Annex B
The College of Family Physicians of Canada
Authorizing Dried Cannabis for Chronic Pain or Anxiety
Preliminary Guidance

THE COLLEGE OF FAMILY PHYSICIANS OF CANADA

LE COLLÈGE DES MÉDECINS DE FAMILLE DU CANADA

Authorizing Dried Cannabis for Chronic Pain or Anxiety

PRELIMINARY GUIDANCE

September 2014

This guidance document was prepared on behalf of the College of Family Physicians of Canada (CFPC) by members of the Addiction Medicine and Chronic Pain Program Committees, in collaboration with members of the Child and Adolescent Health, Maternity and Newborn Care, Mental Health, Palliative Care, and Respiratory Medicine Program Committees, of CFPC's Section of Family Physicians with Special Interests or Focused Practices.

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Disclaimer
This document has been prepared by the CFPC to provide preliminary, rather than comprehensive, guidance, based on what is currently known about the use of cannabis for certain medical purposes. Dried cannabis is not an approved drug or medicine in Canada, and the provision of this information should not be interpreted as an endorsement of the use of this product, or of cannabis generally, by the CFPC.

The content within this document is provided for information and education purposes about a new and largely unstudied area of clinical practice. It is not intended to substitute for the advice of a physician. Patients should always consult their doctors for specific information on personal health matters, or other relevant professionals to ensure that their own circumstances are considered.

The CFPC accepts no responsibility or liability arising from any error or omission or from the use of any information contained herein.

Contact us
The College of Family Physicians of Canada welcomes your feedback.

We are working to ensure that the recommendations in this guidance document continue to reflect the latest available evidence and to incorporate the practice expertise of CFPC members who use them.

If you have suggestions for additions or changes to this document, we would appreciate receiving them. All feedback received will be considered for inclusion in the revised guide, to be released Winter 2015.

Please forward your suggestions to **healthpolicy@cfpc.ca**.

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Introduction

The Health Canada Marihuana for Medical Purposes Regulations (MMPR),[1] which came into force on April 1, 2014, permit a physician to sign a medical document authorizing a patient's access to, and the dispensing of, a specified quantity of the dried cannabis plant, which patients purchase through a licensed producer. The medical document has a format and function similar to a prescription. However, dried cannabis differs from prescribed products in that Health Canada has not reviewed data on its safety or effectiveness and has not approved it for therapeutic use.

This situation puts family physicians in a difficult position: we are asked to authorize our patients' access to a product with little evidence to support its use, and in the absence of regulatory oversight and approval.

To address this predicament, this document offers family physicians preliminary guidance on the authorizing of dried cannabis for chronic pain or anxiety, pending the development of formal guidelines. Although the MMPR speak only of use for medical purposes without specifying any diagnoses, the writing group chose chronic pain and anxiety as the clinical areas to highlight because they may be the most common conditions for which a patient requests authorization for cannabis from a family physician.

Research shows that dried cannabis is a potent, psychoactive substance that can have significant acute and chronic cognitive effects. Its acute effects include perceptual distortions, cognitive impairment, euphoria, and anxiety.[2] Chronic use of dried cannabis may be associated with persistent neuropsychological deficits, even after a period of abstinence.[3,4] The patient may report initial benefit from smoking cannabis and, as with many mood-altering substances such as alcohol, opioids, benzodiazepines, and cocaine, experience temporary relief from pain or anxiety. However, these products have the potential to cause harm by impairing memory and cognition, worsening performance at work and school, and by interfering with social relationships. Before authorizing cannabis, family physicians need to consider if there is sufficient evidence that the anticipated therapeutic benefits for the patient's particular health condition outweigh the potential harms. Similarly, continuation of the cannabis is warranted only if the authorizing physician is satisfied that there has been improvement in the patient's pain level, function, and/or quality of life, and that there are no signs that the patient is at risk of misuse or harm.

Methods

This document was written by members of the Addiction Medicine and Chronic Pain Program Committees of the Section of Family Physicians with Special Interests or Focused Practices (SIFP) of the College of Family Physicians of Canada (CFPC), in collaboration with other individuals and SIFP Program Committees: Child and Adolescent Health, Maternity and Newborn Care, Mental Health, Palliative Care, and Respiratory Medicine. CFPC Program Committees are made up of members with a special interest, and often enhanced expertise, in a specific clinical domain that is relevant to the practice of family medicine.

The writing team based the document on a literature search and review of evidence on specific topics related to cannabis effectiveness, safety, and adverse effects. The team acknowledges the research of Kahan and colleagues,[5] which has been adapted in the preparation of this document. The material appears with the permission of the publisher, *Canadian Family Physician*.

Members of the participating program committees collaborated to prepare a succession of drafts, which then underwent review by an editorial team. A subgroup of the editorial team wrote the final document on behalf of the participants. The final document was taken to the entire group for its consensus before publication.

Recommendations were graded as Level I (based on well-conducted controlled trials or meta-analyses), Level II (well-conducted observational studies), or Level III (expert opinion; for the purposes of this document, consensus among the committee members drafting this document on behalf of the CFPC).

The context within which the participants worked to produce this document is extraordinary, as we have described above: authorization of a largely unstudied substance, particularly challenging medical practice areas (pain and addiction), intense interest from patients (often accompanied by less interest in evidence), an absence of regulation, and, above all, an urgency to provide basic parameters to guide family physicians in the safe treatment of their patients.

The individuals named in the Acknowledgements agreed to be listed as contributors on the basis that this document:

- Was urgently needed to address a knowledge gap in a controversial practice area without the usual supports *and*
- Provides preliminary guidance while the CFPC engages in a rigorous process to provide more formal clinical practice guidelines and continuing professional development offerings

Terminology

Medical marijuana: This term is in popular use but is imprecise, referring broadly to dried cannabis dispensed or otherwise obtained and used either for supervised medical purposes or for self-medication. In a scientific context we prefer to use the term "dried cannabis."

Dried cannabis/cannabis: We use these terms interchangeably to refer to the substance under discussion in this paper: the product that a patient may purchase through a licensed producer, under the MMPR, if he or she has a medical document authorizing its dispensing.

Pharmaceutical cannabinoids: This term refers to the prescription drugs nabilone (Cesamet) and nabiximols (Sativex). Marinol (dronabinol) was previously available but has been removed from the Canadian market by the manufacturer.

Medical document: Health Canada uses this term to denote the prescription-like form that physicians complete and sign to authorize patients' access to dried cannabis from licensed producers. Health Canada provides a sample medical document on its website.[6]

How to navigate this document

This document is organized into two parts. The first, "A. Summary of Recommendations," outlines the recommendations in brief, sketching in point form the new and still developing landscape within which family physicians find themselves regarding "medical marijuana":

- The federal regulations that give the physician the responsibility for granting access to this unregulated substance
- The as-yet limited evidence regarding cannabis's effects and efficacy in clinical use
- The degree to which evidence derived from studies of pharmaceutical cannabinoids can be applied to dried cannabis, and vice versa
- The provincial medical regulatory authorities' requirements of physicians regarding signing medical documents for cannabis
- The issues and questions that arise in the sometimes challenging conversations between physicians and patients surrounding cannabis

The second part, "B. Discussion and Supporting Evidence," provides a fuller discussion of these topics. It describes:

- What we know to date about the potential harms and benefits of cannabis use in various populations and for treating different conditions, with a focus on pain and anxiety
- Regulations and suggested best practices to follow before authorizing and continuing a patient's access to cannabis

It also provides practical resources to use in clinical practice, including:

- Messages for patients
- Tools to use when screening patients for misuse or addiction risk
- A sample treatment agreement
- Information about the strains available from licensed producers
- Calculations for dosing

In sections A and B, the recommendations are grouped under the headings:

- General principles (recommendations 1–6)
- Misuse prevention and intervention (recommendation 7)
- Assessment, monitoring, and discontinuation (recommendations 8 and 9)
- Strategies to prevent harm (recommendations 10 and 11)
- Communication with patients and consultants (recommendations 12 and 13)
- Dosing (recommendations 14 and 15)

A. Summary of Recommendations

To navigate to the discussion and evidence for an individual recommendation, click on the **hyperlinked** heading.

General principles

Recommendation 1

There is no research evidence to support the authorization of dried cannabis as a treatment for pain conditions commonly seen in primary care, such as fibromyalgia or low back pain (Level III). Authorizations for dried cannabis should only be considered for patients with neuropathic pain that has failed to respond to standard treatments (Level I).

Recommendation 2

If considering authorizing dried cannabis for treatment of neuropathic pain, the physician should first consider a) adequate trials of other pharmacologic and nonpharmacologic therapies and b) an adequate trial of pharmaceutical cannabinoids (Level I).

Recommendation 3

Dried cannabis is not an appropriate therapy for anxiety or insomnia (Level II).

Recommendation 4

Dried cannabis is not appropriate for patients who:

a) Are under the age of 25 (Level II)

b) Have a personal history or strong family history of psychosis (Level II)

c) Have a current or past cannabis use disorder (Level III)

d) Have an active substance use disorder (Level III)

e) Have cardiovascular disease (angina, peripheral vascular disease, cerebrovascular disease, arrhythmias) (Level III)

f) Have respiratory disease (Level III) or

g) Are pregnant, planning to become pregnant, or breastfeeding (Level II)

Recommendation 5

Dried cannabis should be authorized *with caution* in those patients who:

a) Have a concurrent active mood or anxiety disorder (Level II)

b) Smoke tobacco (Level II)

c) Have risk factors for cardiovascular disease (Level III) or

d) Are heavy users of alcohol or taking high doses of opioids or benzodiazepines or other sedating medications prescribed or available over the counter (Level III)

Recommendation 6

Physicians should follow the regulations of their provincial medical regulators when authorizing dried cannabis (Level III).

Misuse prevention and intervention

Recommendation 7
Physicians should assess and monitor all patients on cannabis therapy for potential misuse or abuse (Level III).

Assessment, monitoring, and discontinuation

Recommendation 8
Before signing a medical document authorizing dried cannabis for pain, the physician should do all of the following:

a) Conduct a pain assessment (Level II)

b) Assess the patient for anxiety and mood disorders (Level II)

c) Screen and assess the patient for substance use disorders (Level II)

Recommendation 9
The physician should regularly monitor the patient's response to treatment with dried cannabis, considering the patient's function and quality of life in addition to pain relief (Level III). The physician should discontinue authorization if the therapy is not clearly effective or is causing the patient harm (Level III).

Strategies to prevent harm

Recommendation 10
Patients taking dried cannabis should be advised not to drive for at least:

a) Four hours after inhalation (Level II)

b) Six hours after oral ingestion (Level II)

c) Eight hours after inhalation or oral ingestion if the patient experiences euphoria (Level II)

Recommendation 11
When authorizing dried cannabis therapy for a patient, the physician should advise the patient of harm reduction strategies (Level III).

Communication with patients and consultants

Recommendation 12
The physician should manage disagreements with patients about decisions around authorization, dosing, or other issues with unambiguous, evidence-based statements (Level III).

Recommendation 13
The physician who is authorizing cannabis for a particular clinical indication must be primarily responsible for managing the care for that condition and following up with the patient regularly (Level III). Physicians seeking a second opinion on the potential clinical use of cannabis for their patient should only refer to facilities that meet standards for quality of care typically applied to specialized pain clinics (Level III). In both instances, it is essential that the authorizing physician, if not the patient's most responsible health care provider, communicate regularly with the family physician providing ongoing comprehensive care for the patient (Level III).

Dosing

Recommendation 14

Given the weak evidence for benefit and the known risks of using cannabis, the only sensible advice for physicians involved with authorizing dried cannabis is the maxim "Start low, and go slow" (Level III).

Recommendation 15

Although it is not required by the MMPR, physicians should specify the percentage of THC on the medical document for all authorizations for dried cannabis, just as they would specify dosing when prescribing any other analgesic (Level III).

B. Discussion and Supporting Evidence

General principles

RECOMMENDATION 1

There is no research evidence to support the authorization of dried cannabis as a treatment for pain conditions commonly seen in primary care, such as fibromyalgia or low back pain (Level III). Authorizations for dried cannabis should only be considered for patients with neuropathic pain that has failed to respond to standard treatments (Level I).

To date, five controlled trials have examined dried cannabis in the treatment of chronic neuropathic pain.[7-11] The trials were small, included patients who had previously smoked cannabis, and lasted from 1 to 15 days. Functional status, quality of life, and other important outcomes were not measured. No head-to-head comparisons of therapeutic benefits or adverse effects were made with other standard treatments for these conditions, or with pharmaceutical cannabinoid preparations.

The safety and effectiveness of dried cannabis has not been studied for pain conditions such as fibromyalgia and low back pain. No controlled studies have been conducted on dried cannabis for osteoarthritis, and the Canadian Rheumatology Association does not endorse the use of dried cannabis for either fibromyalgia or osteoarthritis.[12] The oral pharmaceutical cannabinoid nabilone has some evidence of benefit for these conditions, although the evidence is weaker than for first-line treatments.[13,14] Family physicians are advised to recommend other treatments with more evidence of safety and efficacy for these conditions.

RECOMMENDATION 2

If considering authorizing dried cannabis for treatment of neuropathic pain, the physician should first consider a) adequate trials of other pharmacologic and nonpharmacologic therapies and b) an adequate trial of pharmaceutical cannabinoids (Level I).

There are many pharmacologic and nonpharmacologic treatments documented as effective in the treatment of neuropathic pain, and these established therapies should be tried before moving on to trials of cannabinoids. Oral and buccal pharmaceutical cannabinoids have a larger body of evidence of efficacy than has dried cannabis in the treatment of neuropathic pain,[15-20] although, apart from Sativex (indicated for neuropathic pain associated with multiple sclerosis or cancer), these drugs' use for this treatment is off label. Evidence suggests that oral cannabinoids are also safer, with a lower risk of addiction and with milder cognitive effects.[19,21-27]

However, until further research is conducted, the same contraindications and precautions that apply to dried cannabis apply to pharmaceutical cannabinoids. Patients who request cannabis but refuse a trial of pharmaceutical cannabinoids may be using cannabis for euphoria rather than analgesia.

RECOMMENDATION 3

Dried cannabis is not an appropriate therapy for anxiety or insomnia (Level II).

To our knowledge, there have been no controlled studies to date on the use of dried cannabis in the treatment of anxiety disorders. There is, however, a strong and consistent association between cannabis use and anxiety and mood disorders, although causality has not been established.[28-38] Acute cannabis use can trigger anxiety and panic attacks,[39] and studies on animals and human volunteers suggest that high doses of cannabis actually worsen anxiety.[40] Cannabis use may worsen psychiatric impairment in patients with anxiety disorders.[36,41,42]

The tetrahydrocannabinol (THC) content of cannabis is associated with anxiety,[41] though this relationship appears to be bidirectional.[43,44] Physicians should consider the THC content of available cannabis and consider authorizing, if at all, only lower-strength strains for patients with anxiety.[45] Regular users of cannabis might experience early symptoms of cannabis withdrawal, including an exacerbation of anxiety, when they abstain; withdrawal symptoms can ultimately be resolved through cannabis cessation.[46]

The evidence for using pharmaceutical cannabinoids in the treatment of anxiety and insomnia is stronger than the evidence for using dried cannabis. Small trials have demonstrated that oral nabilone improves sleep in patients with fibromyalgia or post-traumatic stress disorder.[13,47] An oral extract of pure cannabidiol has been shown to relieve symptoms of social anxiety.[48]

RECOMMENDATION 4

Dried cannabis is not appropriate for patients who:

a) **Are under the age of 25 (Level II)**

b) **Have a personal history or strong family history of psychosis (Level II)**

c) **Have a current or past cannabis use disorder (Level III)**

d) **Have an active substance use disorder (Level III)**

e) **Have cardiovascular disease (angina, peripheral vascular disease, cerebrovascular disease, arrhythmias) (Level III)**

f) **Have respiratory disease (Level III) or**

g) **Are pregnant, planning to become pregnant, or breastfeeding (Level II)**

Patients under the age of 25 (Level II)

Youth who smoke cannabis are at greater risk than older adults for cannabis-related psychosocial harms, including suicidal ideation, illicit drug use, cannabis use disorder, and long-term cognitive impairment.[4,33,49-52]

Patients with current, past, or strong family history of psychosis (Level II)

Observational studies have demonstrated a consistent association between cannabis use in adolescence and persistent psychosis.[53-60]

Patients with current or past cannabis use disorder (Level III)

Pain patients with cannabis use disorder should be counseled to discontinue cannabis and be referred for addiction treatment.

Patients with an active substance use disorder (Level III)

Dried cannabis should not be authorized for any patient with a current problematic use of alcohol, opioids, or other drugs.

Patients with cardiovascular disease (Level III)

Cannabis use causes acute physiological effects such as hypertension, tachycardia, catecholamine release, and vascular constriction.[61-64] There have been reports of young people suffering cardiovascular events shortly after smoking cannabis.[65-67]

Patients with respiratory disease (Level III)

Heavy cannabis smoking may be an independent risk factor for impaired respiratory function and chronic obstructive pulmonary disease.[68,69]

Use of smoked cannabinoids has been found to increase the risk of airflow obstruction and hyperinflation but has been less associated with macroscopic emphysema.[70] The cannabis use was associated with increased risk of lung cancer[71] and head and neck cancer.[72] The respiratory symptoms associated with dried cannabis use include wheezing apart from colds, exercise-induced shortness of breath, nocturnal wakening with chest tightness, and early morning sputum production.[73]

The depth of inhalation and the length of time the breath is held are usually greater when smoking marijuana than when smoking cigarettes. This means exposure to the chemicals in the smoke is greater for cannabis than for tobacco cigarettes, even though the frequency of smoking may be less. Cannabis smokers, for example, end up with five times more carbon monoxide in their bloodstream than do tobacco smokers.[71]

Patients who are pregnant, planning to become pregnant, or breastfeeding (Level II)

Preliminary evidence links cannabis use during pregnancy to neurodevelopmental abnormalities in infants.[74] Cannabis enters the breast milk and is contraindicated in women who are breastfeeding.

