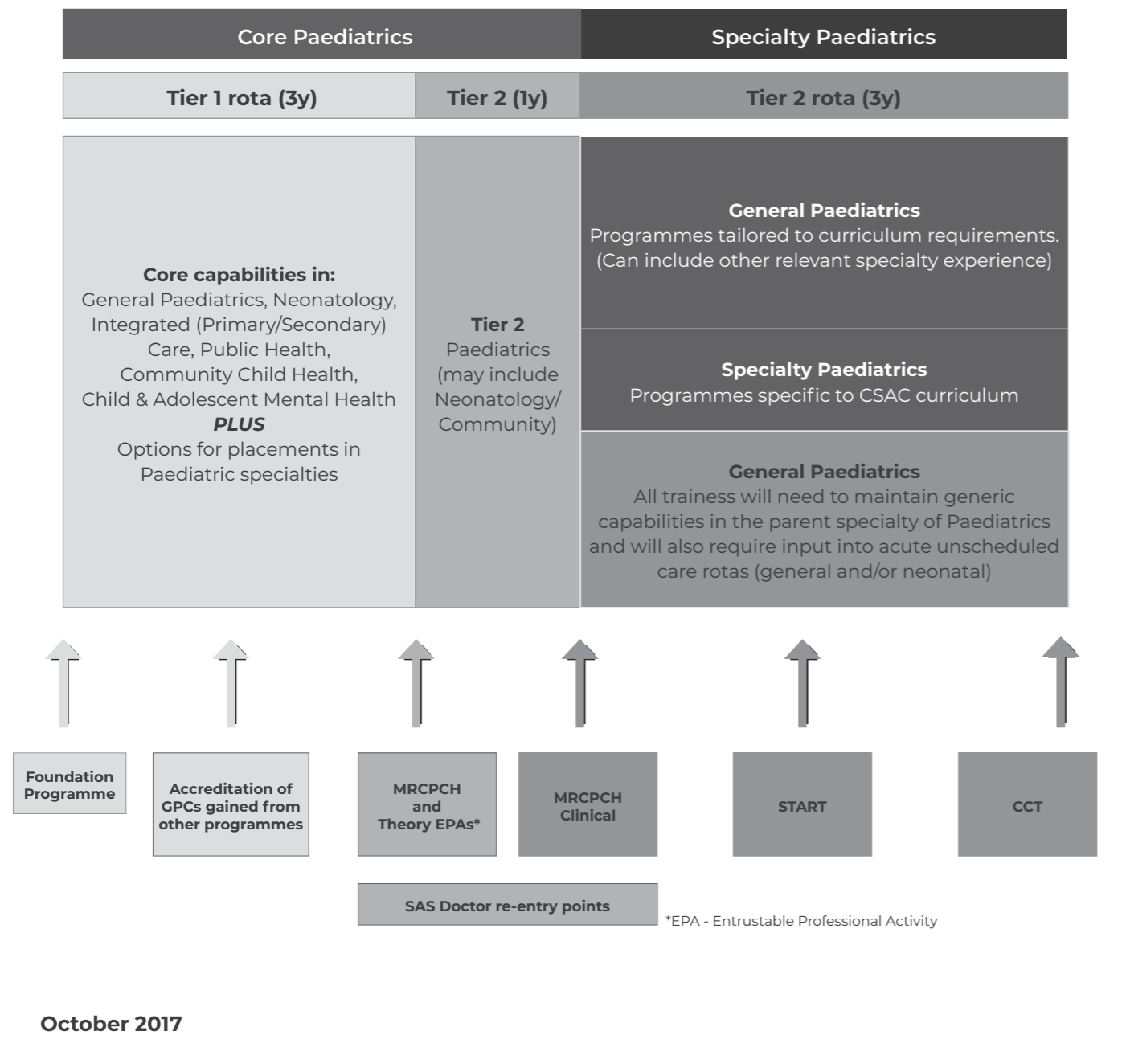


Figure 1: Core and Specialty Training Model

## Development of RCPCH Progress

### Aims of the curriculum review

The redevelopment of the paediatric postgraduate training curriculum first began in late 2014. The aim of the redevelopment was to create a more modern, flexible and user-friendly curriculum that would better meet the needs of trainees, trainers, patients and employers. Feedback from users of the existing curriculum had been that the structure was complex and unwieldy, and that the content was not fully reflective of modern practice and lacked some coherency.

Subsequently, the GMC announced that the Standards for Curricula and Assessment Systems were to be substantially redeveloped, alongside the publication of new Generic Professional Capabilities which must be included in all postgraduate medical curricula by 2020. Therefore, a secondary aim became to ensure that the new RCPCH curriculum would meet these requirements, including moving to an 'outcomes-based' design, and embedding the Generic Professional Capabilities within the curriculum in such a way that all trainees would be able to develop and demonstrate their achievement of these mandatory capabilities.

### Development and consultation

#### Key groups and individuals

Responsibility for the curriculum rests with the RCPCH's ETQC. The Committee instigated the creation of a Curriculum Core Review Group with delegated responsibility for setting the direction of the curriculum revisions and overseeing and approving the review work. The group's terms of reference specified that the new curriculum must be suitable for the immediate and longer-term health needs of children, and the training needs of those wishing to achieve the CCT in Paediatrics.

The review must include an Assessment Strategy which meets the needs of the new curriculum, and any additional educational policies required for training delivery. Group membership included the Vice President for Training and Assessment, the Officer for Training, the Lead Dean for Paediatrics, and representatives from a wide range of stakeholder groups including trainees, tutors, Heads of Schools, the College Specialty Advisory Committee (CSAC), the Less Than Full Time Committee, and an expert in integrated care.

In addition to the Core Group, two new roles were created to support the curriculum review. A Clinical Lead was appointed with responsibility for ensuring the quality of content and consistency across the curriculum levels and sub-specialties, and within the supporting syllabi. A Quality and Standards Co-ordinator was also appointed to provide dedicated resource for managing the project within the College.

## Design and development

The initial work undertaken by the Core Group identified two fundamental changes to be made to the curriculum structure. The first principle agreed was that the curriculum should be focused more around symptoms than diseases, putting the child and their wider context at the heart of practice, and building on the integrated care Whole Population Approach model developed by Klaber et al.<sup>3</sup> The second principle was that the existing 36 assessment standards must be streamlined, with the group revising this document and reducing the number of standards to 14.

With the publication of early drafts of the new GMC *Excellence by design: Standards for postgraduate curricula* and the Generic Professional Capabilities, these principles were developed further to ensure compliance with the future regulatory requirements. There was already substantial alignment between the RCPCH assessment standards and the GMC's Generic Professional Capabilities. Using both documents, the Core Group identified 11 curriculum domains which captured the full breadth of skills, knowledge, behaviour and attributes required for a paediatrician, and which would become the basis of the new curriculum. High level Learning Outcomes were produced for each of these domains, to be achieved for each of the three levels within the paediatric training programme. This forms the new curriculum.

Much of the existing curriculum content would now form the syllabi to support the new curriculum. The College's CSACs completed an initial review of their existing curriculum competences to identify content that could be removed (either to eliminate repetition, or because the content was no longer relevant), refined, or needed to be included. Additional clinicians with specific expertise in key areas such as global child health were also asked to review and develop content for the core paediatric curriculum. Early consultation also involved workshops and other activities with children, young people and their parents/carers, helping inform the content and areas of focus, and supporting the development of content for the communication curriculum domain.

During the early consultation period, the trainee feedback was that long lists of competences were not easy to engage with. The Core Group also identified the need to ensure a balance of the Learning Outcomes being achieved in a manner that was both consistent, while also maintaining some degree of flexibility. To address this, the CSACs and other writers were asked to further refine their content to define which elements were the most critical and must therefore be mandatory capabilities, with evidence of the achievement required before the Learning Outcome they relate to could be signed off. The remaining content was redefined as Illustrations, designed to give additional guidance for trainees and their supervisors as to how the Learning Outcome *may* be demonstrated.

This draft content underwent detailed review and refinement by a range of stakeholders, including other specialty and sub-specialty clinicians, trainees, other Medical Royal Colleges, and lay educational experts. Equality and diversity implications were considered throughout the development and captured in an impact assessment, noting any potential adverse effect on those with protected characteristics as defined by the Equality Act 2010. Early dialogue took place with the GMC, helping to refine the curriculum approach as work on the new standards progressed. The Assessment Strategy was reviewed to ensure suitability for use with the new curriculum, and to identify future developments anticipated over the coming years.

The final curriculum was signed off by the RCPCH's ETQC prior to submission to the GMC in the summer of 2017, and will be piloted with a small number of trainees to refine operational aspects prior to use by the wider trainee population from August 2018 onwards. A full transition plan will be made available to support the trainees, trainers and Schools.

## Consultation

Stakeholder consultation was a crucial aspect of the curriculum development process. Key groups influencing the development have included:

### **CSACs and other College committees**

Members of these groups played a crucial role not only in writing, but also in reviewing the curriculum content and providing invaluable input to shape the new format. The Heads of Schools Committee and Less Than Full Time Committee gave particular input to ensure that the new structure would be implementable at the local level, and for trainees not working full time or undertaking Out Of Programme (OOP) experience.

### **The Trainees Committee**

The RCPCH Trainees Committee is a diverse group representing trainees from across the UK. They have been active in supporting the writing and review of the curriculum and syllabi, as well as ensuring the guidance and plan for implementing the curriculum is feasible and as efficient as possible for existing trainees.

### **Stakeholder consultation event delegates**

In addition to regular consultation with Heads of Schools, College Tutors, Regional Advisors and CSAC Chairs at their scheduled committee meetings, a formal consultation day was held in March 2017 that included representatives from all these groups, as well as other invited delegates from special interest groups, NHS employers, other Medical Royal Colleges, medical students and trainees, a lay educational expert, and the GMC.

### **Children, young people and parents or carers**

With support from the RCPCH & Us team, patients (children and young people) and their parents or carers were involved throughout the curriculum development. Workshops were held at '&us' roadshows, gathering feedback from patients and parents as to what they felt were the most important skills, behaviours and attributes for a paediatrician to possess. A mixed methodology was employed, including online surveys, activity-based workshops and semi-structured interviews. Events took place across the four nations and with a range of children of a variety of ages, genders, ethnicities, health conditions and experiences of healthcare.

<sup>3</sup> Klaber, R.E., Blair, M., Lemer, C., & Watson, M. (2017). Whole population integrated child health: moving beyond pathways. *Archives of Disease in Childhood*, 102, pp.5-7

Feedback from this consultation was shared with the curriculum Core Group and used to help focus content related to the issues they raised, and ensure sufficient emphasis on those particular skills and behaviours.

