



Medical competencies directory in non-cancer pain management and opioid prescribing – Update

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This document is available in its entirety in electronic format (PDF) on the Institut national de santé publique du Québec Web site at: <http://www.inspq.qc.ca>.

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1 Background

The prescription and use of opioid drugs has increased significantly in Québec in recent years. According to studies recently published by the Institut national de santé publique du Québec – INSPQ (Gagné *et al.*, 2013; Gagné, Dubé, Légaré and Perron, 2015), an increase in the number of deaths and the mortality rate attributable to opioid overdose was also reported in the province between 2000 and 2012, among the population aged 20 and over.

As part of an agreement with Health Canada, a project funded by the Drug Strategy Community Initiatives Fund (DSCIF) has been implemented in Québec for 2015-2017 in order to address opioid prescribing practices in chronic non-cancer pain (CNCP) management, which is often associated with the overdose trends. The grant was awarded to the INSPQ as the project coordinator, in collaboration with the Collège des médecins du Québec, the Faculty of Medicine and Health Sciences of Université de Sherbrooke, and the Centre de recherche et d'aide pour narcomanes (CRAN). The project has two main objectives: 1) Provide a description of medical practice for chronic non-cancer pain management, including the related patterns of opioid prescribing; and 2) address the needs identified by organizing training for both clinical physicians and medical students and residents.

More specifically, the project aims to improve physician training in two ways:

- Improve CNCP management and opioid prescribing curricula of Québec medical schools (undergraduate, residency and fellowship medical education programs).
- Develop and make accessible continuing education programs and tools for all medical practitioners in Québec.

2 Approach and methodology

As part of a project to improve the medical training of students in the undergraduate and postdoctoral medical education programs, an analysis of materials used in the undergraduate medical education program and a survey of Université de Sherbrooke residents were conducted in fall 2015. This work helped to identify the training needs of medical students and residents in terms of CNCP management and opioid prescribing. As well, it showed that better quality training led to improved performance by the residents, as reported in the survey.

A committee of experts on pain management and medical education recommended documenting the competencies according to the CanMEDS model, which was still in use in 2016 when the original document in French was published.

2.1 Selected framework: CanMEDS

The competencies were divided according to the seven CanMEDS roles: Medical Expert, Communicator, Collaborator, Leader, Health Advocate, Scholar, and Professional.

2.2 Development of competencies in chronic non-cancer pain management and acute pain management

Several sources were consulted in order to identify the competencies in CNCP management, notably:

- The objectives and competencies of the Pain Medicine subspecialty training program at Université de Montréal (Boulanger, n.d.).
- *Objectives of Training in the Subspecialty of Pain Medicine* (Royal College of Physicians and Surgeons of Canada [RCPSC], 2013).
- Competencies for health professionals in pain management, drug prescribing, dependency, addiction, and abuse (Mock, Buckley, and the First Do No Harm Education Group, 2015).
- Identifying primary care skills and competencies in opioid risk management (Chiauzzi *et al.*, 2011).
- Core competencies in integrative pain care for entry-level primary-care physicians (Tick *et al.*, 2015).

- Pennsylvania State Core Competencies for Education on Opioids and Addiction (Ashburn and Levine 2017).

Based on the opinions of experts consulted on the subject, the next logical step was to include competencies in acute pain management, given the known impact of acute pain management on the phenomenon of opioid abuse and on the possible progression of acute pain to CNCP in cases where the pain is present more than three months after the initial episode.

The exercise revealed that the same competencies are often applied in different situations. The *Provide follow-up* section (section 1.4 of the table, page 18) of this directory lists the competencies that would more likely be associated with CNCP management.

2.3 Document structure – All competencies

2.3.1 MAIN DOCUMENT

The competencies in CNCP management and opioid prescribing were identified for the following three types of medical education programs:

- Residency programs focused towards ongoing patient care, such as Family Medicine, Internal Medicine, Physical Medicine and Rehabilitation, Rheumatology, and also programs such as certain surgical specialties that are more likely to involve the management of pain syndromes.
- Residency programs focused more towards intermittent or short term patient care (eg: Emergency Medicine, certain surgical specialties, etc.), in which residents are likely to have contact with patients presenting with pain syndromes that may require a referral to a family physician or to another specialist for ongoing or long term care.
- Undergraduate medical education programs.

Successful acquisition of these competencies is defined as the resident's ability to independently manage a complex case of CNCP within the scope of his or her specialty by the end of the postdoctoral program.