RECOMMENDATION 5

Dried cannabis should be authorized *with caution* in those patients who:

a) **Have a concurrent active mood or anxiety disorder (Level II)**

b) **Smoke tobacco (Level II)**

c) **Have risk factors for cardiovascular disease (Level III) or**

d) **Are heavy users of alcohol or taking high doses of opioids or benzodiazepines or other sedating medications prescribed or available over the counter (Level III)**

Patients with current mood and anxiety disorders (Level II)

Caution should be used when authorizing cannabis for patients with current mood or anxiety disorders, for the reasons outlined in **Recommendation 3**. If patients with co-existing anxiety and neuropathic pain are authorized for cannabis treatment, i) the dose should be kept low to avoid triggering anxiety, ii) the provider should consider indicating low THC-content or cannabidiol-only (CBD-only) strains on the medical document, and iii) cannabis should be discontinued if the patient's anxiety or mood worsens.

Tobacco smokers (Level II)

Even after controlling for tobacco smoking, cannabis smoking has been associated with lung cancer[75] and chronic bronchitis. Patients who smoke tobacco should be strongly advised to use cannabis via vaporization rather than by smoking it.

Patients with risk factors for cardiovascular disease (Level II)

Physicians are advised to use considerable caution when authorizing dried cannabis for use by patients with risk factors for cardiovascular disease (see **Recommendation 4e**). The dose should be kept low, and the patient should be encouraged to take it through vaporization or the oral route rather than by smoking it.

Patients who are heavy users of alcohol, or taking high doses of opioids or benzodiazepines (Level III)

Cannabis use can worsen the cognitive impairment caused by opioids, benzodiazepines, other sedatives, and alcohol.[76] Patients taking dried cannabis should be advised to use alcohol in moderation, and physicians should consider tapering patients on high doses of opioids or benzodiazepines.[77,78]

RECOMMENDATION 8

Physicians should follow the regulations of their provincial medical regulators when authorizing dried cannabis (Level III).

Many of the provincial/territorial regulatory bodies have released policies on the authorization of cannabis.[79] These regulators advise physicians to conduct a thorough assessment and to try conventional alternatives before providing a medical document for cannabis. Additional requirements, which vary considerably from province to province, are summarized below and in Table 1. Physicians should review the complete policy of their provincial regulator before signing a medical document for cannabis.

Conflict of interest

Physicians must not have a financial interest in a company that produces medical marijuana, and they should follow their provincial regulatory authority's Code of Ethics regarding potential conflicts of interest. Under the usual circumstances described in the MMPR, the licensed producer couriers the dried cannabis to the patient. Under extraordinary circumstances (if, for example, the patient does not have a postal address) the physician may receive and store dried cannabis. Consultation with provincial regulatory authorities about all such arrangements is advised.

Authorizations

Several provinces require physicians to:

- State the patient's medical condition on the medical document
- Register with the regulator as a cannabis authorizer
- Send the regulator a copy of the medical document, and/or keep the medical documents on a separate record for possible inspection

Some provinces specify that only the physician who manages the patient's condition may write a medical document authorizing cannabis, so that the therapy occurs in the most potentially beneficial context of continuing and comprehensive care. An ongoing doctor-patient relationship is similarly important when visits are conducted using telemedicine—where patient and physician must communicate via an interface rather than face to face. For this reason, authorization of dried cannabis by physicians not usually involved in the patient's care and using telemedicine is problematic; the authorizing physician is compelled to monitor response to treatment, emergence of adverse effects, and signs and symptoms of addiction without being physically present with the patient. This raises clear questions about whether care quality to these standards is possible in the context of a relationship that is carried out via telemedicine.

Documentation and consent

Several regulators recommend that the patient sign a written treatment agreement (see Table 2), that the physician document that other treatments have been tried, and that the patient is aware of the risks of dried cannabis. They also recommend that the patient be reassessed at least every three months.

Assessment and monitoring for cannabis misuse

Several provincial regulators advise physicians to use a standardized tool to assess the patient's risk of addiction, and to have a procedure or protocol for identifying cannabis misuse.

Table 1. Provincial regulatory authorities' policies on authorizing dried cannabis

Requirements Applying to Physicians	Medical Regulatory Authorities (Provincial Colleges or Councils)						
Conflict of interest	**BC**	**AB**	**SK**	**MB**	**QC**	**NB**	**NL**
Must not apply to become a licensed producer		●			●		
Must not store, provide, or dispense marijuana		●	●	●	●		
Must not have any financial or management interest in a licensed distributer or producer			●				●
Must not have any personal gain from providing a non-medical service						●	
Authorizations	**BC**	**AB**	**SK**	**MB**	**QC**	**NB**	**NL**
State patient's medical condition on medical document		●	●	●			
Register with regulator as a dried cannabis authorizer		●					
Provide a copy of the medical document to the regulator		●	●				
Send original medical document to licensed producer, give copy to patient, and enter another copy in chart					●		
Review available prescription databases to determine patient's medication usage	●	●					
Keep all medical documents on a separate record for inspection by the College			●	●	●		
May only sign a medical document authorizing cannabis for a patient if he or she is the primary manager of the patient's medical condition			●	●			●
May not authorize cannabis through telemedicine	●						
Keep a register of cannabis patients so they can be invited to participate in the research database projects					●		
Consent and documentation	**BC**	**AB**	**SK**	**MB**	**QC**	**NB**	**NL**
Inform the patient that cannabis can only be authorized as part of the research database project					●		
Ask the patient to read the patient information document					●		
Have patient sign a written treatment agreement			●		●		
Have the patient sign a written consent form	●				●		
Document that the patient was informed of the risks and benefits, and that other treatments were tried	●	●	●	●			●
Assess the patient at least every three months		●			●		
Assessment and monitoring	**BC**	**AB**	**SK**	**MB**	**QC**	**NB**	**NL**
Complete the assessment and follow-up form available on the regulator's website					●		
Cannabis misuse	**BC**	**AB**	**SK**	**MB**	**QC**	**NB**	**NL**
Assess the patient's risk of addiction using standardized tool	●	●					●
Have a process or protocol for identifying misuse		●		●			●

Source: Canadian Consortium for the Investigation of Cannabinoids, www.ccic.net/index.php?id=248,703,0,0,1,0. Accessed 2014 Jun 17.

Please visit CFPC's website for information on the latest statements and requirements from the provincial regulatory authorities: http://www.cfpc.ca/medical_marijuana/

Table 2. Sample treatment agreement

Because we take our responsibilities to authorize and supervise the medical use of marijuana (dried cannabis) very seriously, we ask you to read, understand, and sign this form.

1. I request Dr _____, MD, to sign a medical document for me under the Health Canada MMPR legislation, so that I may legally use marijuana to treat my medical condition.
2. I agree to receive a medical document for marijuana only from one physician, Dr _____, MD.
3. I agree to consume no more marijuana than the doses authorized for me by Dr _____, MD. I will not request a refill before the agreed-upon refill date.
4. I agree to not distribute my marijuana to any other person, for personal use or for sale. I am aware that redistribution of any marijuana for sale is an illegal activity.
5. I am aware that using marijuana is associated with psychosis in persons who are still undergoing neurodevelopment (brain growth). Therefore, I will ensure that no person under the age of 25 years has access to my marijuana.
6. I agree to the safe storage of my marijuana.
7. I am aware that taking marijuana with other substances, especially sedating substances, may cause harm and possibly even death. I will not use illegal drugs (eg, cocaine, heroin) or controlled substances (eg, narcotics, stimulants, anxiety pills) that were not prescribed for me.
8. I will not use controlled substances that were prescribed by another doctor unless Dr _____, MD, is aware of this.
9. I agree to testing (eg, urine drug screening) when and as requested by my physician.
10. I agree to have an office visit and medical assessment at least every _____ (months or weeks).
11. I understand that Health Canada has provided access to marijuana by signed medical document from a physician for the treatment of certain medical conditions, but despite this, Health Canada has not approved marijuana as a registered medication in Canada.
12. I understand that my physician may not be knowledgeable about all of the risks associated with the use of a non-Health Canada-approved substance like marijuana.
13. I agree to communicate to my physician, Dr _____, MD, any experiences of altered mental status or possible medical side effects of the use of marijuana.
14. I accept full responsibility for any and all risks associated with the use of marijuana, including theft, altered mental status, and side effects of the product.
15. I am aware that marijuana use is not advisable during pregnancy and breastfeeding. I agree to inform my physician, Dr _____, MD, if I am pregnant.
16. I am aware that smoking any substance can cause harm and medical complications to my breathing and respiratory status. I will avoid smoking marijuana. I will avoid mixing marijuana with tobacco. I agree to use my marijuana only by vaporizer or as an edible product.
17. I am aware that my physician may discontinue authorizing marijuana for my condition if he or she assesses that the medical or mental health risk or side effects are too high.
18. I agree to see specialists or therapists about my condition at my physician's request.
19. I agree to avoid driving a vehicle or operating heavy machinery for at least 4 hours after the use of marijuana, and for longer if I feel any persistent negative effects on my ability to drive.
20. As per the Health Canada MMPR legislation, I agree to purchase my marijuana only from a licensed producer. I am aware that possession of marijuana from other sources is illegal.
21. I am aware that any possible criminal activity related to my marijuana use may be investigated by legal authorities and criminal charges may be laid. During the course of an investigation, legal authorities have the right to access my medical information with a warrant.
22. Following the terms of this contract is one of the conditions I must meet to access marijuana for treatment. I understand that if I violate any of this agreement's terms, my physician may stop authorizing my use of cannabis.
23. Dr _____, MD, has the right to discuss my health care issues with other health care professionals or family members if it is felt, on balance, that my safety outweighs my right to confidentiality.

_____	_____
Patient's printed name	Patient's signature
_____	_____
Date	Practitioner's signature

Misuse prevention and intervention

RECOMMENDATION 7

Physicians should assess and monitor all patients on cannabis therapy for potential misuse or abuse (Level III).

All patients using dried cannabis regularly should be monitored carefully and assessed routinely for cannabis use disorder. Clinical features of cannabis use disorder are listed in Table 3. Patients with suspected cannabis use disorder should be advised that they will likely experience improved mood and better function if they stop or reduce their use. Patients who are unable to stop or reduce should be referred for formal addiction treatment. Cannabis should not be authorized for patients with current problematic use of cannabis, alcohol, or other drugs (see Recommendation 5d).

Before authorizing cannabis use for the patient, the physician should take a careful history of current and past substance use, including cannabis, alcohol, tobacco, prescription opioids, and benzodiazepines, and illicit drugs such as heroin and cocaine. Several medical regulatory authorities recommend using a standardized tool to assess the risk of addiction. The CAGE-AID instrument[80] is one such simple tool (Table 4). A urine drug screen may also be included in the initial assessment.

If the patient does not use substances problematically and begins cannabis treatment, the physician should ask the patient at each office visit about cognitive and mood-altering effects, as well as compliance with the dosing recommendations and use of any other substances. Periodic urine drug screens are advised.

The authorization for cannabis should be discontinued if the patient:

- Runs out early or uses cannabis from other sources
- Begins to use alcohol, opioids, or other drugs problematically
- Begins to show signs of a cannabis use disorder

Table 3. Clinical features of cannabis use disorder in patients with chronic pain

- Insists on a medical document for dried cannabis rather than trying other treatments known to be effective for his or her condition
- Uses cannabis daily or almost daily, spending considerable non-productive time on this activity
- Has poor school, work, and social functioning
- Is currently addicted to or misusing other substances (other than tobacco)
- Has risk factors for cannabis use disorder: is young, has current mood or anxiety disorder or a history of addiction or misuse
- Reports having difficulty stopping or reducing use
- Reports cannabis withdrawal symptoms after a day or more of abstinence: intense anxiety, fatigue
- Has friends or family members concerned about his or her cannabis use

Assessment, monitoring, and discontinuation

RECOMMENDATION 8

Before signing a medical document authorizing dried cannabis for pain, the physician should do all of the following:

a) **Conduct a pain assessment (Level II)**

b) **Assess the patient for anxiety and mood disorders (Level II)**

c) **Screen and assess the patient for substance use disorders (Level II)**

The physician should ask the patient to rate the pain on a 10-point scale, and to describe the effect of the pain on daily activities, including sleep. The physician should also assess the patient's mood. The physician should take a careful history of current and past substance use, including cannabis, alcohol, tobacco, prescription opioids and benzodiazepines, and illicit drugs such as heroin and cocaine. Several of the provincial medical regulators (the provincial licensing colleges) recommend a standardized tool to assess the risk of addiction; the CAGE-AID is one simple, validated tool[81] available to physicians (Table 4). A urine drug screen is also advised, and the patient should be asked to read and sign a treatment agreement (Table 2).

RECOMMENDATION 9

The physician should regularly monitor the patient's response to treatment with dried cannabis, considering the patient's function and quality of life in addition to pain relief (Level III). The physician should discontinue authorization if the therapy is not clearly effective or is causing the patient harm (Level III).

At follow-up office visits, the physician should reassess the effects of cannabis on the patient's pain ratings and function.

Many psychoactive drugs with abuse liability will temporarily blunt the patient's perception of pain without improving function. All centrally acting analgesics can also cause sedation, euphoria, or cognitive impairment. To authorize or continue to authorize dried cannabis for the purpose of analgesia, physicians should be as certain as they would need to be in prescribing any other analgesic that its potential benefits are greater than its potential risks.

Dried cannabis therapy should be reassessed and possibly stopped in the following circumstances:

- The patient experiences insufficient analgesia and/or no improvement in function (note that some pain patients continue to complain of severe pain even as their function improves)
- The treatment is not improving sleep, mood, function, and/or quality of life
- The patient experiences side effects such as memory impairment, sedation, fatigue, and worsening functioning
- The patient shows clinical features of cannabis use disorder (Table 3), such as running out early or using cannabis from other sources

Strategies to prevent harm

RECOMMENDATION 10

Patients taking dried cannabis should be advised not to drive for at least:

a) **Four hours after inhalation (Level II)**

b) **Six hours after oral ingestion (Level II)**

c) **Eight hours after inhalation or oral ingestion if the patient experiences euphoria (Level II)**

Cannabis use prior to driving is an independent risk factor for motor vehicle accidents.[82-86] Patients should be advised not to drive for a minimum of four hours after inhalation or a minimum of six hours after oral ingestion[87]; they should abstain from driving for a full eight hours if they experience euphoria.[88]

However, note that "Health Canada states that the ability to drive or perform activities requiring alertness may be impaired for up to 24 hours following a single consumption."[12]

RECOMMENDATION 11

When authorizing dried cannabis therapy for a patient, the physician should advise the patient of harm reduction strategies (Level III).

Some patients may consider dried cannabis to be "natural" and therefore safer than pharmaceutical products. They may be unaware that it is as important to follow dosing recommendations with dried cannabis as with any other course of treatment, and that different modes of delivery are safer or more precise than others.

For example, vaporization appears to be safer than smoking (combustion) as the vapour contains fewer toxic elements.[89] Vaporization of herbal cannabis has also been evaluated in clinical trials.[90] One such vaporizer is approved as a medical device in Canada (the Volcano Medic).[91] However, long-term safety effects of unregulated cannabis vaporization techniques (such as e-cigarettes) are unknown at this time.

It is important to ensure that patients understand that potential side effects of cannabis, such as sedation or cognitive impairment, can impact their safety. As noted in **Recommendation 10**, Health Canada has stated that driving, operating heavy equipment, or other activities involving alertness and coordination may be unsafe for up to 24 hours following a single consumption, depending on the dosage, delivery route, and patient's age and other health factors. It is important to discuss with patients that their reactions to the substance and to different formulations are individual, and that it is important to go slowly with the treatment until a stable, effective dose is reached.

We advise physicians to share patient education materials, such as the strategies in **Table 5**, with the patients they authorize for dried cannabis treatment.

Communication with patients and consultants

RECOMMENDATION 12

The physician should manage disagreements with patients about decisions around authorization, dosing, or other issues with unambiguous, evidence-based statements (Level III).

The main messages for the patient who requests cannabis are that a) cannabis is not an approved medicine and b) the medical literature to date reports little evidence of benefit and considerable risk of harm with its use (see Table 6).

Table 4. CAGE-AID Tool

Yes	No	
❑	❑	Have you ever felt you ought to Cut down on your drinking or drug use?
❑	❑	Have people Annoyed you by criticizing your drinking or drug use?
❑	❑	Have you ever felt bad or Guilty about your drinking or drug use?
❑	❑	Have you ever had a drink or used drugs first thing in the morning (Eye-opener) to steady your nerves, get rid of a hangover, or get the day started?

Scoring: One "positive" response indicates the need for further assessment. A urine drug screen (UDS) is also suggested.

