

2023



Paediatric Specialty Training - New Curriculum 2023

A short summary

HONG KONG COLLEGE OF PAEDIATRICIANS

WORKING GROUP ON CURRICULUM REVIEW

28 NOVEMBER 2023



Paediatric Specialty Training – New Curriculum Proposal for Basic and Higher Training

A Short Summary

Working Group on Curriculum Review

Hong Kong College of Paediatricians

Endorsed by College Council on 28 November 2023

Endorsed by Academy Education Committee on 9 January 2024

CONTENT PAGE

Table of Contents

2023.....	0
1 - Introduction.....	2
2. Definitions	3
3. Training Environment and Process	4
4. Curriculum Statement	4
Domain 1 - Professional Values & Behaviour	5
Domain 2 - Communication	6
Domain 3 - Procedures	7
Domain 4 - Patient Management	8
Domain 5 - Health Promotion & Illness Prevention.....	9
Domain 6 - Leadership & Team Working.....	10
Domain 7 - Patient Safety, including Safe Prescribing.....	10
Domain 8 - Quality Improvement	11
Domain 9 - Safeguarding	11
Domain 10 - Education and Training	13
Domain 11 - Research	13
5. Syllabuses.....	14
6. Formative Assessment Tools.....	15
Comparison of the four formative assessment tools	16
Assessment Grid	17
Frequency asked questions	18

1 - Introduction

The new Paediatric Training Curriculum is made up of three parts:

1.1 Competency-based curriculum

At the core of the new curriculum is the concept of training based on competency. Competency encompasses a range of attitudes and skills, divided into 11 domains. These competencies are mandatory for all trainees to acquire and will form the basis of assessment.

1.2 Syllabuses

A syllabus is a range of knowledge in each subspecialty area that the College provides as a framework of personal learning. While a trainee is encouraged to study the topics in a syllabus, each trainee may acquire the knowledge to a variable depth and breadth, depending on one's training path. Syllabuses should not be understood as limits of knowledge required of them at summative assessments.

1.3 Formative and Summative Assessments

Formative assessments are tools of feedback to guide trainees on the acquisition of the competencies. There are four main formative assessments, namely, directly observed procedural skills (DOPS), Mini Clinical Evaluation Exercise (MiniCEX), Case-based discussion (CBD) for both general paediatrics and specifically for safeguarding, and the Paediatric Multi-source Feedback (PaedMSF).

Summative assessments are the definitive assessment before a trainee can advance to the next stage in their development, namely, the MRCPCH Clinical Examination before the advancement to higher paediatric training, and the Exit Assessment before the advancement to College Fellowship.

The new curriculum was endorsed by the College Council on 28 November 2023 and then the Academy Education Committee on 9 January 2024.

The new curriculum is designed with adult learning in mind. Reference has been made to the *PROGRESS curriculum* of the Royal College of Paediatrics and Child Health, United Kingdom, and the *Hong Kong Doctors* document last updated and published by the Hong Kong Medical Council in October 2017.

2. Definitions

Curriculum

Curriculum is a defined set of learning outcomes and key capabilities that a trainee should achieve and acquire during the training. Illustrations are examples that help to describe what the learning outcomes and key capabilities entail.

Learning Outcomes (in curriculum)

Broad statements of mandatory training results

Key Capabilities (in curriculum)

Essential skill a trainee must acquire

Illustrations (in curriculum)

Examples that can demonstrate the achievement of Learning Outcomes and Key Capabilities

Syllabus

Syllabus is a scope of knowledge and skills that are recommended for the trainees during the period of basic and higher training. A trainee can acquire these skills to variable breadths and depths, depending on the training pathway. The syllabuses are intended as guides to learning and not as limits to scope of the two summative assessments, namely the intermediate examinations and the Exit Assessment

Children and Young People (CYP)

Individuals under the age of 18 years.

Summative Assessment

The intermediate examinations and the exit assessment as prescribed by the College

Formative Assessment

Assessment performed during the course of training with the purpose of guiding the trainee's future development. It is usually based at the workplace.