A part of the main document is presented in the form of a table that includes:

- A single list of competencies presented according to the CanMEDS framework, but with specific emphasis on the Medical Expert role.
- Three columns indicating whether or not the competency applies to each of the three types of programs: undergraduate, residencies focused on long term care and residencies focused on short term care.
- Core competencies (in bold) that should ideally be covered in all undergraduate and/or postdoctoral programs (when indicated). The list of the 30 competencies is presented in section 4.
- Several auxiliary competencies marked with an (X), indicating the authors' opinion that the acquisition of these competencies can be left to the program directors' discretion.
- A column for comments on how the competency (knowledge or know-how) should be adapted to the three types of programs (undergraduate, residencies focused on long term care and residencies focused on short term care).

2.3.2 CORE COMPETENCIES – SUMMARY

The authors have presented a list of the competencies that they believed are the most important to be acquired by medical students and residents.

These so called core medical competencies (N=30) are presented under four broad categories:

1. Basic epidemiological, clinical and pharmacological knowledge.
2. Evaluation of pain intensity and consequences.
3. Evaluation of substance abuse and misuse.
4. Management and follow-up of pain in patients considered for opioid therapy.

The 30 core competencies are not classified according to CanMEDS framework but CanMEDS roles are indicated in () for the 3 roles that are associated with the 30 core competencies:

1. Medical Expert – 27 competencies marked as:(1)
2. Communicator-2 competencies marked as: (2)
3. Collaborator –1 competency marked as: (3)

3 Objective of disseminating this document and complementary information

- The purpose of this document is to present a set of competencies to be incorporated into the various undergraduate medical education and postdoctoral medical specialty programs.
- Certain general competencies may already be covered in the current medical school curricula or in the course objectives for residency programs and, as such, have not been listed. The competencies are also flexible in the sense that they can be adapted to different training environments.
- The competencies were written from an academic perspective, according to basic pedagogical guidelines for designing competencies. Nevertheless, faculties are responsible for reviewing the competency labels and adjusting them to their own academic terminology where appropriate.
- This document does not contain a list of references or tools specific to each competency; this could be done in a second phase of the project with additional funding from the Drug Strategy Community Initiatives Fund (DSCIF).

The authors hope this directory will be used to review the medical school curricula and to update postdoctoral residency program activities.

4 Core medical competencies in non-cancer pain management and opioid prescribing

4.1 Basic epidemiological, clinical and pharmacological knowledge (7 competencies)

1. Describe the epidemiology of acute pain and chronic non-cancer pain. (1)
2. Explain the pathophysiology, natural history, clinical presentation, and prognosis, and the treatment of common medical conditions that can cause acute pain and chronic non-cancer pain. (1)
3. Identify the risk factors for chronicity and the interventions likely to reduce this risk. (1)
4. Identify the influence of post-traumatic stress, history of sexual, physical or psychological abuse, and psychiatric history on the presentation and assessment of pain, as well as its response to treatment. (1)
5. Summarize the mechanism of action, various pharmacological characteristics (pharmacokinetic, pharmacodynamic), indications, contraindications, adverse effects and their treatment, age-appropriate dosage, morphine/analgesic equivalency dosing, interactions, formulations, administration routes, and follow-up of the following drugs or drug classes: (1)
 - acetaminophen;
 - anticonvulsants;
 - antidepressants;
 - anti-inflammatories (Coxibs)
 - corticosteroids;
 - opioids;
 - atypical opioids (tramadol, tapentadol, buprenorphine);
 - muscle relaxants.
6. Explain the pharmacokinetics and pharmacodynamics of opioids, including morphine/analgesic equivalency dosing, recommendations for replacing one opioid with another, and tapering guidelines. (1)

7. Select proper opioid formulation including short acting vs long acting formulation as well as when an abuse deterrent formulation may be indicated.

4.2 Evaluation of pain intensity and consequences (4 competencies)

8. Use objective scales to assess the intensity of the pain. (1)
9. Assess the level of functional autonomy, the psychological impacts of chronic pain, and the impacts on work, family life, marital relationship, and social life. (1)
10. Describe the importance of assessment of mood, sleep, and physical functioning in the evaluation of a patient with non-cancer chronic pain. (1)
11. Screen for and assess the signs and symptoms associated with various psychiatric syndromes that could be associated with pain. (1)

4.3 Evaluation of substance abuse and misuse (9 competencies)

12. Be able to define the concepts of tolerance, physical dependency, and opioid use disorder. (1)
13. Describe the impact that substance use disorder can have on chronic health conditions, including diabetes, oral health, and infection. (1)
14. Explain the heterogeneity of opioid consumption patterns (abuse, misuse, diversion) and the consequences of opioid misuse and abuse on the health of individuals and society in general. (1)
15. Apply valid assessment tools and various interview techniques to assess the risk of abuse in patients being considered for opioids. (1)
16. Describe how acute opioid prescribing decisions can directly impact the risk for long term use, including non-medical use, and development of substance use disorder.
17. Recognize inappropriate behaviors and warning signs in a patient who is using opioids, including abuse, dependency, and misuse. (1)