Source: Brown RL et al. *Wis Med J* 1995;94:135-140

Table 5. Advice for patients about safety and harm reduction

- Use the lowest dose necessary.
- Do not "breath hold" or take more cannabis than the dose your doctor has specified.
- We recommend you ingest (that is, eat) your cannabis or take it using a vaporizer instead of smoking it, to reduce your risk of exposure to toxins that result from burning the cannabis in a cigarette. This is important to help protect you from heart or lung disease.
- Do not use dried cannabis with alcohol or other sedating drugs.
- If you are smoking cannabis, do not mix tobacco into the cigarette.
- Do not give or sell your cannabis to others—it is both dangerous and illegal.
- Store your dried cannabis in a locked container, out of reach of children and hidden from visitors and from adolescents at home.
- Avoid smoking cannabis in your house, to limit exposure of family members to second-hand smoke.
- Do not drive for at least four hours after any use by any route, and for at least six hours after oral ingestion. Do not drive for at least eight hours after using cannabis if you experience euphoria when you use it.
- Do not use cannabis of any kind if you are pregnant or plan to become pregnant, or if you are breastfeeding.

Table 6. Messages to patients who disagree with your decision to not authorize cannabis treatment

- Dried cannabis is not a good treatment for you, even if you experience less anxiety or pain right after use. Overall, it may be harming you. It can cause sedation and fatigue, depression, anxiety, or memory impairment. It can also interfere with your work, school, or social relationships.
- Dried cannabis has some serious risks and there is little evidence of benefit.
- Neither Health Canada nor any national medical organization has endorsed dried cannabis as a medicine. As a doctor I am bound to comply with the standards of my profession.
- We will work together to come up with an individualized treatment plan for you. Safe and effective treatments are available for your condition.
- *If the patient is at high risk for cannabis-related harms, eg, is young or has a concurrent anxiety or substance use disorder:* As your doctor I cannot prescribe any treatment that may harm you.
- *If the patient refuses a trial of oral cannabinoids prior to any consideration of dried cannabis, explore the possibility that the patient is using dried cannabis for its effects on mood:* If these drugs are not helping with pain relief or function, is it possible that you are getting a high from cannabis that makes it seem like it is helping pain for a while? If that's so, the trouble is that the high can also impair your thinking and perception, which can create bigger problems for you.
- *If the patient remains dissatisfied:* I can't authorize the use of an untested therapy when we have other, carefully studied and effective treatments that are safer and subject to strict quality control. I won't authorize dried cannabis for you. I can refer you to a doctor who is a pain specialist, who can advise you on the risks and benefits of dried cannabis for your condition.
- *If you suspect a cannabis use disorder:* In my opinion, your use of cannabis could be causing you harm. We need to talk about ways to reduce or stop your cannabis use.
- *If the patient says that your refusal forces him or her to purchase cannabis illegally:* I advise you not to buy cannabis or any other drug from the street. In my opinion, using street cannabis is not benefiting your health, and it could be causing you harm.

RECOMMENDATION 5

The physician who is authorizing cannabis for a particular clinical indication must be primarily responsible for managing the care for that condition and following up with the patient regularly (Level III). Physicians seeking a second opinion on the potential clinical use of cannabis for their patient should only refer to facilities that meet standards for quality of care typically applied to specialized pain clinics (Level III). In both instances, it is essential that the authorizing physician, if not the patient's most responsible health care provider, communicate regularly with the family physician providing ongoing comprehensive care for the patient (Level III).

Fragmentation of patient care is never advisable. Several regulatory authorities (see Recommendation 6) have advised that authorization of cannabis and care for a clinical condition that includes cannabis therapy should be managed by the most responsible health care provider for that patient.

Before referring a patient, the physician should first ensure that the clinic:

a) Has expertise in the patient's medical or psychiatric condition

b) Routinely conducts a careful patient assessment prior to recommending any therapeutic intervention

c) Provides an explicit statement on the clinic's policies on the indications, contraindications, and dosing for dried cannabis

d) Does not have any financial conflicts of interest, such as charging patients fees, or financial involvement with licensed cannabis producers

The referring physician should send the consultant all clinically relevant information on the patient's substance use, mental health, and pain history.

Dosing

RECOMMENDATION 14

Given the weak evidence for benefit and the known risks of using cannabis, the only sensible advice for physicians involved with authorizing dried cannabis is the maxim "Start low, and go slow" (Level III).

The optimal dose should improve pain relief and function, while causing minimal euphoria or cognitive impairment. Gradual dose titration is needed to establish the dose's effectiveness and safety. This is of critical importance because, as Health Canada has stated, even low doses of low-THC cannabis can cause cognitive impairment lasting as long as 24 hours in some individuals.[2,12]

What follows is a synthesis of what we know from the few controlled trials on dried cannabis available, and the medical literature on pharmaceutical cannabinoids. In the absence of rigorous evidence, we cannot overstress the importance of exhausting other possible therapies before embarking on a trial of cannabis therapy, as well as the necessity to "start low and go slow," while continually monitoring the patient's response to the treatment.

Suggested dosing: start low

Determining a safe and effective dose for herbal cannabis is much more difficult than for pharmaceutical products, because individuals vary in their mode of administration (eg, inhaled versus oral), so that there can be a wide variation in the dose delivered. Wide interpatient dose variability is also noted for pharmaceutical cannabinoids.[92]

Subjects in one trial experienced relief of pain with one inhalation of 9.4% THC cannabis smoked three times per day. The single inhalation produced a serum level of 45 µg/L,[11] a level slightly lower than the level associated with euphoria (50–100 µg/L).

Patients initiating cannabis therapy in inhaled form (smoked or vaporized) should start with very small amounts of herbal cannabis. Patients often measure their "dose" in terms of puffs; a single inhalation therefore represents a meaningful and intuitive "dose" form. Since the products available to the patient vary in the amount of cannabinoid they contain (cannabis strains have different cannabinoid profiles), by starting with a single inhalation of a new strain, the patient may slowly explore his or her response to the product. Starting with strains with lower THC levels is wise, because the lower percentage minimizes potential unwanted cognitive effects; higher doses of THC do not necessarily lead to better pain control.

Since medical documents need to specify 30-day quantities, and authorization takes effect on the date of signing, patients may order several grams over a one-month period; they may choose to purchase only a few grams of a given strain for two weeks, then to ask for a different strain. As long as they do not exceed the allowable 30-day limit, and are able to work with the licensed producer, patients may explore different THC and CBD profiles. The licensed producer may call the authorizing physician to confirm details of the authorization. We suggest requesting notification from the licensed producer whenever changes are made to what the physician has authorized (see **Recommendation 15**).

There are many reports of patients having to use larger quantities of herbal cannabis in the form of juicing (ie, maceration in a blender with liquids) or to prepare oral products; we simply do not have enough information to support these claims.

The following calculations are offered as preliminary pharmacokinetic considerations, based on several assumptions as outlined.

The amount of active cannabinoids delivered to the patient using herbal cannabis will depend on several factors, including the cannabinoid content of the source material and the mode of administration, as well as genetic and metabolic patient factors. Clearly the first two factors may be amenable to adjustment; the THC and CBD level of the herbal material is standardized by the licensed producers under the MMPR and physicians should suggest that patients begin with lower THC levels. The MMPR currently only allow for patients to receive dried herbal cannabis, and not any form of extract or oral edible product, so patients must also choose the mode of administration. Here the physician faces difficult choices; the inhaled route may be by vaporization, about which we have limited information, or by smoking, which is clearly not ideal but remains the most common means of cannabis self-administration.

It is useful to consider some broad considerations of these cannabis inhalation techniques to guide these discussions and decisions:

- Based on WHO estimates, an average "joint" contains 500 mg (0.5 g) of herbal cannabis. A typical tobacco cigarette, by comparison, weighs 1.0 g.
- Studies of smoked cannabis for neuropathic pain conditions suggest effective doses ranging from one single inhalation from 25 mg of herbal cannabis containing 9.4% THC three times daily using a pipe,[11] to 9 inhalations from a 900 mg "joint" of herbal cannabis containing 7% THC.[7,8] This translates into current evidence for a daily inhaled dose of 100–700 mg of up to 9% THC content dried cannabis.
- It is worth noting that in all studies the incidence of adverse events increases with increasing THC levels.

In the only study to date of vaporized cannabis for neuropathic pain, the amount of herbal material placed in the vaporizer was 800 mg and subjects took between 8 and 12 inhalations from the vaporizer balloon over a two-hour period.[90] Once again, analgesic effects were noted at low THC levels and side effects increased with the THC level of administered cannabis.

Most studies of smoked or vaporized cannabis use a standardized inhalation procedure: inhale slowly over 5 seconds, hold breath for 10 seconds, then gently exhale.

Until further dose and delivery system information becomes available, these data may be crudely fashioned to provide patients with the following guidance and information:

1. They are advised to consider using vaporized cannabis over smoked cannabis.
2. They should use inhaled cannabis in a well-ventilated, private, and calm environment.
3. The authorization for dried cannabis will be for the lowest effective level of THC available.
4. They should start any new cannabis product with a slow single inhalation, and then wait four hours so that they can fully appreciate the effects.
5. They should allow for several single inhalation trials of a product to observe and then discuss their responses with their physicians, before either increasing the number of inhalations or changing their order with the producer.
6. As with all psychoactive drugs, they must be informed of and alert to cannabis's potential mood-altering, euphoric, or sedative effects, which can occur and present risk even at very low doses.
7. They should keep notes on effects and experiences throughout the therapy to facilitate discussion with their authorizing physician and other health professionals.

Increasing dosage: go slow

Although the MMPR allows physicians to authorize as much as 5.0 g of dried cannabis per patient per day, we expect that analgesic benefit will occur for most patients at considerably lower doses. We expect that the upper level to the safe use of dried cannabis will be on the order of 3.0 g per day, and that even this level of use should be considered only in *very circumscribed conditions*:

- This dosing level would apply to experienced users of dried cannabis only, never to cannabis-naïve patients
- It must only be arrived at through a careful process of assessing the patient's response as dosage is slowly increased, weighing analgesic benefit, improvement in function, and presence or absence of adverse effects

Furthermore, physicians considering authorizing dried cannabis at doses higher than the current evidence supports (an inhaled dose of 100–700 mg of no more than 9% THC cannabis daily) are strongly advised to:

- Discuss the decision to increase the dosage, either approaching or exceeding a 3.0 g/day level, with a trusted and experienced colleague
- Document in the patient's record the reasons that support the increased dosage

Table 7 lists the licensed producers in Canada, and the names of the strains they sell that contain 9% THC or less.[93]

Table 7. Strains containing 9% THC or less, by licensed producer*

Company	Variety and Percentage THC
Bedrocan	Bediol: 6.5%
	Bedrolite: 0.5%
Canna Farms	No strains 9% or less
Cannimed	Cannimed 9.9: 9% Cannimed 1.13: 0.7%
Delta 9 biotech	Does not list % THC on website
In the Zone	Does not list % THC on website
Mettrum	Purple #2: 7.9%
	Green #1, 5: 5.5%
	Green #2: 5.5%
MedReleaf Corp	Avidekel: 1.1%
Organigram	Not listed
Peace Naturals	Harvest Moon: 9%
	Nina: 8%
Thunderbird	Not listed
Tilray	No strains 9% or less
Tweed	Argyle: 5%
Whistler	No strains 9% or less

*Information compiled May 2014.

Source: Health Canada, Authorised licensed producers under the *MMPR*, 2014

RECOMMENDATION 15

Although it is not required by the MMPR, physicians should specify the percentage of THC on all medical documents authorizing dried cannabis, just as they would specify dosing when prescribing any other analgesic (Level III).

The THC concentrations used in the five controlled trials on neuropathic pain (see Recommendation 1) ranged from 1% to 9%. Physicians should be aware that some commercial strains have THC concentrations as high as 15%–30%; these concentrations may increase the risk of cognitive impairment.

Therefore, the physician should note on the medical document to "Supply dried cannabis containing 9% THC or less. Send information on % THC composition directly to physician's office. Notify physician of any change in THC concentration of product given to patient."

The MMPR authorization document also requires indication of a daily quantity of cannabis. As indicated above (Recommendation 14), at present, the medical literature supports a daily dose of 100–700 mg.

Conclusions

As stated earlier, the CFPC developed this guidance document in response to a clearly expressed need from members for assistance in navigating an extraordinary practice situation. They have been caught between their desire and obligation to provide evidence-informed care for their patients and a law that appears, to patients at least, to compel them to deal with dried cannabis as if it were a medicine.

For that reason, this document has been prepared with a sense of urgency. We are confident in the practice expertise and judgment of those members who participated in its creation, but recognize that the clinical conditions it deals with and the lack of solid evidence for almost any assertion in this area make giving clear-cut advice difficult. We have tried, nonetheless, to provide guidance that is as definitive as possible because we recognize that family physicians will not be able to avoid making decisions when their patients approach them about this topic.

We will, as an organization, continue to support efforts by Health Canada and other bodies to generate additional research evidence on the place of dried cannabis in the treatment of chronic pain, anxiety, and the variety of other conditions for which its use has been suggested. We encourage CFPC members to contact us, to add their input and share their experiences as we move forward safely and compassionately in this new and challenging area of therapeutics.

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Annex C
Canadian Consortium for the Investigation of Cannabinoids
Checklist for the Medical Assessment of the Patient Asking about Medical Cannabis

Checklist for the Medical Assessment of the Patient Asking about Medical Cannabis

			Line Ref
☐	Date of visit	Patient Identifier	
☐	Date of Birth (dd/mm/yyyy):		1
☐	Female ☐ Male		2
	Primary Symptom:	Other Symptoms: / Quantitative measures:	3
☐	Location	*NRS Scales*	4
☐	Onset/cause	*BPI Inference Scale Score*	5
☐	Quality	*ADL / IADL*	6
☐	Duration		7
☐	Intensity		8
☐	Aggravating/Alleviating factors		9

☐	Prior Pharmacological Treatments	Reason for discontinuation	Prior Non-Pharmacological	Reason for discontinuation	Line Ref
					10

☐	Current Pharmacological Treatments	Dose/duration	Effect	Line Ref
				11

☐	Current non-pharmacological treatments	Frequency	Effect	Line Ref
				12

Disclaimer: **This checklist is intended to be a reference tool for the evaluation of a patient for medical cannabis by a health professional.** This is not intended for use as a screening questionnaire. This is not a validated clinical guideline. It is intended to provide a basis for a thorough assessment of the patient, their health status, risk factors, contraindications and expectations, to guide specific examination strategies, and to establish goals for medical cannabis use and monitoring. Version Date: 12-March-2014

Checklist for the Medical Assessment of the Patient Asking about Medical Cannabis

Past Medical History

Notes:

☐ **Psychosis (personal)*** ☐ **Psychosis (family)** ☐ **Schizophrenia***

☐ Anxiety ☐ Bipolar disorder ☐ Paranoia

☐ **Unstable heart disease*** ☐ Ischemic heart disease ☐ Arrhythmias

☐ Cerebrovascular disease ☐ Peripheral vascular disease ☐ Hypertension

☐ Liver disease ☐ COPD ☐ Emphysema

☐ Pregnancy ☐ Breastfeeding ***Contra-indications for cannabinoids**

Substance Use

Notes:

☐	Alcohol	Amount / week	Duration
☐	Cigarettes	Pack years	Cessation attempts
☐	Other recreational drugs		Treatments if any
☐	Recreational Cannabis Use	Frequency	Amount / Duration

☐	Medical Cannabis Use	Frequency	Amount	Duration
	☐ Dose, current (g/day)		☐ Dose change over time	
	☐ Mode of administration		☐ Self-titration	
	☐ Onset/how started			
☐	Prescription Cannabinoids tried/used	☐ Nabilone	☐ Dronabinol	☐ Nabiximols

☐ Self-reported impact of cannabis on:

☐Primary symptom:

☐Other symptom(s):

☐Function ☐Sleep

☐Mood ☐Driving ability

☐Quality of life ☐Cognitive function

Social History

Notes:

☐ Police issues ☐Past / ☐Ongoing ☐ Litigation action ☐Past / ☐Ongoing

☐ Legal issues ☐Past / ☐Ongoing ☐ Spousal / partner cannabis use

☐ Workers Compensation Board claims and issues therein ☐ Insurance/ compensation support and issues therein

☐ Occupational Status: ☐ PT employed ☐ Retired ☐ Temporary disability ☐ Unemployed
☐ FT employed ☐ Stay at home ☐ Student ☐ Permanent disability ☐ Other

☐ Household annual Income ☐ $0-20 000 ☐ $40-60 000 ☐ $80-100 000 ☐ $120 000+
☐ $20-40 000 ☐ $60-80 000 ☐ $100 -120 000

Disclaimer: **This checklist is intended to be a reference tool for the evaluation of a patient for medical cannabis by a health professional.** This is not intended for use as a screening questionnaire. This is not a validated clinical guideline. It is intended to provide a basis for a thorough assessment of the patient, their health status, risk factors, contraindications and expectations, to guide specific examination strategies, and to establish goals for medical cannabis use and monitoring. Version Date: 12-March-2014.

Checklist for the Medical Assessment of the Patient Asking about Medical Cannabis

Physical Examination

The patient seeking medical cannabis use may present with a wide range of medical conditions, and since the effects of cannabis may affect multiple symptoms, a full physical examination is recommended to establish baseline health status and confirm diagnosis.

☐	Height		☐ Pulse	
☐	Weight		☐ Blood pressure	
☐	BMI		☐ Oxygen saturation	
☐	Waist size			
☐	Appearance			
☐	Mental status		☐ Mood	
☐	Speech content		☐ Speech quality	
☐	Hands/fingers	☐ Nicotine stains	☐ Needle marks/scars	☐ Pallor/capillary refill
☐	Head ☐ Eyes	☐ Ears ☐ Nose	☐ Throat	Notes:
	☐ Jaundice	☐ Scleral Icterus	☐ Cyanosis	
	☐ Lymphadenopathy	☐ Clubbing	☐ Edema	
☐	Respiratory exam			
☐	Cardiovascular exam			
☐	Neurological exam			
☐	Musculoskeletal exam			
☐	GI / pelvic exam			
☐	Abdominal, etc.			

