



Western University
Pain Medicine Residency Program

Educational Objectives and Competencies

Program Goals and Objectives

Goals of the Program

1. To provide clinical and basic academic training for physicians who will be going on to academic careers in pain medicine
2. To train physicians who can provide pain medicine consultation services in a community based setting

Educational Objectives of the Program

Successful residents will acquire a broad-based understanding of the principles, philosophy, core knowledge, skills and attitudes of pain medicine.

Objectives are presented in the CanMEDS format.

General Educational Objectives/Competencies
Pain Medicine Residency Program
University of Western Ontario

Medical Expert

General Objective #1

The resident will demonstrate skills in performing a pain medicine consultation.

Specific objectives: The resident will be able to:

- 1.1 Perform a complete pain medicine consultation, including assessing the physical, social, psychological, and functional parameters for a pain medicine patient
- 1.2 Communicate the findings both written and verbally.

General Objective #2

The resident will be able to demonstrate advanced knowledge, skill, and attitudes in managing neuropathic pain.

Specific objectives: The resident will be able to:

- 2.1 Assess neuropathic pain, including the use of validated assessment tools, history taking skills, physical examination skills, and appropriate ordering and interpretation of investigations
- 2.2 describe the common and less common neuropathic pain syndromes
- 2.3 describe the neurophysiology of pain transmission
- 2.4 prescribe medications used for the control of neuropathic pain and describe their pharmacology (pharmacokinetics and dynamics)
- 2.5 describe the dose, selection, titration, routes of administration and effectiveness of neuropathic pain medications
- 2.6 list the indications for interventional pain management, and describe how devices (and their complications) are managed
- 2.7 demonstrate knowledge of the level of evidence in the literature regarding neuropathic pain management options
- 2.8 describe non-pharmacological pain relieving modalities for neuropathic pain.

General Objective #3

The resident will be able to demonstrate advanced knowledge, skill, and attitudes in managing pain of musculoskeletal origin.

Specific objectives: The resident will be able to:

- 3.1 Assess patients reporting musculoskeletal pain, including the use of validated assessment tools, history taking skills, physical examination skills, and appropriate ordering and interpretation of investigations
- 3.2 list the common and less common musculoskeletal pain syndromes

- 3.3 describe the neurophysiology of musculoskeletal pain transmission
- 3.4 implement a pharmacologic therapeutic management plan to treat musculoskeletal pain, and describe the pharmacology (pharmacokinetics and dynamics) of those medications
- 3.5 the dose, selection, titration, routes of administration and effectiveness of musculoskeletal pain medications
- 3.6 describe the use and indications of physical treatments for musculoskeletal pain (eg. TENS, ultrasound, physiotherapy, etc.)
- 3.7 appropriately use diagnostic tools to help diagnose and guide management of painful musculoskeletal conditions
- 3.8 describe the indications for interventional pain management options for musculoskeletal pain, as well as their conduct and possible complications
- 3.7 the level of evidence in the literature regarding musculoskeletal pain management options
- 3.8 non-pharmacological pain relieving modalities for musculoskeletal pain.

General Objective #4

The resident will be able to demonstrate advanced knowledge, skill and attitudes in managing pain of malignant origin.

Specific objectives: The resident will be able to:

- 4.1 Describe and demonstrate the components of a comprehensive pain assessment, including the use of validated assessment tools, appropriate history and physical examination skills
- 4.2 list the common and less common cancer pain syndromes
- 4.3 explain the neurophysiology of pain transmission in cancer pain
- 4.4 apply the pharmacology (pharmacokinetics and dynamics) of medications used for pain control
- 4.5 describe dose selection, titration, routes of administration and effectiveness of pain medications
- 4.6 describe the indications for, management of, and complications of interventional anesthetic techniques such as epidural, intrathecal, and neurolytic blocks for cancer pain
- 4.7 the role of radiotherapy and chemotherapy in cancer pain control
- 4.8 explain the importance of an interprofessional team approach for the care of patients with malignancy related illnesses
- 4.9 describe the level of evidence in the literature regarding malignant-pain management.

General Objective #5

The resident will be able to demonstrate effective knowledge, skills and attitudes in assessing and managing acute pain.

Specific objectives: The resident will be able to demonstrate:

- 5.1 the use of multimodal agents for the management of patients experiencing acute postoperative pain
- 5.2 the indications for, management of and complications of interventional anesthetic techniques such as neuraxial techniques and peripheral nerve blocks, in addition to the use of patient controlled analgesia pumps

- 5.3 the appropriate assessment and management of patients with comorbid surgical or medical illness
- 5.4 the assessment and management of patients admitted to hospital with acute pain not requiring surgical intervention
- 5.5 the assessment and management of patients experiencing acute on chronic pain or those who have concurrent addiction.

General Objective #6

The resident will be able to demonstrate effective knowledge, skills and attitudes in assessing and managing psychiatric illness in patients suffering from painful conditions.