18. Identify treatments and follow-up strategies for managing patients with inappropriate consumption habits, including rehabilitation and psychosocial approaches focused on wellness and behavior modification. (1)
19. Describe the phenomenon of opioid diversion and its consequences. (1)
20. Describe what is Opioid Use Disorder and its spectrum from mild to severe. (1)

4.4 Management and follow-up of pain in patients considered for opioid therapy (10 competencies)

21. Adhere to the *2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain* or to provincial guidelines for the management and follow-up of patients who require opioids. (1)
22. Establish the most appropriate treatment plan for a patient in pain using psychological, non-pharmacological, pharmacological and procedural approaches, and including preventive interventions. (1)
23. Defend the statement that both acute and chronic pain can be best treated using a multimodal treatment that may include the use of regional anesthetic techniques, non opioid analgesics, self-management techniques, and physical therapy. (1)
24. Establish the most appropriate interdisciplinary treatment plan with other health care team members such as nursing, psychology, pharmacy, physical therapy, and occupational therapy. (1)
25. Identify withdrawal syndromes and treat opioid withdrawal using appropriate strategies. (1)
26. Identify patients who should be referred to specialized addiction services before or during treatment with opioids. (1)
27. Provide follow-up care appropriate to the patient and his or her clinical situation, including telephone or videoconferencing, as needed. (1)
28. Summarize proper methods for patient education related to proper medication storage and disposal. (2)

29. Effectively communicate with patients and their family to ensure they understand the risks (specifically, dependency and adverse effects) and the possible benefits of prescription medications, including opioids. (2)
30. Collaborate effectively with other health professionals in addressing the main problems presented by patients with acute pain and chronic non-cancer pain. (3)

5 Medical competencies in non-cancer pain management and opioid prescribing classified according to CanMEDS framework

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
Medical Expertise				
As medical experts , students and residents have the ability to summarize the available information and situate the clinical picture within a biopsychosocial framework in order to recommend the best pain relief method. To do so, they must:				
1. Acquire and maintain the knowledge, competencies, and attitudes appropriate to managing acute pain and chronic non-cancer pain.				
1.1. Acquire the knowledge and skills (basic clinical, sociobehavioural, and biomedical) appropriate to pain management and opioid prescribing.	X	X	X	At the undergraduate level, acquire knowledge only.
1.1.1. <i>Knowledge of acute and chronic pain (general)</i>				
<ul style="list-style-type: none"> ▪ Explain the anatomical and neurophysiological principles of pain. 	X	X	X	
<ul style="list-style-type: none"> ▪ Define the term chronic non-cancer pain. 	X	X	X	
<ul style="list-style-type: none"> ▪ Describe the epidemiology of acute pain and chronic non-cancer pain. 	X	X	X	
<ul style="list-style-type: none"> ▪ Explain the pathophysiology, natural history, clinical presentation, and prognosis, and the treatment of common medical conditions that can cause acute pain and chronic non-cancer pain. 	X	X	X	At the undergraduate level, explain the pathophysiology, natural history, and clinical presentation only.
<ul style="list-style-type: none"> ▪ Explain the connections between acute pain and chronic non-cancer pain. 	X	X	X	
<ul style="list-style-type: none"> ▪ Identify the risk factors for chronicity and the early interventions likely to reduce this risk. 	X	X	X	
<ul style="list-style-type: none"> ▪ Recognize the obstacles to the effective assessment and treatment of pain (related to the patient, family members, health professionals). 		X	X	
<ul style="list-style-type: none"> ▪ Distinguish between the influence of historical and environmental factors on the patient's perception of pain and response to treatment. 		(X)	X	

Legend: core competencies in bold; X = competencies recommended for given training; (X) = optional competencies for given training.