Assessment / Diagnosis:

	DSM V Cannabis use Disorder	☐ Criteria met	☐ Criteria not met
☐	Referring diagnosis (if applicable)		
☐	Information from other physicians/sources		
☐	Other treating physicians acknowledge that cannabis is being used or considered		
☐	Describe what the patient expects to gain from medical cannabis prescription		
☐	Specific functional goals for cannabis treatment		
☐	Other alternatives have been discussed and considered		

Disclaimer: **This checklist is intended to be a reference tool for the evaluation of a patient for medical cannabis by a health professional.** This is not intended for use as a screening questionnaire. This is not a validated clinical guideline. It is intended to provide a basis for a thorough assessment of the patient, their health status, risk factors, contraindications and expectations, to guide specific examination strategies, and to establish goals for medical cannabis use and monitoring. Version Date: 12-March-2014.

Checklist for the Medical Assessment of the Patient Asking about Medical Cannabis

Treatment Plan:					
	Medical cannabis will be part of the treatment plan:		☐ Yes ☐ No	☐ Deferred	
☐	Consideration of prescription cannabinoids and alternative treatment options			*Document reasons why alternatives not considered*	
☐	Consideration of patient concerns and questions			*Resources provided*	
☐	Objectives of cannabis treatment			*Primary symptom, other symptom(s), function, mood, sleep, quality of life*	
☐	Cannabis dose authorized *1 cigarette = 0.5 g* *Typical analgesic dose <1-3 g/day* *Watchful dose 5g/day*	g/day	duration	Mode of administration ☐ Smoking ☐ Vaporization ☐ Other	
	☐ Specific precautions	☐ Safety	☐ Storage	☐ Aberrant behaviours	
☐	If cannabis is prescribed:		Licensed Producer Name		
	Cannabis Brand or Identifier		THC (%) _____	CBD (%) _____	
Monitoring Targets					
	Scheduled Follow up	☐ 1 month ☐ 3 months ☐ 6 months ☐ 1 year			
	Follow up with who				
	Effect on Specified Objectives			*NRS Scales* *BPI Inference Scale Score* *Pain Function scales* *Canadian Occupational Performance Measure*	
	Adverse events to be monitored				
Supporting Documentation					
	☐ Medical history documentation	☐ Referring diagnosis	☐ Urine drug screen	☐ Treatment contract	
	☐ Functional goal setting	☐ Opioid agreement	☐ Informed consent		
	☐ Other:				

Disclaimer: **This checklist is intended to be a reference tool for the evaluation of a patient for medical cannabis by a health professional.** This is not intended for use as a screening questionnaire. This is not a validated clinical guideline. It is intended to provide a basis for a thorough assessment of the patient, their health status, risk factors, contraindications and expectations, to guide specific examination strategies, and to establish goals for medical cannabis use and monitoring. Version Date: 12-March-2014.

Checklist for the Medical Assessment of the Patient Asking about Medical Cannabis

	Follow up				Line #
☑	*Complete at next appointment*		Patient Identifier		87
	Date of visit				88
	Months since last visit	☐ 1 ☐ 3 ☐ 6 ☐ 12 ☐ other			89
☐	Effects of Medical cannabis on treatment objectives				90
	Change in	☐ Primary symptom			91
		☐ Other symptom			92
	NRS Scales	☐ Function			93
	BPI Inference Scale Score	☐ Mood			94
	ADL / IADL	☐ Sleep			95
	Canadian Occupational Performance Measure	☐ Quality of life			96
	Treatments added	Dose/duration/frequency	Treatments discontinued	Reason	97
	Decision to continue with medical cannabis as part of the treatment plan	☐ Yes, continue	☐ No, do not continue	☐ Deferred	98
☐	Reason for continuation or discontinuation				99
☐	Consideration of patient concerns and questions				100
	If continuing				101
☐	Review / revise objectives of cannabis treatment				102
☐	Cannabis dose authorized	g/day	duration	Mode of administration	103
	1 cigarette = 0.5 g	*Typical analgesic dose is<1-3 g/day*		*Watchful dose = 5g/day*	104
☐	Specific precautions	☐ Safety	☐ Storage		105
☐	Monitoring Targets				106
☐	Licensed Producer Name		Cannabis brand THC:CBD ratio		107
☐	Scheduled Follow up	☐ 1 month ☐ 3 months ☐ 6 months ☐ 1 year	With:		108

Disclaimer: **This checklist is intended to be a reference tool for the evaluation of a patient for medical cannabis by a health professional.** This is not intended for use as a screening questionnaire. This is not a validated clinical guideline. It is intended to provide a basis for a thorough assessment of the patient, their health status, risk factors, contraindications and expectations, to guide specific examination strategies, and to establish goals for medical cannabis use and monitoring. Version Date: 12-March-2014.

Annex D
Amounts and numbers of program participants

Data Presented in this sheet was ext

Daily g	Number of licences
0-3	3837
3.1-5	2899
5.1-8	1999
8.1-11	2384
11.1-15	2026
15.1-20	3426
20.1-25	689
25.1-30	3113
30.1-35	1310
35.1-40	2020
40.1-45	222
45.1-50	473
50.1-60	506
60.1-70	101
70.1-80	174
80.1-90	88
90.1-100	157
100.1-120	38
120.1-150	46
150.1-200	95
200.1-250	8
250.1-300	2

Department of Justice Canada
Ministère de la Justice Canada

900-840 Howe Street
Vancouver, British Columbia
V6Z 2S9

Telephone: 604-666-4304
Facsimile: 604-775-5942
Email: bj.wray@justice.gc.ca

June 26, 2014

This is Exhibit "B" referred to in the affidavit of Dr. Paul Daeninck sworn before me this 27 day of October, 2014
T. Vandale
A COMMISSIONER FOR OATHS IN & FOR THE PROVINCE OF MANITOBA
MY COMMISSION EXPIRES: July 15, 2015

By Email to: Paul.Daeninck@cancercare.mb.ca

Dr. Paul Daeninck
Coordinator, St. Boniface Unit
CancerCare Manitoba
"O" Block - 409 Taché Avenue
Winnipeg, MB R2H 2A6

Dear Dr. Daeninck:

Re: ***Allard et al. v. Her Majesty the Queen in Right of Canada***
Instruction Letter for Expert Report

Thank you for agreeing to provide the Attorney General of Canada ("AGC") with an expert report in the matter of *Allard et al. v. Her Majesty the Queen in Right of Canada*. As discussed, this Federal Court litigation involves a constitutional challenge to the *Marihuana for Medical Purposes Regulations* (the "MMPR").

Background Information

The plaintiffs in this litigation, all of whom are medical marijuana users, are challenging the constitutionality of the MMPR on the basis that they cause several unjustified violations of their rights to liberty and security of the person under the Canadian *Charter of Rights and Freedoms*.

The plaintiffs' constitutional challenge in *Allard* focuses on four aspects of the MMPR that differ from the old medical marijuana regime: (1) the elimination of personal cultivation of marijuana in favour of requiring approved individuals to purchase from licensed producers; (2) the restriction that licensed producers may not cultivate marijuana in dwelling places or outdoor areas; (3) the limit on possession of marijuana to either 150g or 30 times the amount prescribed for daily consumption by the individual's medical practitioner, whichever is less; and (4) the failure of the MMPR to permit the production and possession of non-dried marijuana such as cannabis oils, salves, tinctures and edibles.

The plaintiffs have obtained an injunction from the Court that permits them to continue personal production of medical marijuana until the constitutionality of the MMPR is decided by the Court.

The AGC is the defendant and it is the AGC's position that the current medical marijuana regime is constitutionally sound, a position that will be defended by legal counsel on behalf of the AGC.

Facts and Assumptions

The facts alleged by the plaintiffs are outlined in the Amended Notice of Civil Claim which is enclosed.

Questions for Your Expert Report

Please address the following matters in your expert report:

1. Based on your experience, what are the challenges associated with authorizing the use of marihuana for medical purposes in a clinical setting? What steps ought to be taken by clinicians in order to mitigate those challenges?

2. The Health Canada publication, "Information for Health Care Professionals" (http://hc-sc.gc.ca/dhp-mps/alt_formats/pdf/marihuana/med/infoprof-eng.pdf, February, 2013) states that surveys published in peer reviewed journals indicate that the majority of individuals who use marihuana for medical purposes consume 1-3 grams of marihuana per day (p. 24). When, if ever, is it medically appropriate for an individual to consume more than 5 grams per day?

3. The attached chart sets out the number of licenses that permit individuals to consume marihuana for medical purposes as of December, 2013 as well as the number of grams per day that these license holders are authorized to consume. In your opinion, what might account for the significant number of licenses that authorize the consumption of more than 5 grams per day?

Format of Your Expert Report

Your report must be prepared in accordance with the Federal Courts Rules. As such, we ask that you do the following within the body of your report:

1. Set out the issues to be addressed in the report;
2. Describe your qualifications on the issues to be addressed;
3. Attach your current curriculum vitae as a schedule to the report;
4. Attach this letter of instruction as a schedule to the report;
5. Provide a summary of your opinions on the issues addressed in the report;
6. Set out the reasons for each opinion that is expressed in the report;
7. Attach any publications or other materials specifically relied on in support of the opinions;
8. If applicable, provide a summary of the methodology used in the report;
9. Set out any caveats or qualifications necessary to render the report complete and accurate, including those relating to any insufficiency of data or research and an indication of any matters that fall outside of your field of expertise; and,
10. Particulars of any aspect of your relationship with a party to the proceeding or the subject matter of your report that might affect your duty to the Court.

Please number each paragraph of your report as this will aid us in referring to your report in Court.

Please sign and date your report.

Duty to the Court

As an expert witness, you have a duty to the Court which is set out in the attached Code of Conduct for Expert Witnesses. Please carefully review this Code of Conduct and, after doing so, sign the attached Certificate and send it back to us.

Due Dates and Procedural Matters

We are required to file our expert reports on or before November 1, 2014. The trial has been set for three weeks commencing February 23, 2015. You may be required to attend the trial for cross-examination and, if so, we will attempt to accommodate your schedule to the extent possible.

Please keep all correspondence pertaining to this assignment in a separate "Expert Witness Report" folder.

We look forward to receiving a draft of your report the **first week of September, 2013**.

Please do not hesitate to contact me by telephone at 604-666-4304 if you require further information or have questions regarding the foregoing.

Yours truly,

BJ Wray
Counsel

Enclosures: Certificate for Expert Witnesses; Code of Conduct for Expert Witnesses; Amended Notice of Civil Claim

Data Presented in this sheet was ext

Daily g	Number of licences
0-3	3837
3.1-5	2899
5.1-8	1999
8.1-11	2384
11.1-15	2026
15.1-20	3426
20.1-25	689
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35.1-40	2020
40.1-45	222
45.1-50	473
50.1-60	506
60.1-70	101
70.1-80	174
80.1-90	88
90.1-100	157
100.1-120	38
120.1-150	46
150.1-200	95
200.1-250	8
250.1-300	2

This is Exhibit "C" referred to in the affidavit of Dr. Paul Dreinick sworn before me this 27 day of October, 2014

T. Vandale

A COMMISSIONER FOR OATHS IN & FOR THE PROVINCE OF MANITOBA
MY COMMISSION EXPIRES: July 19, 2016

Court File No. T-2030-13

FEDERAL COURT

BETWEEN:

NEIL ALLARD
TANYA BEEMISH
DAVID HEBERT
SHAWN DAVEY

PLAINTIFFS

and

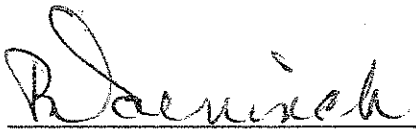
HER MAJESTY THE QUEEN IN RIGHT OF CANADA

DEFENDANT

Certificate Concerning Code of Conduct for Expert Witnesses

I, Paul Daeninck, having been named as an expert witness by the Defendant, Her Majesty the Queen in Right of Canada, certify that I have read the Code of Conduct for Expert Witnesses set out in the schedule to the *Federal Courts Rules* and agree to be bound by it.

Date: October 27, 2014



Dr. Paul Daeninck
Coordinator, St. Boniface Unit
CancerCare Manitoba
"O" Block - 409 Tachè Avenue
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This is Exhibit "D" referred to in the affidavit of Dr. Paul Daeninck sworn before me this 31 day of October, 2014
T. Vandale

A COMMISSIONER FOR OATHS IN & FOR THE PROVINCE OF MANITOBA
MY COMMISSION EXPIRES: July 18, 2016

Paul J Daeninck, MD, MSc, DABIM, FRCPC

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This is Exhibit "E" referred to in the affidavit of Dr. Paul Daeninck sworn before me this 27 day of October 2014
T. Vandale
A COMMISSIONER FOR OATHS IN & FOR THE PROVINCE OF MANITOBA
MY COMMISSION EXPIRES: July 12, 2016

PERSONAL

Date of Birth:	June 22, 1963
Birthplace:	St. Boniface MB Canada
Languages:	English, American Sign Language (ASL)
Family status:	Married, two children enrolled at the University of Calgary

EDUCATION

Fellowship in Palliative Care Medicine, University of Alberta
October 1997 to September 1998
Dr. Eduardo Bruera, Program Director

Fellowship in Medical Oncology, University of Manitoba
July 1995 to June 1997
Dr. James Johnston, Program Director

FRCPC, Internal Medicine, University of Manitoba, June 1995
Internship, July 1991 to June 1992
Residency, July 1992 to June 1994
Chief Medical Resident, July 1994 to June 1995

MD, University of Calgary, May 1991
Elective experiences: Infectious Diseases, Mayo Clinic, Rochester, MN
Emergency Medicine and Anaesthesia, St. Boniface Hospital, Winnipeg, MB

MSc, Human Anatomy, University of Manitoba, October 1987
Advisor: Dr. AC Karim
Thesis Title: The Effect of Adriamycin on the Alkaline Phosphatase Activity of the Rat Incisor Pulp

BSc(General), University of Manitoba, May 1984

LICENSURE AND QUALIFICATIONS

Full License with the Nunavut Medical Licensing Authority (#MAP-513)
Activated June 21, 2006; renewed yearly

Full License with the College of Physicians and Surgeons of Manitoba (#14-164)
Activated February 9, 1996; renewed yearly

Courtesy Register with the College of Physicians and Surgeons of Alberta
September 30, 1997 to October 1, 1998

Methadone Prescribing License issued by Health Canada, October 1996, renewed 2003, 2008, 2011, 2014

Specialist Register, the College of Physicians and Surgeons of Manitoba
Activated August 21, 1995

Fellow of the Royal College of Physicians and Surgeons of Canada (FRCPC)
Appointed August 1995

Diplomate of the American Board of Internal Medicine (DABIM)
Qualified August 1994

Licentiate of the Medical Council of Canada (LMCC), July 29, 1992

ACADEMIC/PROFESSIONAL APPOINTMENTS

Site Coordinator, St. Boniface General Hospital
CancerCare Manitoba /Winnipeg Regional Health Authority
Section of Hematology and Medical Oncology, University of Manitoba
January 1, 2007 to present

Assistant Professor, University of Manitoba, Department of Internal Medicine
Section of Hematology and Medical Oncology
October 1998 to present

Assistant Professor, University of Manitoba, Department of Family Medicine
Section of Palliative Medicine
October 1998 to present

Acting Head, Department of Hematology and Medical Oncology
CancerCare Manitoba (Taché Site, St. Boniface General Hospital)
September 11, 2009 to April 2010

Acting Medical Director, Palliative Care Program
Winnipeg Regional Health Authority
September 1, 2005 to August 31, 2006

Director, Palliative Medicine Residency Program, University of Manitoba,
Department of Family Medicine
June 1999 to June 2006

Attending Staff, CancerCare Manitoba
Department of Hematology and Medical Oncology
October 1998 to present

Palliative Medicine Consultant
Winnipeg Regional Palliative Care Program
October 1998 to present

AWARDS

University of Manitoba Medical School teaching award
2012-13 Mentorship Award Nomination
2011-12, 2008-09 academic years

University of Manitoba, Resident teaching award, Honourable mention
1999 to 2000 academic year

McEachern Fellowship, Canadian Cancer Society for
Palliative Care Medicine Clinical Research, University of Alberta ($38,550)
October 1997 - September 1998

Postgraduate Fellowship, Manitoba Cancer Treatment and Research Foundation for
Palliative Care Medicine Clinical Research, University of Alberta ($36,950)
October 1997 - September 1998

Clinical Research Traineeship Award, Royal College of Physicians and Surgeons of Canada
Palliative Care Medicine Clinical Research,
University of Alberta ($3,000)
October 1997 - December 1997

CV Mosby Book Prize for Scholastic Achievement, Medicine I
University of Calgary, 1988-1989

AFFILIATIONS

American College of Physicians
American Society of Clinical Oncology (ASCO)
Canadian Association of Medical Oncologists (CAMO)
Canadian Consortium for the Investigation of Cannabinoids (CCIC)
Canadian Hospice and Palliative Care Association (CHPCA)/Hospice and Palliative Care Manitoba (HPCM)
Canadian Medical Association/Doctors Manitoba
Canadian Pain Society (CPS)
Canadian Society of Palliative Care Physicians (CSPCP)
International Association of Hospice and Palliative Care (IAHPC)
Multidisciplinary Association for Supportive Care in Cancer (MASCC)