Specific objectives: The resident will be able to:

- 6.1 Assess psychiatric illness, including the use of validated assessment tools, history taking skills, and physical examination skills
- 6.2 identify characteristics of patients who would benefit from a formal psychiatric assessment
- 6.3 describe the diagnosis and fundamental treatment strategies for mood, personality, anxiety, and somatoform disorders
- 6.4 explain the potential effect of pain treatments on psychiatric comorbidities
- 6.5 describe common assessment procedures used in the diagnosis of sleep disorders
- 6.6 outline non-pharmacologic and pharmacologic treatment options for common sleep problems occurring in association with chronic pain disorders

General Objective #7

The resident will be able to demonstrate effective knowledge, skills and attitudes in assessing and managing addiction and/or medication abuse in patients suffering from painful conditions.

Specific objectives: The resident will be able to:

- 7.1 Assess for addiction/medication abuse, including the use of validated assessment tools, history taking skills, physical examination skills, and appropriate ordering and interpretation of investigations
- 7.2 describe the epidemiology of substance misuse within the chronic pain population
- 7.3 describe the pharmacology (pharmacokinetics and pharmacodynamics) of medications used to stabilize patients with substance dependency
- 7.4 describe the non-pharmacological approaches to the treatment of substance dependency
- 7.5 pharmacologically stabilize a patient with identified addiction/medication abuse with concurrent painful conditions
- 7.6 appropriately refer to addiction medicine specialists and incorporate addiction management plans with pain management strategies.

General Objective #8

The resident will be able to demonstrate knowledge, skills and attitudes in assessing and managing issues specific to pediatric pain patients.

Specific objectives: The resident will be able to:

- 8.1 Identify when and who to include / introduce for pain management for children
- 8.2 describe the impact of developmental stage on pain and communication
- 8.3 explore the psychosocial issues unique to pediatric pain management
- 8.4 explore issues around communication with children suffering from pain, their parents and siblings
- 8.5 discuss the ethical considerations relating to a child with significant pain
- 8.6 identify methods for pain assessment in young verbal, older verbal and non-verbal children
- 8.7 be familiar with the pharmacological treatment of pain in children
- 8.8 describe methods for non-pharmacologic pain management in children.

General Objective #9

The resident will be able to demonstrate knowledge, skill and attitude in managing the psychosocial aspects of pain.

Specific objectives: The resident will be able to:

- 9.1 Describe important psychological mechanisms involved in pain and suffering
- 9.2 describe psychological and social issues associated with painful conditions and strategies for management
- 9.3 identify appropriate patients for referrals to psychological and social services for patients experiencing painful conditions
- 9.4 work within a multidisciplinary team, which incorporates psychological and social strategies to manage chronic pain
- 9.5 identify and manage anger, frustration, and other strong affective responses from ongoing painful conditions
- 9.6 Demonstrate skills in providing psychological education to patients and their families around pain and symptom management.

Communicator

General Objective #1

The resident will develop rapport, trust and ethical therapeutic relationships with patients and families:

Specific objectives: The resident will be able to:

- 1.1 Explain the impact of good patient-physician communication on patient care, patient satisfaction, and clinical outcome.
- 1.2 Demonstrate skills in patient-physician communication, including active listening, reflection, use of non-verbal cues, etc.

General Objective #2

The resident will be able to demonstrate skill in developing a management plan with patients and demonstrate an ability to communicate these goals to the primary care physician and other caregivers in the health care team.

Specific objectives: The resident will be able to:

- 1.1 facilitate meetings with patients and their families to discuss relevant issues relating to pain management goals
- 1.2 explain the importance of patient confidentiality
- 1.3 demonstrate skill in addressing challenging communication issues such as anger and misunderstanding
- 1.4 respect diversity and difference, including but not limited to the impact of gender, religion, and cultural beliefs on decision-making.

General Objective #3

The resident will be able to convey effective oral and written information about a medical encounter.

Specific objectives: The resident will be able to:

- 3.1 Maintain clear, accurate, and appropriate records (e.g. written or electronic) of clinical encounters and plans
- 3.2 effectively present verbal reports of clinical encounters and plans.

Collaborator

General Objective #1

The resident will be able to collaborate as an effective member of an interdisciplinary team.

Specific objectives: The resident will be able to:

- 1.1 describe the roles of other disciplines in the provision of pain management
- 1.2 explain the role of pain medicine physicians to other health care providers
- 1.3 participate in the interdisciplinary care of patients
- 1.4 communicate effectively with interdisciplinary team members
- 1.5 describe team function and methods to resolve conflicts within teams.

General Objective #2

The resident will be able to consult effectively with other physicians and health care professionals.

Specific Objectives: The resident will be able to:

- 2.1 demonstrate effective consultation and communication skills when working with referring physicians and services
- 2.2 effectively communicate their assessments and plans to referring physicians and services.

