CHILD HEALTH PROGRAM PROGRAM DESCRIPTION & EDUCATIONAL OBJECTIVES FOR ENHANCED SKILLS RESIDENTS

INTRODUCTION

Paediatrics represents 25% of patient visits to clinic and to community ERs in Canada. The Child Health Program was developed at the Schulich School of Medicine and Dentistry in response to a need for better understanding of primary care paediatrics by family physicians. The learning contract includes agreement to participate in approved rotations as identified by the Department of Family Medicine, Postgraduate Committee and the Department of Paediatrics, Postgraduate Committee. In addition, any particular individual learning objectives, which are discussed and agreed upon at a meeting between accepted candidates and the Child Health Program Coordinator, can be integrated into the program structure.

LEARNING ENVIRONMENT

The program's core and elective rotations are done in hospitals (ambulatory, ward, ER) and in community clinics in London, Sarnia, Windsor and participating centres in the Southwestern Ontario Medical Education Network (SWOMEN). The program rotations are organized in conjunction with the Department of Paediatrics at the Schulich School of Medicine and Dentistry.

APPLICANT REQUIREMENTS

Applicants must have proof of successful completion of a family medicine residency from an accredited Canadian program. Candidates will require a license to practice medicine in Ontario.

ADMINISTRATIVE AND PROGRAM SUPPORTS

- 1) Enhanced Skills Program Director- Dr. Daniel Grushka
- 2) Family Medicine Program Coordinator Dr. Loretta Seevaratnam
- 3) Family Medicine Administrative Support Mr. Dennis Sue
- 4) Paediatrics Program Coordinator Dr. Doris Yuen
- 5) Paediatrics Administrative Support Ms. Vanessa Freer

DUTIES

- 1) Patient care on the scheduled service, including clinic visits, admissions, discharges and daily rounds. To be supervised by the attending physician.
- 2) Participation in Department of Family Medicine and Paediatrics grand rounds.
- 3) Participation in Paediatrics Academic half-days.
- 4) Fellowship project focusing on a topic related to Child Health. This project will be presented at the Department of Family Medicine Resident Research Day.
- 5) On call duties: While on hospital rotations, the Child Health resident will take home call and will follow the PARO contract for weekend call duties. During the CTU rotation, the resident's call schedule will be dictated by the team available, within PARO contract parameters. While on a sub-specialty rotation, the call schedule will be assigned by the attending physician as per service requirements and, again, within PARO contract parameters.
- 6) Teaching of clinical clerks if they are on service, according to clerkship learning objectives.

ORGANIZATION

This would be a 6-month (7 block) program. The training would take place as follows:

Rural general paediatrics
 CTU/inpatient paediatrics
 2 blocks
 Sarnia and other sites
 London or Windsor

• Emergency & Airway 2 blocks London

• Elective (subspecialty paediatrics) 2 block London and other sites

Rural General Paediatrics

Residents will work closely with a single paediatrician or a team of paediatricians in a rural area. Clinical experience will include time in clinics (seeing primary care paediatrics as well as consultations), consultations to the emergency department, perinatal attendance, and hospital inpatients. This rotation will serve to enhance the ability to deliver quality primary care, understand common problems underlying consultations and their management, and enhance a variety of more advanced care of children including neonatal assessment and management, complex emergency room cases, and inpatient management of children with typically noncomplex acute pathology.

CTU/ Inpatient Paediatrics

Residents will work within the Clinical Teaching Unit either at the Children's Hospital Western Ontario or Windsor Regional Hospital, playing a role in complex consultations to the emergency and other departments, and in the ongoing inpatient management of ill children. This rotation will broaden the residents' ability to assess and manage complex children and develop their recognition of when consultation of their future patients will be required.

Emergency & Airway Medicine

Within this rotation, residents will work at the Emergency Department at the Children's Hospital of Western Ontario, and will gain experience in the assessment, stabilization, investigation and management of a variety of childhood pathology (through presentation at the emergency department and through consultations from regional sites). Residents will be exposed to and gain competency in procedural sedation and a variety of technical skills. Intermingled with their emergency shifts, the residents will have scheduled time in the operating room working with the Anaesthesia team. During this time, they will enhance their understanding of child physiology, and gain familiarity of children's airways and the options for management.

Electives

Residents will have two blocks of elective time which should be clinical in nature. Residents should choose electives that will best support their future anticipated roles, and may choose from a number of paediatric subspecialty rotations. These rotations include orthopaedics and sports medicine, gastroenterology, respirology, NICU, psychiatry, cardiology, neurology, endocrinology, nephrology and developmental paediatrics.