The RCPCH also hosts a 'Takeover Day' once a year, when teenagers from local schools join teams across the College to get involved with their work. For the 2016 Takeover Day, participants provided invaluable support to the curriculum review, interviewing clinicians to help them understand more about their role before developing content themselves to be included. The competences (since redefined as Capabilities and Illustrations) which they produced have been included in the core syllabus.



## RCPCH Progress philosophy



Paediatricians support the health of the population and the health and well-being of individual children with their families. The curriculum has been designed to reflect this and uses a whole population segmentation approach development by Klaber et al<sup>4</sup>. Rather than divide the spectrum of child health by organ systems, as in traditional paediatric curricula, RCPCH Progress considers group of conditions: the healthy child, the vulnerable child, the child with a single long term condition, the child with complex long term health issues and the acutely unwell child, both mild/moderate and moderate/severe.

This framework acknowledges that paediatricians have a role in preventing illness and that children present with symptoms, not diagnoses and that an effective paediatrician has a role in the full breadth of child health. An example of this is the paediatric intensivist, who is managing a child with serious infection, who will also ensure that the siblings are protected through immunisation. Or the paediatrician managing a service for children with diabetes, who will work closely with a nurse specialist to help these young people to be as effective as possible at self-management. Or the paediatrician who runs educational workshops with Health Visitors to encourage healthy nutrition for children under 5 years. The illustrations within the syllabi seek to capture some of these examples.

This approach, which puts the child and family at the centre, means that the paediatrician will have the capability to provide care wherever it best suits the child, and not necessarily in hospital. It also reflects the need for future paediatricians to work in a holistic way, more closely with GPs and the wider primary care team and to work in close partnership with the family. A focus on the 'complex disease' segment of the population supports the need for paediatricians of the future to be able to manage the increasing burden of complex chronic disease and understand the role of the wider multi-disciplinary and multi-professional team, encouraging inter-professional learning.

The Learning Outcome structure, built around curriculum domains that span the entire time in training, also serve to support another core philosophy of the RCPCH curriculum – to support trainees in recognising their progress and development through training, with active encouragement of opportunities for the promotion and recognition of excellence. The development of the Learning Outcomes Grid clearly shows trainees how they have progressed through their time in training as Outcomes are achieved, and how they must continue to progress as they complete their training. There is significant flexibility for trainees in how they demonstrate the Learning Outcomes, having taken a risk-based approach to the syllabi with minimal mandatory Key Capabilities, and allowing trainees to reflect on what the achievement of the Learning Outcome looks like, and to think creatively about how it can be demonstrated.

<sup>4</sup>Klauer, R.E., Blair, M., Lerner, C., & Watson, M. (2017). Whole population integrated child health: moving beyond pathways. Archives of Disease in Childhood, 102, pp.5-7

Where trainees excel in a particular domain (e.g. in research) they can be stretched, beginning to record evidence against the higher-level Learning Outcome as soon as they have achieved the Outcome at their substantive level, even if not all the Learning Outcomes at that level are yet achieved. This acknowledges that all doctors will have areas of excellence and areas where more development is required, and so the curriculum should support this rather than expecting them to progress through all areas at the same speed, forming artificial barriers to progression.

## Incorporation of GMC standards

The new RCPCH Progress curriculum is designed to support and encourage training and clinical practice in line with Good Medical Practice. In 2017 the GMC published the Generic Professional Capabilities, which provide the educational articulation of Good Medical Practice. These standards are a compulsory minimum regulatory requirement for all doctors in training, ensuring quality, consistency and flexibility across postgraduate medical training.

In line with the GMC's *Excellence by design: Standards for postgraduate curricula*, the RCPCH Progress curriculum is framed around the Generic Professional Capabilities, which are explicitly reflected in the RCPCH Progress curriculum domains. Through achievement of the Learning Outcomes, trainees will demonstrate they meet the required standard in all Generic Professional Capability domains.

Those completing training for the award of a CCT or equivalent should demonstrate appropriate:

1. Professional values and behaviours
2. Professional skills:
  - Practical skills
  - Communication and interpersonal skills
  - Dealing with complexity and uncertainty
  - Clinical skills:
    - History taking, diagnosis and medical management
    - Consent
    - Humane interventions
    - Prescribing medicines safely
    - Using medical devices safely
    - Infection control and communicable disease
3. Professional knowledge:
  - Professional requirements
  - National legislative requirements
  - The health service and healthcare system in the four countries
4. Capabilities in health promotion and illness prevention
5. Capabilities in leadership and team working
6. Capabilities in patient safety and quality improvement
7. Capabilities in safeguarding vulnerable groups
8. Capabilities in education and training
9. Capabilities in research and scholarship

# Ensuring fairness and supporting diversity

**As part of the development of the RCPCH Progress curriculum and the accompanying Assessment Strategy the College undertook an Equality and Diversity Impact Assessment, considering any actual or potential adverse effects of implementation on those with protected characteristics (as defined in the Equality Act, 2010). The Impact Assessment also included consideration of any likely effect on Less Than Full Time trainees, as these form a sizeable proportion of the paediatric trainee population.**

**The review considered evidence of the actual or potential impact on three distinct strands – curriculum and syllabus content, assessment, and implementation (including transition). The evidence considered came from the existing literature and guidance, existing data relating to the current assessments, review by users, and review by lay experts.**

The RCPCH sought to address issues of equality, diversity and fairness during the development of the curriculum in a range of ways, including:

- Curriculum content was authored, implemented and reviewed by a diverse range of individuals, including at a formal stakeholder consultation event attended by participants with a range of protected and other characteristics. Equality and diversity data is gathered regularly for clinicians involved in the work of the Education and Training division.
- Undertaking careful consideration of the Learning Outcomes and Key Capabilities to ensure that there is a clear rationale for any mandatory content, and thus there are no unnecessary barriers to access or achievement. Each CSAC has reviewed their syllabus from the point of view of the specified characteristics, confirming they do not believe any such barriers exist and/or ways in which these were being addressed. Beyond these mandatory requirements, the assessment tools can be deployed in a more flexible and tailored manner, meeting the requirements of the individual trainee.
- Oversight of the curriculum development was undertaken by the ETQC. As the body responsible for production of the Annual Specialty Report, and receiving summary reports on the National Training Survey from Heads of Schools and other sources, the Committee is well placed to ensure the curriculum meets the needs and addresses any existing concerns of the trainee population.
- A specific review was undertaken by the Less Than Full Time Committee, confirming that they are satisfied that the approach taken should not disadvantage such trainees compared to their full-time counterparts.
- Actions agreed based on the findings of the internal Equality and Diversity audit for the RCPCH Education and Training division have been implemented wherever possible.

- Following early feedback, the structure of the syllabus, particularly around how to utilise the Illustrations, was revised to ensure the requirements for the Learning Outcomes are more explicit.
- All documents were reviewed by a lay educational expert to help ensure consistency and clarity of language, minimising the risk of bias.
- All curriculum documents will be published in font type and size that is appropriate for a wide range of audiences, and optimised for readability. Information regarding the curriculum will be made available through a wide range of media, acknowledging differing learning styles.
- Similarly, the implementation plan has been designed based on the recommendations made in relevant literature, noting that best practice requires careful consideration of how to reach all sections of the intended audience.

The RCPCH is committed to the following actions to continue and enhance its existing work in relation to ensuring equality, diversity and fairness in the delivery and review of the curriculum:

- To use feedback from the Early Adopters group to identify any actual impact on trainees with protected characteristics that arises once the curriculum is in use.
- To continue to review the nominations and appointment process to College positions responsible for the curriculum, examinations and assessments, ensuring equality of opportunity and access.
- To implement a range of measures to improve the quality and quantity of the data set that the College holds related to protected characteristics for all those involved in training and assessment, enabling more comprehensive analysis and reporting. Outcomes will be monitored to identify any trends that may pose a concern with regards to equality, diversity or fairness.
- To develop improved training related to equality and diversity for all clinicians with a role in the examinations and assessments, and improved resources for College Tutors supporting trainees with protected characteristics, particularly where that trainee is experiencing difficulty.
- To continue to gather regular feedback from trainees and trainers on their experience of the curriculum, identifying any areas of bias or discrimination.

# Quality assurance and continual improvement

## Ensuring quality in delivery

A robust quality assurance and improvement framework is required to support an effective curriculum and assessment strategy. The purpose of this is to promote the improving quality of the trainee experience, and to ensure that the curriculum content, delivery, assessment and implementation is monitored and reviewed in a planned, systematic and appropriate manner.

The RCPCH quality infrastructure for training and assessment is based on the Plan, Do, Check, Act (PDCA) cycle, introduced by Deming. In the context of the Programme of Assessment, this means planning for effective assessment processes, executing those processes, review and evaluation including data analysis and multi-source feedback, and finally implementing any required changes.

This quality framework is already in place, but continually evolves to meet changing standards and in response to the outcome of monitoring and review activity, ensuring resources are developed to the area of most need and/or risk.

The framework to support this curriculum will comprise a number of quality improvement tools and processes that impact on the overarching aspects of assessment. These will include:

- 1. Effective recruitment mechanisms.** It is important that the right trainee is recruited into the paediatric programme, and that trainees are not set up to fail before they have begun. The RCPCH recruitment process includes testing of aptitude and attributes along with any existing skills and knowledge specific to paediatrics. A major research project is planned for 2017–2018 to better understand the factors that impact on trainees applying and being successful in their application to paediatrics, which will further inform work in this area. Recruitment assessments are to be better aligned with the validity processes already utilised for other RCPCH assessments.
- 2. Support for induction periods and review of induction.** The RCPCH provides guidance through face-to-face workshops and online resources to support College Tutors in planning and reviewing inductions. The College Tutor toolkit is periodically updated, and sharing of best practice actively encouraged.
- 3. Monitoring of the curriculum and Supervised Learning Event (SLE) usage.** Reviewing ePortfolios will be key to this process, along with talking to and getting feedback from those managing this in practice. This will also include ensuring that standards are being upheld, that there are consistent approaches to the collection and tagging of evidence, and that standardisation between Deaneries will be encouraged and monitored.
- 4. Gathering and responding to trainee feedback.** Analysis of the National Training Survey, and other surveys carried out directly by the College and/or its committees will be key to identifying both concerns and good practice. The psychometric team at the RCPCH already

plan this analysis into the training year and report their findings to senior management teams. The aim is to increase trainee/trainer satisfaction year on year. Feedback is also gathered through a highly pro-active Trainees Committee, and trainee representatives on the Examinations, Assessment and START Executive Committees.

