

# Minnesota Medical Cannabis Program Petition to Add a Qualifying Medical Condition

#### Making your petition

Any person may petition the Minnesota Department of Health ("the department" or "MDH") to add a qualifying medical condition to those listed in subdivision 14 of Minnesota Statutes section 152.22.

Petitions will be accepted only between June 1 and July 31, 2018. Petitions received outside of these dates will not be reviewed.

Petitions must be sent by certified U.S. mail to:

Minnesota Department of Health Office of Medical Cannabis P.O. Box 64882 St. Paul, MN 55164-0882

	You must mail the original copy of the petition with an original signature.
	Complete each section of this petition and attach all supporting documents. Clearly indicate which section of the petition an attachment is for.
	Each petition is limited to one proposed qualifying medical condition. If your petition includes more than one medical condition, it will be dismissed.
	If you are petitioning for the addition of a medical condition that was considered but not approved in a prior year's petition process, you <u>must include</u> new scientific evidence or research to support your petition or describe substantially different symptoms. Please refer to our website to see which medical conditions were reviewed in prior years ( <a href="http://www.health.state.mn.us/topics/cannabis/rulemaking/addconditions.html">http://www.health.state.mn.us/topics/cannabis/rulemaking/addconditions.html</a> ).
	If the petition is accepted for consideration, MDH will send the petition documents to the Medical Cannabis Review Panel ("Review Panel"). MDH staff will also provide information to the Review Panel about the proposed qualifying condition, its prevalence, and the effectiveness of current treatments.
	You may withdraw your petition any time before the Review Panel's first public meeting of the year by submitting a written statement to the Department stating that you want to withdraw it.
Pet	ition review process
	An appointed citizens Review Panel will meet to review all eligible petitions and supporting documentation.
	MDH will post notice of the public meetings of the Review Panel on its medical cannabis website.
	After the public meeting and by November 1, 2018 the Review Panel will provide the Commissioner of Health a written report of findings.
	The Commissioner will approve or deny the petition by December 3, 2018.



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Section A: Petitioner's Information			
Name (First, Middle, Last):			
Home Address (including Apartment or Suite #):			
City:		State:	Zip Code:
		MΛ	
Telephone Number:	E-mail Address:		

Section B: Medical Condition You Are Requesting Be Added
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Please specify the name and provide a brief description of the proposed qualifying medical condition. Be as precise as possible in identifying the condition. **Optional:** Include diagnostic code(s), citing the associated ICD-9 or ICD-10 code(s), if you know them. Attach additional pages as needed.

Opioid Use Disorders

ICD-10-CM F11-F11.99

X see 2+tached



\* see attached

# Minnesota Medical Cannabis Program Petition to Add a Qualifying Medical Condition

* see attached	
Section D. Availability of conventional medic	al therapies



# Minnesota Medical Cannabis Program Petition to Add a Qualifying Medical Condition

# Describe the anticipated benefits from Medical Cannabis specific to the proposed qualifying medical condition. Attach additional pages if needed. \*\*A See attached\*\*

#### Section F (optional): Scientific Evidence of Support for Medical Cannabis Treatment

It will strengthen your petition to include evidence generally accepted by the medical community and other experts supporting the use of medical cannabis to alleviate suffering caused by the proposed medical disease or its treatment. This includes but is not limited to full text, peer-reviewed published journals or other completed medical studies. Please attach complete copies of any article or reference, not abstracts.

I have attached relevant articles. (check box if you have attached scientific articles or studies)

#### Section G (optional): Letters in Support of Adding the Medical Condition

Attach letters of support for the use of medical cannabis from persons knowledgeable about the proposed qualifying medical condition, such as a licensed health care professional.

I have attached letters of support. (check box if you have attached letters of support)

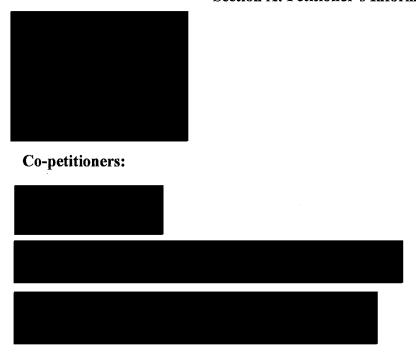


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# Please Note: Any individually identifiable health information relating to any past, present, or future health condition or health care contained in this Petition is classified as a health record under Minnesota Statutes §144.291, and is not subject to public disclosure. I certify that the information provided in this petition is true and accurate to the best of my knowledge. SIGN DATE (mm/dd/yyyy)

To obtain this information in a different format, call: (651) 201-5598 in the Metro area and (844) 879-3381 in the Non-metro.

