Rotation Objectives for:

- **Ambulatory Pediatrics**

CFPC relevant Priority Topics

- Newborn
- In children
- Eating disorder
- See below for all references to pediatric and adolescent learning points from the CFPC Priority Topics

Rotation Objectives

In order demonstrate competence in these clinical issues, the residents must, according to their level of training, be able to demonstrate the following:

Medical Expert
• Obtain pertinent information on history for the illnesses identified in the CFPC Priority Topics relating to care of children • Demonstrate a relevant and reliable physical examination • Order appropriate diagnostic tests interpret these tests accurately • Analyze the clinical information available and identify the most likely diagnosis and the diagnoses most important to exclude • Orders appropriate treatments (both pharmacologic and nonpharmacologic) • Be able to provide support for breastfeeding, and anticipatory guidance for new mothers • Recognize normal neonatal growth and deviations from normal • Have an approach to the crying newborn. Recognize the diagnosis of colic, being sure to evaluate for other causes   ○ Recognize the risk factors and signs of infant abuse

Communicator

- Articulates the principles of the "patient-centred" method and demonstrate that they consistently incorporate this into their clinical assessments

- In children presenting with an illness or parental concern, demonstrate proficiency in the **patient-centred-model** by addressing parental concerns (e.g. do not minimize the symptoms and their impact on the parents)
  - **F**ears (explore child's/parents' fears)
  - **I**deas
  - **F**unction (explore specific indicators of severity)
  - **E**xpectations (explore their agenda - e.g. are they hoping for antibiotics? referrals? Investigations?)

- Accurately and clearly conveys needed information and explanations to patients, families, and colleagues

- Provides clear and accurate written documentation of clinical encounters and plans

- In assessing and treating children:
  - Use age-appropriate language
  - Obtain and share information with them directly (i.e. don't just talk to the parents)

….. *In children*

- In adolescents, ensure the confidentiality of the visit, and, when appropriate, encourage open discussion with their caregivers about specific problems (e.g. pregnancy, depression, and suicide, bullying, drug abuse)

……. *In children*

- When dealing with difficult parents (threatening or demanding), safely establish common ground, be compassionate and sensitive to parental fears, and identify your own attitudes and your own contribution to the situation

……*Difficult patients*

- In managing childhood obesity, challenge parents to make appropriately family-wide changes in diet and exercise, and to avoid counterproductive interventions (e.g. berating or singling out the obese child)

…*Obesity*

- With parents reluctant to vaccinate their children, address the following issues so that they can make an informed decision:
  - their understanding of vaccinations
  - the consequences of not vaccinating (e.g. congenital rubella, death)
  - the safety of unvaccinated children (e.g. no third world travel)

….. In children; Immunizations

Collaborator

- When managing a patient with complex medical or psychiatric conditions, work with a multidisciplinary team by:
  - making clear the roles of different “intervenants”
  - maintaining regular communication
- Effectively consult other specialists (both written and verbal consultations) by:
  - Formulating very clear question
  - Providing the necessary information and prior investigations that allow the consultant make their best clinical evaluation
- Demonstrates a team-based approach, by involving and working together with other members of the team, other related disciplines, and community agencies, depending on patient needs
- Engages patients and those involved in their care as active participants
- Maintains a positive working environment
- Transfers care in a way that ensures patient safety and comfort
- Completes consultations such that the most relevant clinical information is included

Manager/Leader

- Manages their work-flow in a way that balances volume with comprehensive patient care.
- Manages their practice in a way that ensures patient safety. This includes signing off labs in a timely manner and providing follow-up assessments.

Advocate

- When caring for children with complex, chronic illness, disabilities, or from difficult psychosocial ensure the patient and family have access to available community resources to assist them … *Disability*
- Recognizes when a patient has social, cultural, and/or physical causes of vulnerability (also called ‘determinants of health’)
- Recognizes patient and community assets

- Mobilizes additional support and resources for patients and families when vulnerable

Scholar

- Identify gaps in knowledge that are important to your patients' management
- Formulates clinical questions and search the medical literature in order to answer them
- Demonstrates intellectual curiosity by asking relevant clinical questions and study
- Reads and acquires knowledge consistent with their ongoing needs (derived from personal reflection and feedback from supervisors)
- Teaches junior learners

Professional

- Is honest
- Is on time for shifts and clinics. When anticipates being late or absent, informs the right people in a timely manner
- Recognizes own limitations and asks for help
- Is polite and respectful even during periods of stress and conflict
- Maintains patient confidentiality
- Demonstrates an awareness of own attitudes, feelings, and impact on their practice
- Reflects on clinical events to deepen self-knowledge
- Demonstrates awareness of their own attitudes that can influence their patient assessments and therapeutic relationships
- Demonstrates an open-minded and caring approach to patients, even if their values might differ from their own