SCHOLARLY ACTIVITIES

- 1) All residents in the Enhanced Skills program are required to complete a research project. A written report is welcome but not required. A formal presentation at the Department of Family Medicine Resident Research day is required. Topics should be discussed with Dr. Grushka, Dr. Seevaratnam, and Dr. Yuen. Please refer to the Enhanced Skills Orientation Manual for more information regarding project requirements.
- 2) All residents in the Child Health Program are are required to log their self-directed reading and educational endeavours. Goals, objectives and resources should be discussed with Drs. Seevaratnam and Yuen. The resident should attend any half-days or educational teaching experiences that are available within the current rotation. In addition, the resident is expected to attend Grand Rounds in both Family Medicine and Paediatrics Departments.
- 3) The resident is encouraged to teach at PGY-1/PGY-2 academic half day on a topic related to their field of specialization. This can be discussed with the Academic Program Director (Dr. Wickett) and the Enhanced Skills Program Director (Dr. Grushka).

EVALUATION

- The resident will be supervised on a daily basis and will obtain one evaluation per block from a consultant via the one45 system. A logbook is to be kept by the resident, recording consultations, and any procedures performed by the resident during the care of the patient.
- 2) The resident will meet informally with Dr. Seevaratnam to discuss cases and review any concerns. The log book should be reviewed at that time.
- 3) A midterm review with the program director will take place to ascertain the resident's progression either in person, by phone or by video-link (skype).

OBJECTIVES FOR CHILD HEALTH PROGRAM AS CONSIDERED BY THE CANMEDS-FM ROLES

I. Family Medicine Expert

- 1. The Family Medicine Resident will be able to demonstrate the ability to recognixe and manage common illnesses in children and adolescents. The resident will also be able to recognize early signs of less common but serious problems:
- 1.1 Allergy & Immunology
 - **1.1.1** Evaluate and manage allergies to medications, environment and food.
 - **1.1.2** Recognize potential anaphylaxis, educate parents and patients and prescribe Medicalerts and EpiPen appropriately.
- 1.2 Cardiology
 - **1.2.1** Distinguish innocent and abnormal cardiac murmurs and evaluate appropriately for congenital heart disease.
 - **1.2.2** Consider and investigate appropriately less common but important cardiac problems (i.e. arrhythmias, endocarditis, myocarditis).
 - **1.2.3** Have an approach to obesity in childhood including guidance on exercise and diet.
- **1.3** Dermatology

- **1.3.1** Recognize and manage common skin conditions (i.e. atopic dermatitis, acne, viral exanthems, candidiasis, impetigo, seborrheic dermatitis, cellulitis).
- **1.3.2** Recognize important rashes and investigate for possible serious underlying illness (petechiae, purpura, erythema nodosum, erythema migrans, cafe au lait spot).

1.4 Emergency Medicine & Critical Care

- **1.4.1** Be familiar with critical care techniques (i.e. cardiopulmonary resuscitation in infants and children, lumbar puncture, intraosseous lines, catheterization).
- **1.4.2** Evaluate severity of respiratory distress and manage respiratory emergencies (i.e. epiglottitis, retropharyngeal abscess, anaphylaxis, foreign body aspiration, pneumonia, pneumothorax and status asthmaticus).
- **1.4.3** Distinguish simple from complex febrile seizures and investigate/manage appropriately. Stabilize and investigate status epilepticus.
- **1.4.4** With a child presenting with acute abdominal pain or signs of obstruction, recognize and appropriately manage life-threatening illness.
- **1.4.5** Assess hydration status and direct oral or parenteral fluid resuscitation.
- **1.4.6** Assess decreased level of consciousness using age appropriate tools; consider broad differential diagnosis (i.e. infections, toxic ingestions, DKA and other metabolic problems, non-accidental trauma). Investigate and manage appropriately.
- **1.4.7** Provide initial management of paediatric trauma, burns and environmental/toxic exposure.

1.5 Endocrinology

- **1.5.1** Recognize signs and symptoms of new onset Type 1 diabetes and manage diabetic ketoacidosis in the emergency and inpatient setting.
- **1.5.2** Collaborate with specialist teams in providing ongoing management of diabetes. Consider and investigate appropriately for less common but important endocrine diseases in children (i.e. adrenal insufficiency, thyroid disease).
- **1.5.3** Recognize and evaluate precocious puberty and primary amenorrhea.