#### Section A: Petitioner's Information



Section B: Medical Condition You Are Requesting Be Added

#### Clinical Information: Opioid Use Disorders

- Condition: Opioid Use Related Disorders ICD-10-CM F11-F11.99.
- Diagnostic Criteria:
  - Opioids are taken in greater dosages and for longer periods than initially intended.
  - o Compulsive, continuous use.
  - O Patients spend a significant amount of time attempting to obtain opioids, use opioids, or recover from its effects.
  - o Craving or urge to use opioids.
  - o Recurrent opioid use negatively affecting social and professional lives.
  - o Social, occupational, or recreational activities are reduced due to opioid use.
  - Opioid use during potentially physically hazardous situations.
  - Recurrent opioid use even if the opioids are causing or exacerbating physical or psychological complications.
  - Tolerance defined as: a need for increased amounts of opioids to induce intoxication or desired affects, or a marked diminished affect with the same continuous dosage.
  - Withdrawal defined as: opioid withdrawal syndrome or opioids are taken to relieve or to avoid withdrawal symptoms (unless, under medical supervision).
  - o Specific severity:
    - 305.50 (F11.10) Mild: Presence of 2-3 symptoms.
    - 304.00 (F11.20) Moderate: Presence of 4-5 symptoms.
    - 304.00 (F11.20) Severe: Presence of 6 or more symptoms. ii

#### Section C: Symptoms of Proposed Medical Condition and/or Its Treatments

- Symptoms of Opioid Use Disorders include: potential for anxiety and/or depressive disorders, constipation, nausea, euphoria, slowed breathing rate or stopped breathing or coma, drowsiness, confusion, poor coordination, increased pain with higher doses, excessive mood swings or hostility, increase or decrease in sleep, low blood pressure, overdose significant risk of death. iii
- Symptoms of withdrawal syndromes: \*see next page for chart.

Sign or Symptom	Score
Resting pulse rate measured after patient has been sitting or lying for 1 min — beats/min	
≲80	0
81–100	1
101-120	2
>120	4
Sweating during past half hr not accounted for by room temperature or physical activity	
No report of chills or flushing	0
Subjective report of chills or flushing	1
Flushed or observable moisture on face	2
Beads of sweat on brow or face	3
Sweat streaming off face	4
Restlessness observed during assessment	
Patient able to sit still	0
Patient reports difficulty sitting still but is able to do so	1
Frequent shifting or extraneous movements of legs and arms	3
Patient unable to sit still for more than a few seconds	5
Pupil size	-
Normal size for room light	0
Possibly larger than normal for room light	1
Moderately dilated	2
	5
So dilated that only rim of iris is visible	۶
Bone or joint aches?	•
None	0
Mild, dilfuse discomfort	1
Severe diffuse aching of joints, muscles, or both	2
Patient is rubbing joints or muscles and is unable to sit still because of discomfort	4
Runny nose or tearing not accounted for by cold symptoms or allergies	
None	0
Nasal stuffiness or unusually moist eyes	1
Nose running or tearing	2
Nose constantly running or tears streaming down cheeks	4
Gastrointestinal upset during past half hr	
None	0
Stomach cramps	1
Nausea or loose stool	2
Vomiting or diarrhea	3
Multiple episodes of diarrhea or vomiting	5
Fremor in outstretched hands	
None	0
Tremor can be felt but not observed	1
Slight tremor observable	2
Gross tremor or muscle twitching	4
Yawning observed during assessment	
None	0
Once or twice during assessment	1
Three or more times during assessment	2
Several times/min	4
Anxiety or irritability	
None	0
Patient reports increasing irritability or anxiousness	1
Patient obviously irritable or anxious	2
	4
Patient so irritable or anxious that participation in assessment is difficult	4
Piloerection  Chinic connects	^
Skin is smooth	0
Piloerection of skin can be felt or hairs standing up on arms	3
Prominent piloerection	5

For each item, the clinician should record the score that best describes the patient's signs or symptoms. Only signs or symptoms that are related to opiate withdrawal should be rated. For example, if the patient's heart rate is increased because he or she was jogging just before the assessment, the increased pulse rate would not be included in the score. Scores should be entered at time zero, 30 minutes after the first dose of buprenorphine, 2 hours after the first dose, and so forth. A score of 5–12 indicates mild withdrawal, 13–24 moderate withdrawal, 25–36 moderately severe withdrawal, and more than 36 severe withdrawal. Data are from Wesson and Ling.<sup>18</sup> † Only pain that is directly linked to withdrawal from opiates should be scored.

