DEVELOPING A CORE CURRICULUM FOR PEDIATRICS

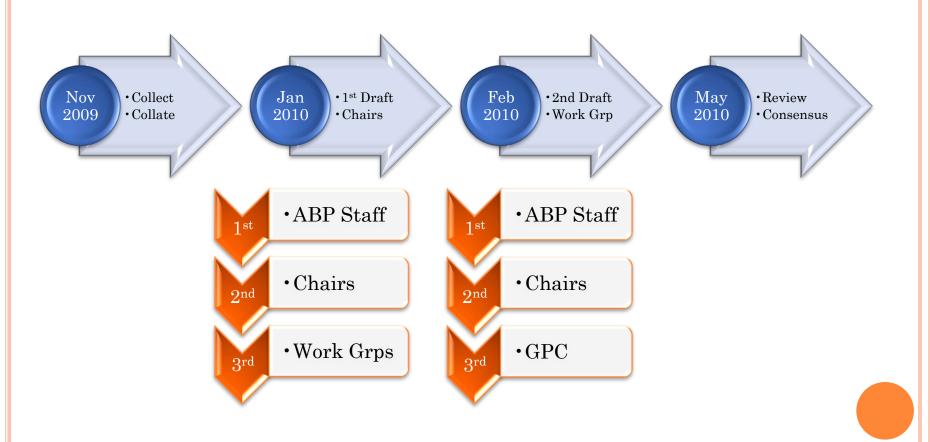
Harish Amin, MBBS, MRCP, FRCPC, FAAP Arvind Saili, MBBS, MD

2nd Global Pediatric Summit 14-16 May 2010 Frankfurt, Germany

ELEMENTS OF THE CORE CURRICULUM

- Syllabus
 - Outline of the knowledge/content of General Pediatrics
- Competency Framework
 - A collection of core skills, attitudes, and behaviors
 - Foundation of training, assessment, physician accreditation, and professional development

Work Process: 2009 - Present



CREATING A FIRST DRAFT

Catalog current-practices among participating countries

- Arab States
- Australia/New Zealand
- Canada
- Egypt
- European Union
- India
- Israel
- Nigeria
- Pakistan
- United Kingdom
- United States























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Comprehensive curricular documents:

Australia/New Zealand (RACP)

• Canada (RCPSC)

• European Union (EAP/EBP)

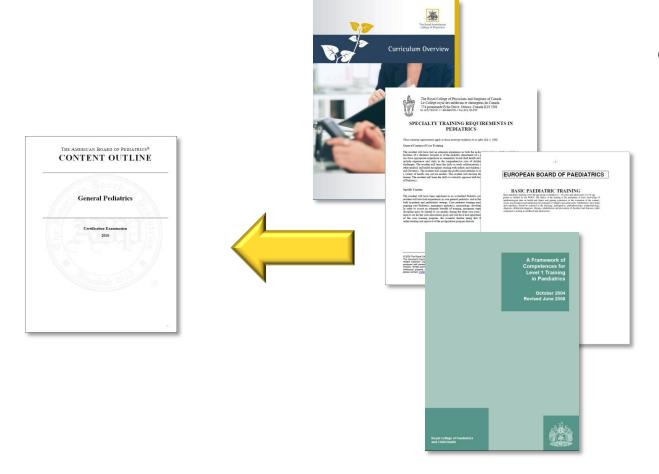
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United Kingdom (RCPCH)

United States (ABP/ACGME)



CREATING A FIRST DRAFT: SYLLABUS



Contributing Organizations:













SYLLABUS: DRAFT 1

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Global Pediatric Syllabus February 2010 Draft

Genetics

A. General

- Mendelian inheritance (autosomal dominant, autosomal recessive, X-linked recessive, X-linked with incomplete penetrance, X-linked dominant)
- 2. Multifactorial inheritance
- 3. Mitochondrial inheritance

