DEVELOPING A CORE CURRICULUM FOR PEDIATRICS

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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

Nov 2009
- Collect
- Collate

Jan 2010
- 1st Draft
- Chairs

Feb 2010
- 2nd Draft
- Work Grp

May 2010
- Review
- Consensus

1st • ABP Staff
2nd • Chairs
3rd • Work Grps

1st • ABP Staff
2nd • Chairs
3rd • GPC

1st • ABP Staff
2nd • Chairs
3rd • GPC
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
Creating a First Draft

Comprehensive curricular documents:

- Australia/New Zealand (RACP)
- Canada (RCPSC)
- European Union (EAP/EBP)
  - Common Trunk
- United Kingdom (RCPCH)
- United States (ABP/ACGME)
CREATING A FIRST DRAFT: SYLLABUS

Contributing Organizations:
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<td>XLI</td>
<td>Research (see notes)</td>
<td>Salooijee</td>
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### Genetics

#### A. General
1. 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
1. Prenatal
   - Invasive prenatal genetic diagnosis, chorionic villus sampling, amniocentesis, prenatal umbilical blood sampling
   - Non-invasive (ultrasound, maternal blood screening)
2. Prenatal: Karyotyping, fluorescent in situ hybridization, comparative genomic hybridization, molecular analysis, metabolic analysis, newborn screening

#### C. Chromosomes: Normal Karyotype and Abnormal Karyotypes
1. Autosomal (eg. trisomy, deletions, translocations, duplications, inversions, monosomy, mosaic syndromes)
2. Sex chromosomes (eg. Turner syndrome, Klinefelter syndrome)
3. 47,XXX
4. 47,XXY

#### D. Gene abnormalities
1. Short stature
2. Overgrowth syndromes
3. Neurodevelopmental disorders
4. Facial and limb abnormalities
5. Osteochondrodysplasias
6. Congenital anomalies
7. Storage disorders
8. Connective tissue disorders
9. Heterochromias

#### E. Miscellaneous
1. Pharmacogenetics
2. Transcutaneous expansion
3. Implanting
4. Autopsies
5. Associations
Creating a First Draft: Competency/Skills

Curriculum Overview

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.

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

Themes
The Themes identify and link more specific aspects of learning within 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.

Domains

Domain 1: Communication
Theme 1.1: Physician-patient communication
Theme 1.2: Communicating with a patient’s family and/or caregivers
Theme 1.3: Communicating with colleagues and broader health care team
Theme 1.4: Communicating with the broader community

Domain 2: Legal and Safety
Theme 2.1: Billing, revenue and information
Theme 2.2: Safe practices
Theme 2.3: Identifying, preventing and managing potential harm

Domain 3: Teaching and Learning (Scholar)
Theme 3.1: Teaching learning
Theme 3.2: Research
Theme 3.3: Educator

Domain 4: Cultural Competency
Theme 4.1: Cultural competency

Domain 5: 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: Complex decision making
CREATING A FIRST DRAFT: COMPETENCY/SKILLS

SPECIALTY TRAINING REQUIREMENTS IN PEDIATRICS

These training requirements apply to those nearing residency as of July 1, 2000.

General Content of Core Training

The resident will have had adequate experience in both in-hospital services and the ambulatory setting of a children’s hospital or the pediatric department of a general hospital. The resident also has appropriate experience in community-based child health services. A portion of the training will be supervised off-site, inclusive of challenging clinical situations.

Specific Content

The resident will be required to complete a specified number of inpatient and outpatient experiences in the care of pediatric patients. These experiences will include, but not be limited to, both acute and chronic conditions. The resident will also participate in the care of patients with complex medical and social needs, and will have opportunities to observe and participate in the care of patients with special needs.

Key and Enabling Competencies: Physicians are able to:

1. Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical, and patient-centered medical care.
   1.1. Provide comprehensive, evidence-based assessment and recommendations in written and verbal form in response to a request from another health 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 appropriately present professional data, including results of multiple patient- and problem-oriented care.
   1.5. Demonstrate organizational and patient-centered care.
   1.6. Demonstrate effective use of all CanMEDS competencies relevant to Pediatrics.
   1.7. Demonstrate medical expertise and skills appropriate to patient care, such as providing and legal requirements for addressing emotional support.