- The efficacy of opioid use in the treatment of chronic pain has not been definitively proven. Common side effects of opioid use include: sedation, dizziness, nausea, vomiting, constipation, physical dependence, tolerance, and respiratory depression. Physical dependence and addiction are definitive clinical concerns. Less common side effects include delayed gastric emptying, hyperalgesia, immunologic and hormonal dysfunction, muscle rigidity, and myoclonus. The most common side effects are constipation and nausea. Constipation may be severe enough to warrant opioid use discontinuation. Opioids are broad spectrum analgesic agents affecting many organ systems and influencing a large number of body functions. vi
- Methadone side effects include: constipation, dizziness, drowsiness, nausea or vomiting, impaired cognition or confusion, forgetfulness, impaired balance or coordination. It is much easier to overdose on methadone than other opioid drugs. Symptoms of overdose include: respiratory depression, clammy or bluish skin, blue-tinted lips and fingertips, extreme fatigue (unable to stay awake), stupor, convulsions, vomiting, coma, and death. Side effects of methadone withdrawal include: watery eyes, runny nose, fever or chills, sweating, tremors, muscle aches, diarrhea, nausea or vomiting, loss of appetite, anxiety or irritability, depression, restlessness, insomnia, and tachycardia. Buprenorphine is viewed as having less potential for abuse than methadone, but side effects are similar to those of methadone. L-alpha-acetylmethadol (LAAM) is another alternative to methadone treatment with side effects including: rash, nausea, increased blood pressure, and abnormal liver function. vii
- Anxiety and insomnia are treated with benzodiazepines. The most common side effects of benzodiazepines include: drowsiness, dizziness, confusion, unsteadiness, lightheadedness, slurred speech, muscle weakness, memory problems, constipation, nausea, dry mouth, and blurred vision. Less common side effects are headaches, low blood pressure, increased saliva production, digestive disturbances, rashes, sight issues (such as double vision), tremors, changes in sexual desire, incontinence, and difficulty urinating. Also reported side effects include: blood disorders, jaundice (yellow skin), and breast development in men. Some people may experience memory problems, or paradoxical effects, such as increased anxiety, aggressive behavior, agitation, delusions, depersonalization/ disassociation/ derealization, hallucinations, decreased inhibitions/ inappropriate behavior, irritability, nightmares, personality changes, psychoses, rages, restlessness, and suicidal thoughts or behavior. Long term side effects include: difficulty concentrating, feeling dulled and slow, feeling isolated and unreal, feeling cut off from one's emotions, irritability and impatience, loss of confidence, weight problems, and memory problems. Withdrawal symptoms can occur several hours after short-acting benzos. and up to three weeks after taking long-acting benzos; if benzos have been taken for an extended period of time, symptoms of withdrawal may last for weeks or months. Possible withdrawal symptoms include: abdominal cramps, agoraphobia, increase anxiety, physical symptoms of anxiety (muscle tension, tight chest, palpitations, fast heartbeat, sweating, and trembling), blurred vision, depression, difficulty sleeping, dizziness, face and neck pain, headaches, inability to concentrate, increased sensitivity to light, noise, touch, and smell, loss of interest in sex, loss of appetite, nausea, nightmares, panic attacks, restlessness, sore eyes, sore tongue and metallic taste, tinnitus, tingling in the hands and feet, unsteady legs, vomiting, and weight loss. Severe withdrawal symptoms include: burning sensations in the skin, confusion, severe depression,

- depersonalization, derealization, hallucinations, memory loss, muscle twitching, paranoia and delusions, and seizures. Symptoms of sudden withdrawal from benzos. include: confusion, psychosis, seizures, a condition similar to delirium tremens (alcohol withdrawal). viii
- Side effects of clonidine include: dry mouth, drowsiness, dizziness, lightheadedness, irritability, tiredness, mood changes, sleep problems (insomnia or nightmares), headache, ear pain, fever, feeling hot, constipation, diarrhea, stomach pain, increased thirst, loss of interest in sex, impotence, difficulty having an orgasm, cold symptoms (stuffy nose, sneezing, cough, or sore throat). Serious side effects include: hypotension, bradycardia, congestive heart failure, weakness, and edema. Other side effects may occur. ix
- Loperamide side effects may include: bloating, constipation, loss of appetite, stomach pain with severe nausea and vomiting, skin rash, dizziness or drowsiness, and dry mouth.x
- Prochlorperazine side effects may include: agitation, black/ tarry stools, chest pain, clay-colored stools, constipation, dark urine, decrease in urine frequency, diarrhea, difficulty swallowing and breathing, dizziness, drooling, drowsiness, dry mouth, fever, headache, impotence, loss of appetite, mask-like face, nasal congestion, nausea, painful urination, shuffling walk, sore throat, sores or ulcers on the lips or in the mouth, stomach pain, swollen glands, tightness of throat, tremors in extremities, uncontrolled chewing movements and movements of the arms and legs, unpleasant breath odor, unusual bleeding or bruising, fatigue or weakness, vomiting of blood, and jaundice. Symptoms of an overdose include: change in consciousness, irregular heartbeat, loss of consciousness, seizures, severe sleepiness. Some side effects that may diminish during continuation of treatment include: blurred vision, increased sensitivity of the skin to sunlight, irregular menstrual periods, itching/ rash/ redness/ or discoloration of the skin, jitteriness, and insomnia. Common nervous system side effects include: drowsiness, dyskinesia, akathisia, parkinsonism, and tremor/ tremulousness.xi
- Common naproxen side effects include: belching, bruising, difficult or labored breathing, feeling of indigestion, headache, itching skin, large/flat/blue/ or purplish patches on skin, chest pain, skin eruptions, stomach pain, swelling, chest tightness, bloating, bloody or black stools, blurred or loss of vision, burning upper abdominal or stomach pain, cloudy urine, constipation, decrease in urine output, disturbed color perception, double vision, irregular heartbeat or pulse, halos around lights, indigestion, loss of appetite, nausea or vomiting, night blindness, light sensitivity, pale skin, skin rash, inflammation of the mouth, troubled breathing with exertion, tunnel vision, unusual bleeding or bruising, fatigue, vomiting material that looks like coffee grounds (clotted blood from stomach bleeding), and weight loss. Rare side effects include: anxiety, back or leg pains, bleeding gums, blindness, blistering/peeling/ or loosening of the skin, blood in urine or stools, blue lips and fingernails, canker sores, color distortion, chest pain, clay-colored stools, cold sweats, coma, confusion, cool/ pale skin, cough or hoarseness, pink/ frothy sputum from coughing, cracks in the skin, darkened urine, decreased vision, depression, diarrhea, difficult/ burning/ or painful urination, difficult/ fast/ or noisy breathing, difficulty with swallowing, dilated neck veins, dizziness, dry cough, dry mouth, excess air or gas in the stomach, extreme fatigue, eve pain, fainting, fever, fluid-filled skin blisters, flushed/dry skin, frequent urination, fruit-like breath odor, greatly decreased frequency of urination or amount of urine, hair loss, high fever, hives, increased hunger,