B. Diagnostic testing

- Prenatal
 - (a) Invasive (preimplantation genetic diagnosis, chorionic villus sampling, amniocentesis, prenatal umbilical blood sampling)
 - (b) Noninvasive (ultrasonography, maternal blood screening)
- Postnatal (karyotyping, fluorescent in situ hybridization, comparative genomic hybridization, molecular analysis, metabolic analysis, newborn screening)
- C. Chromosomes: Normal Karyotype and Abnormal Karyotypes
 - Autosomal (eg. trisomy, deletions, translocations, duplications, inversions, contiguous gene syndromes)
 - 2. Sex chromosomes (eg, Turner syndrome, Klinefelter syndrome)
 - 3. 47.XYY
 - 4. 47.XXX

D. Gene abnormalities

- 1. Short stature
- 2. Overgrowth syndromes
- 3. Neuromuscular disorders
- 4. Facial and limb abnormalities
- 5. Osteochondrodysplasia
- Craniosynostosis
- 7. Storage disorders
- Connective tissue disorders
 Hamartoses

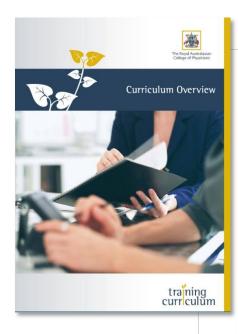
E. Miscellaneous

- 1. Pharmacogenetics
 - Trinucleotide expansion
 - 3. Imprinting
 - 4. Anticipation
- 5. Associations

Global Pediatric Syllabus February 2010 Draft

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CREATING A FIRST DRAFT: COMPETENCY/SKILLS



CURRICULUM DOMAINS, THEMES AND LEARNING OBJECTIVES

Each of the curriculum documents has been developed using a common format, thereby ensuring a degree of consistency and approach across the spectrum of training.

The Domains are the broad fields which group common or related areas of learning.

The Themes identify and link more specific aspects of learning into logical or related groups.

Learning Objectives

The Learning Objectives outline the specific requirements of learning. They provide a focus for identifying and detailing the required knowledge, skills and attitudes. They also provide a context for specifying assessment standards and criteria as well as providing a context for identifying a range of teaching and learning strategies.

DOMAIN 1: COMMUNICATION

Theme 1.1: Physician-patient communication

Theme 1.2: Communicating with a patient's family and/or carers

Theme 1.3: Communicating with colleagues and broader health care team Theme 1.4: Communicating with the broader community

DOMAIN 2: QUALITY AND SAFETY

Theme 2.1: Using evidence and information Theme 2.2: Safe practice

Theme 2.3: Identifying, preventing and managing potential harm

DOMAIN 3: TEACHING AND LEARNING (SCHOLAR)

Theme 3.1: Ongoing learning Theme 3.2: Research

Theme 3.3: Educator

DOMAIN 4: CULTURAL COMPETENCY

Theme 4.1: Cultural competency

DOMAIN S. ETHICS Theme 5.1: Professional ethics

Theme 5.2: Personal ethics

Theme 5.3: Ethics and health law

DOMAIN 6: CLINICAL DECISION MAKING

Theme 6.1: Clinical decision making



CREATING A FIRST DRAFT: COMPETENCY/SKILLS



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SPECIALTY TRAINING REQUIREMENTS IN PEDIATRICS

These training requirements apply to those entering residency on or after July 1, 2008.

General Content of Core Training

The resident will have had an adequate experience in both the in-benjital services and the analytic facilities of a children's bogain of or the polarite department of a general hopping. The resident also have appropriate experience in community based child health service. A portion of the training includes experience and turbly in the comprehensive case of children with playical and paybook challenges. The resident will learn the skills to work collaboratively with and to provide consultant of the medical and health discipline scaling with infarth and children, especially with Psychiatry, Sun and Obstetric. The resident will acquire the prefessional attitudes to work with other health discipline and a variety of bashful care service models. The resident will develop the skills of a self-directed, life learner. The resident will learn the skills to critically appraise both his her practice as well as the practice of Pedatrics.