General Paediatrics

Knowledge that a fellow after a six-year training has to successfully discharge his duty as a paediatrician. It is a summation of all subspecialty knowledge, including neonatology.

Subspecialty

A body of knowledge and a system of clinical practice that is traditionally recognized as distinct in the practice of Paediatrics.

3. Training Environment and Process

Paediatric training under the new curriculum is workplace-based. The structure of the training and the mandatory training are prescribed by the College and the Academy. The minimum duration of training before attaining fellowship is six years.

4. Curriculum Statement

There are 11 domains of competencies:

1. Professional values and behaviours
2. Communications
3. Procedures
4. Patient management
5. Health promotion and Illness prevention
6. Leadership and Team working
7. Patient safety and safe prescribing
8. Quality improvement
9. Safeguarding
10. Education and Training
11. Research

In this short summary, each domain is divided into basic and higher training levels and two columns indicating the learning outcomes and key capabilities (illustrations are given in the full curriculum statement, which are examples demonstrating the achievement of the learning outcomes and key capabilities).

Learning Outcomes	Key Capabilities
Broad statements of mandatory training results	Essential skills that a trainee must acquire

The domains are mapped to the capabilities in the HK Doctors document published in 2017. For details of the mapping, please refer to the full curriculum statement.

Domain 1 - Professional Values & Behaviour

Basic Training

Learning Outcome	Key Capabilities
1. Be committed to excellence, service, honour, integrity and respect of others.	1. Act with altruism, accountability and responsibility.
2. Take the interest and welfare of children as the first and most important consideration.	2. Respect the autonomy of CYP and their families in making informed decisions about medical care and assess their competence in doing so
3. Apply the knowledge of growth and development in the holistic care of Children and Young Persons (CYP).	3. Foster constructive working relationships with healthcare professionals, CYP and their families taking into account of the effect of different cultural and religious backgrounds on patient care
4. Demonstrate insight and recognize the limits of their capabilities in common emergency and non-emergency paediatric conditions.	4. Reflect on one's own work

Higher Training

Learning Outcome	Key Capabilities
1. Act in a way that is safe, appropriate and does no harm to the patients when handling a broad range of common paediatric conditions and emergencies as an independent clinician	1. Apply knowledge of the principle of medical ethics and current local legislation related to the care of children and families
2. Act as an example to junior colleagues in upholding professional and personal integrity	2. Manage more difficult clinical conditions and complex situations, seeking help when appropriate.

Domain 2 - Communication

Basic Training

Learning Outcome	Key Capabilities
<ol style="list-style-type: none"> 1. Build and maintain functional relationships with CYP under one's care through effective communication 2. Engage in effective bi-directional verbal, non-verbal and written communication with CYP, their families, professionals and agencies in an accurate and respectful manner 	<ol style="list-style-type: none"> 1. Develop effective listening skills with social and cultural awareness and sensitivity. 2. Keep good and accurate medical records. 3. Hand over the care of patients through effective communication. 4. Facilitate shared decision making with patients, families and carers. 5. Take part in a multi-disciplinary team as a constructive member.

Higher Training

Learning Outcome	Key Capabilities
<ol style="list-style-type: none"> 1. Apply effective communication skills in difficult settings, including handling complaints, patient interactions involving litigation, advance care plan and end-of-life management 	<ol style="list-style-type: none"> 1. Author legal documents and child protection reports 2. Foster team work approach and take a leading role in a MDT 3. Demonstrate to others how to manage an effective consultation, including communicating a diagnosis and prognosis effectively to children, young people and families