sensitivity of the skin to sunlight, increase sweating, increased thirst, irregular breathing, joint or muscle pain, lightheadedness, loss of heat from the body, lower back or side pain, nervousness, nightmares, no blood pressure, no breathing, no pulse, nosebleeds, numbness or tingling in the hands, feet or lips, pain in ankles or knees, pain or burning in the throat, pain in the arms/ jaw/ back/ or neck, pounding in ears, inflammation of the eyelids or around the eyes/ face/ lips/ or tongue, rapid/ shallow breathing, red/ irritated eyes, skin lesions, red-green color blindness, scaly skin, seizures, severe sunburn, shakiness, thin skin, slurred speech, sneezing, mouth ulcers, unexplained weight loss, watery or bloody diarrhea, weight gain, and jaundice. Symptoms of an overdose include: bleeding under the skin, confusion about identity/ place/ and time, muscle tremors, restlessness, and sleepiness.xii

#### Section D: Availability of Conventional Medical Therapies

#### Treatment: comprehensive care:

- Psychiatry in addiction treatment
- o Therapy with a licensed alcohol and drug addiction counselor
- Intensive addiction programs
- Outpatient programs
- o Continuing care recovery group programs
- Treatment may also require detoxification (withdrawal), addiction medication, and recovery support. Withdrawal may be dangerous and should be supervised under a doctor's care.
- Medications to assist in withdrawal: clonidine, buprenorphine, suboxone, or methadone may be used by physicians, under legally regulated conditions to ease symptoms of withdrawal from opioids. Vivitrol can be given as an injection, monthly, by a healthcare provider, which may assist patients in staying off opioids early in recovery. iv
- Treatment of acute withdrawal syndromes; this is often not enough for long-term recovery. Patients with increased impulsivity, due to opioid dependence, may relapse and there is an increased risk of overdose, as the patient may take a higher dosage after having stopped opioid use.
- Treating withdrawal symptoms with a long-acting opioid, such as methadone or buprenorphine, and then gradually reducing dosage to allow the patient to adjust to a body with no opioids. Naltrexone is used in heavily sedated patients. Patients are prescribed drugs to help with withdrawal symptoms, and monitored, by medical professionals trained in opioid dependency. Ultra-rapid protocols utilizing naltrexone to stimulate withdrawal is not effective in producing long-term recovery of opioid use.
- Anxiety and insomnia are treated with benzodiazepines or other drugs for sedation. Clonidine or tizanidine can be used to decrease signs of autonomic overactivity, such as anxiety or piloerection. Diarrhea, nausea, and vomiting are treated with loperamide, prochlorperazine, or both, along with electrolyte drinks and intravenous fluids. Pain is

mitigated with naproxen. Said treatments are not as effective in relieving symptoms as a methadone or buprenorphine taper protocol, according to the New England Journal of Medicine.

#### Section E: Anticipated Benefits from Medical Cannabis

Opioid use and overdose reduction have been observed in states with legal medicinal or recreational cannabis. Recently, New York and Pennsylvania approved Opioid Use as a qualifying condition for medicinal cannabis in order to address the growing opioid epidemic. It should be noted that New York's medicinal cannabis program is modeled after Minnesota's. Medicinal cannabis may reduce the use of highly addictive pain killers in Minnesota, while addressing side effects and symptoms of other medication and medical conditions that patients with Opioid Use Disorder experience. Medicinal cannabis eliminates the risk for overdose mortality and severe side effects in comparison with opioids and other pain killers. Utilizing cannabinoids within the endocannabinoid system shows promise in assisting with addiction cessation. A person cannot overdose from the use of cannabis.