- 5. Data analysis.** This is a strong feature of RCPCH reporting, with a dedicated psychometric team performing regular analysis of all centrally administered examinations and assessments, and as required for other data such as the National Training Survey results. It is hoped that the new ePortfolio system will be able to provide a wider variety of data on Workplace-based Assessments (WPBAs) and Annual Reviews of Competence Progression (ARCPs) to support the team in undertaking further analysis. Data will continue to be provided to the regulatory body as requested. Transparency and openness will be promoted by the publication of the outcomes of high stakes metrics and progression assessments.
- 6. Quality assurance of examinations.** This takes a variety of forms during the development, delivery, standard setting and review stages, as captured in the validity arguments for each of the assessment tools within this strategy, and will be developed further within the forthcoming validation framework.
- 7. Quality of assessors and supervisors.** This is supported by a strong Educational Supervisor course provided by the RCPCH. Monitoring and review of Educational Supervisors' reports by the RCPCH is a process that will be introduced for the year 2017. Working alongside Heads of School, a supervisor feedback form is being introduced to offer peer support to supervisors and will enable feedback to be given (using a standardised form) to supervisors about the quality of their feedback to trainees, along with mechanisms for development. The College is supportive of GMC moves towards greater recognition and accreditation for clinicians undertaking assessor roles, and other responsibilities supporting education and training.
- 8. Monitoring and support for ARCP.** The externality process has been reviewed and strengthened over the past 2 years, and this is now managed by the Quality and Standards team at the RCPCH. There is focused review of where externality is most effective, and the team ensures that the Gold Guide requirements are met across all Deaneries. Improvement aspirations include closer scrutiny of external reporting and feedback to external representatives on the quality of their reports. Additional training and standardisation activities are also being considered.
- 9. Self-assessment and review.** Annual self-assessment contributing towards the Annual Specialty Report is undertaken using a range of data sources. This report is submitted to the GMC, as well as shared internally to support continual improvement.
- 10. Opportunity for syllabus review.** An annual window of opportunity for amendments to the syllabus will be scheduled into the training year calendar. Proposals for review can be submitted by specialist interest groups and individuals during this predetermined period, for consideration by the Education and Training Quality Committee. Proposed amendments can include both the addition of new medical practices or removal of those that may be redundant, a change to the mandatory (or optional) nature of a particular element of the syllabus, or to the assessment method or process.

Along with these mechanisms, there will be scheduled review points for the evaluation of the effectiveness and impact of this strategy. By applying the framework processes outlined above, the College will ensure that assessment is monitored and reviewed in a structured, planned and risk-based manner.

## Curriculum governance

The RCPCH's Education and Training Quality Committee (ETQC) has overall responsibility for the RCPCH Progress curriculum. The ETQC will monitor the performance of the curriculum directly and through the College committees, with specific delegated responsibility from the ETQC – the Assessment Executive, Examinations Executive, Recruitment Board and START Board. The Quality and Standards team support this work by providing detailed quantitative and qualitative analysis and reporting following an annual schedule, and with additional ad hoc scrutiny when required. The ETQC will continue to report key findings to the GMC in the Annual Specialty Report.

### **Curriculum review and revision**

The ETQC will manage a process to allow for regular review of the curriculum to ensure it remains fit for purpose, reflecting current training and service needs. On an annual basis, all stakeholders will be invited to submit proposed revisions to the syllabi. The ETQC will review and either approve or reject the proposed changes. Updated syllabi will be issued prior to the start of the training year, making clear using the version tracking table at the front of each document what amendments have been made on each occasion. Where this amendment relates to a Key (mandatory) Capability, the ETQC will issue guidance for trainees currently at that level of training, noting any implications of the amendment. Amendments will only be made where a clear rationale exists for doing so, and every effort will be made to minimise any negative impact on the trainee.

It is intended that by satisfying the GMC as to the robustness of its internal governance, the RCPCH will have the authority to update the illustrations autonomously, retaining an audit trail of changes, with only changes to the mandatory content (Learning Outcomes and Key Capabilities) requiring a formal submission to the GMC.

The ETQC will next review the full curriculum and supporting processes at the point that the Shape of Training changes are made to the RCPCH training programme. A suitable schedule for future planned reviews will be agreed at that point. Should the need for an amendment to the curriculum (Learning Outcomes) be identified prior to the changes to the training programme being implemented, the RCPCH will submit the proposed change to the GMC and consult and communicate with all stakeholders.

.....

# Section 2

## How to use this Curriculum



# How to use the RCPCH Progress curriculum

The curriculum is a crucial document for ensuring the quality and consistency of training and assessment. It must be referred to throughout training, as the trainees record evidence demonstrating their developing skills and knowledge, while progressing towards achievement of the Learning Outcomes. All trainees must achieve the Generic Learning Outcomes shown on pages 35-37, and either the Level 3 General Paediatric Learning Outcomes or the relevant Level 3 sub-specialty Learning Outcomes for the post to which they have been appointed.

The curriculum should be used to help design training programmes locally that ensure all trainees can develop the necessary skills and knowledge, in a variety of settings and situations. The curriculum is designed to ensure it can be applied in a flexible manner, meeting service needs as well as supporting each trainee's own tailored Learning and Development Plan.

Trainees and trainers should refer to the syllabi for more guidance on what is required to achieve each Learning Outcome. Generic syllabi are provided for the Learning Outcomes for each level, and for all Level 3 General Paediatrics and sub-specialty Learning Outcomes. The syllabi list the mandatory minimum requirements (Key Capabilities) and provide a range of Illustrations of additional suggested evidence for demonstrating achievement of the Learning Outcome. The Illustrations are examples only, helping trainees consider what other evidence they may have that is naturally occurring, or other ways in which they can develop against each curriculum domain, and as such they are not intended to be restrictive or prescriptive.

Trainees are encouraged to consider innovative ways of demonstrating how they have met the Learning Outcome. In line with the Whole Population Approach, trainees are particularly encouraged to utilise opportunities for working in an integrated fashion, as shown in the example case studies presented in Appendix A. Trainees will have different strengths and areas of interest, and so may be able to demonstrate achievement of some Learning Outcomes at different rates. Where a trainee has already achieved the Learning Outcome for a curriculum domain at their level of training, they may record evidence against a higher-level Learning Outcome if it is relevant and appropriate.

Trainees and trainers should also be familiar with the RCPCH Assessment Strategy and particularly the Programme of Assessment Blueprint, which outlines the minimum assessment requirements for trainees at all levels.

## Preparation for the ARCPs

Trainees are strongly encouraged to record evidence against the Learning Outcomes throughout the year, including engaging in active reflective practice to support their own development.

Prior to the ARCPs, trainees must ensure they have recorded relevant evidence against the Key Capabilities, and any other evidence that demonstrates their progression towards or achievement of the Learning Outcomes.

The supervisor will review and comment on whether the trainee is on target to achieve or has achieved the Learning Outcome(s), and will suggest specific areas of focus for the following year to ensure that the trainee achieves the Learning Outcome(s) by the end of the training programme level. The Illustrations may be a useful prompt for this.

# Requirements for curriculum delivery



The requirements for curriculum delivery have not changed as a result of this new curriculum.

All training must comply with the GMC requirements presented in *Promoting excellence: standards for medical education and training* (2017). This stipulates that all training must comply with the following ten standards:

## Theme 1: Learning environment and culture

- S1.1 The learning environment is safe for patients and supportive for learners and educators. The culture is caring, compassionate and provides a good standard of care and experience for patients, carers and families.
- S1.2 The learning environment and organisational culture value and support education and training, so that learners are able to demonstrate what is expected in Good Medical Practice and to achieve the learning outcomes required by their curriculum.

## Theme 2: Educational governance and leadership

- S2.1 The educational governance system continuously improves the quality and outcomes of education and training by measuring performance against the standards, demonstrating accountability and responding when standards are not being met.
- S2.2 The educational and clinical governance systems are integrated, allowing organisations to address concerns about patient safety, the standard of care, and the standard of education and training.
- S2.3 The educational governance system makes sure that education and training is fair and is based on the principles of equality and diversity.

## Theme 3: Supporting learners

- S3.1 Learners receive educational and pastoral support to be able to demonstrate what is expected in Good Medical Practice, and to achieve the learning outcomes required by their curriculum.

## Theme 4: Supporting educators

- S4.1 Educators are selected, inducted, trained, and appraised to reflect their education and training responsibilities.
- S4.2 Educators receive the support, resources and time to meet their education and training responsibilities.

## Theme 5: Developing and implementing curricula and assessments

- S5.1 Medical school curricula and assessments are developed and implemented so that medical students are able to achieve the learning outcomes required for graduates.
- S5.2 Postgraduate curricula and assessments are implemented so that doctors in training are able to demonstrate what is expected in Good Medical Practice, and to achieve the learning outcomes required by their curriculum.

It is the responsibility of each Deanery/Local Education Training Board (LETB) to ensure compliance with these standards for paediatric training, and to notify the RCPCH if further support is required in achieving this. Training delivery must also comply with the requirements of the Conference of Postgraduate Medical Deans' (COPMeD), *a reference guide for postgraduate specialty training in the UK* (6<sup>th</sup> ed.).

Additional requirements for Level 3 sub-specialty curriculum delivery are published on each of the sub-specialty training pages on the RCPCH website. This addresses any specific requirements; for example, the human or physical resource experiences the trainee will need to be able to access in order for the curriculum to be delivered successfully.



## How to assess the RCPCH Progress curriculum

The RCPCH Progress Programme of Assessment lays out how trainees will be assessed against this curriculum, and the tools available for formative and summative use. The Programme of Assessment (2017) reflects the evolution of previous strategies as opposed to revolution, reinforcing assessment practices which currently work effectively and ensuring these can continue to be deployed appropriately to support this new curriculum.

As the new curriculum represents a far more radical change, a conscious decision was taken to avoid making significant changes to the assessment approach at this juncture, thus minimising the disruption for trainees. In May 2017, the GMC published *Excellence by design: standards for postgraduate curriculum*, and also *Designing and maintaining postgraduate assessment programmes* as supporting guidance. Some minor amendments have been required to reflect these new requirements; for example, by identifying key critical progression points ('waypoints') where specific assessments are required, and the addition of the assessment of Entrustable Professional Activities (EPAs). Further changes will be introduced in an incremental manner.

The key aspect of the Programme of Assessment is the Assessment Blueprint. This is a grid indicating the assessment requirements at each level, assessments that must be completed satisfactorily at key waypoints and, where appropriate, the minimum number of assessments required. The critical progression points identified are 1) at the end of Level 1 training (prior to commencing work on the middle-grade rota), and 2) at the point of CCT.

The Programme of Assessment comprises a wide range of assessment instruments which must be used in conjunction with the Blueprint to develop skills and assess capability. The assessments are a mix of formative and summative; centrally and locally set and administered; and knowledge, skills and capability-based assessments capturing a wide range of evidence which can be integrated to reach a judgement as to the trainee's suitability for progression. The assessments also provide trainees with the opportunity to obtain developmental feedback. Further information on all assessment instruments can be found within the RCPCH Progress Programme of Assessment.