Specific Conten

The resident will have been registered in an accredited Pediatric postgraduate residency programresident will have add expenserse in core general pediatrics and in the vision pediatric subspectible both in-patient and ambulatory settings. Core pediatric training must include separatence in acute congoing care Pediatrics, emergency pediatrics, neonatology, developmental, and bahavioural pedia In order to assure an adequate breadth of training, maximum expenserse in any one subspecial discipline must be finanted to an membra during the three cerv years under Section 1. The resident discipline must be finanted to an membra during the three cerv years under Section 1. The resident of the core training program, the essential feature being that these must be arranged with understanding and approval of the prodeptionals program dissector.

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OBJECTIVES OF TRAINING IN PEDIATRICS (2008)

Key and Enabling Competencies: Pediatricians are able to ...

- Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical and patient-centered medical care
 - 1.1. Perform a consultation effectively, including the presentation of well-documented assessments and recommendations in written and/or verbal form in response to a request from another health care professional with respect to patient care and education
 - 1.2. Demonstrate effective use of all CanMEDS competencies relevant to Pediatrics
- 1.3. Identify and appropriately respond to relevant ethical issues arising in patient care
- 1.4. Demonstrate ability to effectively and appropriately prioritize professional duties when faced with multiple patients and problems
- 1.5. Demonstrate compassionate and patient-centered care
- 1.6. Recognize and respond to the ethical dimensions in medical decision-making
- 1.7. Demonstrate medical expertise in situations other than patient care, such as providing expert legal testimony or advising governments, as needed

2. Establish and maintain clinical knowledge, skills and attitudes appropriate to Pediatrics

In Pediatrics, knowledge acquisition must include normal human anatomy, physiology and psychology as expressed in a biopsychosocial model of human growth and development. The Pediatrician will undestand the pathophysiological and psychological processes underlying departure from normal. This will include knowledge of therapy in its broadest sense, to include life-style, nutritional, physical and drug therapies. A Pediatrician will demonstrate the ability to access and apply relevant information to clinical practice.

For all clinical situations listed below, the Pediatrician must be able to evaluate, investigate, diagnose, manage and refer when appropriate:

- Apply knowledge of the clinical, socio-behavioural, and fundamental biomedical sciences relevant to Pediatrics
 - 2.1.1. Recognize, diagnose and manage; the normal healthy state, the natural course of pediatric problems, variations in and departure from the normal

2.1.2. ACUTE CARE (Critical Care / Emergency Pediatrics)

- Pathophysiology of altered consciousness, shock, respiratory failure and principles of mechanical ventilation
- 2.1.2.2. Pathophysiology of cardiorespiratory arrest and resuscitation

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CREATING A FIRST DRAFT: COMPETENCY/SKILLS

A Framework of Competences for Level 1 Training in Paediatrics - October 2004 - Revised June 2008

2. General competences

The learning objectives in this section reflect the general practice of a paediatrican and have been developed from our description What is a paediatrican? The detail of speciality-specific practice can be found in Section 4 (page 22).

The statements are mapped to Good Medical Practice² (2001) and to Good Medical Practice in Paediatrics and Child Health³ (2002), essential reading for all trainees. In addition, you should ensure that you have read carefully the Laming Report⁴ (2003) and the UN Convention on the Rights of the Child⁵.