Updated: June 21, 2017

Care of Children and Adolescents

Preventive Health/ Screening
[Learning objectives for **FM-***focus on Parent Child*; Ambulatory Peds;

1. Recognize that the "Past Medical History" of a young child must include the child's birth and antenatal history

2. Evaluate the pediatric patient in the context of their family:

    a. Must take the child's family **social history**, to understand their social context as this will influence your decisions for admission and discharge

    ..... *In children*

    b. Must take a child's **family medical history** when considering what screening tests are appropriate (e.g. consider familial hypercholesterolemia in families with early onset coronary artery disease)

    ……*Hyperlipidemia*

3. Be able to screen for **developmental delays** at different stages

    a. To accomplish this, the resident must become familiar with normal patterns of gross motor and fine motor skills, language, social development

    …….. *Well-baby care*

4. As children (especially adolescents) generally present infrequently for medical care, take advantage of visits to ask about:

    a. the child or adolescent's functioning in school, to identify learning difficulties

    ….. *Learning; in children*

    b. Social well-being (e.g. relationships, home, friends)

    c. Modifiable risk factors (e.g. drug use, sex, smoking, driving) to promote harm reduction

        i. E.g. **HEADSS approach** ……. http://www.bcchildrens.ca/Youth-Health-Clinic-site/Documents/headss20assessment20guide1.pdf

        ……. *In children*

5. Be able to demonstrate a systematic **physical examination** of a newborn.

    a. This must include recognition of congenital anomalies (*e.g. ear abnormalities, sacral dimple, etc.*) as they may be associated with **other** anomalies and genetic syndromes

    .....*Newborn*

6. Be able to recognize and evaluate the causes of neonatal jaundice. Do not assume all causes are physiologic or "breastfeeding jaundice

    …….*Hepatitis*

7. Be able to demonstrate the physical examination **screening tests** as recommended by Rourke and ABC'daire, including:

    a. Newborn *skull*, recognizing normal fontanelles and signs of plagiocephaly
    b. Newborn *tongue* that indicate anterior and posterior tongue ties
    c. Examination of the *hips* for congenital hip dislocation
    d. Physical exam of the *umbilicus*, recognizing and knowing guideline management of umbilical hernias
    e. Age appropriate *eye* exams (red light reflex, corneal light reflex, cover/uncover test; acuity testing)

8. Be able to perform an age-appropriate *cardiac* exam
    a. Presence of femoral pulses
    b. Be able to distinguish physiologic from pathologic heart murmur
    c. In children 3 years and old, perform blood pressure measurements

9. Male *foreskin* and *testicular exams.* Be able to recognize and manage phimosis (physiologic and pathologic) cryptocrchidism, ….…*Well-baby care*

10. As part of well-child care, consider **anemia** and **lead poisoning** in high-risk populations ….*Anemia*; *Well baby care*

11. Measure and chart growth parameters, including head circumference at each assessment using the WHO growth curves. Know how to <u>identify</u> and proceed with <u>appropriate management</u> of the following:

……..*Newborn*

    a. failure to thrive
    b. stunted height
    c. overweight and obesity
    d. precocious growth

12. At each assessment, provide parents with anticipatory advice on pertinent issues (e.g., feeding patterns, development, immunization, dental care, parenting tips, antipyretic dosing, and safety issues).

…….……*Well baby care*

    a. As part of preventing childhood obesity, advise parents of healthy activity levels for their children, limiting screen time, and healthy eating guidance

…….…….. *Obesity*

    b. As part of well-child care, discuss preventing and treating poisoning with parents (e.g. "child-proofing", poison control number)

…….……*Poisoning*

13. Know the Canadian **immunization** guidelines

    a. Know how to give vaccines in a way that minimizes pain
    b. Do not delay immunizations unnecessarily (e.g. vaccinate a child even if he or she has a runny nose)
    c. With parents who are hesitant to vaccinate their children, explore the reasons, and counsel them about the risk of deciding against routine immunization of their children
    d. Modify the routine immunization schedule in those patients who require it (e.g. those who are immune-compromised, those who have allergies)

……..… *Immunizations*

14. As part of the periodic health assessment of newly arrived **immigrants**:

    a. assess vaccination status and update if necessary
    b. As part of ongoing care of all **immigrants**, inquire about the use of alternative healers, practices, and/or medication (e.g., "natural" or herbal medicine, spiritual healers, medications from different countries)

……..… *Immigrants*

    c. Recognize the risk of vertical transmission of **Hepatitis B** of newborns born to mothers with Hepatitis B and to mothers born in endemic regions. Manage these newborns appropriately.