Manager

General Objective #1

The resident will understand the importance of activities that contribute to the effectiveness of the healthcare organization within which they work.

Specific objectives: The resident will be able to:

- 1.1 describe the different models of pain medicine delivery (eg. Community based, academic, etc.) and their utilization
- 1.2 describe the roles of the primary care physician and the specialist in the provision of pain management
- 1.3 demonstrate effective use of resources across the healthcare system, demonstrating awareness of the just allocation of healthcare resources
- 1.4 participate in quality assessment and improvement initiatives
- 1.5 demonstrate an ability to work with others in the location of practice, whether it is community or hospital-based
- 1.6 develop skills for building effective teams in varied circumstances.

General Objective #2

The resident will demonstrate an ability to manage their practice in pain medicine.

Specific objectives: The resident will be able to:

- 2.1 manage time in order to balance the demands of practice requirements as well as non-clinical activities and personal life.

Health Advocate

General Objective #1

The resident will be able to demonstrate knowledge and skills in managing pain medicine patients in their community.

Specific objectives: The resident will be able to:

- 1.1 describe the societal, environmental and resource allocation factors that are relevant to the care of patients in pain
- 1.2 support patients when interacting with government, insurers, or legal bodies which are involved with the circumstances surrounding pain condition
- 1.3 develop a proactive and preventive approach for the early treatment of painful conditions at risk for becoming chronic (eg. Postoperative pain conditions, complex regional pain syndrome, etc...)
- 1.4 contribute to the education of patients and physicians to assist in managing painful conditions in the community.

General Objective #2

The resident will be able to demonstrate the ability to act as an advocate within the health care system.

Specific objectives: The resident will be able to:

- 2.1 act as an effective advocate for the rights of patients in clinical situations involving ethical considerations
- 2.2 advocate for the needs of patients receiving care throughout the health care system
- 2.3 identify the ethical and professional issues inherent in health advocacy, including altruism, social justice, autonomy, integrity and idealism.

General Objective #3

The resident will be able to identify the determinants of health for the populations that they serve.

Specific objectives: The resident will be able to:

- 3.1 identify the barriers to adequate pain management for vulnerable or marginalized patients in their patient population
- 3.2 describe the barriers to the effective care of patients in pain in different care settings across a community.

Scholar

General Objective #1

The resident will be able to develop a strategy for life-long learning:

Specific objectives: The resident will be able to:

- 1.1 design, implement and monitor a personal plan for continuing education
- 1.2 practice reflective practice as a learning tool.

General Objective #2

The resident will be able to incorporate evidence-based clinical decision making in caring for pain medicine patients.

Specific objectives: The resident will be able to:

- 2.1 access the relevant literature to address a specific clinical question
- 2.2 apply critical appraisal skills to the evidence and integrate it into clinical care.

General Objective #3

The resident will facilitate the learning of patients, students and other health care professionals when appropriate.

Specific objectives: The resident will be able to:

- 3.1 describe the principles of medical education, specifically with reference to adult education principles

- 3.2 act as an educator to patients and their families concerning pain management issues
- 3.3 demonstrate an effective lecture or presentation
- 3.4 provide effective feedback
- 3.5 assess and reflect on a teaching encounter.

General Objective #4

The resident will contribute to the creation, dissemination, application and translation of new medical knowledge and practices.

Specific objectives: The resident will be able to:

- 4.1 describe the principles of research and scholarly activity
- 4.2 describe the principles of research ethics
- 4.3 pose a scholarly question
- 4.4 conduct a systemic search for evidence
- 4.5 select and apply appropriate methods to address the question
- 4.6 appropriately disseminate the findings of a study.

Professional

General Objective #1

The resident will demonstrate a commitment to patient, their profession, and society through ethical practice.

Specific objective: The resident will be able to:

- 1.1 Demonstrate appropriate professional behavior, such as honesty, integrity, commitment, compassion, respect, and altruism
- 1.2 demonstrate a commitment to delivering the highest quality of care
- 1.3 appropriately manage ethical issues in their practice
- 1.4 appropriately manage conflict of interest
- 1.5 maintain appropriate relations with patients.

General Objective #2

The resident will demonstrate a commitment to participate in profession-led regulation.

Specific objective: The resident will be able to:

- 2.1 appreciate the professional, legal and ethical codes of practice
- 2.2 fulfill the regulatory and legal obligations required of current practice
- 2.3 demonstrate accountability to professional regulatory bodies
- 2.4 recognize and respond to others' unprofessional behaviors and practice.

General Objective #3

The resident will demonstrate a commitment to physician health and sustainable practice.

Specific objective: The resident will be able to:

- 3.1 describe methods of managing his or her own stress associated with caring for patients in pain
- 3.2 demonstrates how his or her own personal experiences surrounding pain management issues influence his or her attitudes
- 3.3 recognize and respond to other professionals in need.