PROFESSIONAL/ACADEMIC ACTIVITIES & POSITIONS

Professional: International

EPEC Professional Development Workshop (for Master Facilitator designation), Northwestern University
September 19-20, 2013 Denver, USA

EPEC-O Train the Trainer course, Education in Palliative and End of Life Care, Northwestern University
October 16-19, 2009 Chicago, USA

Open Society Institute (OSI) / International Association of Hospice and Palliative Care (IAHPC) Meeting
World Health Organization (WHO) Essential Medicines in Palliative Care
Representative for the Canadian Society of Palliative Care Physicians
April 30-May 2, 2006 Salzburg, Austria

Professional: National

Member, Health Canada Expert Advisory Committee, Medical Marihuana Program
December 2011 to September 2013

Member, National Conference Program Planning Committee, Canadian Pain Society (CPS)
June 2012 to present

Canadian Partnership Against Cancer (CPAC)
Committee Member, Palliative and End-of-Life Care Initiative
Members responsible for the planning of and participation in consultative meetings, and help inform the Partnership's investment in Palliative and End-of-Life Care projects.
January 2012 to June 2013

Project Committee, EPEC-O Canada (Education in Palliative and End of Life Care-Oncology)
National project to educate oncology professionals in palliative and end of life care, using an integrative, inter-professional peer-teaching model. Based on the EPEC-O program in the U.S. (developed by NCI and Northwestern University)
June 2009 to present
Facilitator, EPEC-O Canada Regional Workshop program
New Brunswick Regional Cancer Program: June 2014
Windsor Regional Cancer Centre: April 2014
BC Cancer Agency: March 2013, Sept 2012
CancerCare Manitoba: May 2014; Oct 2013; Nov 2012; May 2012; Oct 2011 (*vide infra*)
deSouza Institute (Ontario): every November 2013-2011
Faculty member, EPEC-O Canada Train-the-Trainer Programs
Toronto, March 2010 and Calgary, May 2010.
Palliative Care Working Group, Cancer Journey Action Group,
August 2008 to December 2012

Canadian Consortium for the Investigation of Cannabinoids (CCIC)
Secretary Treasurer, June 2011 to June 2013
Board Member, October 2006 to June 2011
Steering committee, CCIC CME program
August 2014 to present
Program advisory committee, Accredited Cannabinoid Education (ACE) program *(partnership between CICC and RxMedia)*
October 2008 to June 2011

Board Member, Canadian Society of Palliative Care Physicians
Member at large, June 2013 to present
Past-President, October 2006 to November 2007
President, September 2004 to September 2006
Chair, Postgraduate Education Committee, October 1999 to September 2004

Member, National Conference Program Committee, Canadian Society of Palliative Care Physicians (CSPCP)
January 2011 to June 2012

Member, National Conference Program sub-committee, Canadian Hospice Palliative Care Association (CHPCA)
January 2008 to November 2011

Member, Project Committee, Educating Future Physicians in Palliative and End-of-Life Care (EFPPEC)
National five-year project successful for integrating competencies for palliative medicine education in Canadian universities undergraduate medical programs, as well as national standards for postgraduate residency programs, notably Family Medicine and Royal College programs (Internal Medicine, Medical Oncology, Radiation Oncology, Hematology)
February 2004 to March 2008 (4 year funding from Health Canada)

Member, Project Advisory Council, PALLIUM Project, Phase I
May 2001to October 2003

Professional: Local

Facilitator, EPEC-O Canada Regional Workshop program
Planning and presentation:
August to November 2014
February to May 2014
April to October 2013
September to November 2012
January to May 2012
May to October 2011

CancerCare Manitoba committees:
Chair, Symptom Management and Palliative Care Disease Site Group
Re-appointed June 2014
October 1998 to October 2009
CCMB/WRHA Palliative Care Working Group
CCMB Medical Co-lead
June 2013 to present
Medical/Radiation Oncology Working Group, Cancer Patient Journey Project
Medical Co-lead (with Dr. Rashmi Koul)
February 2013 to present
Member, GI Disease Site Group
2007 to present
Founding member, Pain and Symptom Research Group
October 2008 to present
Recruitment Committee, Dept of Medical Oncology and Hematology
2008 to 2013
Language Access Project Team
June 2008 to September 2012
Oncology Pharmacotherapeutics Appeal Panel
September 2006 to December 2013
Chair, 2009 to 2012
Advisory Panel, Clinical Practice Guidelines Initiative
January 2006 to 2008

Quality Systems Team
April 2008 to April 2011
Chair, Oncology Pharmacotherapeutics Sub-Committee, Winnipeg RHA
October 2002 to June 2004
Co-Chair, October 1999 to October 2002

WRHA Palliative Care Program committees
Education committee
June 2007 to present
Palliative Care/Oncology/Home Care committee
September 2005 to September 2011

Specialist advisor, Northern Medical Unit, University of Manitoba
June 2006 to present

Medical Advisor, Prostate Cancer Support Group, Winnipeg
February 2000 to present

Attending Staff, Palliative Care Unit, Department of Geriatric Medicine
St. Boniface General Hospital, Winnipeg
April 1997 to September 1997
Riverview Health Centre, Winnipeg
June 1997 to September 1997

Academic: National

Conjoint Advisory Committee, Palliative Medicine, Royal College of Physicians and Surgeons of Canada
Chair, Royal College: May 2014 to May 2016

Nucleus Advisory Committee, Palliative Medicine, Royal College of Physicians and Surgeons of Canada
Vice-Chair, Royal College: March 2007 to June 2012
Member: July 2004 to March 2007

External Reviewer, Palliative Medicine Residency Training Program, Office of Postgraduate Medical Education, Queen's University
November 2009

Member of SC.22 Trial Committee (Phase I study: Methadone as first line treatment for neuropathic cancer pain), National Cancer Institute of Canada-Clinical Trial Group (NCIC-CTG) Symptom Control Group,
2004 to May 2011

Member, Advisory Committee, Addressing Disability in Cancer Care, a project of the Vulnerable Persons New Emerging Team (VP-NET)
January 2008 to May 2010

Academic: Local (University of Manitoba)

Theme Leader, Palliative Care, Undergraduate Medical program
February 2013 to present

Mentor, University of Manitoba Medical School Mentorship program
2008 to present

Member, Palliative Medicine Residency Program, Dept. of Family Medicine
June 2006 to present

Member, Medical Oncology Residency Program Committee, Dept. of Internal Medicine
October 1999 to August 2010

Chair, Standing Subcommittee on Resident Transfers, Faculty of Medicine
May 2005 to September 2010
Committee Member, March 2003 to May 2005

Clinical supervisor, Physician Assistant education program
August 2009 to August 2011

Clinical supervisor, Nurse practitioner program
September 2005 to June 2006

Reviewer, Neurology Residency Program, Office of PGME
June 2004 to September 2004

Chair, Probations Subcommittee, Office of PGME
January 2003 to July 2004

Chief Medical Resident, St. Boniface General Hospital, July to December 1994
Health Sciences Centre, January to June 1995

Thesis Examiner

Faculty of Nursing, University of Manitoba
External Examiner, Masters of Nursing Thesis Committee for Ms. Kristin Schellenberg: "Nursing behaviours and the provision of end-of-life care in the ER."
October 2009 to July 2012

External Examiner, Masters of Nursing Thesis Committee for Ms. Fozia Bokhari: "Prevalence and risk factors associated with chronic neuropathic pain in women following breast cancer surgery"
June 2007 to March 2010

External Examiner, Masters of Nursing Thesis Committee for Ms. Jamie Penner: "A qualitative study of the experiences of family caregivers of patients with advanced head and neck cancer receiving enteral tube feeding"
May 2007 to November 2008

External Examiner, Masters of Nursing Thesis Committee for Ms. Michelle Kralt: "Implementation and evaluation of the Edmonton Symptom Assessment Scale in gyne-oncology patients admitted to acute care: a pilot project"
October 2003 to August 2005

External Examiner, Masters of Nursing Thesis Committee for Ms. Alexandra Beel: "Nursing Perceptions Regarding Palliative Sedation."
May 2002 to April 2004

External Examiner, Masters of Nursing Thesis Committee for Ms. Genevieve Thompson: "Creating a haven for safe passage: nurses' perceptions of quality end-of-life on an acute medical unit"
March 2002 to August 2003

Reviewer

Canadian Pharmaceutical Association,
Reviewer, *Therapeutic Choices for Minor Ailments*: 2013-14
Editorial Board, *Therapeutic Choices*: 2006-2011
Monograph reviewer, *Compendium of Pharmaceuticals and Specialities* (CPS): 2008-present

Associate Editor, *BioMed Central Palliative Care*: September 2008 to June 2011
Editorial Board, *BioMed Central Palliative Care:* 2002 to 2008

Reviewer, Canadian Consensus Recommendations for Constipation in Patients with Advanced Progressive Illness
RxMedia: Summer/Fall 2009

Manuscript reviewer:
CA: A Cancer Journal for Clinicians: 2014
Journal of Palliative Medicine: 2002-03; 2005-07, 2011
Supportive Care in Cancer: 2007-08, 2010-13
Open Medicine: 2007
Life Sciences: 2007

Grant Reviewer
Canadian Institutes of Health Research (CIHR), Palliative Care stream grants: 2005, 2010
Physician Services Incorporated: 2004, 2006

INVITED PRESENTATIONS

National/International

10th Annual Advanced Learning in Palliative Medicine Conference, Toronto, ON, June 1, 2014: "Medical Marijuana in Canada, 2014: Panacea or Blowing Smoke?" Co-presenter: Mr. Brent Zettel

10th Annual Advanced Learning in Palliative Medicine Conference, Toronto, ON, May 30, 2014: "It's Only A Pill...Update on Palliative Chemotherapy".

Canadian Consortium for the Investigation of Cannabinoids Accredited Education Program: *Cannabinoids in Clinical Practice-Navigating a New Landscape*, Toronto, ON March 28, 2014: "Cannabinoids in Cancer Therapy"

PEI Palliative Care Conference 2013, Summerside, PEI, May 30, 2013, Plenary Presentation: "Effective Pain Management for the Palliative Patient"

IASP World Congress pre-conference Symposium, Milan, Italy, August 25, 2012: "Cannabinoids and Pain Update 2012" Sponsored by the Canadian Consortium for the Investigation of Cannabinoids (CCIC).

8th Annual Advanced Learning in Palliative Medicine Conference, Kingston, ON, June 8, 2012: "Protein Kinase Inhibitors: A New Paradigm for Cancer Therapy, A Challenge for Palliative Care".

IASP World Congress pre-conference Symposium, Montreal QC, August 28 2010:"Cannabinoid Use in Cancer Pain" Sponsored by the Canadian Consortium for the Investigation of Cannabinoids (CCIC).

Canadian Consortium for the Investigation of Cannabinoids Accredited Cannabinoid Education Program 2010, April 12, 2010, Hamilton. "Cannabinoids in Medical Practice: A Case-based Learning Program"

University of Alberta Medical Student Class of 2013, Sign Language for Medical Students Club, Winnipeg to Edmonton (tele-linked), March 5, 2010: "My Experience with Deaf Patients"

Canadian Consortium for the Investigation of Cannabinoids Accredited Cannabinoid Education Program 2009, September 17, 2009 Winnipeg; November 23, 2009 Saskatoon: "Cannabis and Cannabinoids in Medical Practice: Challenges and Opportunities"

17th International Congress on Palliative Care, Montreal QC September 26, 2008: "Slap it on! Topical Medication Use in Palliative Care" (Workshop; co-presenters: Ms. L. Lemanski).

17th International Congress on Palliative Care, Montreal, QC, September 23, 2008: Clinical Master Class Seminars "What's the Buzz about Cannabinoids?"

Hematology/Oncology Nursing Education Day, Calgary Health Region, Calgary, October 23, 2007 Keynote Address: "The Emerging Role of Cannabinoids for the Oncology Patient"

Grand Rounds, Ottawa Regional Cancer Centre, Ottawa, ON, April 26, 2007: "From Head to Toe: The Emerging Role of Cannabinoids in the Oncology Patient"

Meeting the Challenges of Caring for the Cancer Patient: The Emerging Role of Cannabinoid Neuromodulators in Symptom Management, Satellite Symposium at the MASCC 18th Annual International Symposium, Toronto, ON, June 23, 2006: "The Role of Cannabinoids in Supportive Care of the Cancer Patient"

Educational In-service for Nunavut communities provided through the Northern Medical Unit, University of Mantioba, March 17, 2006, "Palliative Care"

University of Calgary Chronic Pain Group. Holy Cross Medical Centre, Calgary, AB, December 21, 2004: "Cannabinoids and Pain: Is There Another Pathway to Relief?"

Manitoba Breast and Women's Cancer Education Day, Winnipeg, MB, November 4, 2011: "What the heck is advance care planning anyway?"

Community Cancer Care 2011 Educational Conference-Community Cancer Control: Innovations and Growth, Brandon, MB, September 30, 2011: "Gaps in Cancer Care: Transitions from Acute to Palliative Care" and "Last Hours: Patients and Family Concerns in End of Life Care"

Accredited Cannabinoid Education III, "Synergies: Opioids and Cannabinoids"
Winnipeg, MB November 24, 2010; Brandon, MB November 9, 2010

Pain Week 2010 Brandon, MB, November 9, 2010: "Pain in the Cancer Patient: Challenges and Controversies"

Community Cancer Care 2010 Educational Conference-The Power of Community, Winnipeg, October 22, 2010: "Let's Talk About..."

Winnipeg Prostate Cancer Support Group, Winnipeg, MB, August 19, 2010: "Insights into Pain Management".

Annual Spring Symposium, University of Manitoba Centre on Aging, Winnipeg, May 3, 2010: "Persistent Pain in the Elderly" (co-presented with Dr P St. John and Dr. D Sitar)

Manitoba College of Family Physicians 52nd Annual Scientific Assembly, Winnipeg, April 22, 2010: "Weed and Feed: Cannabinoids In Medical Practice-More than just Marijuana"

7th Annual Canadian Association of Nurses in Oncology-Manitoba Chapter Education Day, Winnipeg, March 6, 2010: "Symptom Management in GI Malignancies"

Victoria General Hospital Community Respiratory Care and Best Practice, Winnipeg, May 29, 2009: "I Hurt and I Need Something for Pain. Treating Symptoms in the Substance Abuser"

CancerCare Manitoba Head and Neck Oncology Grand Rounds, Winnipeg, May 28, 2009: "My Cancer Patient has Pain: What do I do?" (Co-presented with Ms. Jamie Penner)

Geriatric Medicine Section Rounds, University of Manitoba, St. Boniface Day Hospital, January 14, 2009: "Slap it on! Topical Medication Use in Palliative Care" (Co-presented with Ms. Lindsey Lemanski)

Winnipeg Prostate Cancer Support Group, Winnipeg, MB, January 15, 2009: "Supportive Care for the Prostate Cancer Patient and his Family"

Internal Medicine Grand Rounds, St. Boniface General Hospital, Winnipeg, November 20, 2008: "Palliative Chemotherapy in the Cancer Patient: Fact or Fantasy"

2008 CancerCare Manitoba Head and Neck Oncology Pain and Symptom Management Symposium, Winnipeg, November 14, 2008: "Cancer: A Pain in the Head...and Neck"

Riverview Health Centre: Erase Pain Education Day, Winnipeg, October 2 and 22, 2008: "Medical Management of Pain"

Primary Care UPDATES, Winnipeg, October 3, 2008: "Cancer Treatment Related Pain: A Systematic Approach to Diagnosis and Effective Management"

5th Annual Ostomy Education Day: A Focus on Colorectal Cancer, May 7, 2008: "Medical Oncology Treatment of Colorectal Cancer"

Canadian Society of Hospital Pharmacists, Manitoba Chapter Annual Education Day, Winnipeg, April 29, 2007: "You want me to put that where?!?! Alternative routes for drug administration in palliative and supportive care" (co-presenter: Mr. Greg Harochaw)

The Expedition 2007: CancerCare Manitoba/Community Cancer Program Network Annual Conference, Winnipeg, MB, April 20, 2007: "Debate: Chemotherapy and Palliative Care: Can They Co-exist?" (co-presenter: Dr. Cornie Woelk)

New Connections 2006, Canadian Cancer Society – Manitoba Division, Fairmont Hotel, Winnipeg, MB, November 10, 2006: "Pain and Symptom Management in Prostate and other Cancers"

End of Life Care Education Day, WRHA Long Term Care Group, Deer Lodge Health Care Centre, Winnipeg, MB, October 31, 2006: "Jake's Story: Longing for End of Life Care", individual topics: "Symptom Management", "Nutritional Care in the Elderly", "Swallowing Issues at the End of Life", "Communication", and "Final Days" (co-presenters: Ms. Lisa Streeter and Ms. Kelly Tye Vallis)

Manitoba Palliative Care Nurses Association quarterly meeting, Winnipeg, MB, September 14, 2006: "Palliative Care: Facts and Fables" (co-presenter: Mr. Pat Trozzo)

Vulnerable Persons and End of Life New Emerging Team (VP-NET) A Good Life Until the End: Palliative Care and People with Disabilities, Winnipeg, MB June 12, 2006: Discussion panellist

St. Boniface General Hospital Annual Health Care Ethics Seminar Program, Winnipeg, MB, May 17, 2006: Guest panelist "Consent and Informed Decision Making"

CancerCare Manitoba Community Cancer Program Network Annual Conference, Neepawa, MB, May 5, 2006: "Palliative Care: An Introduction"

CME for Family Physicians: Palliative Care, University of Manitoba, Winnipeg, April 21, 2006: "Managing Gastrointestinal Symptoms in Palliative Care: Nausea/Vomiting, Constipation & Bowel Obstruction"

CME at Noon for Rural/Remote Physicians, University of Manitoba, April 7, 2006: "Palliative Care"

End of Life Care Education Day, WRHA Long Term Care Group, Holy Family Nursing Home, Winnipeg, MB, March 13, 2006: "Jake's Story: Longing for End of Life Care", individual topics: "Symptom Management", "Nutritional Care in the Elderly", "Swallowing Issues at the End of Life", "Communication", and "Final Days" (co-presenters: Dr. Susan McClement and Ms. Kelly Tye Vallis)

Keynote speaker, Manitoba Medical Students Art Show, Theme: Palliative Care. University of Manitoba, March 6, 2006

City-wide Emergency Rounds, Department of Emergency Medicine, St. Boniface Hospital Research Centre, December 21, 2005, "Pain Management"

Manitoba Pharmacists Association, Continuing Education series, University of Manitoba, November 29, 2005: "Palliative Care and the Pharmacist"

Prostate Cancer Support Group, Bethesda Hospital, Steinbach, November 3, 2005: "Treatment Options for Men with Prostate Cancer"

Family Medicine Departmental Rounds, University of Manitoba, Winnipeg, October 18, 2005: "Opioids: Management of Side Effects and Overdosing"

Winnipeg Prostate Cancer Support Group, Winnipeg, MB, June 16, 2005: "Pain Control in Patients with Prostate Cancer".