Domain 3 - Procedures

Basic Training

Learning Outcome	Key Capabilities
<p>1. Carry out clinical examinations with appropriate adaptations for CYP of different growth and developmental stages.</p> <p>2. Carry out basic clinical procedures with appropriate adaptation and troubleshooting for CYP under a range of situations</p>	<p>1. Perform basic and advanced paediatric life support and neonatal resuscitation.</p> <p>2. Recognize and take prompt and appropriate procedures when the child's well-being, safety, dignity or comfort is being compromised.</p> <p>3. Perform developmental assessment of CYP and appreciate normal variations in growth and development</p> <p>4. Perform the following essential procedures:</p> <p>Infection control measure Aseptic technique Administration of sedation Blood taking techniques, including heel prick Various injection techniques Peripheral venous cannulation Peripheral Arterial cannulation Umbilical venous cannulation Umbilical arterial cannulation Intraosseous needle insertion Lumbar puncture Measuring peak flow rate Advanced airway support, including tracheal intubation, replacing tracheostomy tube and bagging Microbiological study specimen collection Bladder catheterization ECG performance and interpretation Use of Epinephrine auto-injector Chest tap and chest tube insertion Nasogastric tube insertion Use of Automated external defibrillator Red Reflex examination</p>

Higher Training

Learning Outcome	Key Capabilities
<p>1. Supervise and assess junior staff undertaking clinical procedures, and manage complications arising from the procedures.</p> <p>2. Demonstrate competence in performing independently a wider range of advanced procedural skills that are required in the practice of paediatrics and their chosen subspecialties.</p>	<p>1. Perform the following essential procedures during higher training:</p> <p>Exchange transfusion Point-of-care Ultrasound (e.g. head ultrasound examination, ultrasound guided vascular cannulation) – <i>the use of ultrasound as a modality of examination or guidance of clinical procedure instead of the specific ultrasound procedure.</i></p>

<p>3. Recognize the situation that requires the advanced or specialized skills of other health professionals and to employ their skills.</p>	
--	--

Domain 4 - Patient Management

Basic Training

Learning Outcome	Key Capabilities
<p>1. Perform comprehensive history taking, physical examination and investigations and give due consideration of personal factors of the CYP</p> <p>2. Devise a safe management plan of common paediatric problems at hospital and community settings based on knowledge and sound clinical reasoning</p> <p>3. Refine differential diagnosis and tailor management plans in response to the patient's needs and clinical progress</p>	<p>1. Recognize emergency and serious situations of physical and mental health in CYP and intervene appropriately</p> <p>2. Apply local and international guidelines in the management of common paediatric problems</p> <p>3. Adapt the best evidence-based clinical practice for paediatric problems if guideline is lacking</p>

Higher Training

Learning Outcome	Key Capabilities
<p>1. Recognize, investigate, initiate and continue the management of a wider range of acute and chronic conditions in the outpatient setting when possible</p> <p>2. Consider a wider range of treatment and management options available, including new therapies, relevant to paediatrics and their chosen subspecialties</p> <p>3. Anticipate and determine the need for transition of patient to other specialties or treatment settings, including the transition to adult care, and plan accordingly</p>	<p>1. Collaborate with other clinicians, specialists, allied health professionals and health-related agencies in patient management in a multidisciplinary setting</p> <p>2. Plan the return of patients with medical complexities to community and home care</p>

Domain 5 - Health Promotion & Illness Prevention

Basic Training

Learning Outcome	Key Capabilities
<ol style="list-style-type: none"> Promote healthy lifestyle and optimal physical and mental development of CYP by giving advice and anticipatory guidance during daily clinical practice. Consider the potential impact of cultural, social, religious and economic factors on health promotion and illness prevention of CYP. 	<ol style="list-style-type: none"> Promote and advise on childhood vaccination Promote and advise on breast feeding, infant and young child feeding. Promote and advise the importance of parenting in child health and development

Higher Training

Learning Outcome	Key Capabilities
<ol style="list-style-type: none"> To lead the promotion of health and wellbeing of CYP in different settings, including well CYP and CYP with chronic conditions. 	<ol style="list-style-type: none"> Understand the importance of a stable family and good physical health in promoting good mental health Understand the impacts of family composition, socio-economic factors and poverty on child health Understand strategies and the implications for universal screening e.g. universal hearing screening, metabolic screening.