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
<ul style="list-style-type: none"> Recognize the importance of the living environment (family, employers, health care workers) and its influence on pain perception, its presentation, over the assessment and treatment of pain. 		(X)	X	
<ul style="list-style-type: none"> Understand the neurophysiological influences of age, sex, and ethnicity on pain. 	(X)	X	X	
<ul style="list-style-type: none"> Recognize the multidimensional nature of pain, i.e., physiological, sensory, emotional, cognitive, behavioural, societal, cultural, and political. 	(X)	X	X	
<ul style="list-style-type: none"> Describe the emotional and functional aspects of the pain experience to be addressed in the treatment plan. 		(X)	X	
<ul style="list-style-type: none"> Understand the physiological and psychological consequences of unrelieved pain. 	X	X	X	
<ul style="list-style-type: none"> Be able to define the concepts of tolerance, physical dependence, and opioid use disorder. 	X	X	X	
<ul style="list-style-type: none"> Explain the heterogeneity of opioid consumption patterns (abuse, misuse, diversion) and the consequences of opioid misuse and abuse on the health of individuals and society in general. 	X	X	X	
<ul style="list-style-type: none"> Describe the epidemiology of opioid abuse and misuse and its consequences, i.e., hospital admissions for overdoses and fatal overdoses. 	X	X	X	
<ul style="list-style-type: none"> Describe the impact that substance use disorder can have on chronic health conditions, including diabetes, oral health, and infection. 	X	X	X	
1.1.2. <i>Pain management and competencies to be acquired during certain rotations or certain specialized trainings.</i>				The following competencies can be acquired outside of specific training in addiction medicine or psychiatry.
Psychiatry				
<ul style="list-style-type: none"> List the psychological mechanisms most commonly involved in pain and suffering. 		(X)	X	

Legend: core competencies in bold; X = competencies recommended for given training; (X) = optional competencies for given training.

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
<ul style="list-style-type: none"> Describe how the psychiatric conditions, which can be associated with the pain problem, can be modulated by predisposing, precipitating, perpetuating, and protective factors. 		X	X	
<ul style="list-style-type: none"> Identify the influence of post-traumatic stress, history of sexual, physical or psychological abuse, and psychiatric history on the presentation and assessment of pain as well as its response to treatment. 	(X)	X	X	
<ul style="list-style-type: none"> Explain the potential effect of the pain treatment on psychiatric comorbidities. 		X	X	
<ul style="list-style-type: none"> Identify the characteristics of patients who would benefit the most from a psychological assessment. 		X	X	
Addiction Medicine				
<ul style="list-style-type: none"> Describe the characteristics of opioid disorder in patients suffering from pain who use opioids. 		X	X	
<ul style="list-style-type: none"> Identify patients who should be referred to specialized addiction services before or during treatment with opioids. 		X	X	
<ul style="list-style-type: none"> Apply valid assessment tools and different interview techniques to estimate the risk of abuse in patients for whom we are considering opioid treatment. 		X	X	
<ul style="list-style-type: none"> Recognize inappropriate behaviors and warning signs in a patient who is using opioids, including abuse, dependency, and misuse. 	X	X	X	
<ul style="list-style-type: none"> Identify treatments and follow-up strategies for managing patients with inappropriate consumption habits, including rehabilitation and psychosocial approaches focused on wellness and behavior modification. 		(X)	X	
<ul style="list-style-type: none"> Describe the phenomenon of opioid diversion and its consequences. 	X	X	X	

Legend: core competencies in bold; X = competencies recommended for given training; (X) = optional competencies for given training.

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
<ul style="list-style-type: none"> Describe what is Opioid Use Disorder and its spectrum from mild to severe. 	X	X	X	
Sleep Medicine				
<ul style="list-style-type: none"> Explain the interactions between pain, sleep, anxiety, mood disorders, and medications (or other substances used). 		(X)	X	
<ul style="list-style-type: none"> Describe the importance of assessment of mood, sleep, and physical functioning in the evaluation of a patient with non-cancer chronic pain. 		X	X	
<ul style="list-style-type: none"> Design a pain treatment plan that does not involve the combined use of benzodiazepines and opioids. 		X	X	
Musculoskeletal system and spinal pathologies, rehabilitation				
<ul style="list-style-type: none"> List the clinical signs indicative of a tumour, fracture, myelopathy, or infection. 	X	X	X	
<ul style="list-style-type: none"> Formulate an appropriate treatment plan for musculoskeletal pain. 		(X)	X	
<ul style="list-style-type: none"> Apply joint and soft tissue injection techniques for pain management as an alternative to ongoing oral medications. 		(X)	X	
<ul style="list-style-type: none"> Describe complementary forms of medicine and alternatives commonly used to treat pain, when indicated. 		(X)	X	
<ul style="list-style-type: none"> Explain the concepts of functional limitation, disability, and handicap, and explain how these concepts apply to the individual presenting with pain and how they define the medicolegal aspects of these disabilities. 	X	X	X	There is no need to address the medicolegal aspects at the undergraduate level.
<ul style="list-style-type: none"> Summarize the principles of functional recovery in patients with musculoskeletal pain. 			X	
Neurology				
<ul style="list-style-type: none"> Identify the common medical conditions that cause neuropathic pain (central and peripheral). 	X	X	X	

Legend: core competencies in bold; X = competencies recommended for given training; (X) = optional competencies for given training.