End of Life Care Education Day, WRHA Long Term Care Group, Deer Lodge Centre, Winnipeg, MB, March 2, 2005: "Jake's Story: Longing for End of Life Care", individual topics: "Symptom Management", "Food and Fluids", "Communication", "Advance Directives" and "Final Days" (co-presenter: Dr. Susan McClement)

New Connections: Together. Strong, Canadian Cancer Society – Manitoba Division, Winnipeg, MB, November 12, 2004: "New Developments in Brain, Breast, Ovarian, Prostate and Skin Cancer Research" (Panel presentation)

Staff Education Program, Kenora, ON, September 10, 2004: "Pain Assessment and Management in the Cancer Patient"

Nine Circles Community Health Centre, Winnipeg, MB, June 3, 2004: "Opioid use in Patients with Substance Abuse/Dependence"

Hospice and Palliative Care Manitoba Workshops, May-June 2004, presented with Dr. Susan McClement, Brandon, May 11; St. Pierre Jolys, May 18; Stonewall, May 27; Churchill, June 1: "Dan's Story: Pursing Palliative Care", individual topics: "Symptom Management", "Food and Fluids", "Communication", "Final Days"

Westman Prostate Cancer Support Group, Brandon, MB, May 10, 2004: "Pain and Sleep Control in Men with Prostate Cancer"

Annual Scientific Assembly, Manitoba College of Family Physicians, Platform Presentation, Winnipeg, MB, April 22, 2004: "The Use of Cannabinoids in Pain Management"

Urology Rounds, University of Manitoba, Winnipeg, April 7, 2004: "Management of the Patient with Advanced Prostate Cancer"

Hospice Nursing Education, Grace Hospital Hospice, Winnipeg, MB, December 12, 2003: "The Role of Cannabinoids in Symptom Management"

Pain Management of the Elderly, Brandon, MB, November 14, 2003: "Pain Assessment & Management in the Elderly Patient"

Pain Management for Primary Care Physicians Workshop, Sheraton Hotel, Winnipeg, October 18, 2003: "Complex Pain in the Cancer Patient"

The Road's Last Turn: End-of-Life Care Education Day, Deer Lodge Hospital, Winnipeg, May 30, 2003: "Pain Assessment & Management in the Elderly Patient"

CancerCare Manitoba Community Cancer Program Network Annual Conference, Winnipeg, May 3, 2003: "When Opioid Therapy Alone is Insufficient to Control Pain" (co-presenter: Mr. Pat Trozzo)

CME for Family Physicians, University of Manitoba, Winnipeg, May 2, 2003: "Update on Pain Control in the Cancer Patient"

Grand Rounds, Concordia General Hospital, Winnipeg, MB, May 1, 2003: "Effective Pain Management in the Elderly Patient"

Surgical Oncology Rounds, CancerCare Manitoba, Winnipeg, April 24, 2003: "The Cancer Patient with Substance Abuse/Dependence"

Nursing and Allied Health Professional Lunch and Learn, St. Boniface Hospital, Winnipeg, MB, March 20, 2003: "Effective Pain Management in the Elderly Patient"

Nor-Man Regional Health Authority CME presentation, The Pas, MB, March 13, 2003: "Cancer Pain and Symptom Management: A Case Discussion"

Corrections Service of Canada, Palliative Care Course, Winnipeg, MB, March 3, 2003: "The Basics of Pain Management", and "Opioid use in Patients with Substance Abuse/Dependence" (co-presenter: Mr. Pat Trozzo)

Annual Scientific Assembly, Manitoba College of Family Physicians, Winnipeg, MB, April 11, 2002: "Medical Marijuana" (Panel Discussant)

Together 2002... A Conference for Women Living with Breast Cancer, Breast Cancer Action Manitoba, Winnipeg, April 6, 2002: "Meet the Experts" (Panel Discussant)

Together 2002... A Conference for Women Living with Breast Cancer, Breast Cancer Action Manitoba, Winnipeg, April 6, 2002: "Palliative Care? Who? Me? Not Yet!"

Manitoba Association of Asian Physicians, Winter Symposium, Winnipeg, MB, March 2, 2002: "Opioid Use in Treating Cancer Pain"

Grand Rounds, Concordia General Hospital, Winnipeg, MB, May 31, 2001: "Doctor, Why am I so Tired?"

Wound Care across the Boundaries Conference, Winnipeg, MB, April 5, 2001: "Wound Pain Management"

Medical Humanities Lecture Series, University of Manitoba, Winnipeg, January 17, 2001: "Pain Control in Palliative Care"

Together... A Conference for Women Living with Breast Cancer, Breast Cancer Action Manitoba, Winnipeg, MB, October 21-22, 2000: "Symptom Management in Breast Cancer"

Urology Rounds, University of Manitoba, Winnipeg, May 10, 2000: "Pain Management in the Patient with Genitourinary Cancer"

Psychiatry Grand Rounds, University of Manitoba, Winnipeg, May 9, 2000: "Psychiatry in Palliative Care" (co-presenters: Drs. H. Chochinov, K. Skakum and M. Harlos)

Annual Scientific Assembly, Manitoba College of Family Physicians, Winnipeg, March 17, 2000: "Palliative Care in Winnipeg: Where are We Now?"

A Road Less Traveled: Living with Metastatic Breast Cancer, Breast Cancer Action Manitoba, Winnipeg, March 4, 2000: "Pain and Symptom Control in the Patient with Metastatic Disease"

CME for Family Physicians (Topic: Palliative Care), University of Manitoba, Winnipeg, March 3, 2000: "Cancer Pain Management for the Family Physician"

Winnipeg Prostate Cancer Support Group, Winnipeg, MB, February 17, 2000: "Pain Control in Patients with Prostate Cancer".

North Eastman Regional Health Authority CME program, Beausejour, MB, October 27, 1999: "Hydration in the Terminally Ill"

Medical Grand Rounds, Seven Oaks General Hospital, Winnipeg, MB, September 29, 1999: "Cancer pain: Special Issues in Treatment"

Community Cancer Program Network Annual Conference, The Pas, MB, September 18, 1999: "Cancer Pain and Symptom Management: A Case Discussion"

Canadian Association of Nurses in Oncology (MB Chapter) Annual Meeting, Winnipeg, June 10, 1999: "Ambulatory and Community-Based Palliative Care" (co-presenter: Dr. Mike Harlos)

Palliative Care Week Presentation, Brandon General Hospital, Brandon, MB, May 13, 1999: "Pain and Symptom Management: An Overview" (co-presenter: Dr. Mike Harlos)

Health Care Ethics Rounds, Health Sciences Centre, Winnipeg, MB, March 19, 1999: "Ethics and Palliative Care: Planning for HSC, Other Hospitals and Home Care" (Panel Discussant)

Advances in the Biology & Treatment of Lung Cancer, Winnipeg, MB, Workshop, February 27, 1999: "Issues for Management and Research in Palliative Care" (co-presenter Dr. Mike Harlos)

Medical Grand Rounds, Grace General Hospital, Winnipeg, MB, December 3, 1998: "Opioid Induced Neurotoxicity: Recognition & Management"

Vernon Hunter Bursary Program for Palliative Care Nurses, Edmonton Palliative Care Program, Edmonton, AB, April 21, 1998: "Delirium: Recognition and Management"

SCIENTIFIC MEETINGS

Platform Presentations

23rd Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, MB, September 26, 2013, "The 'New' Chemotherapy-Oncology Game Changer, Palliative Care Challenge"

19th International Congress on Palliative Care, Montreal, QC, October 12, 2012: "Integration of Palliative Care Education within Oncology Using the EPEC-O Canada Program" Co-presenter: L Hanvey for L Librach, M Fitch, J Simpson, I Nicoll.

CHPCA Learning Institutes, Banff, AB, June 2012: Integration of inter-professional palliative care education within oncology using the EPEC-O Canada train-the-trainer program" Presented by J Simpson for Hanvey L, Librach L, **Daeninck P**, Nicoll I, Fitch M.

21st Annual Hospice and Palliative Care Manitoba conference, Winnipeg, MB, September 22, 2011 "Bowel Care in Palliative Care: Getting Your S*** Together!" Co-presenter: Ms. B. Hearson.

Canadian Hospice and Palliative Care Association (CHPCA) National Conference, Ottawa, October 30, 2010 "Education in Palliative and End-of-life Care™-Oncology (EPEC-O) Canada: Helping oncology professionals in their care of palliative patients" Co-presenters: J Simpson, L Hanvey, L Librach.

18th International Congress on Palliative Care, Montreal, QC, October 8, 2010. "Update on Cannabinoids in Palliative Care: The Smoke is Clearing" Co-presenter: M Ware.

CHPCA National Conference, Winnipeg October 19, 2009 "Symptom burden and quality of life (QoL) in patients (pts) with advanced lung cancer (ALC) presenting to a pain and symptom clinic" Co-presenters: P Johnston, JR Gingrich for C Harlos, S Navaratnam, N Ahmed, J Sisler, L Xue.

Canadian Geriatrics Society (CGS) Annual Meeting, Toronto ON, April 25, 2009 "Do opiates or uncontrolled pain cause delirium? A systematic review" Fatima Maryam Hussain for P St. John, **P Daeninck.**

CHPCA National Conference, Toronto, ON, November 5, 2007 "NCIC Sociobehavioural Cancer Research Network – Clinical Trials Group: Cancer Pain Classification Project: Pilot and Feasibility Phase" Presented by J Gingerich and B Solomon for Cohen R, Velly A M, Iancu A, Bezjak A, Fainsinger R, Warr D, Wong R, **Daeninck P**, Chasen M, Lapointe B, and Zaza C.

CHPCA National Conference, Toronto, ON, November 5, 2007 "Advance Care Planning: An Interprofessional Learning Module" Co-presenters: L Hanvey, L Librach.

CHPCA National Conference, Toronto, ON, November 6, 2007 "Use of Medication Kits in Palliative Care Home Deaths:" Co-presenters: L Embleton, C Newell

Family Medicine Forum 2007, 50th Annual Scientific Assembly, Winnipeg, MB, October 13, 2007 "Palliative Care Update: Use of Cannabinoids in Palliative Care".

17th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, MB, September 21, 2007 "Advance Care Planning: An Inter-professional Learning Module" Co-presenters: L Hanvey for L Librach.

17th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, September 20, 2007 "I'm Sick of Feeling Sick… Management of Nausea and Vomiting in the Palliative Patient" Co-presenter: G. Harochaw.

16th International Congress on Care of the Terminally Ill, Montreal, QC, September 27, 2006 "Joint Investigation: The Emerging Role of Cannabinoids in Palliative Care" Co-presenters: M Ware, V Maida.

16th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, September 14, 2006 "Implementing Undergraduate & Postgraduate Curriculum in Palliative & End of Life Care" Co-presenter: L Hanvey for the EFPPEC Project Management Board.

CHPCA National Conference, Edmonton, AB, September 28, 2005 "From Competencies to Curricula: The Canadian EFPPEC Project for educating new physicians" Co-presenters: L Librach and Ms M. Bouvette for the EFPPEC Project Management Board.

15th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, September 23, 2005 "Joint Investigation: The Emerging Role of Cannabinoids in Palliative Care".

15th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, September 22, 2005 "You want me to put that where?!?!: Alternative routes for drug administration in palliative and supportive care" Co-presenter: Mr. G. Harochaw.

15th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, September 22, 2005 "Educating Future Physicians for Palliative/ End of Life Care Project (EFPPEC): A Unique Experiment in Educational Change" Co-presenters: Dr. L. Librach, Ms. L. Hanvey.

14th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, MB, Sept. 23, 2004: "Head and Neck Cancer Case Studies" Panel presentation.

15th International Congress on Care of the Terminally Ill, Montreal, QC, September 21, 2004: "Incident Pain in Terminal Illness: The Role of Sublingual Opioids" Co-presenter: Dr. H. Marr.

13th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, MB, Sept. 26, 2003: "Incident Pain in Terminal Illness: The Role of Sublingual Opioids" Co-presenter: Dr. H. Marr.

13th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, MB, Sept. 25, 2003: "Outpatient Rotation of Opioid to Methadone: A Monitoring and Titration Protocol".

14th International Congress on Care of the Terminally Ill, Montreal, QC, October 7, 2002: "Palliative Care Education in Rural and Remote Areas in Canada: the Canadian PALLIUM Project" Co-presenters: Dr. J. Pereira, Mr. M. Aherne.

Canadian Hospice Palliative Care Association (CHPCA) Annual Conference, Victoria, BC, October 23, 2001, "The Provision of Palliative Care Services to the Deaf Community: a New Outlook" Co-presenter: Mr. K. Nichols.

11th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, MB, Sept. 20, 2001: "The Provision of Palliative Care Services to the Deaf: A New Outlook" Co-presenter: Mr. K. Nichols.

10th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, MB, Sept. 14, 2000: "What a difference a Day Makes".

9th Annual Hospice and Palliative Care Manitoba Conference, Winnipeg, MB, Sept. 24, 1999: "Pain in the Terminally Ill: Basics and Advances in Treatment".

ASCO Annual meeting Denver USA, May 1997: "Treatment of hairy cell leukemia with low dose 2'-deoxycoformycin: results of long-term follow-up" **Daeninck PJ** for Johnston JB, Eisenhauer E, Wainman N, Corbett WEN, Zaentz SD and the National Cancer Institute of Canada Clinical Trials Group.

ASH Annual Meeting, Orlando USA, December 1996: "Single institution experience with hairy cell leukemia: long-term follow-up of patients treated with 2'-deoxycoformycin".

Resident Research Day, Department of Internal Medicine, University of Manitoba, Winnipeg, May 1996, Clinical Vignette: "Myeloma presenting as lymphoma: report of a case treated with bone marrow transplant" Dr. JB Johnston, supervisor.

Resident Research Day, Department of Internal Medicine, University of Manitoba, Winnipeg, May 16, 1995: "Comparison of BCL-2 vs BAX Expression in Patients with CLL Following Drug Treatment *in vitro*" Dr. JB Johnston, supervisor.

Canadian Federation of Biological Sciences, Winnipeg, MB June 1987: "The effect of Adriamycin on the alkaline phosphatase activity of pulp cells" Dr. A Karim, supervisor.

Poster Presentations

2014 ASCO Annual Meeting June 2, 2014: "The risks of debilitating falls (DFs) in patients (pts) with cancer: the Manitoba experience" Joel R Gingrich for Pascal J Lambert, Marshal W Pitz, **Paul J Daeninck**, Malcolm Doupe.

10th Annual Advanced Learning in Palliative Medicine Conference, Toronto, ON, May 30-June 1, 2014: "The risks of debilitating falls (DF) in Manitoba patients (pts) with cancer" Daeninck PJ, Gingrich JR, Lambert P, Pitz MW, Doupe M.

ASCO Genitourinary Symposium, Orlando, USA, February 14-16, 2013. "The risk of debilitating falls in Manitobans living with prostate cancer (pc)" Gingrich JR for Lambert P, Doupe M, **Daeninck PJ**, Pitz MW, Czaykowski P, Bertram Farough A.

MASCC/ISOO International Symposium on Supportive Care in Cancer, New York, NY, June 28-30, 2012 "Palliative Care education for oncology professionals using the EPEC-O Canada program-results of the first 2 years" Fitch M, **Daeninck P**, Librach L, Hanvey L, Simpson J, Nicoll I.

2012 CAMO Annual Scientific Meeting, Toronto, ON, April 26, 2012. "Palliative care education for oncology professionals using the EPEC-O Canada program-results of the first 2 years" **Daeninck PJ**, Hanvey L, Librach L, Simpson J, Nicoll I, Fitch M.

11th Congress of the European Association of Palliative Care, Vienna, Austria, May 8, 2009. "Topical Pain Medications (TPM) for Patients with Advanced Cancer" **Daeninck PJ**, Wadhwa D, Gingerich J, Lemanski L, Krahn M.