Each syllabus document contains more detailed guidance on the assessments to be used to demonstrate the Key Capabilities which underpin the curriculum Learning Outcomes. The Assessment Grid at the back of each syllabus document lists all Key (mandatory) Capabilities, and indicates the assessment tools that the RCPCH either mandates or recommends as most suitable for assessing that particular Capability. Please note, not all assessments are mandated or their use prescribed, such that trainees may use other assessment types from the list within the Programme of Assessment, where they and their supervisors feel this is appropriate.

## Section 3 The RCPCH Progress Curriculum

# Components of the curriculum



The curriculum provides a framework for training, articulating the standard required to work at a Consultant level, and at key progression points during their training, as well as encouraging the pursuit of excellence in all aspects of clinical and wider practice.

The curriculum comprises Learning Outcomes which specify the standard that trainees must demonstrate as they progress through training and ultimately attain a Certificate of Completion of Training (CCT). Paediatric trainees are required to demonstrate achievement of generic and sub-specialty or General Paediatric Learning Outcomes throughout their training period.

For all level 1 and level 2 trainees, there are 11 generic paediatric Learning Outcomes for each level. At level 3, there are 11 generic paediatric Learning Outcomes for all trainees, and several additional Learning Outcomes in either General Paediatrics or the sub-specialty the trainee has been appointed into.

The syllabi support the curriculum by providing further instructions and guidance as to how the Learning Outcomes can be achieved and demonstrated. Each syllabus contains 5 interlinked elements, as outlined in Figure 2 (below) which illustrates how each element elaborates on the previous one.

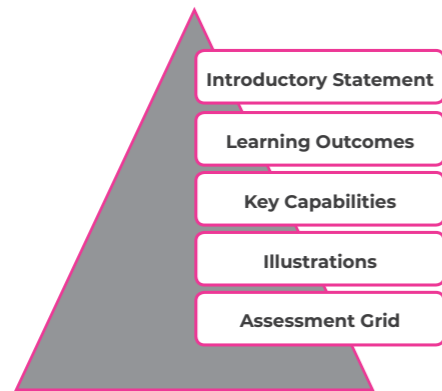


Figure 2: The 5 elements of the syllabus

## Elements of the Syllabus

The **Introductory Statement** sets the scene for what makes a Paediatrician, and at level three what defines a General Paediatrician or sub-specialist.

The **Learning Outcomes** are stated at the beginning of each section. These are the outcomes which the trainee must demonstrate they have met to be awarded their CCT in Paediatrics. Progress towards achievement of the Learning Outcomes is reviewed annually at the ARCP. Each Learning Outcome is mapped to the GMC's Generic Professional Capabilities framework. Each trainee must achieve all the Generic Professional Capabilities to meet the minimum regulatory standards for satisfactory completion of training.

The **Key Capabilities** are mandatory capabilities which must be evidenced by the trainee, in their ePortfolio, to meet the Learning Outcome. Key Capabilities are therefore also mapped to the GMC Generic Professional Capabilities framework.

The **Illustrations** are examples of evidence and give the range of clinical contexts that the trainee may use to support their achievement of the Key Capabilities. These are intended to provide a prompt to the trainee and trainer as to how the overall outcomes might be achieved. They are not intended to be exhaustive, and excellent trainees may produce a broader portfolio or include evidence that demonstrates deeper learning. It is not expected that trainees provide ePortfolio evidence against every individual illustration (or a set quota); the aim of assessment is to provide evidence against every Key Capability.

The **Assessment Grid** indicates suggested assessment methods, which may be used to demonstrate the Key Capabilities. Trainees may use differing assessment methods to demonstrate each capability (as indicated in each Assessment Grid), but there must be evidence of the trainee having achieved all Key Capabilities.



# Generic Learning Outcomes

This table contains the generic Learning Outcomes required for all trainees working towards a CCT in paediatrics. Within the curriculum and throughout the syllabi they are mapped to the Generic Professional Capabilities (GPCs).

Curriculum Domain	Level 1	Level 2	Level 3
<b>1. Professional values and behaviours and professional knowledge</b>  <b>GPC 1 and 3</b>	<p>In addition to the professional values and behaviours required of all doctors (Good Medical Practice), a paediatric trainee maintains confidentiality but judges when disclosure may be required in relation to safeguarding.</p> <p>Taking into account the differing legislation and health services between the four countries.</p>	<p>Adheres to the specific legislation (including safeguarding) and healthcare systems between the four countries which applies to children and families' legislation.</p> <p>Acts as a role model and guides junior colleagues in developing professional values and behaviours in relation to paediatrics.</p> <p>Creates an open and supportive working environment.</p>	<p>Adheres to current legislation related to children and families, e.g. adoption, safeguarding, etc.</p> <p>Adopts a self-regulatory approach to their behaviour and demonstrates the professional qualities required by a paediatrician undertaking independent practice, across the four countries.</p>
<b>2. Professional skills: Communication</b>  <b>GPC 2</b>	<p>Develops effective relationships with children and families and colleagues, demonstrating effective listening skills, cultural awareness and sensitivity.</p> <p>Communicates effectively in the written form, by means of clear, legible, and accurate written and digital records.</p>	<p>Participates effectively in the MDT and engages with patients and families/carers, facilitating shared decision-making.</p> <p>Recognises complex discussions and when to seek assistance.</p>	<p>Leads MDTs and demonstrates effective communication skills in a range of environments and situations with children, young people and families in challenging circumstances.</p> <p>Communicates effectively with external agencies, including authoring legal documents and child protection reports.</p>

Curriculum Domain	Level 1	Level 2	Level 3
<b>3. Professional skills: Procedures</b>  <b>GPC 2</b>	<p>Adapts clinical examinations to meet the needs of the child and family/carers, undertaking basic paediatric clinical procedures.</p> <p>Recognises an emergency situation, knowing when and how to escalate appropriately.</p> <p>Initiates basic life support and able to carry out advanced life support with guidance.</p>	<p>Supervises and assesses junior staff when undertaking clinical procedures.</p> <p>Respond to and manages emergency situations, and able to perform advanced life support.</p>	<p>Demonstrates competence in the full range of clinical skills relevant within paediatrics and either General Paediatrics or their chosen sub-specialty.</p> <p>Utilises the skills of other health professionals when required.</p>
<b>4. Professional skills: Patient management</b>  <b>GPC 2</b>	<p>Conducts a patient assessment and makes a differential diagnosis.</p> <p>Plans appropriate investigations and initiates a treatment plan.</p>	<p>Refines differential diagnosis and tailors management plans in response to the patient's needs and/or response to initial treatment.</p>	<p>Considers the full range of treatment and management options available, including new and innovative therapies, relevant within paediatrics and either General Paediatrics or their chosen sub-specialty.</p> <p>Anticipates and determines the need for transition from paediatric services and plans accordingly.</p>
<b>5. Health promotion and illness prevention</b>  <b>GPC 4</b>	<p>Promotes healthy behaviour, including giving advice, from early years to adulthood.</p>	<p>Takes into account the potential impact of cultural, social, religious and economic factors on child and family health.</p>	<p>Demonstrates leadership in the promotion of health and wellbeing practices in the wider community.</p>

Curriculum Domain	Level 1	Level 2	Level 3
<b>6. Leadership and team working</b>  <b>GPC 5</b>	<p>Recognises why leadership and team working are important in the paediatric clinical environment.</p> <p>Works constructively within a team, valuing contributions of others.</p> <p>Develops personal leadership skills.</p>	<p>Demonstrates an awareness of own leadership qualities, adjusting their approach to improve outcomes.</p> <p>Participates effectively and constructively in multidisciplinary and inter-professional teams.</p>	<p>Leads in multi-disciplinary team working.</p> <p>Promotes an open culture of learning and accountability by challenging and influencing colleague's behaviour.</p> <p>Supports the development of the team's leadership qualities and critical decision-making skills.</p>
<b>7. Patient safety (including safe prescribing)</b>  <b>GPC 6</b>	<p>Establishes the importance of safe prescribing, and is able to prescribe commonly-used medication in an appropriate manner.</p> <p>Recognises when a patient has been exposed to risk and escalates in accordance with local procedures.</p>	<p>Applies appropriate procedures to both prescribing and clinical care situations and manages risk effectively.</p> <p>Demonstrates ability to mitigate against potential risks.</p>	<p>Participates in investigating, reporting and resolving risks to patients, including appropriate communication with patients and families/carers.</p> <p>Evaluates safety mechanisms across a range of healthcare settings, applying a reflective approach to self and team performance.</p>

Curriculum Domain	Level 1	Level 2	Level 3
<b>8. Quality improvement</b>  <b>GPC 6</b>	<p>Applies quality improvement methods (e.g. audit and QI projects) under guidance.</p>	<p>Independently applies knowledge of quality improvement processes to undertake projects and audits to improve clinical effectiveness, patient safety and patient experience.</p>	<p>Identifies quality improvement opportunities.</p> <p>Supervises healthcare professionals in relation to improvement projects.</p> <p>Leads and facilitates reflective evaluation in relation to quality improvement interventions.</p>
<b>9. Safeguarding</b>  <b>GPC 7</b>	<p>Promotes the professional responsibility of safeguarding children and young people, and able to document accurately and raise concerns in a professional manner to senior staff.</p>	<p>Takes responsibility for raising concerns, getting advice and taking appropriate actions, with supervision.</p>	<p>Independently leads the full process of safeguarding children, including assessment and reporting.</p>
<b>10. Education and training</b>  <b>GPC 8</b>	<p>Performs planned teaching and learning events under guidance.</p>	<p>Plans and delivers teaching and learning experiences to trainees and other professionals.</p> <p>Provides appropriate and constructive feedback.</p>	<p>Models the knowledge, skills and attitudes to provide appropriate teaching, learning opportunities, supervision, assessment and mentorship in the paediatric healthcare setting.</p>
<b>11. Research</b>  <b>GPC 9</b>	<p>Adopts an evidence-based approach to paediatric health practice and the critical appraisal of existing published research.</p>	<p>Implements an evidence-based approach to practice to inform decision-making and enhance patient care and patient outcomes.</p>	<p>Demonstrates independent development and revision of guidelines and procedures to improve service delivery, centred around current clinical research and evidence-based healthcare.</p>

## Additional Level 3 Learning Outcomes

In addition to the generic Learning Outcomes, all Level 3 trainees must fulfil the requirements of the Level 3 Learning Outcomes for General Paediatrics or their chosen sub-specialty.

The following pages contain the purpose statements and Learning Outcomes for each sub-specialty,

For more information on the requirements for these Learning Outcomes, please see the Level 3 syllabus for General Paediatrics or the relevant sub-specialty.