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
<ul style="list-style-type: none"> Master at least one algorithm for neuropathic pain management 		X		
<ul style="list-style-type: none"> List the clinical signs observed in establishing a diagnosis of neuropathic pain, including positive signs, negative signs, and other associated signs. 	X	X	X	
Pharmacology, pharmacotherapy, and alternative treatments				
<ul style="list-style-type: none"> Summarize the mechanism of action, various pharmacological characteristics (pharmacokinetic, pharmacodynamic), indications, contraindications, adverse effects and their treatment, age-appropriate dosage, morphine/analgesic equivalency dosing, interactions, formulations, administration routes, and follow-up of the following drugs or drug classes: <ul style="list-style-type: none"> acetaminophen anticonvulsants antidepressants anti-inflammatories (Coxibs) corticosteroids opioids atypical opioids (tramadol, tapentadol, buprenorphine) muscle relaxants 	X	X	X	There is no need to address morphine/analgesic equivalency dosing or atypical opioids at the undergraduate level.
<ul style="list-style-type: none"> Explain the pharmacokinetics and pharmacodynamics of opioids, including morphine/analgesic equivalency dosing, recommendations for replacing one opioid with another, and tapering guidelines. 		(X)	X	
<ul style="list-style-type: none"> Select proper opioid formulation including short acting vs long acting formulation as well as when an abuse deterrent formulation may be indicated. 	(X)	X	X	
<ul style="list-style-type: none"> Identify non-pharmaceutical alternatives to opioids and their indications. 		X	X	

Legend: core competencies in bold; X = competencies recommended for given training; (X) = optional competencies for given training.

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
1.2. Perform an appropriate patient assessment.				
1.2.1. <i>Identify the problems to be addressed in terms of acute pain or chronic pain, taking into account the patient's situation and the specific elements noted during the interview.</i>				
Acute pain				
<ul style="list-style-type: none"> Describe how acute opioid prescribing decisions can directly impact the risk for long term use including non-medical use and development of substance use disorder. 	X	X	X	
<ul style="list-style-type: none"> Take a detailed and targeted history¹ of the pain. 	X	X	X	
<ul style="list-style-type: none"> Conduct a relevant, appropriate, and targeted physical examination² in order to diagnose and treat the pain. 	X	X	X	
<ul style="list-style-type: none"> Determine the urgency of the situation. 	X	X	X	
<ul style="list-style-type: none"> Recognize patients in crisis situations, such as intracranial hypertension and spinal compression, who may present with a chief complaint of pain. 	(X)	X	X	
<ul style="list-style-type: none"> Prioritize which health issues to assess, jointly with the patient. 		X	X	
<ul style="list-style-type: none"> Request the appropriate investigations. 	(X)	X	X	Prescriptions must be countersigned at the undergraduate level.
<ul style="list-style-type: none"> Generate a diagnostic hypothesis. 	X	X	X	
<ul style="list-style-type: none"> Generate a differential diagnosis. 	X	X	X	
Chronic pain				
<ul style="list-style-type: none"> Perform a clinical assessment that includes the past medical history, and the history of the present illness (in order to diagnose and treat the chronic non-cancer pain). 	X	X	X	

Legend: Core competencies in bold; X = competencies recommended for given training; (X) = optional competencies for given training.

¹ The history includes collecting all available and relevant information.

² The examination covers the physical, psychiatric, and functional spheres.

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
<ul style="list-style-type: none"> Assess the contribution of nociceptive (somatic and visceral), neuropathic, and functional pain in the patient's presentation of pain. 	(X)	X	X	At the undergraduate level, students should be exposed to the different concepts only.
<ul style="list-style-type: none"> Assess the psychosocial aspects likely to influence the pain, such as lifestyle, medication or substance abuse, employment, financial compensation, marital status. 			X	
<ul style="list-style-type: none"> Assess for other comorbidities likely to influence the pain through the systems review, such as insomnia, psychiatric conditions, etc. 	(X)	X	X	
<ul style="list-style-type: none"> Screen for and assess the signs and symptoms associated with various psychiatric syndromes that could be associated with the pain. 		X	X	
<ul style="list-style-type: none"> Assess the level of functional autonomy, the psychological impacts of the chronic pain, and the impacts on work, family life, marital relationship, and social life. 	X		X	At the undergraduate level, students should be exposed to the different tools available to perform these assessments.
<ul style="list-style-type: none"> Conduct a relevant, appropriate, and targeted physical examination in order to diagnose or treat the chronic non-cancer pain. 	X	X	X	
<ul style="list-style-type: none"> Conduct an assessment that distinguishes between an inflammatory picture and a degenerative picture, and generate a differential diagnosis. 	X	X	X	
<ul style="list-style-type: none"> Use objective scales to assess the intensity of the pain. 	X	X	X	
<ul style="list-style-type: none"> Request appropriate investigations including blood tests, nerve conduction studies, and imaging tests, while adhering to an ethical approach and taking into account the cost-benefit ratio of these approaches. 	(X)	X	X	Prescriptions must be countersigned at the undergraduate level.
<ul style="list-style-type: none"> Apply valid assessment tools and various interview techniques to assess the risk of abuse in patients being considered for opioids. 	X	X	X	At the undergraduate level, students should be exposed to the different tools available to perform these assessments.
<ul style="list-style-type: none"> Identify the signs of physical, psychological, sexual, or emotional abuse or neglect, and make the appropriate reports and subsequent referrals. 	X	X	X	There is no need to make reports and subsequent referrals at the undergraduate level.