11th Congress of the European Association of Palliative Care, Vienna, Austria, May 8, 2009. "The use of cannabinoids (CBs) for the treatment of chemotherapy-induced peripheral neuropathy (CIPN): A Retrospective Review" Gingerich J, Wadhwa D, Lemanski L, Krahn M, **Daeninck PJ.**

Canadian Hospice and Palliative Care Association (CHPCA) National Conference Toronto, ON, November 5, 2007, "The Palliative Learning Commons: An Online Resource for Educators" Hanvey L, Librach L, **Daeninck P**, Kavanagh J.

13th International Congress on Care of the Terminally Ill, Montreal, QC, October 2000: "The changing nature of utilization of a Tertiary Palliative Care Unit (TPCU) over the past decade" **Daeninck P**, Honer J, Harlos MS, Chochinov HM.

MASCC/ISOO International Symposium, on Supportive Care in Cancer, Washington, DC, March 23, 2000: "Dose Ratio of Oral to Subcutaneous Hydromorphone in Advanced Cancer Patients" Lawlor PG, Quan H, **Daeninck P**, Hanson J, Bruera E.

Canadian Hospice Palliative Care Association (CHPCA) Annual Conference, London, ON, October 1999: "Characteristics of length of stay in a palliative care unit" Harlos MS, **Daeninck PJ**, Chochinov HM.

18th Annual Scientific Meeting American Pain Society, Ft. Lauderdale FL, October, 1999: "Dose ratio of oral to subcutaneous morphine in the treatment of cancer pain" Lawlor PG, **Daeninck P**, Doyle J, Quan H, Hanson J, Bruera E.

1stInternational Conference on Research in Palliative Care: Methodologies and Outcomes, May 1998: "Subcutaneous clodronate: evidence of minimal local toxicity" Walker P, **Daeninck P**, Bruera E.

12th International Congress on Care of the Terminally Ill, Montreal, QC, October 1998: "Effective pain relief in cancer patients using methadone at extended dosing intervals" **Daeninck P**, Watanabe S, Walker P, Bruera E.

10th Annual Edmonton Palliative Care Conference: Education and Research Days, October 1998: "Effective pain (P) relief in cancer patients (PTS) using methadone (ME) at extended dosing intervals" **Daeninck P**, Watanabe S, Walker P, Bruera E.

16th International Society on Thrombosis and Haemostasis Congress Florence, Italy, 1997. "Coexistence of antiphospholipid syndrome and hyperhomocysteinemia in a family with thrombosis" **Daeninck PJ**, Johnston JB, Carson N, Israels SJ.

87th Annual Meeting of the American Association for Cancer Research April 1996: "Bax, bcl-2 and mdm-2 expression and drug sensitivity in chronic lymphocytic leukemia (CLL) cells" Johnston JB, **Daeninck PJ**, Verburg L, Lee K, Williams G, Mowat M, Israels LG, Begleiter A.

Royal College of Physicians and Surgeons of Canada Annual Meeting/Canadian Society for Clinical Investigation, Halifax, NS, September 26-29 1996: "P53 and mdm-2 expression and correlation with drug sensitivity in chronic lymphocytic leukemia (CLL)" **Daeninck PJ**, Williams G, Begleiter A, Verburg L, Lee K, Israels LG, Johnston JB.

37th American Society of Hematology (ASH) Annual Meeting, Nashville TN, December 1995: "Correlation of Bax, Bcl-2 and MDM-2 expression with drug sensitivity in chronic lymphocytic leukemia" **Daeninck PJ**, Begleiter A, Verburg L, Lee K, Williams GJ, Israels LG, Johnston JB.

Canadian Society for Clinical Investigation Annual Meeting, Winnipeg, May 1995 "Comparison of Bcl-2 vsBax expression in patients with chronic lymphocytic leukemia following drug treatment *in vitro*." **Daeninck PJ**, Verburg L, Begleiter A, Israels LG, Johnston JB.

SUPERVISOR RESIDENT/TRAINEE PROJECTS

Platform Presentations

Association of Rehabilitation Medicine of Manitoba Research Day, May 2, 2012. "Changes in psychosocial factors and prediction of physical activity in breast cancer survivors: The effects of a lifestyle intervention program" Karen Dobbin for Szuck B, Ryan-Arbez N, Walker M, Rother K, Grenier D, **Daeninck P**, MacIntosh E, Marion J, Antonick P, Taylor-Brown J, Lau YKJ, Lee CE.

CancerCare Manitoba Resident Research Day, May 2, 2012. "Psychosocial Factors in Breast Cancer Survivors: Their Changes and Effects in a Lifestyle Intervention Program" Karen Dobbin for Szuck B, Ryan-Arbez N, Walker M, Rother K, Grenier D, **Daeninck P**, MacIntosh E, Marion J, Antonick P, Taylor-Brown J, Lau YKJ, Lee CE.

University of Manitoba Department of Internal Medicine Resident Research Day, May 26, 2009. "Sublingual Sufentanil for the Management of Incident Pain" Jonathan K Wong for M Harlos, HM Chochinov, H Marr, **P Daeninck**.

CancerCare Manitoba Resident Research Day, April 24, 2009. "Symptom burden and quality of life (QoL) in advanced lung cancer (ALC) patients (pts) presenting to a dedicated pain and symptom clinic" C Harlos for Gingrich J, Johnston P, **Daeninck P**, Navaratnam S, Sisler J, Xue L.

13th Annual Meeting of Hospice and Palliative Care Manitoba, Winnipeg, MB, Sept. 26, 2003: "Going to Pot: Can Marijuana and Cannabinoids Help the Terminally Ill?" M. Routledge for **P Daeninck**.

13th Annual Meeting of Hospice and Palliative Care Manitoba, Winnipeg, MB, Sept. 25, 2003: "'Beauty is Only Skin Deep': Prevalence of Dermatologic Disease in the Terminally Ill" C Barnabe for **P Daeninck**.

9th Annual Meeting of Hospice and Palliative Care Manitoba, Winnipeg, MB, Sept. 24, 1999: "Development and implementation of a Symptom Management Diary in an ambulatory cancer patient population" S Stenekes for L Johnston, **P Daeninck**.

Poster Presentations

Canadian Association of Medical Oncologists (CAMO) Annual Meeting, May 1, 2009. "Topical Pain Medications (TPM) for Cancer Patients (Pts) with Neuropathic Pain (NP) and Other Pain Syndromes" D Wadhwa for Gingerich J, Lemanski L, Krahn M, **Daeninck P**.

Canadian Association of Medical Oncologists (CAMO) Annual Meeting, May 1, 2009. "Symptom burden and quality of life (QoL) in advanced lung cancer (ALC) patients (pts) presenting to a dedicated pain and symptom clinic" C Harlos for Gingrich J, Johnston P, **Daeninck P**, Navaratnam S, Sisler J, Xue L.

CancerCare Manitoba Resident Research Day, March 30, 2007. "NCIC Sociobehavioural Cancer Research Network – Clinical Trials Group Cancer Pain Classification Project: Pilot and Feasibility Phase" J Gingerich for **P Daeninck**.

Multinational Association for Supportive Care in Cancer (MASCC) 18th Annual International Symposium, Toronto, ON, June 23, 2006 "A Retrospective Analysis of the Use of Corticosteroids on a Canadian Palliative Care Unit" J Pilkey for **PJ Daeninck**.

Canadian Hospice Palliative Care Association (CHPCA) Annual Conference, Victoria, BC, October 23, 2001. "What are the experiences of parents of dying adult children?" MM Dean for McClement S, Bond J, **Daeninck P**, Nelson F.

Educational Materials

WRHA Palliative Care Program Constipation Assessment & Management Algorithm, development and review team, 2011.

Canadian Consortium for the Investigation of Cannabinoids Accredited Cannabinoid Education (ACE) Program. Development and review of educational slide deck, 2008-10

Canadian Consensus Recommendations for Constipation in Patients with Advanced Progressive Illness, Manuscript review, RxMedia, 2009

"Cannabinoids in Chemotherapy-Induced Nausea and Vomiting: Clinical Practice Perspectives and Expert Opinion" Newsletter contributor and editor, CME Solutions and Valeant Pharmaceuticals, 2009

"Constipation: A Significant Source of Suffering for patients with Advanced Illness" CME slide presentation, Editorial Committee, Wyeth Pharmaceuticals, 2008

Constipation information brochure, Reviewer on behalf of the Canadian Hospice and Palliative Care Association, 2008

"Assessment and Treatment of Constipation for the Palliative Care Patient" CME presentation (Science and Medicine Canada), cma.ca website, primary content contributor, 2008

Breast cancer education and teaching placard (Astra-Zeneca), contributor, pain and symptom management, 1998

PUBLICATIONS

Theilmann A, **Daeninck PJ**. Medical Marijuana in Cancer: Harmful or Harm reduction? *Clinical Practice*, 2013; 10(3): 371-381 (doi: 10.2217/cpr.13.15)

Penner J, McClement S, Lobchuk M, **Daeninck P**. Family Members' Experiences Caring for Patients with Advanced head and Neck Cancer Receiving Tube-Feeding: Descriptive Phenomenological Study. *J Pain Symptom Manage*, 2012; published online June 15, 2012; doi:10.1016/j.painsymman.2011.10.016

Bokhari FN, McMillan DE, McClement S, **Daeninck PJ**. Pilot Study of a Survey to Identify the Prevalence and Risk Factors for Chronic Neuropathic Pain in Women Following Breast Cancer Surgery. *Oncology Nursing Forum*, 2012; 39(2); E141-E149.

Pilkey, J and **Daeninck, PJ**. A Retrospective Analysis of Dexamethasone Use on a Canadian Palliative Care Unit. *Progress Pall Care*, 2008; 16(2): 63-68.

Ware MA, Maida V, **Daeninck P**. A Review of Nabilone in the Treatment of Chemotherapy-Induced Nausea and Vomiting. *Therapeutics Clin Risk Manage*, 2008; 4 (1): 99-107.

Lobchuk MM, McClement SE, **Daeninck, PJ**, Elands, H. Caregiver thoughts and feelings in response to different perspective-taking prompts. *J Pain Symptom Manage*, 2007; 33: 345-362.

Lobchuk MM, McClement SE, **Daeninck PJ**, Shay C, Elands H. Asking the right question of informal caregivers about patient symptom experiences: Multiple proxy perspectives and reducing inter-rater gap. *J Pain Symptom Manage*, 2007; 33:130-145.

Davis M, Maida V, **Daeninck P**, Pergolizzi J. The Emerging Role of Cannabinoid Neuromodulators in Symptom Management. *Support Care Cancer* 2007; 15: 63-71.

Beel AC, Hawranik P, McClement S, **Daeninck P**. Palliative Sedation: Nurses' Perceptions. *International J Pall Nurs* 2006; 12 (11): 510-520.

Sutton I, **Daeninck PJ**. How We Do It: Cannabinoids in the Management of Intractable Chemotherapy-induced Nausea and Vomiting and Cancer-related Pain. *J Support Oncology* 2006; 4:531-536

Lau F, Yang J, Pereira J, **Daeninck P**, Aherne M. A Survey of PDA Use in Palliative Care. *J Pall Care*, 2006; 22(4): 267-274.

Thompson GN, McClement SE, **Daeninck, PJ**. Changing Lanes: Facilitating the Transition from Curative to Palliative Care. *J Pall Care* 2006; 22(2): 91-98.

Thompson G, McClement S, **Daeninck P**. Nurses' perceptions of quality end-of-life care on an acute medical unit. *J Adv Nurs* 2006; 53: 169-177.

Dean M, McClement S, Bond J, **Daeninck PJ**, Nelson F. Parental Experiences of Adult Child Death from Cancer. *J Pall Med* 2005 (Aug);8:751-65.

Barnabe C, **Daeninck P**. "Beauty is only skin deep": Prevalence of Dermatologic Disease in the Terminally Ill. *J Pain Symptom Manage* 2005;29:419-422.

Mazuryk M-E, **Daeninck PJ**, Neumann C, Bruera E. Daily Journal Club: an educational tool in palliative care. *Pall Med*, 2002, 16:57-61.

Johnston JB, Eisenhauer E, Wainman N, Corbett WEN, Zaentz SD, **Daeninck PJ**. Long-term outcome following treatment of hairy-cell leukemia with pentostatin: a National Cancer Institute of Canada study. *Sem Oncology*2000; 27 (2 Suppl 5):32-6.

Daeninck PJ, Bruera E. Reduction in laxative requirements following opioid rotation to methadone. A report of four cases. *J Pain Symptom Manage* 1999; 18:303-309.

Daeninck PJ, Bruera E. Opioid use in cancer pain. Is a more liberal approach enhancing toxicity? *Acta Anaesthesiologica Scandinavica* 1999; 43:924-938.

Daeninck PJ, Williams GJ, Rubinger M, Johnston JB. Multiple Myeloma Presenting Clinically as Lymphoma. *Leuk Lymphoma* 1997; 28:195-201.

Johnston JB, **Daeninck P**, Verburg L, Lee K, Williams GJ, Mowat MR, Israels LG, Begleiter A. P53, MDM-2, BAX and BCL-2 and drug resistance in chronic lymphocytic leukemia. *Leuk Lymphoma*1997; 26:435-49.

Daeninck PJ. Attitudes, not deafness isolate deaf people [letter]. *Can Med Assoc J* 1996; 155:1663.

Daeninck PJ, Messiha N, Persaud TVN. Intrauterine Development in the Rat Following Continuous Exposure to Nicotine from Gestational Day 6 through 12. *AnatomischerAnzeiger* 1991;172:257-261.

Textbooks

1) Hiebert T, **Daeninck PJ**. "Constipation", in Palliative Medicine: a case-based manual, 3rd edition, N MacDonald, N Hagen, D Oneschuk eds., Oxford University Press, Toronto, Canada, 2012.

2) **Daeninck, Paul J** and Crawford, Garnet. "Laxatives", in Palliative Medicine, T Declan Walsh, chief editor, Saunders Elsevier, Philadelphia, PA, 2008.

3) Crawford G, **Daeninck PJ**. "Constipation", in Palliative Medicine: a case-based manual, 2nd edition, N MacDonald, N Hagen, D Oneschuk eds., Oxford University Press, Toronto, Canada, 2005.

4) Shadd J, **Daeninck PJ**. "Non-Opioid and Adjuvant Analgesics", in Managing Cancer Pain, R. Gallagher, editor, Rogers Media, Toronto, Canada, 2005.

Submitted/In preparation

"A single institution retrospective review of efficacy, toxicity and symptom burden in patients with pancreatic cancer receiving FOLFIRINOX chemotherapy", James T Paul, Pascal J Lambert, Joel R Gingerich, Piotr Czaykowski, **Paul J Daeninck**.

ABSTRACTS

Published

Joel R Gingrich, Pascal J Lambert, Marshal W Pitz, **Paul J Daeninck**, Malcolm Doupe. The risks of debilitating falls (DFs) in patients (pts) with cancer: the Manitoba experience *J Clin Oncol* 2014, 32:5s (suppl; abstr 6588).

Gingerich JR, Lambert P, Doupe M, Pitz MW, **Daeninck PJ**, The risk of debilitating falls (DF) in Manitobans living with cancer. *J Clin Oncol* 2013, 31 (suppl; abstr e17596).

Fitch M, **Daeninck P**, Hanvey L, Librach L, Simpson J, Nicoll I. Palliative Care education for oncology professionals using the EPEC-O Canada program-Results of the first 2 years, *Support Care Cancer* 2012, 20 (Suppl1) #424. S101-2.

J Gingerich, D Wadhwa, L Lemanski, M Krahn, **PJ Daeninck**. The use of cannabinoids (CBs) for the treatment of chemotherapy-induced peripheral neuropathy (CIPN): A retrospective review. *J Clin Oncol* 2009; 27 (suppl):abstr e20743.

Daeninck PJ, Wadhwa D, Gingerich J, Lemanski L, Krahn M. Topical Pain Medications (TPM) for Patients with Advanced Cancer. *Eur J Pall Care*; Abstract issue (May 2009): PE 1.F321, pg 109.

Gingerich J, Wadhwa D, Lemanski L, Krahn M, **Daeninck PJ**. The use of cannabinoids (CBs) for the treatment of chemotherapy-induced peripheral neuropathy (CIPN): A Retrospective Review. *Eur J Pall Care*; Abstract issue(May 2009): PE 1.F329, pg 110.

Fatima Maryam Hussain, Philip St. John, **Paul Daeninck**. Do opiates or uncontrolled pain cause delirium? A systematic review, *Can J Geriatrics* 2009; 12 (1): 55.

Gingerich J, Solomon B, Cohen R, Velly A M, Iancu A, Bezjak A, Fainsinger R, Warr D, Wong R, **Daeninck P**, Chasen M, Lapointe B, and Zaza C. NCIC Sociobehavioural Cancer Research Network – Clinical Trials Group: Cancer Pain Classification Project: Pilot and Feasibility Phase. *J Palliative Care* 2007; 23(3):199 (abstract RES-ORL320).

Hanvey L, Librach L, **Daeninck P**. Advance Care Planning: An Interprofessional Learning Module. *J Palliative Care* 2007; 23(3):195 (abstract EDU-WS240).

Embleton L, **Daeninck P**, Newell C. The Use of Medication Kits in Palliative Care Home Deaths. *J Palliative Care* 2007; 23(3):209 (abstract CLN-ORL600).

Hanvey L, Librach L, **Daeninck P**, Kavanagh J. The Palliative Learning Commons: An Online Resource for Educators. *J Palliative Care* 2007; 23(3):232 (abstract Board 067).

Daeninck PJ, Ware M, Maida V. Joint Investigation: The Emerging Role of Cannabinoids in Palliative Care. *J Palliative Care* 2006; 22(3):196 (abstract B06).