#### **Population Level Benefits**

- Reduce number of hospitalizations related to opioid overdose and for opioid dependence;
- Save lives by reducing morbidity and mortality rates related to opioid overdose;
- Give Minnesotans suffering from opioid dependence a treatment option that is more widely available than medication assisted treatment or in-patient rehabilitation.

#### **Individual Level Benefits**

- Reduce symptoms of opioid withdrawal lessen nausea, help appetite, promote rest / sleep;
- Improve sense of emotional control by reducing craving anxiety;
- Improve success / retention rates for people in medication assisted treatment (methadone, buprenorphine (Suboxone), Naltrexone, Vivitrol);
- Prevent people who use cannabis to support themselves in recovery from doing so illegally and potentially going to jail.

#### Section F: Scientific Evidence of Support for Medical Cannabis Treatment

#### Cannabis as a Substitute for Opioid-based Pain Medication; Patient Self-Report

A journal published by *Cannabis and Cannabinoid Research* analyzed a self-reported patient survey with a sample size of 2897 participants. Prescription drug overdoses are the leading cause of accidental death in the United States. Cannabis can be an effective treatment for pain, greatly reduces the chance of dependence, and eliminates the risk of fatal-overdose compared to opioid-based medications.

34% of the sample analyzed reported using opioid-based pain medication in the past six months. 97% of the sample "strongly agreed/agreed" that they are able to decrease the number of opiates they consume when they also use cannabis, and 81% "strongly agreed/agreed" that taking cannabis by itself was more effective at treating their condition than taking cannabis with opioids. 92% of the sample "strongly agreed/agreed" that they prefer cannabis to opioids for the treatment of their condition and 93% "strongly agreed/agreed" that they would be more likely to choose cannabis to treat their condition if it were more readily available. In addition, 80% of patients reported that cannabis by itself was more effective than their opioids.

When discussing the implications of this study from the macro level, there have been three previously published indicators of public health changes in states that permit medical cannabis: decreases in opioid related mortality, decreases in spending on opioids, and a decrease in traffic fatalities. At the micro level, there is a great deal of individual risk associated with prolonged use of opioids and perhaps even non-opioid-based pain medications. xiii

#### Do Medical Marijuana Laws Reduce Addictions and Deaths Related to Pain Killers?

Many medical marijuana patients report using marijuana to alleviate chronic pain from musculoskeletal problems and other sources. A study by the Rand Corporation looks at positive impacts of medical marijuana laws and finds that there may be a reduction in the harms associated with opioid pain relievers in states with liberal medical marijuana laws. The research looks at two factors for determining opiate addiction: admission to addiction treatment programs, and opioid overdoses. The research finds that states permitting medical marijuana dispensaries experience a relative decrease in both opioid addictions and opioid overdose deaths compared to states that do not. Findings suggest that broader access to medical marijuana may have the potential benefit of reducing abuse of highly addictive painkillers used for both medical and nonmedical purposes.

Based on treatment admission data, the research finds no significant change in admissions for states with restrictive medical cannabis laws, such as Minnesota. However, in states with greater accessibility, the research has found a significant decrease in individuals seeking treatment for opiate misuse and addiction, with an average decrease of 18.5%. When only looking at data for individuals seeking treatment on their own volition (not being referred by the criminal justice system), the research finds a reduction of 11%. Based on an analysis of opiate-overdose related mortality and medical cannabis laws, the research finds an inconsequential impact for states like Minnesota. However, with states with more permissive medical marijuana laws, the researchers find a 20% reduction in overdose-related fatalities.

The research shows a significant decrease in medical and non-medical opiate use in states where legal cannabis is available, suggesting that it is being used as an alternative for pain

treatment and for managing addictions. The reduction in opiate-related fatalities suggests that it is a safer alternative, and that further research and expansion of access should be considered in the context of today's opiate epidemic.xiv

# Medical Cannabis Access, Use, and Substitution for Prescription Opioids and Other Substances: A Survey of Authorized Medical Cannabis Patients

In research published in the *International Journal of Drug Policy*, researchers survey Canadian medical cannabis patients to determine usage trends, issues of accessibility, and impacts, especially surrounding the issue of medication substitution. The researchers found that 63% of patients served by Canadian cannabis company Tilray use cannabis as a substitute for traditional pharmaceutical medications. Of the 63% of patients, 32% substituted cannabis for opioids, 16% for benzodiazepines, and 12% for antidepressants. The most common reason for medication substitution cited in the survey was "less adverse side effects". Respondents report that medical cannabis is incredibly effective at symptom relief, especially around pain-related conditions, with 95% reporting that medical cannabis "often" or "always" relieves their symptoms. The authors argue that in light of the growing rates of morbidity and mortality associated with prescription medications, particularly opiates, cannabis can play a significant role in reducing the health burdens of problematic prescription drug use.\*\*

## Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in the United States, 1999-2010

This study discusses the correlation between the introduction of medical cannabis laws and the decrease of opioid analgesic (painkiller) overdose mortality in the United States from 1999 to 2010. In an analysis of death certificate data from 1999 to 2010, it was found that medical cannabis laws were associated with a mean 24.8% lower annual rate of opioid analgesic overdose deaths, compared to states without laws. In 2010, this translated to an estimated 1729 fewer deaths than expected. This finding persisted when excluding intentional overdose deaths (i.e. suicide), and when including all deaths related to heroin, even if no opioid analgesic was present. These findings indicate that 1) medical cannabis laws are associated with lower opioid analgesic overdose mortality among individuals using opioid analgesics for medical purposes and 2) lower rates of opioid analgesic overdose mortality were not offset by higher rates of heroin overdose mortality.