Legend: core competencies in bold; X = competencies recommended for given training; (X) = optional competencies for given training.

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
<ul style="list-style-type: none"> Consult the file of previous prescriptions through the provincial prescription monitoring system when available. 		X	X	
<ul style="list-style-type: none"> Interpret consultations related to the current and past history of substance abuse in the patient's file, when available. 	(X)	X	X	
<ul style="list-style-type: none"> Make the diagnosis [or retain the most likely diagnosis(es)] based on the interpretation of all clinical data and scientific evidence. 	X	X	X	The list of diagnoses is not as exhaustive at the undergraduate level as at the postdoctoral level.
<ul style="list-style-type: none"> Write a concise, accurate, and complete consultation report. 	X	X	X	At the undergraduate level, the report can be less accurate and concise than at the postdoctoral level. Generic competency for all undergraduate and postdoctoral medical education programs.
1.2.2. <i>As needed, consult other health professionals when the case exceeds one's level of expertise. The resident must:</i>				
<ul style="list-style-type: none"> Demonstrate that he or she is aware of his or her expertise limits by performing self-assessment. 		X	X	
<ul style="list-style-type: none"> Demonstrate that he or she can, when necessary, consult another professional effectively and appropriately, and in a timely manner in order to provide the best possible patient care, in particular in the following situations: <ul style="list-style-type: none"> an emergency consultation with another specialist is required; a consultation with another specialist would be helpful in clarifying the diagnosis or optimizing the treatment; a consultation with another health professional is required for a patient presenting with problematic opioid use; a consultation with another health professional, such as a physiotherapist or an occupational therapist, would be helpful. 		X	X	

Legend: core competencies in bold; X = competencies recommended for given training; (X) = optional competencies for given training.

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
1.3. Treatment				
1.3.1. Adhere to the 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain or to provincial guidelines for the management and follow-up of patients who require opioids.			X	
1.3.2. Establish the most appropriate treatment plan for a patient in pain, using psychological, non-pharmacological, pharmacological and procedural approaches, and including preventive interventions.		X	X	The treatment plan could be more elaborate at the postdoctoral level when there is ongoing care.
<ul style="list-style-type: none"> ■ In collaboration with the patient, whether an adult or an elderly person, and his or her family; depending on the type of pain, the patient's medical condition, and the comorbidities, e.g., musculoskeletal pain, frequent peripheral and central neuropathic pain. 		X	X	
<ul style="list-style-type: none"> ■ Based on the scientific evidence, consensus, and practice guides. 		X	X	
<ul style="list-style-type: none"> ■ Based on the risks and benefits of the proposed procedures. 		X	X	
<ul style="list-style-type: none"> ■ Based on the available resources. 		X	X	
<ul style="list-style-type: none"> ■ Based on developmental factors and the family environment. 		(X)	X	
<ul style="list-style-type: none"> ■ Based on the patient's occupation, and social and cultural environment. 		(X)	X	
1.3.3. Appropriately assess the populations at risk for undertreatment of pain, namely children, the elderly, pregnant women, and people with communication problems or cognitive disorders.	(X)	X	X	
1.3.4. Discuss the possible procedures (benefits, adverse effects, risks) and the objectives of treating the pain with the patient and his or her family in order to obtain voluntary and informed consent.	(X)	X	X	
1.3.5. With the patient, agree on which procedures he or she explicitly consent to.	(X)	X	X	