Pilkey J, **Daeninck PJ**. A Retrospective Analysis of the Use of Corticosteroids on a Canadian Palliative Care Unit. *Support Care Cancer* 2006, 14:660 (abstract 22-161).

Librach L, **Daeninck P**, Bouvette M. From Competencies to Curricula: The Canadian EFPPEC Project for educating new physicians. *J Palliative Care* 2005, 21(3): 212

Shadd J, **Daeninck P**. Standards for Training of Palliative Medicine Physicians: An International Comparison. *J Palliative Care* 2004, 20(3): 246

Barnabé C, **Daeninck P**. Skin Integrity: Dermatologic Conditions in the Terminally Ill. *J Palliative Care* 2004, 20(3): 252

Daeninck P, Marr H, Chochinov H, Harlos M. Incident Pain in Terminal Illness: The Role of Sublingual Opioids. *J Palliative Care* 2004, 20(3): 225

Pereira J, Aherne M, Chary S, **Daeninck P**. Palliative Care Education in Rural and Remote Areas in Canada: the Canadian Pallium Project. *J Palliative Care* 2002, 18(3): 211

Dean MM, McClement S, Bond J, **Daeninck P**, Nelson F. What are the experiences of parents of dying adult children? *J Palliative Care* 2002, 18(3): 214

Dean MM, Bond J, **Daeninck P**, McClement S. Losing an adult child to cancer. *J Palliative Care* 2001, 17(3): 219

Daeninck PJ, Nichols KR, The provision of palliative care services to the Deaf community: a new outlook. *J Palliative Care* 2001, 17(3): 214

Daeninck P, Honer J, Harlos MS, Chochinov HM. The changing nature of utilization of a Tertiary Palliative Care Unit (TPCU) over the past decade. *J Palliative Care* 2000, 16(3): 88

Harlos MS, **Daeninck PJ**, Chochinov HM. Characteristics of length of stay in a palliative care unit. *J Pall Care* 1999; 15(3): 69

Walker P, **Daeninck P**, Bruera E. Subcutaneous clodronate: evidence of minimal local toxicity. *J Pain Symptom Manage* 1998; 15:S12

Daeninck P, Watanabe S, Walker P, Bruera E. Effective pain relief in cancer patients using methadone at extended dosing intervals. *J Palliative Care* 1998; 14(3): 117

Daeninck PJ, Johnston JB, Carson N, Israels SJ.Coexistence of antiphospholipid syndrome and hyperhomocysteinemia in a family with thrombosis. *Thromb Haemost*1997; (Suppl) 337

Daeninck PJ, Johnston JB, Eisenhauer E, Wainman N, Corbett WEN, Zaentz SD for the National Cancer Institute of Canada Clinical Trials Group. Treatment of hairy cell leukemia with low dose 2'-deoxycoformycin: results of long-term follow-up. *Proc Amer Soc Clin Oncol*1997; 16:17a

Daeninck PJ, Morales C, Dalal B, Israels LG, Johnston JB. Single institution experience with hairy cell leukemia: Long-term follow-up of patients treated with 2'-deoxycoformycin. *Blood* 1996; 88(Suppl 1):482a

Daeninck PJ, Williams GJ, Begleiter A, Verburg L, Lee K, Israels LG, Johnston JB. P53 and mdm-2 expression and correlation with drug sensitivity in chronic lymphocytic leukemia (CLL). *Clin Invest Med* 1996;19:S60

Johnston JB, **Daeninck PJ**, Verburg L, Lee K, Williams G, Mowat M, Israels LG, Begleiter A. Bax, bcl-2 and mdm-2 expression and drug sensitivity in chronic lymphocytic leukemia (CLL) cells. *Cancer Res* 1996; 317

Daeninck PJ, Begleiter A, Verburg L, Lee K, Williams GJ, Israels LG, Johnston JB. Correlation of Bax, Bcl-2 and MDM-2 expression with drug sensitivity in chronic lymphocytic leukemia. *Blood* 1995; 86:#1367

Daeninck PJ, Verburg L, Begleiter A, Israels LG, Johnston JB.Comparison of Bcl-2 vsBax expression in patients with chronic lymphocytic leukemia following drug treatment *in vitro.Clin Invest Med* 1995; 18:B64

Daeninck P, Karim A. The effect of Adriamycin on the alkaline phosphatase activity of pulp cells. Program and Proceedings of 30th Annual Meeting of the Canadian Federation of Biological Societies June 1987

Submitted/In preparation

GRANTS

Palliative Care, Transition and End of Life Care Programming at CancerCare Manitoba, **P Daeninck** and Valerie Wiebe, Funded through CancerCare Manitoba Foundation, Term: June 2014 to May 2015. Amount: $45,000

Palliative Care, Transition and End of Life Care Programming at CancerCare Manitoba, **P Daeninck** and Valerie Wiebe, Funded through CancerCare Manitoba Foundation, Term: June 2013 to May 2014. Amount: $24,000

Palliative Care, Transition and End of Life Care Programming at CancerCare Manitoba, **P Daeninck** and Sue Bates, Funded through CancerCare Manitoba Foundation, Term: June 2012 to May 2013. Amount: $18,141

Palliative Care, Transition and End of Life Care Programming at CancerCare Manitoba, **P Daeninck** and Sue Bates, Funded through CancerCare Manitoba Foundation, Term: June 2011 to May 2012. Amount: $24,000

Patterns of *Cannabis* (Marijuana) use among persons registered on a palliative care program. **P Daeninck**. Funded through the Canadian Consortium for the Investigation of Cannabinoids (CCIC), May 2010. Amount: $3500.

Evaluating debilitating falls in the Manitoba ambulatory cancer patient, J Gingrich (PI), A Bertram Farough, A Demers, **P Daeninck**, M Doupe. Funded through CancerCare Manitoba Foundation, Term: May 2010 to May 2011, Amount: $18,800.

Advanced Lung Cancer Quality Improvement Pilot Project, J Gingrich, (PI), P Johnston, S Navaratnam, **P Daeninck**, J Sisler, A Demers, C Harlos. Funded through the NCIC Sociobehavioural Cancer Research Network (SCRN)-Clinical Trials Group, Term: June 2008 to December 2009, Amount: $12,438.

Managing Cancer Fatigue Exercise Pilot Project, J Taylor-Brown, H Chochinov, **P Daeninck**, Funded through CancerCare Manitoba Foundation, June 2008, Amount: $13,000.

Cancer Pain Classification Project: Pilot and Feasibility Phase, Dr. S. Robin Cohen (PI), R Fainsinger, D. Warr, R Wong, **P Daeninck**, M Chasen, B Lapointe, Funded through NCIC Sociobehavioural Cancer Research Network-Clinical Trials Group, Term: June 2006 to March 2009, Amount: $45,000 (all centres).

A Randomized Double-Blind, Parallel-Group Study Comparing Olanzapine (ZYPREXA) with Haloperidol (Novo-Peridol) for the Relief of Nausea and Vomiting (N&V) in Patients with Advanced Cancer, Dr. Jose Pereira (PI), P. Brasher, K Fisher, P Gagnon, D Oneschuk, G Fyles, **P Daeninck**, V Baracos, from Canadian Insittues of Health Research (CIHR), Term: Sept 2004 to Aug 2007, Amount: $305,000.

What do informal caregivers think and feel when they are induce to perspective-take on cancer patients' symptom experiences? M. Lobchuk (PI), S. McClement, **P Daeninck**, from the National Cancer Institute of Canada (NCIC), Term: July 1, 2004-June 30, 2005; extension to Oct.31, 2005, Amount: $35,515.

Losing an Adult Child to Cancer, M Dean, J Bond, S McClement, F Nelson, **P Daeninck** (PI), from Socio-Behavioral Cancer Research Network, Pilot grant awarded June 2001; completed August 2003, Amount: $4,000.

Losing an Adult Child to Cancer, M Dean, **P Daeninck** (PI), St. Boniface Hospital Research Foundation, Term: July 1/01 – June 30/02, Amount: $3,500.

Improving quality end of live care and informing social policy in palliative care. (R. Cohen [PI], H. Chochinov, M. Deschamps, K. Wilson, P. Allard, R. Viola, V. Fiset, J. Lachance, P. Gagnon, S. McClement, **P. Daeninck**, K.I. Stajduhar, B. Mount); National Cancer Institute of Canada– SCRN, Term: 2001-2005, Amount: $356,000.

Phase I-II Study of Omega-3 Fatty Acid & Megestrol Acetate in Advanced Cancer Patients with Anorexia and Cachexia, Co-investigator (part of a multicentre trial with McGill University; Dr. Neil Macdonald, PI). Supported

with a grant from the St. Boniface Research Foundation, Palliative Care Endowment Fund. Term: August/00 – Jan. 15/01, Amount: $2,500.

Sublingual sufentanil for the management of incident pain, **P Daeninck**, (PI) M Harlos, H Chochinov, H Marr, Riverview Health Centre Foundation, Term: Sept/99 – Jan /01. Study closed in November, 2000, Amount: $6,810.

RESEARCH

Active Trials/Projects

A single institution retrospective review of efficacy, toxicity and symptom burden in patients (pts) with pancreatic cancer (PaC) receiving FOLFIRINOX chemotherapy PI: James T Paul, Co-Is: Joel R Gingerich, Piotr Czaykowski, **Paul J Daeninck.**

Factors associated with outcomes in advanced hepatocellular carcinoma patients treated with sorafenib, National PI Winson Cheung, local PIs: Piotr Czaykowski, **Paul Daeninck**

Projects on Hold

Patterns of *Cannabis* use among persons with cancer. PI: **Paul Daeninck.**

Topical Pain Medications for Cancer Patients with Neuropathic Pain and Other Pain Syndromes PIs: Joel Gingerich, **Paul Daeninck** September 2008 to present

The Use of Cannabinoids for the Treatment of Chemotherapy-induced Peripheral Neuropathy: An ongoing retrospective review PIs: Joel Gingerich, **Paul Daeninck** Co-Is: Lindsay Lemanski, Dr. Marianne Krahn. September 2008 to present

Protocol Development

Member of SC.22 Trial Committee (Phase I study: Methadone as first line treatment for neuropathic cancer pain), National Cancer Institute of Canada-Clinical Trial Group (NCIC-CTG) Symptom Control Group, 2004 to 2009.

Primary Investigator (closed)

NCIC SC.22 A Phase I Study to Determine the Dose of Methadone as a First Line Agent in the Treatment of Chronic Neuropathic Cancer Pain, Local PI: **Paul Daeninck**, Co-I: Joel Gingerich. Opened February 2010. Closed centrally May 2011.

Wyeth 3200K1-4000-WW: Randomized Double-blind Placebo-controlled Study of a Fixed Dose of Subcutaneous Methylnaltrexone in Adults with Advanced Illness and Opioid-induced Constipation: Efficacy, Safety and Additional Health Outcomes Local PI: **Paul Daeninck**, Co-I: Joel Gingerich. Opened April 2009, closed February 2011.

Wyeth 3200K1-4001-WW: Open-Label Extension Study to Assess the Safety of a Fixed Dose of Subcutaenous Methylnaltrexone in Subjects with Advanced illness and Opiod-Induced Constipation. Local PI: **Paul Daeninck**, Co-Is: Joel Gingerich. Opened April 2009, closed February 2011.

Advanced Lung Cancer Quality Improvement Pilot Project (based at CancerCare Manitoba) Local PI: Joel Gingrich Co-Is: P Johnston, S Navaratnam, **P Daeninck**, J Sisler, A Demers, C Harlos. Opened Sept. 2008, Closed December 2009.

Use of opiates in the elderly and their relationship to delirium. A systematic literature review. PI: F. Maryam Hussain, P. St. John, **P. Daeninck.** February 2008 to September 2009.

GWCA0701: A double blind, randomized, placebo controlled, parallel group dose-range exploration study of Sativex® in relieving pain in patients with advanced cancer, who experience inadequate analgesia during optimized chronic opioid therapy. Local PI: **Paul Daeninck**, Co-Is: Joel Gingerich. Opened June 2008, Closed June 2009.

Cancer Pain Classification Project: Pilot and Feasibility Phase (NCIC Sociobehavioural Cancer Research Network-Clinical Trials) PI: Dr. S. Robin Cohen, Local Co-Is: **P Daeninck**, J. Gingerich Opened June 2006 Closed March 2009

A Randomized Double-Blind, Parallel-Group Study Comparing Olanzapine (ZYPREXA) with Haloperidol (Novo-Peridol) for the Relief of Nausea and Vomiting (N&V) in Patients with Advanced Cancer, National PI: J Pereira, Local PI: **P Daeninck**, Opened Dec. 2007, closed June 2008.

WEX 14-02 Multicentre randomized controlled trial of the efficacy and safety of subcutaneous tetrodotoxin (Tectin) for modest to severe inadequately controlled cancer-related pain. National PI: N Hagen, Local PI: **P Daeninck** Opened June 2004, Closed March 2006.

Phase III multi-centre, double-blind, randomized placebo-controlled, parallel group dose-titration study of imidapril hydrochloride in the treatment of cancer cachexia, Ark Therapeutics/Inveresk Research. Local PI: **P Daeninck.** Opened October 2003; closed July 2004

Phase III Double-Blind, Placebo-controlled Randomized Comparison of Megestrol Acetate (Megace) versus an N-3 Fatty Acid (EPA) Enriched Nutritional Supplement vs both for the Treatment of Cancer Cachexia and Anorexia (NCIC CTG SC.18 / NCCTG 98-92-55) National PI: N MacDonald Local PI: **P Daeninck**. Opened January 2001; Closed Sept. 2002

Randomized Double-Blind Placebo-controlled Comparison of the Analgesic Activity of Valdecoxib (SC-65872) 40 mg BID as Add-on Therapy to Opioid Medication in Patients with Chronic Cancer Pain, IND#52,153, Local PI: **P Daeninck.** Study Closed October 31, 2001.

Phase I-II Study of Omega-3 Fatty Acid & Megestrol Acetate in Advanced Cancer Patients with Anorexia and Cachexia, National PI: N MacDonald Local PI: **P Daeninck**. Opened Sept. 2000; closed Jan. 2001

RESEARCH INTERESTS

The role of cannabinoids in symptom control and palliative care

Use of topical medications in palliative care patients

Medical education and evaluation in palliative medicine

COMMUNITY AND VOLUNTEER ACTIVITIES

Bethune Bai Qiuen Canadian Alliance, May 2011 to present
Traveled to Hubei and Shanxi provinces October 2014; participated in an International Forum Commemorating the 75th Anniversary of the Passing of Dr. Norman Bethune
Traveled to Hebei and Yunnan provinces April 2013
Humanitarian group working in China;
To promote friendship between the people of Canada and China, advancing the Norman Bethune legacy in health care and education

Winnipeg Watch Enthusiasts
Hobby group for watch collectors in Manitoba, Co-founder (with Mr Rick Gilbert), Nov 2012 to present

Manitoba Speed Skating Association,
Past President, March 2012 to September 2014
President, May 2009-March 2012
Board Member, Manitoba Speed Skating Association, May 2004 to 2009
Level 3B Official (Starter), June 2013
Level 2 Official, May 2008
Level 1 Official, May 2007

Speed Skating Canada
Sustainability Advisory Committee
July 2010 to October 2012

Manitoba Sports Hall of Fame
Selection Committee,
April 2010 to December 2012

Special Olympics
Speed Skating Official 2014 Manitoba Provincial Championships
Speed Skating Official 2011 Ontario Provincial Championships

Advisory Board, Shared Reading Project, Society for Manitobans with Disabilities, Inc., 2001 to 2004

Principal Search Committee, Manitoba School for the Deaf, 2001 to 2005

Advisory Council for School Leadership, Manitoba School for the Deaf, 1998 to 2001

MEDIA PRESENTATIONS

Media and Messaging Workshop, Ron Cameron-Lewis, facilitator, November 16, 2013.

Interviewed for documentary on "Medical Marijuana" by Kim Kaschor (Shaw TV), January 20, 2014.

Interviewed for story on "Synthetic Marijuana" by CBC reporters, for February 26, 2013 broadcast (radio, television and internet).

Interviewed and quoted, for the article, "How the terminally ill live with death and go with grace" for *The Globe and Mail*, August 29, 2011 issue.

Interviewed for article on cancer pain, for *The Chronicle of Cancer Therapy*, May 2007 issue.

Interviewed about the introduction of Cesamet© (Nabilone) into the United States market for *Internal Medicine News*, June 15, 2006 issue.

Media Training Session, Ed Barks, facilitator. Barks Learning Network, January 14, 2006.

Interviewed and quoted (newspaper article), "Cancer victims given toxin to relieve pain", *Winnipeg Free Press*, November 26, 2004.

Interviewed (news clip, cancer pain study), Global TV local news program, November 25, 2004.

Interviewed and quoted, "Sufentanil preferable to morphine for pain in terminal CA", *The Medical Post*, October 12, 2004.

Interviewed and quoted (newspaper article), "Cancer patients willing to try marijuana", *Winnipeg Free Press*, September 27, 2003.

Interview (human interest story, cancer patient), CKY TV "Buddies for Life" program, April 5, 2002.

Interviewed (news clip, cannabis use in pain), Global TV local news program, July 30, 2001.

Interviewed (news clip, cannabis use in pain), CBC TV "Canada Now" news program, July 19, 2001.

Guest on "Warren" (national open line radio show), WIC Radio Network, December 19, 1999.

Round Table participant, Topic: Palliative Care, Charles Adler Radio Show, CJOB, September 8, 1999.

Interviewed and quoted, cover story on "Pain", *Maclean's*, August 16, 1999.