## General Paediatrics

The purpose of the Level 3 General Paediatrics curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a General Paediatrician.

A General Paediatrician is a doctor with the knowledge and skills to manage a wide range of health problems and concerns in children. General Paediatricians are not bound by age group or organ. They manage children from birth to late adolescence with problems ranging from acute, life-threatening illnesses to chronic diseases, and focus on health promotion from newborn to late adolescence.

General Paediatricians are experts in the investigation and diagnosis of children with nonspecific symptoms and signs. They initiate treatment which may be delivered and continued by themselves or by another person or team according to the needs of the child. General Paediatricians also collaborate with other professionals and agencies in order to deliver optimal care. They step in and oversee individual, tailored care whenever appropriate. As a result, General Paediatricians develop a wide variety of skills allowing them to provide holistic, child-centred care across the full range of paediatric subspecialties. They may develop significant expertise in specialised paediatric areas, but they maintain their knowledge and skills across the full breadth of child health.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a General Paediatrician must demonstrate that they have met the following General Paediatric Learning Outcomes:**

- Resuscitates, stabilises, and treats acutely unwell children and young people, liaising with specialist and primary care teams as necessary.
- Assumes the role of Acute Paediatric Team Leader and liaises with the primary care and other hospital and community specialist teams to effectively manage and coordinate patient flow, staffing, safety and quality in the paediatric acute assessment and inpatient units.
- Recognises, investigates, initiates and continues the management of the full range of acute and chronic health problems presenting to paediatric outpatient clinics, drawing upon the expertise of other specialists as necessary.
- Recognises, investigates and manages safeguarding issues, including providing advice to general practitioners, other healthcare professionals and social care providers.
- Co-ordinates and leads the care of children and young people with complex conditions, liaising with primary care and other hospital and community specialist teams.
- Supports and communicates effectively with families when their child is extremely unwell, dying or has died.

# Paediatric Allergy, Immunology and Infectious Disease

The purpose of the Level 3 Allergy, Immunology and Infectious Disease curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as an Allergy, Immunology and Infectious Diseases Paediatrician.

A Paediatric Allergy, Immunology and Infectious Diseases (PAIID) specialist is a doctor who works across all paediatric age groups to investigate, diagnose and manage infectious, immunological and allergic disorders. They work in both inpatient and outpatient settings, with acute and chronic presentations of disease, and provide specialist regional advice in a model of shared care with local hospitals. Most specialists will have one primary area of interest (allergy, immunology or infection), but will have core training in all three areas. PAIID paediatricians usually practice in MDTs in centres with co-located specialty disciplines, including Paediatric Intensive Care Unit (PICU) and adult Allergy, Immunology and Infectious Disease (AIID) specialists, and supporting services e.g. immunology, microbiology and virology laboratories.

At the tertiary level, PAIID paediatricians have developed detailed knowledge of the developing immune system and its role in infection and allergic disease in children. Furthermore, they are knowledgeable about the interpretation of microbiological and immunological investigations, and have had laboratory experience in a tertiary centre. They are involved in the treatment of primary and secondary immunodeficiency, Human Immunodeficiency Virus (HIV) infection and infection in the immunocompromised host, as well as in the administration of allergen-specific immunotherapy.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training an Allergy, Immunology and Infectious Diseases Paediatrician must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Demonstrates ability to expertly investigate, diagnose and manage conditions within paediatric allergy, immunology and infectious diseases.
- Competently manages children and young people with infectious diseases (including the diagnosis and management of common, specific scenarios) and appropriately uses diagnostics, therapeutics, vaccines and infection-control measures.
- Competently manages all aspects of paediatric immunology (including the diagnosis of common and rare, primary and secondary immunodeficiencies) and understands the appropriate referral for, management of and complications associated with definitive treatments (including bone marrow transplant and gene therapy).

- Competently manages children and young people with allergies (including the diagnosis and management of common and rare allergic conditions) and applies diagnostic procedures and new or complex therapies to optimise clinical care.
- Ensures up-to-date knowledge and understanding of new developments in relevant specialty strands and utilises this knowledge to develop and update specialised protocols and guidelines to inform clinical practice and develop initiatives nationally and internationally.



# Child Mental Health

The purpose of the Level 3 Child Mental Health curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Child Mental Health Paediatrician.

A Child Mental Health Paediatrician is a doctor who has expertise in promoting mental wellbeing, “parity of esteem” (the principle by which mental health must be given equal priority to physical health) and working with children and families with mental health difficulties. This includes children with somatisation and complex presentations, behavioural challenges, neurodevelopmental disorders, eating disorders, mood disorders, anxiety, and other mental health presentations.

Child Mental Health Paediatricians have a thorough knowledge of theoretical aspects of mental health, including psychological, social and neurobiological aspects, and apply it in a clinical and advisory capacity. They can use the biopsychosocial model and know the range of psychotherapeutic approaches within the MDT.

They are involved in developing formulations, managing complex cases and liaising with other mental health specialists, paediatric subspecialists and local teams in order to enhance holistic care. They have the ability to provide specialist regional advice in complex cases.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Child Mental Health Paediatrician must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Demonstrates a thorough knowledge and application of theoretical frameworks in mental health.
- Demonstrates expertise in the diagnosis and management of children with mental and psychological difficulties.
- Effectively promotes mental health and resilience among children, families and communities.
- Provides specialist advice on complex clinical presentations with a mental health component, including the psychological impact on staff members and colleagues.
- Takes a leading role in advocacy for children with mental health difficulties and promotes parity of esteem.

# Paediatric Clinical Pharmacology

The purpose of the Level 3 Paediatric Clinical Pharmacology curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Paediatric Clinical Pharmacologist.

A Paediatric Clinical Pharmacologist is a doctor who has expertise in all aspects of the development of medicines and their safe, rational use. This includes research (from early phase clinical trials to translational), ethics, clinical practice, drug regulation and education.

In clinical practice, they provide advice and support locally and nationally regarding the introduction of new medicines, adverse drug reactions, poisoning and toxicity, and prescribing policies. They contribute to the ethical review of research, plus the safe and effective conduct and delivery of drug trials. Additional research skills developed during training include those in drug development, medicine safety and the rational use of medicines in children.

Clinical Pharmacologists play a vital role in many areas that complement the use of medicines in children. Roles within drug regulation include developing local guidelines, advising on pharmacovigilance and serving on national committees. They contribute to the education of undergraduate and postgraduate healthcare professionals on drug metabolism, formulations and prescribing.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Paediatric Clinical Pharmacologist must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Competently manages patients with adverse drug reactions (ADRs) and acute poisonings.
- Designs and plans a clinical trial of a medicine and understands the roles of the study team.
- Participates in the design, delivery and interpretation of paediatric clinical trials of medicines.
- Understands, advises and teaches on drug metabolism in children.
- Contributes to Trust, regional and national paediatric drug policy development and implementation.
- Advocates for the safe and effective evidence-based use of medicines in children.

# Community Child Health



The purpose of the Level 3 Community Child Health curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Community Child Health Paediatrician.

A Community Child Health Paediatrician is a doctor who has expertise in working with vulnerable groups of children and their carers. This includes children with developmental disorders and disabilities, those with complex behavioural presentations, and those who are at risk of abuse or are being abused. They also have a particular role with children who are “looked after” or are in the process of being adopted.

They hold clinics in a variety of settings, including schools, with an emphasis on continuity of care, and have strong skills working with multiple agencies, particularly with education and social care.

Community paediatricians have a vital role in planning and implementing local strategies to improve the health of all children in their area, including safeguarding policies and overseeing universal and targeted lifestyle programmes.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Community Child Health Paediatrician must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Demonstrates proficiency in the paediatric assessment and management of vulnerable children, including those with developmental disorders and disabilities.
- Adopts a leading role with children who are at risk of abuse or are being abused and for those who are “looked after”, and can contribute to the process of adoption.
- Demonstrates strong skills in working with multiple agencies, particularly with education and social care.
- Actively participates in planning and implementing local strategies to improve the health of all children in their area, including safeguarding policy and overseeing universal and targeted lifestyle programmes.
- Contributes with other professionals to the management of children with life-limiting complex disability.

# Paediatric Diabetes and Endocrinology



The purpose of the Level 3 Paediatric Diabetes and Endocrinology curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Paediatric Endocrinologist consultant.

A Paediatric Endocrinologist is a doctor who has special expertise in looking after children and young people with hormone disorders. These can affect growth or pubertal development and have significant effects on a child's physical and emotional well-being. The conditions managed can include normal variations in growth and puberty; over- or under-activity of the pituitary, thyroid and adrenal glands; endocrine-related obesity; more complex disorders of sex development; and metabolic bone disease.

Paediatric Endocrinologists link closely with other tertiary specialties, including surgeons, gynaecologists, geneticists and adult endocrinologists, to provide coordinated and comprehensive care. Many Paediatric Endocrinologists are actively involved in clinical research. Paediatric Endocrinologists are also involved in managing children and young people with diabetes mellitus. This entails developing expertise in optimising blood glucose control to minimise future complications, intensive insulin regimes, continuous glucose monitoring systems (CGMS), and continuous subcutaneous insulin infusions (CSII).

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Paediatric Endocrinologist must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Competently manages common endocrine conditions and has an awareness of rare endocrine disorders.
- Competently manages all aspects of type 1 and type 2 diabetes mellitus and rare forms of diabetes.
- Provides expert advice at a regional level for the management of endocrine conditions and diabetes mellitus.
- Implements and maintains safe and effective practice related to endocrinology and diabetes mellitus.

## Paediatric Emergency Medicine

The purpose of the Level 3 Paediatric Emergency Medicine curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as an Emergency Medicine Paediatrician. The curriculum is also used by trainees at the Royal College of Emergency Medicine, whose representative has participated in the group redeveloping this curriculum.

A Paediatric Emergency Physician is a doctor who specialises in the initial management of children presenting with a wide range of undifferentiated conditions. They need to make pragmatic and rapid decisions using a wide breadth of knowledge across a vast range of paediatric presentations. They need to be adaptable in order to be able to switch immediately from managing minor conditions to leading the resuscitation of children. They are equally at home dealing with minor and major trauma, and minor and serious illness, as well as the worried well, and their training prepares them for this.