Domain 6 - Leadership & Team Working

Basic Training

Learning Outcome	Key Capabilities
1. Participate effectively and constructively in multidisciplinary and inter-professional teams	1. Understand the importance of leadership and team work in common clinical settings. 2. Work constructively within a team and value the contribution of team members in various disciplines and sectors.

Higher Training

Learning Outcome	Key Capabilities
1. Demonstrate effective leadership qualities and critical decision-making skills	1. Coordinate and communicate effectively in a MDT to handle a range of situations with CYP and families in chronic disease settings and challenging circumstances. 2. Demonstrate leadership quality and decision making ability in conflicts and critical circumstances

Domain 7 - Patient Safety, including Safe Prescribing

Basic Training

Learning Outcome	Key Capabilities
1. Understand the importance of patient safety and apply its principles in child safety, namely sedation and procedural safety and injury prevention. 2. Select and prescribe common medications safely and appropriately for CYP.	1. Apply the prevailing guidelines in drug prescription. 2. Educate CYP on the safe use of medicine and their side effects

Higher Training

Learning Outcome	Key Capabilities
1. Identify, report, investigate and mitigate actual and potential risks in clinical management	1. Perform risk reporting and participate in the investigation and mitigation using the existing mechanisms

	2. Counsel CYP and the family on the safety implications of drug compliance and handle complicated compliance issues
--	--

Domain 8 - Quality Improvement

Basic Training

Learning Outcome	Key Capabilities
1. Understand quality improvement principles.	1. Understand the concept of audit and CQI projects 2. Understand the concept and technique in data collection

Higher Training

Learning Outcome	Key Capabilities
1. Apply knowledge of Quality Improvement to undertake projects and audits to improve clinical effectiveness, patient safety and experience under guidance. 2. Participate in Quality Improvement projects with other healthcare professionals and facilitates reflective evaluation in relation to QI interventions under guidance.	1. Identify opportunities for quality improvement

Domain 9 - Safeguarding

Basic Training

Learning Outcome	Key Capabilities
1. Understand and uphold the professional responsibility of safeguarding CYP 2. Document any safeguarding concern, alert senior staff of such concern and seek advice and guidance. 3. Understand the long term impact of child maltreatment and other adverse childhood experiences.	1. Recognize presenting features of children where child protection issue may be a concern. 2. Recognize vulnerable children and distressed families that need assistance or intervention 3. Apply knowledge on how to act in cases of suspected child maltreatment 4. Apply knowledge of local multidisciplinary procedures for CYP in need of safeguarding support, including adoption and foster care.

	<ol style="list-style-type: none"> 5. Document clearly and accurately all examination results, assessment and communication relating to possible safeguarding issues. 6. Provide oral or written reports for welfare meetings, multidisciplinary case conferences and produce written reports for the police, social service or court hearings under supervision. 7. Participate actively in multidisciplinary conference and welfare meetings
--	---

Higher Training

Learning Outcome	Key Capabilities
<ol style="list-style-type: none"> 1. Lead independently the detection, assessment, reporting and decision making in the safeguarding of CYP 	<ol style="list-style-type: none"> 1. Handle with sensitivity the disclosure and any need to escalate action regarding case with possible safeguarding issue 2. Follow the established guidelines and procedures in the identification, assessment, referral and follow-up of CYP who may have been sexually abused. 3. Initiate and take part in the comprehensive multidisciplinary assessment of the developmental, physical and psychological status and the family function of CYP who have been possibly maltreated and draw up a conclusion about the nature of the case. 4. Provide oral or written reports for welfare meetings, multidisciplinary case conferences and produce written reports for the police, social service or court hearings independently. 5. Assess the role of a Paediatrician as it relates to those of other professionals in the management of children in need of protection and ensure suitable follow-up

Domain 10 - Education & Training

Basic Training

Learning Outcome	Key Capabilities
<ol style="list-style-type: none">1. Conduct scheduled learning and teaching activities under guidance.2. Be committed to continuing medical education and professional development	<ol style="list-style-type: none">1. Deliver case and topic presentations, journal clubs under guidance