Although evidence for the analgesic properties of cannabis is limited, it may provide analgesia for some individuals. In addition, patients already receiving opioid analgesics who start medical cannabis treatment may experience improved analgesia and decrease their opioid dose, thus potentially decreasing their dose-dependent risk of overdose. Finally, if medical cannabis laws lead to decreases in polypharmacy - particularly with benzodiazepines - in people taking opioid analgesics, overdose risk would be decreased.xvi

#### Medical Marijuana Laws Reduce Prescription Medication Use in Medicare Part D

The research by Bradford and Bradford explores correlations between the increased accessibility of medical marijuana on Medicare Part D spending. The study utilizes publicly accessible physician prescribing data across states with and without medical marijuana laws to

determine what conditions the medical community is recommending cannabis over FDA approved drugs for treatment.

Bradford and Bradford find the most significant reduction in the number of daily doses for FDA approved medications for pain management (primarily, opiate-based painkillers), with an average reduction of 1,826 daily doses prescribed per physician annually in states with medical marijuana laws. Researchers also found a significant reduction in prescriptions for treating anxiety, nausea, psychosis, and seizures, modest reductions in prescriptions for treating depression and sleep disorders, and insignificant impacts on prescriptions for glaucoma and spasticity.

Researchers found that the reduction of prescription medication use had significant cost savings for government healthcare programs. The research estimates that annual savings in Medicare Part D nationally were \$165.2 million in 2013 as a result of changed prescribing behaviors in states which have legalized medical marijuana, and that further cost reductions would appear when researching other government aid programs, or with the expansion of medical marijuana access in other states. xvii

#### Rationale for Cannabis-Based Interventions in the Opioid Overdose Crisis

The Lucas study discusses the substitution effect: a theory that examines how the availability of one good can impact and influence the use of other goods. Observational and epidemiological studies have found that medical cannabis programs are associated with a reduction in the use of opioids and associated morbidity and mortality.

Recently, a retrospective survey of Michigan patients concluded that medical cannabis use was associated with a 64% decrease in opioid use, decreased side effects of medications, and an improved quality of life; many research subjects in surveys around the country found that in those that report opioid-based pain medications, up to 97% "strongly agreed/agreed" that they were able to decrease their opioid use when using medical cannabis. In a study done in 2011 of cannabinoid-opioid interactions, it was noted that cannabinoids and opioids share many similar therapeutic and pharmacodynamic properties, including analgesic (pain-killing) effects; the potential to induce hypothermia, sedation, and hypotension; as well as inhibition of intestinal motility and locomotor activity.

This paper proposes three important windows of opportunity for cannabis for therapeutic purposes (CTP) to play a role in reducing opioid use and interrupting the cycle towards opioid use disorder, the first being prior to opioid introduction in the treatment of chronic pain. Research suggests that four out of five heroin users report their opioid use began with prescription opioids. If physicians and patients have access to a safer, less addictive alternative for pain control like cannabis, introducing it into the course of care as a first line treatment could potentially prevent the opioid overuse cycle from starting by not only reducing the risk pain patients would have of developing opioid use disorders, but also by reducing the overall supply of pharmaceutical opioids on the black market. The second window of opportunity for CTP is as an opioid reduction strategy for those patients already using opioids, as cannabis augments the pain relieving potential of opioids, and can re-potentiate their effects, thereby reducing the need to increase the dosage of opioid pain medications, and the third is as an adjunct therapy to methadone or suboxone treatment in order to increase treatment success rates as a part of opioid replacement therapy (ORT). \*\*viii\*

#### Recreational Cannabis Legalization and Opioid-Related Deaths in Colorado, 2000-2015

The American Journal of Public Health analyzed the effects of recreational cannabis legalization on opioid-related deaths in Colorado. This study used an interrupted time-series design to analyze monthly counts of opioid deaths from January 2000 through December 2015. Rates of opioid deaths were analyzed and compared before and after Colorado stores began selling recreational cannabis. Colorado's legalization of recreational cannabis sales and use resulted in a 0.7 deaths per month reduction in opioid-related deaths. This reduction represents a reversal of the upward trend in opioid-related deaths in Colorado. It can be concluded that legalization of cannabis in Colorado was associated with short-term reductions in opioid-related deaths. Xix

# Substituting Cannabis for Prescription Drugs, Alcohol, and Other Substances Among Medical Cannabis Patients: The Impact of Contextual Factors

The research done in this article discusses substitution of cannabis for prescription drugs, alcohol and other substances (mainly illicit drugs) for medicinal purposes using the substitution effect: a theory that examines how the availability of one good can impact and influence the use of other goods. Several studies have identified analgesia (pain killing) as a prominent reason for using cannabis for therapeutic purposes (CTP), and cannabis has several potential advantages relative to widely used opiate analgesics (pain killers) including fewer side-effects, a lower risk of dependence, and no possibility of fatal overdose.