Paediatric Emergency Physicians must also acquire a wide range of non-clinical skills and abilities, both inward and outward looking. These may revolve around process management, either in the Emergency Department (ED), the hospital as a whole, or the wider community and interfaces of care. They must also learn to take care of themselves and the emergency team, developing skills to counteract the high-pressure nature of the workload through, for example, communication, debriefing, and resilience training. They gain their skills by working in busy Paediatric Emergency Departments (PEDs), Paediatric Intensive Care Units (PICUs), and alongside colleagues from other specialties including emergency medicine, paediatrics, general paediatric surgery and other surgical specialties, mastering both the diagnostic challenge and the practical skills required to treat this diverse population. As consultants, Paediatric Emergency Physicians may work in designated PEDs or alongside adult colleagues, taking on the care of children in mixed EDs.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training an Emergency Medicine Paediatrician must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Recognises, assesses and manages the full range of paediatric emergency conditions.
- Assumes the role of paediatric emergency team leader and takes responsibility for this domain of service.
- Performs high-level clinical and technical skills and procedures in the paediatric emergency setting.
- Liaises effectively with hospital and community specialist paediatric emergency medicine (PEM) teams.
- Effectively manages and coordinates patient flow, staffing, safety and quality in a PED.
- Demonstrates the ability to make pragmatic and rapid decisions across a broad range of paediatric emergencies.

## Paediatric Gastroenterology, Hepatology and Nutrition

The purpose of the Level 3 Paediatric Gastroenterology, Hepatology and Nutrition curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Paediatric Gastroenterologist or Hepatologist.

A Paediatric Gastroenterologist is a doctor who provides tertiary services for the diagnosis and long-term management of rare disorders and complex cases of more common disorders that affect the gastrointestinal tract. Gastroenterologists provide nutritional support for patients, including those with temporary or permanent intestinal failure, and manage services for home parenteral nutrition. Paediatric Hepatologists provide both tertiary and national hepatology services in designated centres. They diagnose and manage paediatric liver diseases, such as acute and chronic liver failure, and are co-located with transplant services to provide care for liver and small bowel transplantation patients.

Paediatric Gastroenterologists and Hepatologists often provide specialist advice in a model of shared care. They are co-located in regional units with key services such as paediatric surgery and paediatric intensive care. They understand the indications, benefits and risks of procedures for diagnostic evaluation and possess specialised skills in performing and interpreting the results of tests, such as gastrointestinal endoscopy and liver biopsy.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Paediatric Gastroenterologist or Hepatologist must demonstrate that they have met the following sub-specialty Learning Outcomes:**

### In Gastroenterology

- Diagnoses, assesses and coordinates the management of inflammatory bowel disease (IBD) in all aspects of its care as part of an MDT.
- Diagnoses, assesses and manages both congenital and acquired conditions that may result in intestinal malabsorption and associated clinical disorders, as part of an MDT.
- Manages the assessment of gastrointestinal bleeding, its risk stratification and safe, effective management as part of both a gastroenterology network and an MDT.
- Demonstrates the confident management of a range of gastroenterology conditions, distinguishing functional gastrointestinal disorders from other gastrointestinal disease and providing safe and effective care.
- Performs high-level clinical and technical skills and procedures, while demonstrating understanding of the role of endoscopy, both diagnostic and therapeutic, in the management of children with gastrointestinal disorders.

**In Nutrition**

- Manages all aspects of reversible and irreversible intestinal failure in children.
- Manages children with complex nutritional needs requiring nutritional support.

**In Hepatology**

- Competently manages children and families throughout the transplantation process.
- Manages children in the peri- and post-transplant periods.
- Competently manages children with acute liver failure.
- Provides expert advice at a national level on the initial management for children with acute liver failure.
- Competently manages children with chronic and end-stage liver disease and the associated complications, alongside an MDT.
- Competently manages different conditions of infantile cholestasis and has an awareness of the rare disorders associated with infantile cholestasis.
- Stabilises and safely manages children with acute gastrointestinal bleeding secondary to bleeding varices and portal hypertension.
- Demonstrates the technical skills required for the diagnosis and management of children with liver disease.

# Paediatric Inherited Metabolic Medicine



The purpose of the Level 3 Paediatric Inherited Metabolic Medicine curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Metabolic Paediatrician.

A Metabolic Paediatrician is a doctor who cares for children and families who have inherited disorders that affect the body's normal biochemical reactions. There are many rare metabolic disorders that can affect the function of any organ system and can present at any age. They have detailed knowledge of normal human biochemistry and the impact of metabolic diseases, and use this knowledge in the diagnostic process (including identifying novel disorders) and in planning management strategies. They strive to improve the early recognition and diagnosis of metabolic diseases, including through newborn screening.

Metabolic Paediatricians work closely with laboratory scientists, metabolic dietitians, pharmacist specialists and nursing teams. They are research-active and keep up to date with the rapid and innovative developments in therapeutics for metabolic disorders. They are advocates for their patients, actively engaging in developing and commissioning high-quality services and evolving therapies.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Metabolic Paediatrician must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Recognises, assesses and manages the full range of acute paediatric inherited metabolic emergencies.
- Demonstrates sound understanding of the full range of metabolic conditions and applies this knowledge to newly referred patients.
- Counsels families of a patient with the diagnosis of an inherited metabolic disorder (IMD) detected through the newborn screening programme.
- Explains the inheritance of IMD to families and applies this within a cultural context.
- Liaises effectively with hospital and community specialist teams for managing paediatric inherited metabolic conditions, particularly with specialists such as dietitians, pharmacists, nurses and laboratory scientists.
- Effectively works with paediatricians in district general hospitals and specialist centres to coordinate patient care, and maintains consistent quality in the context of a paediatric inherited metabolic medicine service.
- Contributes to international collaborations and research.

# Paediatric Intensive Care Medicine

The purpose of the Level 3 Paediatric Intensive Care Medicine curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Paediatric Intensive Care Physician (PICP).

The PICP is a doctor from a paediatric, intensive care or anaesthetic background who resuscitates, stabilises, transfers and treats critically ill and injured children. They identify those children who need intensive care support and are skilled at the procedures and techniques necessary to deliver that support. They are highly skilled at directing, leading and coordinating both medical and surgical resuscitation, and can prioritise and respond to new and urgent clinical situations.

The PICP treats children with a wide range of life-threatening pathologies within the emergency, transfer and intensive care settings. They interact with, coordinate, educate and supervise all members of the multi-professional Intensive Care Team, understanding the unique interaction of the Intensive Care Unit with every component of the hospital. They work in difficult and challenging environments within the emergency, transfer and intensive care settings. The PICP also coordinates and delivers appropriate care in the setting of a major incident.

## PICM Specialty Recognition within Intensive Care Medicine

Paediatric Intensive Care Medicine (PICM) has been approved by the GMC as a specialty of Intensive Care Medicine. The Faculty of Intensive Care Medicine (FICM) sets the training requirements for adult Intensive Care Medicine (ICM). Trainees engaged in a Single or Dual CCT in ICM can undertake specialty accreditation in PICM via the GRID Training Programme.

Single ICM CCT trainees incorporate the PICM training into the exiting programme, which requires no extension of training time. Trainees undertaking Dual CCTs in ICM and a partner specialty (e.g. Anaesthesia) may also wish to apply for the PICM Specialty Programme. Undertaking Dual CCTs and specialty recognition, however, will result in a significantly prolonged period of training with an additional 24 months required.

The full details of how PICM can be incorporated into the ICM training programme can be found within the FICM's ICM CCT curriculum.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Paediatric Intensive Care Physician must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Recognises, assesses and manages the full range of both medical and surgical paediatric conditions requiring intensive care support, including the management of safeguarding issues within this environment.
- Assumes the role of Intensive Care Team Leader and liaises with hospital and community specialist teams, effectively managing and coordinating patient flow, staffing, safety and quality in the context of a busy Paediatric Intensive Care Unit (PICU).
- Resuscitates, stabilises, and transfers critically ill children, performing the high-level clinical and technical skills and procedures necessary to carry this out in the paediatric intensive care, emergency and transport environments.
- Performs high-level technical skills and procedures utilising the appropriate medications necessary for managing critically ill children, and troubleshoots appropriately.
- Supports and communicates with families when their child is extremely unwell, dying or has died.

# Neonatal Medicine

The purpose of the Level 3 Neonatal Medicine curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a consultant Neonatologist.

A Neonatologist is a doctor who provides comprehensive care to the critically ill infant on the neonatal intensive care unit whilst ensuring the care of well term infants on the postnatal ward. The spectrum of clinical conditions and the care required is vast, from the term baby with feeding issues on the postnatal ward to the sick, fragile, extremely preterm baby with multiple problems.

Neonatologists often face difficult discussions with families in the antenatal and postnatal environment regarding counselling about care, management, prognostication and, potentially, palliative care. Ethical and medicolegal knowledge and its application are central to many of these discussions.

Whilst providing team leadership and clinical and skill training, the Neonatologist is also expected to be able to perform challenging technical procedures.

Long-term follow-up with developmental screening until 2 years of age is provided in this role and it is the combination of intensive care skills, ethical and emotional support, and clinic follow-up that make this a unique speciality.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Neonatologist must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Provides comprehensive care to the critically ill infant on the neonatal intensive care unit, whilst ensuring the care of well term infants on the postnatal ward.
- Communicates expertly with parents or carers and other staff in the antenatal and postnatal environment.
- Demonstrates effective and appropriate follow-up of babies following neonatal intensive care.

# Paediatric Nephrology

The purpose of the Level 3 Nephrology curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Paediatric Nephrologist.

A Paediatric Nephrologist is a doctor who deals with the diagnosis, investigation and management of chronic and acute kidney disease, including the provision of dialysis and renal transplantation. Paediatric Nephrologists have a detailed knowledge of renal physiology, including fluid management and disturbances in electrolytes and acid-base balance. They are skilled in the management of acute kidney injury (AKI), which may be managed conservatively or with renal replacement therapy (RRT), including peritoneal dialysis (PD), haemodialysis (HD), and continuous venovenous haemodialysis (CVVHD) and continuous venovenous haemodiafiltration (CVVHF). They are also skilled in the management of chronic kidney disease (CKD), including the pre-dialysis phase, peritoneal dialysis, haemodialysis and transplantation.

Paediatric Nephrologists also develop expertise in the management of children and infants with congenital anomalies of the renal tract, nephrotic syndrome, glomerulonephritis, vasculitis, inherited and acquired forms of tubulopathy, urinary tract infection (UTI) and vesicoureteric reflux (VUR), renal stone disease, hypertension, inborn errors of metabolism, and inherited nephropathies. CKD is a life-long condition and Paediatric Nephrologists are frequently involved in the care of patients from birth all the way through to the successful transition into adult renal care.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Paediatric Nephrologist must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Demonstrates extensive knowledge of renal physiology, including fluid management and disturbances in electrolytes and acid-base balance.
- Manages the diagnosis, investigation and management of acute and chronic kidney disease, including the provision of renal replacement therapy and renal transplantation.
- Demonstrates proficiency in all aspects of the management of children and infants requiring acute and long-term dialysis, including peritoneal dialysis, haemodialysis, continuous venovenous haemodialysis and continuous venovenous haemodiafiltration.
- Manages children and infants with congenital anomalies of the renal tract, nephrotic syndrome, glomerulonephritis, vasculitis, inherited and acquired forms of tubulopathy, UTI and vesicoureteric reflux, renal stone disease, hypertension, inborn errors of metabolism, and inherited nephropathies.
- Shows expertise in the transition of renal patients to adult care.