…… *Hepatitis*

15. In adolescence:

    a. enquire about sexuality (e.g. normal sexuality, safe sex, contraception, sexual orientation)

…….*Sexuality*

    b. Advise about adequate **contraception.**
    c. Effectively counsel adolescents to aid in decision-making to ensure adequate adherence
    d. Look for and identify risk (relative and absolute contraindications)
    e. Identify barriers to specific methods (costs, cultural, personal concerns)
    f. Advise of efficacy and side effects that result in discontinuation.
    g. Be able to provide *emergency contraception*

….. *Contraception*

    h. Advise and screen appropriately for **sexually transmitted infections** (see below)

    i. Whenever teenagers present for care, include an assessment of their risk of **eating disorders** (e.g. altered body image, binging, and types of activities, as dancers, gymnasts, models, etc., are at higher risk). (See below)

Illness

[Learning Objectives for **FM, Ambulatory Peds; ER Peds; Peds Wards**]

16. When discharging a newborn or child from hospital or Emergency room, advise parent(s) of warning signs or serious or impending illness, and develop a plan with them to access appropriate care should a concern arise

17. When evaluating children, generate a differential diagnosis that accounts for the common medical problems, which may present differently in children (e.g. urinary tract infections, pneumonia, appendicitis, depression, sepsis in the newborn)

…. *In children*

18. In a child or adolescent with a chronic disease – actively inquire about:
    a. the psychological impact of the diagnosis and treatment
    b. functional impairment
    c. underlying depression or risk of suicide
    d. underlying substance abuse

……. *Chronic disease*

19. Have a systematic diagnostic approach to **abdominal pain**. The differential diagnosis must include both the <u>common</u> and the <u>life threatening</u> diagnoses in: 1) infants; (2) older children; and (3) adolescence.

20. To be able to do this, the resident must be able to diagnose an acute abdomen on physical exam

….. *Abdominal pain*

21. Be able to diagnose features characteristic of a true IgE mediated **allergic reaction** versus a rash from a viral infection or non IgE mediated reaction

    a. Must be able to <u>manage</u> acute allergic reactions
    b. Recognize the signs and symptoms
    c. Treat immediately and aggressively
    d. Prevent a delayed hypersensitivity reaction through observations and adequate treatment (with steroids)
    e. Must be able to counsel about prevention (med alert bracelets, prescribing adequate numbers of Epipens (home, school, car), counsel about early recognition and treatment)

…….. *Allergy*

22. Have a systematic approach to **anemia**, with a focus on causes in the pediatric setting

….*Anemia*

23. Have a diagnostic approach to **headaches** in children

    a. Recognize the variable presentations of headaches in children, including migraine variants
    b. Consider more unusual causes of headaches that can present in older children, including pseudo tumour cerebri

…. *Headache*

24. In a patient presenting with an ill-defined episode (e.g. fits, spells, turns,) take a history to distinguish a **seizure** from other events

….*Seizures*

25. In pediatric patients with a persistent (or recurrent) **cough**, generate a broad differential diagnosis (e.g., gastro esophageal reflux disease [GERD], asthma, rhinitis, presence of a foreign body, pertussis).

….*Cough*

26. **Febrile** infants 0-3 months old:
    a. A) recognize the risk of occult bacteremia
    b. Investigate thoroughly (e.g. blood cultures, urine, lumbar puncture +/- chest X-ray)

……*Fever*

    c. In a **febrile** child, aggressively and immediately treat patient who have fever resulting from serious causes before confirming the diagnosis, (e.g. febrile neutropenia, septic shock, meningitis) or non-infectious (e.g. heat stroke, drug reaction, malignant neuroleptic syndrome)

…. *Fever*

    d. In the **febrile** patient, consider causes of hyperthermia other than infection (e.g. heat stroke, drug reaction, malignant neuroleptic syndrome)

27. … *Fever*

28. Using Canadian Pediatric Society guidelines, evaluate and manage common **infections**, including:

29. **Urinary tract infections** and pyelonephritis

…..*Urinary tract infection*

    a. Identify non-urinary causes of **dysuria**

…..*Dysuria*

    b. Know the Montreal Children's Hospital guidelines for which patients need further investigations to evaluate for risk factors for *recurrent* urinary tract infections

    c. Identify those at risk of *complicated* urinary tract infection (e.g. diabetes, congenital genitourinary anomalies, immunocompromised, neonate)….