1.6 Otolaryngology

- **1.6.1** Diagnose otitis externa, otitis media, sinusitis and pharyngitis age appropriate criteria.
- **1.6.2** Prescribe antibiotics judiciously using evidence-based recommendations. Show awareness of complications, including language development, if these infections are chronic or untreated.
- **1.6.3** Knowledge of indications for surgical referral for tympanostomy tubes or tonsillectomy.

1.7 Gastroenterology

- **1.7.1** Form comprehensive differential diagnoses and management plans for gastrointestinal complaints in children including less common but serious illnesses knowing that these may present atypically (i.e. vomiting, acute/chronic abdominal pain, acute/chronic diarrhea, constipation, failure to thrive).
- **1.7.2** Manage chronic conditions constipation, celiac disease, chronic diarrhea, gastroesophageal reflux, lactose intolerance, and chronic abdominal pain.

1.8 Genetics & Developmental Medicine

- **1.8.1** Recognize the significance of dysmorphism or congenital anomalies and refer for genetic assessment.
- **1.8.2** Recognize developmental or behavioural concerns, refer for specialist assessment and involve community resources (i.e. Global Developmental Delay, Language Delay, Learning Disorder, Autism Spectrum Disorder, Fetal Alcohol Spectrum Disorder, Attention Deficit Hyperactivity Disorder, Cerebral Palsy, Myelodysplastic and Neuromuscular Disorders).

1.8.3 Assess hearing in all children presenting with language delay.

1.9 Neurology

- **1.9.1** Diagnose and manage common headaches in children using a red flag approach to rule out more serious causes.
- **1.9.2** Work with specialist colleagues in managing epilepsy and movement disorders.

1.10 Opthalmology

1.10.1 Assess and direct treatment or referral for children presenting with red eye, decreased visual acuity, strabismus, dacryocystitis, preorbital and orbital cellulitis.

1.11 Orthopedics & Sports Medicine

- **1.11.1** Evaluate and manage a child presenting with limp, in toeing, alignment abnormalities/scoliosis, joint instability, swelling or pain.
- **1.11.2** Evaluate fractures involving the growth plate and fractures/dislocations more common in children.

1.12 Psychiatry

- **1.12.1** Recognize the high prevalence of eating disorders in adolescents and manage appropriately.
- **1.12.2** Evaluate children with disruptive behaviour (ODD, CD) or possible mood/psychotic disorder and refer appropriately.
- **1.12.3** In children presenting with sleep disturbance, encopresis/enuresis, failure to thrive or change in level of activity, use a biopsychosocial approach to diagnosis.

1.13 Respirology

1.13.1 Evaluate and manage causes of wheeze, stridor, acute and chronic cough including common conditions (ex. asthma, bronchiolitis, URTI, post viral cough, pneumonia, croup) and less common, important conditions (i.e. foreign body aspiration, epiglottitis, cystic fibrosis, congenital malformations, congenital heart disease).

1.14 Urology & Nephrology

1.14.1 Diagnose and manage urinary tract infections and coordinate appropriate investigations and monitoring.

2. The family medicine resident will be able to provide comprehensive preventative care throughout infancy, childhood and adolescence:

- **2.1** Employ case-finding as well as evidence based surveillance and screening tools to detect illness, deviation from normal growth and development and prevent injury.
- **2.2** Provide thorough and attentive evaluation of parent's concerns cognizant that many developmental problems first present this way.
- 2.3 Understand and be able to counsel parents about normal nutritional needs at different ages.
- **2.4** Effectively monitor growth and suggest intervention as necessary.
- **2.5** Provide education and advice on injury prevention and common behavioural and family issues.
- **2.6** Provide suggestions to encourage motor, language and social development.
- **2.7** Learn to administrate an organized vaccination program within family practice including routine vaccinations and those for travel and special populations.
- **2.8** Discuss benefits, safety and side effects of vaccinations with parents.
- **2.9** When caring for adolescents, review and counsel about substance abuse, peer issues, home environment, diet/eating disorders, academic performance, social stress/mental illness and sexuality/STDs/contraception.
- **2.10** For children of all ages, evaluate home, school and recreational environments in terms of supports and stressors and intervene appropriately.
- **2.11** Recognize the impact of domestic violence on children and adolescents.