## Paediatric Neurodisability

The purpose of the Level 3 Paediatric Neurodisability curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Neurodisability Paediatrician.

A Neurodisability Paediatrician is a doctor who has specialist expertise in the management of children and young people with disabilities resulting from congenital or acquired long-term conditions. These problems are generally due to impairment in the nervous or musculoskeletal systems and can be static or progressive in nature.

Although they are involved in the diagnosing, the Neurodisability Paediatrician's emphasis is in managing the complex comorbidities seen, targeting the patients' rehabilitation and enablement. While working closely with local teams in the hospital and community (such as Genetics, Neurology, Community Paediatrics, surgical specialties and Palliative Care, as well as NGOs and education and social services), they often provide specialist regional advice in a model of shared care.

At a tertiary level, Neurodisability Paediatricians have developed specialist skills within the neurosciences. This includes in the assessment of motor and neurobehavioural disorders (e.g. attention deficit hyperactivity disorder [ADHD] and autism), and neurorehabilitation, and they often subspecialise in one or more of these areas.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Neurodisability Paediatrician must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Demonstrates specialist expertise in the management of children and young people with disabilities resulting from congenital or acquired long-term conditions.
- Effectively manages comorbidities, and focuses on rehabilitation and enablement.
- Demonstrates the ability to act as a resource across both hospital and community teams to provide specialist regional advice in a model of shared care.
- Shows development of specialist skills within the neurosciences in the assessment of motor and neurobehavioural disorders, including ADHD and autism, and in neurorehabilitation.

## Paediatric Neurology

The purpose of the Level 3 Paediatric Neurology curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Paediatric Neurologist.

A Paediatric Neurologist is a doctor who has knowledge and understanding of disorders of the nervous system that affect infants, children and young people. They need to have expertise in conditions including the epilepsies; movement disorders; cerebrovascular disease; neuromuscular disorders; neurogenetic, inflammatory and demyelinating disorders; neonatal neurology; and acquired brain injury and neurorehabilitation. In addition, they have generic expertise in neuroimaging, molecular medicine and neurosurgical disorders. Some Paediatric Neurologists will subspecialise and work largely or exclusively in a particular field.

Paediatric Neurologists are usually based in a regional neuroscience centre providing secondary- and tertiary-level services, working in outpatient and hospital settings. In the acute setting, they manage a wide spectrum of disorders and provide shared care management of patients on the paediatric intensive care unit (PICU) and the neonatal ICU (NICU), and of patients undergoing neurosurgery. They provide specialist support to paediatric specialty colleagues, advising on the diagnosis and ongoing management of chronic and complex disease. Paediatric Neurologists work particularly closely with neurodisability paediatricians, neurosurgeons, neurophysiologists, neuroradiologists and neurogeneticists.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Paediatric Neurologist must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Recognises, assesses and manages the full range of paediatric neurological conditions, including acute neurological disorders with common and uncommon presentations, anticipating possible pitfalls and complications, while recognising and managing high-risk situations.
- Coordinates urgent and complex clinical management, including the provision of non-acute clinic services and ward-based neurogenetic, neuroradiological or neurophysiological multidisciplinary meetings; completes appropriate onward referrals and discharges; and communicates clearly with colleagues.
- Promotes the neurological and developmental health of a child with a neurological disorder.
- Assumes the role of paediatric neurological team leader and takes responsibility for this area of service.
- Practises safe child neurology, including when prescribing medication, and initiates and completes a quality improvement project applicable to child neurology.
- Keeps up to date and engages in, supports and stimulates research in child neurology.

# Paediatric Oncology

The purpose of the Level 3 Paediatric Oncology is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Paediatric Oncologist.

A Paediatric Oncologist is a doctor with specialist expertise in managing children with cancer. The cancer may be in any location or system, including the blood (leukaemia), brain or body. They care for children and young people and their families at all stages of treatment, from diagnosis to long-term follow-up or palliative care, and often maintain support for many years.

Paediatric Oncologists work closely with haematologists, surgeons, radiation oncologists, pathologists, radiologists, endocrinologists, and other oncologists, nationally and internationally, to ensure therapies are appropriate and effective. They work locally with psychologists, social workers and teachers to support patients and their families, ensuring that the burden of treatment is contained and that the long-term effects of treatment are minimised. Evidence-based medicine is at its core, and oncology is characterised by the expectation that patients will be treated according to clinical trials whenever possible.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Paediatric Oncologist must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Recognises, assesses and manages the full range of paediatric oncology conditions.
- Assumes the role of oncology team leader and takes responsibility for this area of service, effectively managing and coordinating patient flow, staffing, safety and quality in the context of a paediatric oncology department.
- Builds robust relationships with parents or carers and patients that will be sustainable for both parties throughout the cancer journey.
- Understands the concepts of evidence-based medicine and clinical trials, and the cornerstones that they maintain in the field of paediatric oncology.

# Paediatric Palliative Medicine

The purpose of the Level 3 Paediatric Palliative Medicine curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a consultant in Paediatric Palliative Medicine (PPM).

A Paediatric Palliative Medicine (PPM) doctor has expertise working with neonates, infants, children and young people with life-limiting conditions and life-threatening illness, and their families. These conditions include malignancy; inherited disorders; cardiac, neurological and neuromuscular diseases; and a variety of rare progressive and irreversible conditions.

PPM doctors work alongside MDTs across hospital, hospice and community settings, providing a total approach to care and focusing on quality of life. The approach embraces physical, emotional, social and spiritual elements. These consultants provide specialist symptom management (e.g. nausea, pain, breathlessness, and agitation), guidance on advance care planning (e.g. the preferred place of care, and ceilings of care), and end-of-life and bereavement care, as well as offering support with complex ethical decisions (e.g. feeding and hydration). The PPM doctor also plays a vital role in supporting other healthcare professionals to care for children with life-limiting conditions.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a PPM Paediatrician must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Demonstrates specialist expertise in the management of life-threatening illness and life-limiting conditions across the paediatric spectrum, from the unborn baby, neonate and infant to the child and young person.
- Works as a specialist expert in paediatric palliative medicine across a range of settings and within the MDT, by providing a holistic approach to care.
- Recognises, assesses, anticipates and manages the full range of symptoms experienced as disease and illness progress.
- Prescribes, reviews and monitors pharmacological treatment and non-pharmacological interventions necessary to manage patients with life-limiting illness, and at the end of life; ensures non-pharmacological interventions are integrated into care at all stages of management.
- Works together with patients, families and professionals to facilitate decision-making regarding planning and provision of care towards the end of life; ensures good practice and provides appropriate support and guidance in decision-making and advance care planning.
- Makes complex decisions and supports others making complex ethical decisions within the recognised UK framework.
- Demonstrates expertise in the physiological process and practical requirements of death and dying in childhood.



- Recognises grief and the need for bereavement care, including support for all family members and those who require specialist input.
- Recognises the impact of managing stressful, sensitive and often complex situations; the impact of multiple bereavements and the risk of burnout specific to palliative medicine; and the vulnerabilities of practitioners and colleagues.
- Works as a leader to improve evidence for, access to, and provision of paediatric palliative care.
- Possesses the procedural skills necessary to practise competently and effectively as a palliative care consultant, with the confidence to advise and support others.

## Paediatric Respiratory Medicine

The purpose of the Level 3 Paediatric Respiratory Medicine curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Paediatric Respiratory Medicine consultant.

Respiratory Paediatricians are doctors who have detailed knowledge and understanding of the respiratory system in children. They are skilled in providing holistic care to manage respiratory health and ill-health in infants, children and young people. At a tertiary level, they have highly specialised skills to manage complex acute and chronic conditions including difficult-to-treat asthma, cystic fibrosis and rare lung disease. They have expertise in technical skills including flexible bronchoscopy and the care of technology-dependent children.

Respiratory Paediatricians deal with challenging problems of diagnostic and therapeutic uncertainty in their field of medicine. In doing so, they interact with many medical and surgical specialties to improve outcomes in children with lung disease in acute and chronic settings. They have a significant interest in patient responsibility and hold clinics in a variety of settings, including sharing care within clinical care networks. They advocate on public health issues at the individual, local and national level to promote lung health.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Respiratory Paediatrician must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Demonstrates proficiency in providing holistic care to manage respiratory health and ill-health in infants, children and young people, including the promotion of respiratory health.
- Demonstrates tertiary level specialist skills to manage complex acute and chronic conditions, including difficult-to-treat asthma, cystic fibrosis (CF) and rare lung disease.
- Demonstrates expertise in technical skills, including flexible bronchoscopy and the care of technology-dependent children.

# Paediatric Rheumatology

The purpose of the Level 3 Paediatric Rheumatology curriculum is to support the trainee Paediatrician in developing the skills and knowledge required to work safely and confidently as a Paediatric Rheumatologist.

A Paediatric Rheumatologist is a doctor who cares for children and young people with a range of conditions, from mechanical pains and juvenile arthritis to complex multi-system inflammatory disorders. They rely on history-taking, examination and communication with other professionals, as the conditions they manage often do not have specific diagnostic tests. Central to their work is liaising with the MDT – particularly, specialist nurses, physiotherapists, occupational therapists and psychologists. They support collaborative work within clinical networks, are competent in practical skills such as joint injections and have expert understanding of the drugs used to target the inflammatory pathway. Paediatric Rheumatologists belong to a rapidly developing specialty that encourages a range of clinical and academic interests, including clinical, educational and basic science research. They are committed to contributing to collaborative research studies and clinical trials, with the aim of improving outcomes for children and young people with rheumatological conditions.

**In addition to the generic Level 3 Learning Outcomes, by the end of their training a Paediatric Rheumatologist must demonstrate that they have met the following sub-specialty Learning Outcomes:**

- Performs the high-level clinical and technical skills required in paediatric rheumatology.
- Assumes a leadership role within the Paediatric Rheumatology Team, including sharing responsibility for service delivery, research and education.
- Liaises effectively with hospital and community teams and networks to manage the spectrum of conditions that are encountered in paediatric rheumatology.
- Effectively manages and coordinates patient flow, staffing, safety and quality in the context of a Paediatric Rheumatology MDT/Network.

# Appendix A: Integrated care case studies

**The following case studies have been produced as examples of how trainees can use examples of working in integrated care to demonstrate achievement against a variety of different aspects of the curriculum.**

All examples below are mapped to key capabilities and illustrations in the Level 1 generic syllabus.