…….Urinary tract infection

30. **Upper respiratory infections** (rhinitis, pharyngitis, epiglottitis, retropharyngeal abscess, bacterial versus viral sinusitis)

…… *Upper respiratory infection*

    a. The differential diagnosis for **pharyngitis**

    b. Croup
        i. In a child presenting with a clear history and physical examination compatible with mild to moderate croup, make the clinical diagnosis without further testing (e.g. do not routinely order a X-ray)

ii. In patients with a diagnosis or croup, use steroids (do not undertreat mild-to-moderate cases of croup)

iii. In a patient presenting with croup, address parental concerns (e.g. not minimizing the symptoms and their impact on the parents), acknowledging the fluctuating course of the disease, providing a plan anticipating recurrence of the symptoms

……Croup

31. Lower respiratory infections (bronchiolitis, pneumonia)

….Pneumonia

32. **Acute otitis media**

a. Assess for complications, (e.g. mastoiditis)
b. Acute otitis externa
c. Recurrent ear infections and when to send for tubes

….Ear pain

33. Cellulitis, impetigo

…..Infections; Skin disorders

34. Meningitis

… Infections; Meningitis

35. Tinea capitis, tinea corporis

….Skin disorders

36. In any patient presenting with **respiratory symptoms**, look specifically for the signs and symptoms that differentiate upper from lower respiratory disease (e.g. stridor vs. wheeze vs. whoop

……Croup

a. In children with **stridor**, include in your differential diagnosis: croup, anaphylaxis, foreign body (airway or esophagus), retropharyngeal abscess, epiglottitis

…Croup

b. In a child with acute respiratory distress and **wheeze**, distinguish asthma or bronchiolitis from croup and foreign body aspiration by taking an appropriate history and doing a physical examination.

….Asthma

c. In children with **respiratory distress**, Identify the need for respiratory assistance (e.g. assess ABCs, fatigue, somnolence, paradoxical breathing, in-drawing)
   i. Provide that assistance when indicated

…. Croup

d. In a known **asthmatic**, presenting either because of an acute exacerbation or for ongoing care:

   i. Objectively determine the severity of the condition (e.g., with history, including the pattern of medication use), physical examination, spirometry). Do not underestimate severity.
   ii. Treat the acute episode (e.g., use beta-agonists repeatedly and early steroids, and avoid under-treatment).
   iii. Rule out co-morbid disease (e.g., lung disease from prematurity, congenital heart disease)
   iv. Determine the need for hospitalization or discharge (basing the decision on the risk of recurrence or complications, and on the patient's expectations and resources). For the ongoing (chronic) treatment of an **asthmatic**, when to consult back.
   v. Assess severity and compliance with medication regimens.
   vi. Recommend lifestyle adjustments (e.g., avoiding irritants, triggers) that may result in less recurrence and better control.
   vii. propose a stepwise management plan including:
      a) Self-monitoring.
      b) Self-adjustment of medication.

…… *Asthma*

37. In children with **red eye**/ conjunctivitis, based on the age of the patient, history, and physical examination, distinguish between allergic, infectious (viral or bacterial) causes or part of a systemic condition

…..*Red eye*

   a. Distinguish blocked lacrimal glands from infectious causes

38. In an adolescent who is sexually active or considering sexual activity, take advantage of opportunities to advise about prevention, screening, and complications of sexually transmitted infections

……*Sex; in children; sexually transmitted infections*

39. In patients with **acute diarrhea**, use the history to establish the possible etiology (infectious contact, travel, recent antibiotic use, common eating place for multiple ill patients).

   a. Counsel about timing of return to school (likelihood of infectivity

   b. In patients with chronic or recurrent diarrhea, look for both GI and non-GI symptoms and signs suggestive of specific diseases (e.g. inflammatory bowel disease, malabsorption syndromes, compromised immune system)

……*Diarrhea*

   c. Be able to assess for signs and symptoms and indications of severity of dehydration

   d. Determine the appropriate volume of fluid for replacement of deficiency and ongoing needs. Be able to calculate and order both oral and intravenous hydration

……*Diarrhea; Dehydration*

40. Recognize common **skin disorders** in children and adolescence including
    a. Eczema
    b. Candida
    c. Acne
    d. Impetigo
    e. Tinea infections