The participants in this study were 473 self-identified current users of CTP drawn from the Cannabis Access for Medical Purposes Survey (CAMPS). The survey involved 414 forced choice and open-ended items that queried demographic information, medical conditions and symptoms, and patterns of cannabis use. The results of this study are consistent with a growing body of research suggesting that cannabis use may play an important role in the use of prescription drugs, alcohol and illicit substances.

The high rate of substitution for prescribed substances, particularly among patients with pain-related conditions, suggests that further research into cannabis/cannabinoids as a potentially safer substitute for or adjunct to opiates is justified, and adds to research suggesting this phenomenon is robust across samples. The finding that cannabis was substituted for alcohol and illicit substances suggests that the medical use of cannabis may play a harm reduction role in the context of use of these substances and could have implications for substance use treatment approaches requiring abstinence from cannabis in the process of reducing the use of other substances. Taken together, these findings provide additional evidence for the widespread nature of cannabis substitution and suggest potentially fruitful avenues for further research that elucidates the complex interaction between cannabis use and the use of other substances.\*\*

## The Endocannabinoid System as a Target for Addiction Treatment: Trials and Tribulations

In addressing addiction as a public health issue, medical professionals are limited in treating opioid addiction due to the small presence of viable treatment options. This study from the medical journal, *Neuropharmacology*, examines the ways in which endocannabinoid signaling is involved in reward and addiction. Randomized, controlled trials were utilized in

evaluating cannabinergic medications for addiction. Results suggested that cannabinergic medications, such as dronabinol, are effective in reducing symptoms of opioid withdrawal. Both cannabinoid receptor 1 (CB1) agonists and antagonists show promise in promoting addiction cessation of opioids and other substances. The study suggests that the endocannabinoid system is a promising target for addiction treatment.\*\*xxi

#### Cannabis Abuse is Not a Risk Factor for Treatment Outcome in Methadone Maintenance Treatment: A 1-year Prospective Study in an Israeli Clinic

The objective of this study was to identify the prevalence of cannabis use in an Israeli methadone maintenance treatment (MMT) clinic, if cannabis use changes over time during MMT, if cannabis use is related to measurable outcomes of retention rate and the abuse of drugs, if the use of cannabis is connected to psychopathology/ HIV/HCV risk-taking and infectious diseases, if cannabis users (CUs) have a different psychosocial and demographic profile than nonusers (NCUs), and if cannabis use is part of a polydrug tendency or a distinct substance of abuse. Patients in the study had completed one year of MMT, underwent random urine analysis for various drugs of abuse, responded to self-report questionnaires, interviews, and hepatitis C & HIV testing. It was found that CUs did not increase use, significantly, over a one-year period. CUs were found to be more often polydrug users than NCUs, but CUs did not exhibit signs of increased psychological distress, infectious diseases, did not leave MMT earlier than NCUs, and did not engage in more HCV/ HIV risk-taking behavior. It was concluded that no specific influences of cannabis use on psychological and medical conditions of MMT patients were observed.\*\*

# Cannabis as Secondary Drug is Not Associated with a Greater Risk of Death in Patients with Opiate, Cocaine, or Alcohol Dependence

The objective of this study from 2017 was to assess the influence of cannabis use as secondary drug on mortality of patients with other substance use disorders. Participants were patients with opiate, cocaine, or alcohol dependence that were admitted to detoxification from 2001 to 2010 at a teaching hospital in Badalona, Spain. During admission into the study, patients' sociodemographic characteristics, drug use, medical comorbidities, and urine drug screens were obtained. A total of 474 patients with a median age of 38 were admitted. Positive urinary cannabis was detected in 168 or 38% of patients. Prevalence of cannabis use among patients with opiate, cocaine, or alcohol dependence was 46.5%, 42.9%, and 25.2%. There was no association between cannabis detection and overall mortality in the study's regression models, but AIDS-related deaths were more frequent in patients that were positive for cannabis. (If patients with compromised immune systems are smoking cannabis from the illicit market, patients may be inhaling bioaerosols, mold, fungus, pesticides, heavy metals, or other contaminants that aren't tested on cannabis from the illicit market). The study concluded that cannabis use did not confer an increased risk of death in patients with severe opiate, cocaine, or alcohol dependence. xxiii

#### Conclusion:

Access to medicinal cannabis has the potential to decrease opioid mortality rates, ease symptoms of treatments of opioid use disorders, ease withdrawal from opioids, and is viable option for addiction treatments and harm reduction in Minnesota. Cannabis use is not associated as a risk factor for treatment outcomes in methadone maintenance treatments. Medicinal cannabis may assist in addiction cessation. One may not overdose on medicinal cannabis. Approving opioid use disorder will help address the opioid epidemic in Minnesota, by allowing patients a safer avenue for treatment. It is recommended that opioid use disorder be an approved qualifying condition for Minnesota's Medical Cannabis Program.