## Patient experience and involvement

### CASE STUDY

A trainee organised the local paediatric training programme around case presentations. Of the four cases presented monthly, one is always presented by the patient or parent themselves. Hearing the story from the patient or parent is very powerful and provides rich learning for trainees. Patients report that they, too, benefit from the sessions.

### Level 1 curriculum coverage:

#### *Professional values and behaviours*

- Identifies opportunities and shows commitment for child health advocacy in their daily practice, including examples of injustice, empathy and political influences.
- Succinctly and objectively communicate the wider needs of the child verbally and in writing, with clear recommendations and justifications.

#### *Professional skills and knowledge: communication*

- Demonstrates strong communication and interpersonal skills to enable effective collaboration with patients and their families, and colleagues in multi-professional and multi-disciplinary teams. This includes demonstrating courtesy and respect for different cultures and those with protected characteristics (e.g. age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, gender, sexual orientation).
- Demonstrates skills that empower children and young people to speak out.

#### *Education and training*

- Plans and delivers small group teaching sessions e.g. case presentation, journal club.

## Data influencing change

### CASE STUDY

A trainee notes that looked after children in one borough are taking far longer to receive their medicals than their counterparts in neighbouring boroughs. They compile this evidence to make a business case for getting a Clinical Nurse Specialist in that borough.

#### Level 1 curriculum coverage:

##### *Health promotion and illness prevention*

- Understands the factors which contribute to child health inequalities and the consequences of those inequalities in terms of disability, life expectancy and health economics.
- Understands the effects of the environmental, economic and cultural contexts of health and healthcare on illness prevention.

##### *Quality improvement*

- Undertakes a quality improvement project under guidance.
- Applies knowledge of the principles of evaluation, audit, research, development and standard-setting and their roles in quality improvement
- Applies knowledge of how national and local policy initiatives impact medical practice and social health and well-being

##### *Research and scholarship*

- Forms a research question, searches for an answer and demonstrates how findings could be applied in practice

## Working clinically in an integrated way

### CASE STUDY

The trainee sets up a 'WhatsApp' group for teenagers from the diabetes clinic, encouraging them to provide peer support. They expect this will also improve communication with their patients by using a method that they feel more comfortable with.

#### Level 1 curriculum coverage:

##### *Professional skills and knowledge: communication*

- Demonstrates strong communication and interpersonal skills to enable effective collaboration with patients and their families, and colleagues in multi-professional and multi-disciplinary teams. This includes demonstrating courtesy and respect for different cultures and those with protected characteristics (e.g. age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, gender, sexual orientation).

##### *Demonstrates approachability and friendliness.*

- Uses information technology effectively in clinical practice and audit.
- Uses electronic communication media in both clinical practice and audit, taking into account the principles of confidentiality outlined in the Data Protection Act 1998 (to be replaced by the General Data Protection Regulations in May 2018).

##### *Professional skills and knowledge: patient management*

- Understands the elements of a young-people-friendly health service
- Health promotion and illness prevention
- Understand the effects of the environmental, economic and cultural contexts of health and healthcare on illness prevention.

## Leading development of integrated services

### CASE STUDY

A GP trainee contacts a paediatric trainee because she noticed that her referrals to community paediatrics were frequently rejected and wanted to understand why. She met the community paediatric team and learned that it is very different from adult services (e.g. those that offer community care for uncomplicated diabetes). The trainees collaborated to create a directory of community paediatrics to guide local GPs to make the correct referral decision. The directory was published on websites and on the GP electronic patient record. Evaluation of the number of referrals that need redirection since implementation is now underway.

#### Level 1 curriculum coverage:

##### *Leadership and team working*

- Collaborates, consults and promotes good team working.
- Works effectively with colleagues in MDTs to ensure consistency, continuity and a holistic approach to the treatment and care of children and young people.

##### *Quality improvement*

- Designs, implements, completes and evaluates a simple quality improvement project using improvement methodology as part of an MDT.

# Appendix B: Glossary

<b>Assessment</b>	An event where an evaluative judgement is made regarding a trainee's knowledge or skills. Assessment can be formative and can help to guide learning and prompt reflection. It can also be summative, where an overall judgement regarding competence, fitness to practice, or qualification for progression to higher levels of responsibility is made.
<b>Assessor</b>	An assessor provides an assessment and is responsible for interpreting the learner's performance in that assessment.
<b>Curriculum/curricula</b>	The framework that lays out the intended aims and objectives, content, experiences, learning outcomes and processes of a programme or course of learning.
<b>Capability</b>	The ability to be able to do something in a competent way.
<b>Children and Young People (CYP)</b>	The terms child/children refers to infants, children and young people under the age of 18 across the UK and may extend up to 25 depending on transition arrangements. Also referred to ICYP – Infants, Children and Young People.
<b>Critical progression points</b>	Key points during the curriculum where trainees will transition to a higher level of responsibility or enter a new area of practice. These points are frequently associated with increased risk, and so robust assessment is required. For the RCPCH Progress curriculum, these points are at the end of level 1 (transition to middle-grade rota), and the end of level 3, achieving a Certificate of Competence of Training (CCT).
<b>CSAC</b>	College Specialty Advisory Committees (CSACs) are the RCPCH committees responsible for developing the curriculum for their paediatric sub-specialty. They also monitor Level 3 trainees' progression through their sub-specialty training, advising and signing off sub-specialty CCTs.
<b>Curriculum domain</b>	The 11 areas against which all trainees must demonstrate capability, through achievement of Learning Outcomes which develop and progress through the three levels of training.
<b>Entrustable Professional Activity (EPA)</b>	Broad areas of professional practice that can be entrusted to a sufficiently competent individual.
<b>ePortfolio</b>	The RCPCH online learning tool for trainees and their supervisors to log their activities and monitor progress through the curriculum.

<b>General Paediatrics</b>	The most common field within paediatrics. General Paediatricians have broad knowledge and skills, managing a wide range of health problems in children. They are not bound by age group or organ, and manage children from birth to late adolescence with problems ranging from acute, life-threatening illnesses to chronic diseases, as well as focusing on health promotion for all ages.  Trainees following the General Paediatric Level 3 curriculum must also complete the generic Level 3 Learning Outcomes.
<b>Generic</b>	Applicable to <i>all</i> trainees regardless of level of training, e.g. generic learning outcomes.
<b>Generic Professional Capability Framework (GPCF)</b>	A matrix of educational outcomes that describe educational and critical capabilities that underpin core professional practice in the United Kingdom.
<b>General Medical Council (GMC)</b>	The General Medical Council is the regulatory body which governs medical education within the United Kingdom. All curricula for postgraduate medical education must be approved for use by the GMC.
<b>Good Medical Practice (GMP)</b>	The core ethical guidance that the GMC provides for doctors.
<b>Illustration</b>	The Illustrations are examples of evidence and give the range of clinical context in which the trainee may use to support their achievement of the Key Capabilities. These are intended to provide a prompt to the trainee and trainer as to how the overall outcomes might be achieved. They are not intended to be exhaustive and the excellent trainee may produce a broader portfolio or include evidence that demonstrates deeper learning. It is not expected that trainees provide e-portfolio evidence against every individual illustration (or a set quota); the aim of assessment is to provide evidence against every Key Capability.
<b>Introductory Statement</b>	The Introductory Statement sets the scene for what makes a Paediatrician. There are also individual statements for each sub-specialty
<b>Key Capability</b>	These are mandatory capabilities which must be evidenced by the trainee, in their e-portfolio, to meet the Learning Outcome. Key Capabilities are therefore also mapped to the GMC Generic Professional Capabilities.
<b>Learning Outcome</b>	Learning outcomes are statements that set out those essential aspects of learning that must be achieved. For the purpose of this document, these are the outcomes which the trainee must demonstrate they have met to be awarded their Certificate of Completion of Training (CCT) in Paediatrics.

<b>Level 1</b>	This is the first level of training and usually last between 2-3 years. This level provides a basic level of knowledge about paediatrics and child health. The trainee usually learns this in the following settings: acute general, community and neonatal departments.
<b>Level 2</b>	This second level of training usually lasts 1-2 years and occurs primarily within district general hospitals. There is an expectation that the trainees builds on previous knowledge and is able to apply this to common paediatric conditions, child development and safeguarding.  There is greater emphasis on out patient management and placements occur using core training posts and rotations including community and neonates.
<b>Level 3</b>	During the third level of training, which usually lasts 2-3 years, the trainees can choose to remain on a general paediatric pathway or apply for one of the 17 approved sub specialty pathways.
<b>Programme of assessment</b>	The framework of assessments intended to be used with the curriculum. The programme of assessment demonstrates how all Learning Outcomes can (or must) be achieved, and specifies minimum levels of performance at Critical Profession Points.
<b>Protected characteristic</b>	As defined by the Equality Act (2010) as groups who are protected by the Act. These are characteristics which may result in that individual suffering discrimination, harassment, victimisation, or some other inequality of opportunity. The protected characteristics are: age; disability; gender; gender reassignment; pregnancy and maternity; race; religion or belief; sexual orientation.
<b>Quality Assurance (QA)</b>	The oversight of education and training to ensure that it meets the required standards and that organisations are complying with their own and external policies, procedures and regulations.
<b>Quality Management (QM)</b>	The mechanisms by which Medical Schools and Deaneries/LETBs satisfy themselves that local training and assessment is meeting the required standards. This may include reporting and monitoring mechanisms.
<b>RCPCH Progress</b>	The curriculum for use by RCPCH trainees undertaking post graduate paediatric training from August 2018. The purpose of the curriculum is to train doctors to acquire a detailed knowledge and understanding of health and illness in babies, children and young people. This curriculum provides a framework for training, articulating the standard required at critical progression points, and encourages the pursuit of excellence.

<b>Sub-specialty</b>	The various areas within paediatrics that a trainee may opt to specialise in throughout their level 3 training. The full list of approved paediatric sub-specialties can be found <a href="#">here</a> . Entry to sub-specialty training is through a central recruitment process.  Trainees following a sub-specialty Level 3 curriculum must also complete the generic Level 3 Learning Outcomes.
<b>Syllabus/syllabi</b>	Supporting documents to be used in conjunction with the curriculum documents. The syllabus includes key capabilities, illustrations and an assessment grid, designed to guide trainees and trainers in what must be evidenced, and suggestions of other evidence which may help the trainee demonstrate their achievement of the Learning Outcomes.
<b>Training programme</b>	The combination of posts undertaken by the trainee in their specialty or subspecialty, enabling them to fulfil the requirements of the curriculum.
<b>Transition</b>	The process by which existing trainees will move from the old curriculum to RCPCH Progress. Detailed guidance will be provided to support this process, and all existing evidence in ePortfolio will be retained.