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Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
1.3.6. <i>Obtain the necessary informed consent for invasive treatments, the use of off-label medications, and treatment with opioids.</i>	(X)	X	X	
1.3.7. <i>Prescribe opioids optimally, at a dose that provides the greatest possible benefits with the fewest possible risks.</i>	(X)	X	X	Prescriptions must be countersigned at the undergraduate level.
1.3.8. <i>Perform the selected pain treatment procedures safely, efficiently, and in a timely manner.</i>		(X)	X	
1.3.9. <i>Properly document the procedures performed and their outcomes, and disseminate this information.</i>		(X)	X	
1.3.10. <i>Record the treatment plan and procedures in the patient's file, according to good practices.</i>	(X)	X	X	
1.3.11. <i>Communicate the treatment recommendations to the relevant members of the patients health care team, ensuring the recommendations are concise, accurate, and complete.</i>	(X)	X	X	
1.3.12. Defend the statement that both acute and chronic pain can be best treated using a multimodal treatment that may include the use of regional anesthetic techniques, non opioid analgesics, self-management techniques, and physical therapy.	(X)	X	X	
1.3.13. Establish the most appropriate interdisciplinary treatment plan with other health care team members such as nursing, psychology, pharmacy, physical therapy, and occupational therapy.		(X)	X	
1.3.14. <i>Initiate progressive tapering of opioids when indicated</i>		X	X	
1.3.15. <i>Manage patients with inappropriate consumption habits using different methods (including rehabilitation and psychosocial approaches focused on wellness and behavior modification).</i>		(X)	X	
1.3.16. <i>Apply pain treatment strategies for drug addicted patients or patients in remission.</i>		(X)	X	
1.3.17. Identify withdrawal syndromes and treat opioid withdrawal using the appropriate strategies.	(X)	X	X	Only identify withdrawal syndromes at the undergraduate level.

Legend: core competencies in bold; X = competencies recommended for given training; (X) = optional competencies for given training.

Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
1.3.18. <i>Pain management in specific populations</i>	(X)	X	X	
Treatment of pain in psychiatric patients				
<ul style="list-style-type: none"> Identify an appropriate pain treatment strategy for patients with a psychiatric comorbidity. 		(X)	X	
Treatment of pain in children				
<ul style="list-style-type: none"> Formulate a treatment plan that accounts for current guidelines on the use of analgesics in children. 		X	X	
Treatment of pain in pregnant women				
<ul style="list-style-type: none"> Formulate a treatment plan that accounts for current guidelines on the use of analgesics in pregnant women. 		X	X	
Treatment of pain in geriatric patients				
<ul style="list-style-type: none"> Describe the changes in pain perception associated with aging. 	X	X	X	
<ul style="list-style-type: none"> Use validated pain assessment tools in geriatric patients with cognitive problems. 		(X)	X	
<ul style="list-style-type: none"> Formulate a treatment plan that accounts for current guidelines on the use of analgesics in geriatric patients. 		(X)	X	
<ul style="list-style-type: none"> Adjust medication according to kidney function test results. 		(X)	X	
<ul style="list-style-type: none"> Assess pain of incompetent patient by using validated age related scales. 		(X)	X	
<ul style="list-style-type: none"> Use the non-pharmacological pain relief approaches employed in geriatric medicine. 	(X)	X	X	
1.4. Provide follow-up				
1.4.1. <i>Organize follow-up care appropriate to the patient and his or her clinical situation, including telephone or videoconferencing follow-up, as needed.</i>		X	X	
1.4.2. <i>Provide follow-up care appropriate to the patient and his or her clinical situation, including telephone or videoconferencing, as needed.</i>		X	X	

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Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
1.4.3. <i>Identify obstacles to a positive outcome for an individual, the community, and the population of patients with chronic pain.</i>			X	
1.4.4. <i>Assess the response to treatments based on the objectives.</i>			X	
1.4.5. <i>As needed, adjust the treatment plan based on the results obtained.</i>			X	
1.4.6. <i>Treat any adverse effects and complications resulting from the treatment interventions.</i>			X	
1.4.7. <i>Issue the appropriate warnings about the risks of opioid diversion.</i>			X	
1.4.8. <i>Where applicable, review and reconsider the diagnosis.</i>			X	
1.4.9. <i>Adjust procedures, when appropriate, for safety reasons.</i>			X	
1.4.10. <i>Communicate outcomes to the relevant members of health care team.</i>			X	
1.4.11. <i>Record each assessment in the patient's file, according to good practices.</i>			X	
1.4.12. <i>Assess improvements in functional limitations.</i>			X	
1.4.13. <i>Refer patients to the appropriate rehabilitation programs.</i>			X	
1.4.14. <i>Adequately request urine drug testing when required.</i>			X	
1.4.15. <i>Develop an appropriate follow-up plan based on the urine test results.</i>			X	
Communication				
As communicators , students and residents facilitate the physician-patient relationship and the dynamic exchanges that occur before, during, and after the medical consultation. To do so, they must:				
<ul style="list-style-type: none"> Establish therapeutic relationships with patients and their family members, based on trust and in compliance with established ethical principles. 	X	X	X	
<ul style="list-style-type: none"> Provide accurate information and explanations to patients and their family members, colleagues, and other health professionals. 	(X)	X	X	
<ul style="list-style-type: none"> Effectively communicate with the patients and their family to ensure they understand the risks (specifically, dependency and adverse effects) and the possible benefits of prescription medications, including opioids. 	(X)	X	X	