Higher Training

Learning Outcome	Key Capabilities
<ol style="list-style-type: none">1. Deliver educational activities to junior trainees and clinical colleagues.2. Be committed to life-long continuing medical education and professional development beyond higher training.	<ol style="list-style-type: none">1. Debrief and give feedback constructively

Domain 11 - Research

Basic Training

Learning Outcome	Key Capabilities
<ol style="list-style-type: none">1. Adopt the Evidence-based Medicine approach in Paediatric medicine	<ol style="list-style-type: none">1. Perform literature searches2. Critically appraise published studies under guidance3. Apply basic statistical concepts in appraising published data

Higher Training

Learning Outcome	Key Capabilities
<ol style="list-style-type: none">1. Apply the principle of evidence based medicine in clinical decision making process2. Generate evidence to address a paediatric problem	<ol style="list-style-type: none">1. Complete a project that generates evidence (e.g. research, clinical audit).

5. Syllabuses

There are twenty-two syllabuses in this document. They cover the scopes of knowledge that general paediatricians shall equip themselves with as best they can. These syllabuses form the body of “General Paediatrics”.

However, it should be emphasized that the width and breadth of knowledge a trainee can acquire in Paediatric Specialty training is understandably variable. The knowledge listed are guiding reference, not the limits to or minimum requirement of what a trainee learns during the period of basic and higher training. They are not to be construed as the minimum requirements or examination standards..

The length of each syllabus has no implication to its relative importance in training. An all -round paediatrician should have a reasonable body of learning to deal with the daily patients.

The syllabuses are listed in alphabetical order. They are:

1. Adolescent Medicine
2. Cardiology
3. Community Paediatrics
4. Dermatology
5. Developmental - Behavioural Paediatrics
6. Ear, nose & throat
7. Emergency Paediatrics
8. Endocrinology
9. Gastroenterology, Hepatology and Nutrition
10. Genetics and Genomics
11. Haematology and Oncology
12. Immunology, Allergy and Infectious diseases
13. Intensive Care
14. Mental Health
15. Metabolic medicine
16. Neonatology
17. Nephrology
18. Neurology
19. Ophthalmology
20. Palliative Care
21. Respiratory Medicine
22. Rheumatology

For a complete listing of the syllabuses, please refer to the full curriculum document.

6. Formative Assessment Tools

There are four formative assessment tools:

1. Directly observed procedural skills (DOPS)
2. Mini clinical evaluation exercise (MiniCEX)
3. Case based discussion (CbD) – with two versions, one on General Paediatrics and one on Safeguarding
4. Paediatric Multi-source feedback (PaedMSF)

ASSESSMENT FOR LEARNING

Formative assessments are designed to guide a trainee on the acquisition of the competencies in the curriculum by receiving feedback from the trainers. A minimum requirement of the number of each assessment is set before a trainee can complete the specialty training

FIRST HAND OBSERVATION

These assessments are based in the workplace. Trainers should give the assessment based on **FIRST HAND** observation of the trainee.

ASSESSMENT BY DOMAIN

Each assessment tool is linked to a number of domains in the curriculum. The domains under assessment are listed clearly in the assessment form.

ASSESSMENT GRID

The assessment grid maps out the domains assessment by each summative and formative assessment tool.

Comparison of the four formative assessment tools

	Expected Duration of assessment session	Minimum frequency	Recommended frequency
Directly observed procedural skills (DOPS)	15 - 30 minutes	Until the trainee can perform the skill unsupervised (Entrustability level)	Nil
Mini Clinical Evaluation Exercise (MiniCEX)	20 to 40 minutes	10 to 15 in three years	6 per year
Case based Discussion - General Paediatrics (CbD)	30 minutes	6 in three years	Once every 6 months
Case based Discussion – Safeguarding (CbD – Safeguarding)	60 minutes	Once in three years	Once a year
Paediatric Multisource Feedback (PaedMSF)	15 – 20 minutes	Once a year	Once a year