II. Manager

Family Medicine residents will:

- 1. Order appropriate and economical selection of diagnostic and screening tests.
- 2. Make referrals effectively.
- 3. Demonstrate understanding of roles of all health care providers in the team.
- 4. Demonstrate understanding of hospital care planning and policy-making.
- 5. Understand how to mobilize a health care team in an emergency situation.
- 6. Understand the principles of a high reliability organization and the role of the team in an emergency.
- 7. Demonstrate the ability to make effective diagnostic decisions.
- 8. Understand the need and abitlity to assess for risk management, quality assurance and improvement.
- 9. Understand the role of information management in the care of hospitalized patients.
- 10. Use evidence-based paediatric flow sheets for prevention and screening of infants and children.
- 11. Demonstrate knowledge of reportable diseases and parameters for interim exclusion from school and recreational activities.

III. Communicator

Family Medicine Residents will be able to communicate effectively with patients, family members and members of the health care team:

- 1. Demonstrates listening skills.
- 2. Demonstrates language skills (verbal, writing, charting).
- 3. Demonstrates non-verbal skills (expressive and receptive).
- 4. Demonstrates skills in adapting communication appropriately to a patient's or colleague's culture and age.
- 5. Demonstrates attitudinal skills (ability to respectfully hear, understand and discuss an opinion, idea or value that may be different from their own).
- 6. Apply these communication skills to facilitate shared and informed decision-making.
- 7. Able to coordinate community resources including knowledge of the Community Care Access Centre (CCAC) and other outreach services.
- 8. Function within a team composed of members from various health care disciplines.
- 9. Recognizing situations where a specialist consultation is appropriate, and effectiveness in communicating the purpose of the referral, the patient's clinical condition and pertinent previous medical history.
- 10. Adapt communication methods based on the age of the child always attempting to maximize the child's participation in their medical care.
- 11. Effectively evaluate the illness experience and influence on relationships for children and their families especially for children with chronic conditions or critical illness.
- 12. Find common ground with children and adolescents as well as parents in managing medical or developmental issues cognizant of personal/cultural differences in parenting.

IV. Collaborator

Family Medicine Residents will be able to collaborate

1. Work collaboratively in different models of health care.

- 2. Engage patients and families as active participants in their care.
- 3. Work with patients, families and colleagues to achieve optimal paediatric patient care within a multidisciplinary family practice.
- 4. Understand the role of the family physician as a teacher and consultant.
- 5. Work effectively with specialist teams in managing chronic conditions in childhood recognizing the family doctor's key role in providing continuity of care into adulthood. (ex. congenital heart disease, asthma, cystic fibrosis, DM Type 1, developmental and physical disabilities, sensory impairments).

V. Health Advocate

Family Medicine Residents will be able to advocate for the health of patients

- 1. Acting as an effective patient advocate with employers and social service agencies.
- 2. Identify patients who are vulnerable or marginalized and assist them in issues (i.e. occupational issues, special diet application forms, etc.) that promote their health.
- 3. Identify patients at risk because of social, family or other health situations and to work appropriately with social services.
- 4. The resident will show awareness of the determinants of health across health/education/social service sectors and from a biopsychosocial approach.
- 5. The resident will demonstrate awareness of community resources to help children meet their greatest potential in the community. The resident will recognize the indications for these services and advocate effectively.

VI. Professional

Family Medicine Residents will have demonstrated professionalism

- 1. Demonstrates (i.e. day to day behaviour) that reassures that the resident is responsible, reliable and trustworthy.
- 2. Identify patients at risk because of social, family or other health situations.
- 3. Demonstrate leadership, professional and ethical qualities.
- 4. Be knowledgeable in reporting obligations for child abuse and neglect and describe/demonstrate a sensitive, thorough approach.
- 5. Demonstrate understanding of privacy legislation and physician confidentiality and consent as it pertains to children and adolescents.
- 6. The resident will demonstrate awareness of own ideas and beliefs about parenting and how this may influence their advice to families.

VII. Scholar

The Family Medicine Resident will have demonstrated their scholarly proficiencies:

- 1. Strategies for lifelong learning and continuing maintenance of professional competence.
- 2. Demonstrates self-directed learning based on reflective practice.
- 3. Access, critically evaluate and use medical information in health care decisions.
- 4. The resident will be aware of standards of care and recommendations from the College of Family Physicians of Canada and from the Canadian Paediatric Society for care of children.
- 5. The resident will engage in ongoing review of signs and symptoms of rare but serious illnesses in the paediatric population to maintain strong case finding skills over their career.

Developed by: Dr. Daniel Grushka, Dr. Loretta Seevaratnam & the Child Health Program

Subcommittee

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