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Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
<ul style="list-style-type: none"> Summarize proper methods for patient education related to proper medication storage and disposal. 	(X)	X	X	
<ul style="list-style-type: none"> Establish a common understanding of the issues, problems, and various treatment options with the patients and their family members, colleagues, and other health professionals in order to implement a joint care plan. 		X	X	
<ul style="list-style-type: none"> Provide effective verbal and written information about a medical assessment. 	(X)	X	X	
<ul style="list-style-type: none"> Encourage discussion, questions, and conversation during the patient interview. 	(X)	X	X	
<ul style="list-style-type: none"> Gather relevant information from other sources, such as the family and the health professionals involved in the patients' care, while respecting the principles of confidentiality. 	(X)	X	X	
<ul style="list-style-type: none"> Identify, summarize, and provide accurate information and explanations to patients and their family members, colleagues, and other health professionals. 	(X)	X	X	
Collaboration				
As collaborators , students and residents work as effective members of a health care team in order to provide the best possible patient care. To do so, they must:				
<ul style="list-style-type: none"> Collaborate effectively with other health professionals in addressing the main problems presented by patients with acute pain and chronic non-cancer pain. 	X	X	X	
<ul style="list-style-type: none"> Work with the patient to identify achievable and appropriate goals of care. 	(X)	X	X	
Management of leadership				
As leaders , students and residents participate fully in community life at the health care institutions, where they establish sustainable practices, make decisions about the allocation of resources, and contribute to the efficiency of the health care system. To do so, they must:				
<ul style="list-style-type: none"> Participate in activities that contribute to the efficiency of the health care system. 		(X)	X	
<ul style="list-style-type: none"> Appropriately allocate the limited resources of the health care system. 	(X)	X	X	
<ul style="list-style-type: none"> Judiciously use the human and material resources of the health care system, while maintaining a balance between efficiency, effectiveness, and access, on the one hand, and optimal patient care, on the other hand. 	(X)	X	X	

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Competency	Level: undergraduate	Level: residency focused on short term or intermittent care	Level: residency focused on long term or ongoing care	Comments
Health advocacy				
As health advocates , students and residents use their expertise and influence responsibly to advocate for the health and well-being of patients, communities, and populations. To do so, they must:				
<ul style="list-style-type: none"> Respond to patients' health needs and problems, within the specific treatment context. 	(X)	X	X	
<ul style="list-style-type: none"> Jointly with the patient, apply the screening recommendations and recognized preventive measures, taking into account habits, lifestyles, and comorbidities. 	(X)	(X)	X	
<ul style="list-style-type: none"> Appropriately prescribe procedures supported by the literature to prevent postoperative pain. 	(X)	X	X	Prescriptions must be countersigned at the undergraduate level.
Scholarship				
As scholars , students and residents demonstrate a lifelong commitment to learning based on the consideration, generation, dissemination, application, and use of medical knowledge. To do so, they must:				
<ul style="list-style-type: none"> Maintain and improve their professional skills through continuing education. 	X	X	X	
<ul style="list-style-type: none"> Critically assess information and its sources. 	(X)	X	X	
<ul style="list-style-type: none"> Judiciously apply the information to practice-related decisions. 	(X)	X	X	
<ul style="list-style-type: none"> Recognize the importance of basing clinical approaches on conclusive evidence. 	X	X	X	
Professionalism				
As future professionals , students and residents are dedicated to the health and well-being of individuals and society, to ethical practice, self-regulation of the profession, and strict standards of personal behavior. To do so, they must:				
<ul style="list-style-type: none"> Demonstrate a commitment to their patients, the profession, and society through ethical practice. 	X	X	X	
<ul style="list-style-type: none"> Demonstrate openness, curiosity, and caution, in particular with drug addicted patients. 	X	X	X	
<ul style="list-style-type: none"> Respect the patients in all regards, regardless of their sex or sexual orientation, age, ethnicity, or religious and cultural beliefs. 	X	X	X	
<ul style="list-style-type: none"> Provide care and services in a just and fair manner. 	X	X	X	
<ul style="list-style-type: none"> Ensure that patients receive care even in situations that conflict with the students' or residents' personal beliefs as physicians. 	X	X	X	

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