Assessment Grid

	Professional values and behaviour	Communication	Procedures	Patient Management	Health Promotion and Illness Prevention	Leadership and Team Working	Patient safety and Safe Prescribing	Quality Improvement	Safeguarding	Education and Training	Research
Trainer's Report	P	P	P	P	P	P	P	P	P	P	P
MRCPCH FOP	S			P	S		S	S	S		S
MRCPCH TAS	S			P	S		S	S	S		S
MRCPCH AKP	S			P	S		S	S	S		S
MRCPCH Clinical		P	P	P		S	S		S		
DOPS	S	S	P	S			S				
MiniCEX	P	P	S	P	S	S	S				
CbD	P	P		P	S	S	P		S	S	
Safeguarding CbD	P	P		P		P	S		P		
PaedMSF	P	P	P	P	P	P	P	P	P	P	P
Exit Assessment	P	S	S	P	S	S	S	P	S	P	P

Legend

P - Primary Assessment Domain

S - Supplementary Assessment Domain

FOP - Foundation of Practice Examination

TAS - Theory and Science Examination

AKP - Applied Knowledge in Practice Examination

DOPS - Directly observed Procedural Skills

MiniCEX - Mini Clinical Evaluation Exercise

CbD - Case based discussion

PaedMSF - Paediatric Multisource Feedback

Frequency asked questions

Why is the new curriculum competency-based?

The Hong Kong Academy of Medicine has taken the initiative to implement competency-based medical education. It is a world trend that has been adopted by many international organization, including the Royal College of Paediatrics and Child Health. It moves the focus from the transferal of medical knowledge to the skills of continuing advancement that are necessary for paediatricians of the next generation.

Why is formative assessment adopted in the new curriculum?

Trainers have always formed their opinions about the trainees. The process of recording the opinions in a formal, standardized setting will help to provide the trainees with constructive feedback such that they can be used in self-reflection and continuous improvement.

Does formative assessment take a lot of time?

Formative assessment tools are designed with the economy of time and effort in mind. A typical assessment will take about 30 to 45 minutes to finish. The minimum number required for each assessment tool is set such that they are manageable in the workplace. It is not expected that a trainer or a trainee would need to write down a lot of details in the assessment forms.

Who is responsible for initiating an assessment?

Trainees are expected to take the initiative to request an assessment. A trainee is expected to have at least the minimum number of assessment completed before sitting for the MRCPCH Clinical Examination and the Exit Assessment.

Is log book no longer required in the new curriculum?

Case logging using a log book is not required in the new curriculum.

Do trainers still need to submit half yearly assessment records?

Yes. In the half-yearly report, trainers can tally the number of formative assessments, give an assessment of the overall performance of the trainee and raise any concerns in the progress of training.

Are the formative assessment tools recorded in the e-portfolio system?

Yes, the formative assessment tools will be recorded in the e-portfolio system. These records will form part of the training portfolio that will be submitted before the summative assessments.

Will a trainee be prevented from advancing in training if he repeatedly fails the formative assessment?

The aim of formative assessment is to guide a trainee in his professional development. It should be as non-threatening as possible. However, a trainee may be required to receive counselling or repeat a formative assessment if the formative assessment was deemed to be unsatisfactory. This should be done to support the trainee. Any of these remediations shall be undertaken with the agreement of the trainee and the trainer at the institution.

Will the College offer any support to trainees who are severely underperforming or facing difficulties in training under the new Curriculum?

The College should be informed if there is any concern raised about a trainee in the Paediatric Multisource Feedback (PaedMSF) or the trainer's report. The College will offer support to trainee directly or through the training institution indirectly.

When will the new curriculum be implemented?

Trainees who start their basic training or higher training on or after 1 July 2025 will have to adopt the new curriculum and the formative assessments.

Is there any change in the requirements to become a trainer in the new curriculum?

No. The requirements to become a basic or higher trainer have not changed. However, trainers are encouraged to join the Basic Medical Education Course and other training courses that are offered by the College, the Academy or overseas institutions that enhance one's knowledge in medical training and adult learning.