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 experienced in a hospital-based setting of human growth and development. The resident will understand the patho-physiological and psychological processes underlying departures from normal. This will include knowledge of therapy in its broadest sense, to include life-style, nutritional, physical and drug therapies. The resident will demonstrate the ability to access and apply relevant information to clinical practice.

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

2.1. Apply knowledge of the clinical, social and community, and fundamentals of biocultural sciences relevant to Pediatrics.
   2.1.1. Recognize, diagnose and manage the normal healthy state, the usual course of pediatric problems, transitions to and departures from the normal.

2.1.2. ACUTE CARE (Critical Care / Emergency Pediatrics)
   2.1.2.1. Pathophysiology of altered consciousness, shock, respiratory failure and principles of pharmacological treatment.
   2.1.2.2. Pathophysiology of cardiovascular arrest and resuscitation.
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 paediatrician and have been developed from our description What is a paediatrician? The detail of specialty-specific practice can be found in Section 4 (page 22).

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

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 anatomy 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 examination
- recognise the impact on parents and the rest of the family of acute or chronic illness.
CREATING A FIRST DRAFT: COMPETENCY/SKILLS

Contributing Organizations:
## Competency/Skills: Draft 1

**Table 2. Global Pediatric Competencies and Skills: Level One & Two**

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<td><strong>1. Assessment and Diagnostic Skills</strong></td>
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<tr>
<td>Residents must be able to perform the following:</td>
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<tr>
<td>- Collect, elicit essential and accurate information about the patient and the</td>
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<td>presenting complaint(s)</td>
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<td>- Interview patients/families about the particulars of the medical condition for which</td>
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<td>they seek care, with specific attention to behavioral, psychosocial, environmental,</td>
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<td>and family unit correlates of disease</td>
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<td>- Perform a physical examination on newborn infants, which includes assessment of</td>
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<td>gestational age and the appropriateness of intrauterine growth</td>
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<tr>
<td>- Perform a complete, accurate, and developmentally appropriate physical examinations</td>
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<td>for children, adolescents, and young adults</td>
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<td>- Tanner staging for sexual maturity rating and development</td>
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<td>- Breast examination</td>
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<td>- Assess psychomotor development and developmental milestones</td>
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<td>- Assess mental status</td>
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<td>- Assess an adolescent using HIV/AIDS (home, education, eating, activity, drugs,</td>
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<td>sexuality, suicide) format</td>
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<tr>
<td>- Assist and formulate a plan of management for common pediatric conditions</td>
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<td>- Assess nutritional status and caloric requirement in various clinical situations</td>
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<td>- Develop a differential diagnosis and making informed diagnostic decisions</td>
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<td>- Access the medical and non-medical needs and formulating a follow-up plan of</td>
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<td>children with chronic conditions</td>
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<td>- Recognize and refer to other specialties when needed</td>
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<td>- Counsel patients and address their concerns on different health issues including</td>
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<td>normal growth, development and behavior (provide anticipatory guidance)</td>
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<td>- Counsel parents regarding available community support and resources as necessary</td>
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<td>- Appropriate use of growth charts</td>
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<td>- Administer and interpret developmental screening tests</td>
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<td><strong>2. Life Support Skills</strong></td>
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<td>Residents must successfully complete the following courses:</td>
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<tr>
<td>- Basic Life Support</td>
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<td>- Recognized acute Pediatric Life Support ([e.g., APLS])</td>
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<td>- Recognized Neonatal Life Support course ([e.g., Neonatal Life Support])</td>
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<td>- Advanced Cardio Life Support</td>
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<td>NALS has been replaced by ICM (ACI)</td>
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<tr>
<td>APLS = Acute Care of Pediatric Patients (ICP)</td>
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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

1. Branski
   - GUI
   - Klein

2. Cabral
   - Bhutta
   - McGraw

3. Hoyer
   - Olowu
   - Keenan

4. Badrawi
   - Konstantopoulos
   - Stockman
   - Takihashi

5. Batra
   - Mohammad
   - Saloojee

Chairs
- Amin
- Saili