By the end of Level 1, trainees will:

Knowledge and understanding

- understand the duties and responsibilities of a paediatrician in the safeguarding of babies, children and young people
- understand the duties and responsibilities of a paediatrician to support and enable parents and carers to be effective in caring for their children
- know and be able to apply the scientific base relevant to clinical practice in paediatrics
- know the aetiology and patho-physiology of common and serious childhood conditions
- understand the promotion of health and the management of ill-health in babies, children and adolescents
- understand the specific health issues, diseases and disorders related to the stages of growth and development
- · recognise the mental health components of all paediatric illness
- recognise the effects that school and other social settings may have on childhood illness and vice versa
- understand the factors that affect a child's level of anxiety about illness, treatment or
- · recognise the impact on parents and the rest of the family of acute or chronic illness,

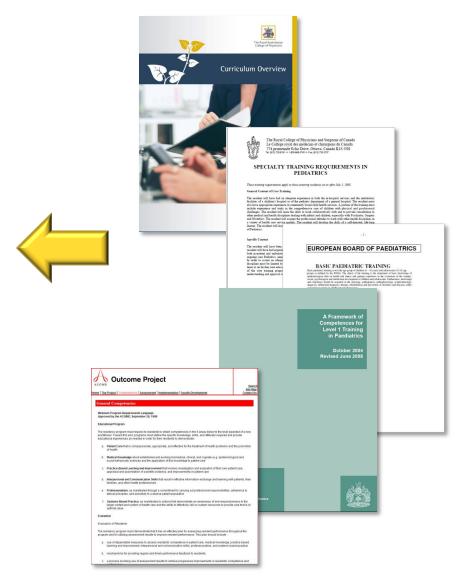
A Framework of Competences for Level 1 Training in Paediatrics

October 2004 Revised June 2008

Royal College of Paediatrics and Child Health



CREATING A FIRST DRAFT: COMPETENCY/SKILLS



Contributing Organizations:













COMPETENCY/SKILLS: DRAFT 1

+1+	Table 2	Global Pediatric	Competencies	and Skills: Level	One & Two

Compe	tencies and Skills	Comments
	essment and Diagnostic Skills	
	as according to the second sec	
Resider	ts must be able to perform the following:	
35	Gather essential and accurate information about the patient and the	
	presenting complaint(s) Interview patients/families about the particulars of the medical	
-	condition for which they seek care, with specific attention to	
	behavioral, psychosocial, environmental, and family unit correlates of	
	disease	
10	Perform a physical examination on newborn infants, which includes	
	assessment of gestational age and the appropriateness of intrauterine	
	growth	
2-	Perform complete, accurate, and developmentally appropriate	
	physical examinations for children, adolescents, and young adults	
92	Tanner staging for sexual maturity rating and orchidometry	
2.5	Breast examination	HA: We should insert a
3	Assess psychomotor development and developmental milestones	bullet indicating the wor
	attained	'resident' is synonymou:
10	Assess mental status	with Pediatric doctors in
12	Assess an adolescent using HEEADSS (home, education, eating,	training.
	activity, drugs, sexuality, suicide) format	
12	Assess and formulate a plan of management for common pediatric	HPH: Maybe we should
	conditions	use the word "Trainee"?
3.5	Assess nutritional status and caloric requirement in various clinical	111111
	situations	
-	Develop a differential diagnosis and making informed diagnostic	
	decisions Assess the medical and non-medical needs and formulating a follow-	
	up plan of children with chronic conditions	
	Recognize and refer to other specialties when needed	
15	Counsel parents and address their concerns on different health issues	
	including normal growth, development and behavior (provide	
	anticipatory guidance)	
25	Counsel parents regarding available community support and resources	
	as necessary	
8	Appropriate use of growth charts	
10	Administer and interpret developmental screening tests	
2. Life	Support Skills	
Docidos	ts must successfully complete the following courses:	
NESIDE!	Basic Life Support	
-	Recognised acute Pediatric Life Support (e.g APLS)	NALS has been replaced
	Recognised Neonatal Life Support Course (e.g., NRP)	by NRP (HA)
92	Advanced Cardiac Life Support	-, V1
		ACORN = Acute Care of
		at-risk Newborns (HA)

THE REVIEW PROCESS

Principal Reviews

• Pre-meeting reviews

Small Group Reviews

• Today

Consensus

- Small Group Report-outs (Today or Tomorrow)
- GPC Consensus (Tomorrow)

Today's Review Groups



Chairs

- Amin
- Saili