……..*Skin disorders*

41. Know the elements of a complete history for a child with **vaginitis**
    a. (vaginal itching, vaginal discharge, or dysuria) that considers infectious and non-infectious causes
    b. In a child with a vaginal discharge, rule out sexually transmitted infections and foreign bodies (do not assume that the child has a yeast infection)

    c. Know how to prepare wet mounts (saline and KOH slides), whiff test, vaginal pH,

    d. In a child with a candida infection, look for underlying illness (e.g. immune-compromised, diabetes)

……..*Vaginitis; Dysuria*

42. In a patient requesting **sexually transmitted infection** testing:
    a. identify the reason(s) for requesting testing
    b. assess the patient's risk
    c. provide counseling appropriate to the risk (i.e., human immunodeficiency virus infection)
    d. use appropriate techniques for collecting specimens
        i. Understand the sensitivity and specificity of the tests
    e. In a patient with a confirmed STI, initiate:
        i. Treatment of partner(s)
        ii. Contact tracing through a public health or community agency

……..*Sexually transmitted infections*

43. Be able to appropriately evaluate and manage an adolescent girl with **vaginal bleeding** and/or **anemia** - both in the outpatient and the emergency care setting normal menstrual patterns. Must know:

    a. how to differential ovulatory versus non ovulatory causes of abnormal vaginal bleeding
    b. to rule our pregnancy
    c. Do an appropriate work-up to establish the cause
    d. diagnose and treat hemodynamic instability
    e. provide appropriate medical management to decrease abnormal bleeding both acutely, and in the long-term

……..*Vaginal bleeding; Anemia*

44. In patients complaining of **dizziness**, take a careful history to distinguish vertigo, presyncope, and syncope.

…….Dizziness

45. In very young children, develop an approach to ALTE (apparent life threatening event)

…..*Loss of consciousness*

46. In patients with **loss of consciousness** following head trauma, treat and follow-up according to current concussion guidelines

….. *Loss of consciousness; Trauma*

47. In children presenting with **musculoskeletal pain**, include referred pain in the differential diagnosis (e.g. slipped capital epiphysis presenting as knee pain)

    a. In a child, be able to distinguish “growing pains” from more pathologies

    …..*Joint pains*

48. Consider growth plate fracture, even if there is a normal X-ray, since these are prone to have normal x-ray findings

    ….*Fractures; Trauma*

    a. Use clinical decision rules (Ottawa ankle rules, C-spine rules, and knee rules) to guide the use of X-ray examinations in the case of mild trauma, know how these rules can apply in children.

    …..*Fractures*

    b. When examining patients with a fracture, assess neurovascular status and examine the joint above and below the injury

    ….*Fractures*

    c. Recognize fractures consistent with **child abuse**
        i. Recognize other clues indicating child abuse or neglect.
        ii. Know how to signal concerns to protective services

    ….*Trauma*

49. Maintain a broad differential diagnosis in children and adolescents presenting with **behavioural** and **school problems,** consider:

    a. Medical conditions, including hearing impairment

    b. Psychiatric conditions, including anxiety disorders, depression, and schizophrenias, and conduct disorder

    c. Psychosocial factors, including peer issues, family conflict

    d. Substance abuse

    e. Learning disabilities, including ADHD and autistic spectrum disorders

    …..*Behaviour problems; Learning, Substance abuse*

    f. When caring for a child with a learning disability, regularly assess the impact of the learning disability on the children and the family

    ….*Learning*

50. In **disabled** children, assess all spheres of function (physical, language, social, cognitive) as well as impact on the family

…. *Disability*

51. Recognize that **depression** can present differently in childhood and adolescence
    a. Know how to evaluate depression in children and adolescence
    b. Know what community resources can assist in the global management

……*Depression*

52. Have an approach to deal with the adolescent in psychological **crisis**, including those with **suicidal** ideation: knowing how to deal with the ethical and legal issues of confidentiality

……*Crisis; Suicide*

53. Include "*complication of an eating disorder*" in the differential diagnosis of patients with arrhythmias without cardiac disease, an electrolyte imbalance without drug use or renal impairment, amenorrhea without pregnancy

…. *Eating disorder*

    a. When <u>diagnosing</u> an **eating disorder**:

    b. Take an appropriate history to differentiate anorexia nervosa from bulimia, as treatment and prognosis differ

    c. Evaluate for co-existing psychiatric conditions (e.g. depression, personality disorder, obsessive-compulsive disorder, anxiety disorder

    d. When <u>managing</u> a patient with an **eating disorder**:

    e. look for *complications* (e.g. tooth decay, amenorrhea, an electrolyte imbalance, osteopenia)

    f. Evaluate the *level of disease* activity by noting eating patterns, exercise, laxative use

……*Eating disorder*