CanMEDS Goals and Objectives

To train physicians with added competency in the area of pediatric pain to provide primary and consultant supervised pain management services to pediatric patients in the areas of acute, chronic, oncological, and palliative care. The program will provide clinical exposure and initial basic academic training for physicians who will be going on to academic careers in pain medicine including pediatric pain.

Educational Objectives of the Program

To prepare the resident to understand, identify, assess and manage the unique aspects of pediatric pain management in preterm/term infants, children and youths in the following settings:

- Acute postoperative,
- Post traumatic including burns.
- Chronic or recurrent medical illnesses
- Cancer related pain.
- Palliative care
- Chronic/complex pain syndromes

Successful residents will acquire a basic understanding of the principles, philosophy, and core knowledge, skills and attitudes of pediatric pain medicine.

The Pediatric core rotation will be a one month rotation in the second year of the Pain Medicine residency consisting of acute pain service, chronic pain service and various outpatient clinics over a maximum of 20 weekdays scheduled mostly located at BCCH and Canuck Place.

Outpatient clinics include: psychiatry, rehabilitation, psychology, adolescent medicine and mindfulness, rheumatology, neuro, and gastrointestinal.

1. To learn to assess pediatric inpatients with complex pain and to co-ordinate pain treatments with medical care.
   The trainee will be rotated through the inpatient consultation service at BC Children’s Hospital (BCCH) managed by Pediatrician and pain specialist Dr. Oberlander and anesthesiologist pain specialist Dr. Gillian Lauder.

2. To learn to assess pediatric patients with complex pain and to co-ordinate pain treatments in an outpatient setting, the resident will be complete consults with the BCCH outpatient multidisciplinary pain service. This team consists of pediatric clinician and pain specialist Dr. Oberlander or anesthesiologist pain specialist Dr. Gillian Lauder, Sarb Randhawa (Nurse clinician), psychologist Dr. Sue Bennett, and physiotherapist Lawren DeMarchi. The Pediatric Outpatient pain clinic occurs every Tuesday.

3. The pain resident will be exposed to some of the technical skills regarding interventional procedures at BCCH. Exposure to interventional procedures to manage pain in pediatric patients will be done with Dr. Gillian Lauder for both non-cancer and cancer pain management where possible and available.
4. To learn to assess and provide a management plan for pediatric patients with acute pain in the postanesthetic recovery room (PAR), surgical wards, and medical wards.

   The resident will be assigned to do rounds with the Acute Pain Service which includes the acute pain physician anesthesiologist, pain nurse and on call anesthesia resident when available. The APS anesthesiologist include: Dr. G. Lauder (director), Dr N Broemling, Dr S Malherbe, Dr S Whyte, Dr M Traynor, Dr Y Csanyi-Fritz, Dr A Morrison, Dr. Z. Brown, Dr. M. Cassidy, Dr M. Baker , Dr.N., Barker, Dr. H. Bailey and Dr. J. Chen. The pain resident may join anesthesia residents in the morning teaching where pain is a component of their teaching.

5. To learn the etiology, pathophysiology, classification, and characteristics of pediatric cancer pain.

   The resident will rotate a minimum of 1 day in Canuck Place Hospice with Dr Hal Siden (Pediatric palliative Care).

Upon completion of the pediatric pain rotation, the pain medicine resident will:

**Medical Expert**

**Outpatient**

1. Understand the anatomical, biologic, physiologic and psychological development of pain in children.
2. Describe the etiology, pathophysiology, classification, and characteristics of pediatric chronic pain.
3. Understand the biopsychosocial model and the importance of the interdisciplinary approach for management of pediatric complex pain.
5. Demonstrate competency in taking a pain history, use of appropriate assessment tools and perform an appropriate physical examination in different ages of pediatric patient and nonverbal and developmentally delayed children.
6. Understand the differences in providing pain management for developmentally delayed or preverbal children and their families.
7. Recognize the impact of situational, behavioral, emotional and environmental factors that modify children’s pain experience and behaviors.
8. Identify the importance of multidisciplinary approach to evaluation and management of pediatric pain related to acute and chronic conditions as well as the contributions of non-physician health care providers such as psychologists, physical and occupational therapists, social workers and child life specialists.
9. Understand different models of care for different types of pain.
10. Understand the importance of good quality acute pediatric pain management and how it can improve outcomes.
11. Demonstrate knowledge of opioid pharmacology, classification, dosing, titration, routes of administration, side effects, toxicities relevant to developmental pediatric pharmacology.
12. Understand the role of the opioid antagonist naloxone.

**Acute pain service**

1. Recognize and treat the side effects of acute pain management modalities.
2. Explain use of adjuvant agents in pediatric pain
3. Understand and order the multiple acute pain management modalities, e.g., COI, PCA,
4. Understand the role of nerve blocks and how to manage nerve catheters.
5. Understand how to trouble shoot the non or partially functioning epidural.
6. Understand and recognize acute critical incidents related to epidural analgesia.
7. Understand how to step patients down from epidural and PCA to oral analgesics.
8. List the indication and contraindications for each acute pain management modality.

**Cancer Pain**

1. To learn the etiology, pathophysiology, classification, and characteristics of pediatric cancer pain

**Communicator**

1. Demonstrate effective communication skills in dealing with pediatric patients and their families.
2. Identify barriers to effective communication, and modify approach to minimize these barriers. Realize that empathy and caring can be expressed through both verbal and non-verbal communication.
3. Demonstrate effective verbal and written communication among members of the interdisciplinary medical care team, and other health care professionals.
4. Prepare and deliver formal presentations for journal clubs and rounds.

**Collaborator**

1. Realize the importance of collaboration and assess the stages of team formation and development.
2. Recognize the unique roles of members of the interdisciplinary care team.
3. Demonstrate effective collaboration among members of the interdisciplinary care team, and other health professionals.

**Manager**

1. Describe the roles, regulatory frameworks, responsibilities and professional capabilities of members of other professions involved in pediatric pain management.
2. Consider career options and be aware of practice management skill requirements for different career paths.
3. Use mentors to explore career opportunities.

**Health Advocate**

1. Reflect on the current state of pediatric pain management in Canada, including barriers to providing better care, including geographical, cultural and financial barriers.
2. Reflect on the psychosocial and spiritual issues of pediatric pain patients and their families. In particular, consider the impact on quality of life, and the nature of suffering.

**Scholar**

1. Incorporate evidence based decision making in caring for pediatric pain patients and their families.
2. Access the relevant literature in helping to solve clinical problems.
3. Participate actively in all academic division activities.
4. Apply critical appraisal skills to literature in pediatric pain medicine.
5. Provide clinical teaching and mentoring for more junior trainees.
Professional

1. Recognize the importance of a reflective practice by exploring personal experiences of suffering and in caring for pediatric pain patients.
2. Demonstrate skillful care of children in severe pain.
Demonstrate integrity, honesty, and compassion in the care of pediatric patients and their careers