#### Section G: Letters in Support of Adding the Medical Condition

#### \*see attached.

"To whom it may concern,

I am writing this letter as a licensed alcohol and drug counselor that also works as a harm reductionist with the opioid using population. Working at a methadone and Suboxone clinic I see patients come in to our facility in severe withdrawal. Until the patient is stable on their medication they often have symptoms of withdrawal that could be compared to the flu times 10. What I have witnessed over the past 4 years working with this population is that THC assists heavily with opioid withdrawal as well as cravings to use opioids for some. The use of THC helps the person to not use opioids such as prescription medication, heroin and numerous synthetics like Fentanyl. By using marijuana this also helps them to be at no risk of overdose and death compared to the risks of opioids specifically illicit street opioids. With the clients I work with about 60% of them use marijuana to help cope with opioid withdrawal and cravings, as well as many mental health symptoms with a high number being heavy anxiety and PTSD. I do have 3 patients that are on the medical marijuana program but find it difficult to maintain due to cost, most have to fill in with illicit street marijuana due to financial cost of program.

As a person that works with addiction and specifically opioids I spend much of my days training first responders, community, family, active users and treatment providers to use Naloxone to reverse and opioid overdose, not once has anyone died due to using marijuana nor overdosed. This drug has so many properties that are helpful for people who use drugs specifically opiates. Often when working with clients I will create treatment plans that state, "I will smoke more marijuana and shoot less heroin." Using harm reduction techniques like this for opioid dependent patients has proven for over 3 years to be extremely successful with my patients, having them choose a lesser harmful drug to replace one that could potentially kill them and will also help with withdrawal and cravings has given most of my patients the means to become successful at no longer using opioids.

I firmly believe that marijuana in replacement of an opioid is the best way to help alleviate the deaths we are having daily in the state, and nationwide, and it is the safer option for those with not only addiction issues but chronic pain issues instead of prescribing opioids that could be more harmful be it long or short term for the person."

Thank you,

#### Citations and Research:

- <sup>i</sup>ICD-10-CM diagnostic code.
- iiDSM-5.
- iiiSymptomology of opioid disorder and misuse.
- ivTreatments of opioid use disorder.
- <sup>v</sup>Symptoms of withdrawal syndromes.
- viOpioid use side effects.
- viiMethadone, buprenorphine, LAAM side effects.
- viiiBenzodiazepine side effects.
- ixClonidine side effects.
- \*Loperamide side effects.
- xiProchlorperazine side effects.
- xiiNaproxen side effects.
- xiiiCannabis as a substitute for opioids.
- xivCannabis, addiction, and deaths related to pain killers.
- xvCannabis as a substitution for prescription opioids and other substances.
- xviCorrelation between medical cannabis laws and reduction in opioid overdose mortality.
- xviiMarijuana laws and the reduction of prescription medications.
- xviiiCannabis and opioid harm reduction.
- xix Analyzed effects of cannabis legalization and opioid related deaths in CO.
- xxMedical cannabis as a substitution for other substances.
- xxiThe endocannabinoid system and addiction.
- xxiiCannabis use and methadone maintenance treatment.
- xxiiiCannabis as secondary drug is not associated with a greater risk of death in patients with addiction disorders.

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<sup>&</sup>lt;sup>v</sup> Treatment of Opioid-Use Disorders | NEJM. (n.d.). Retrieved from https://www.nejm.org/doi/full/10.1056/NEJMra1604339

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- viii Sleeping pills and minor tranquillizers. (n.d.). Retrieved from <a href="https://www.mind.org.uk/information-support/drugs-and-treatments/sleeping-pills-and-minor-tranquillisers/side-effects-of-benzodiazepines/#.W0uOA9hKi8V">https://www.mind.org.uk/information-support/drugs-and-treatments/sleeping-pills-and-minor-tranquillisers/side-effects-of-benzodiazepines/#.W0uOA9hKi8V</a>
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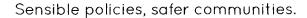
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July 25, 2018

Commissioner Jan Malcolm Minnesota Department of Health Office of Medical Cannabis PO Box 64882 St. Paul, MN 55164-0882

Re: Petition to add Opioid Use Disorder as a Qualifying Condition for Medical Cannabis

#### Dear Commissioner Malcolm:

I write today in support of Sensible Minnesota's petition to add Opioid Use Disorder ("OUD") as a qualifying condition for medical cannabis in Minnesota. As you may know, there is much debate about medical cannabis and its usefulness in reducing opiate use and dependence in the United States. In Minnesota, we added intractable pain as a qualifying condition in 2016, and our own numbers show substantial success with reduction and elimination of opiate therapy for patients using medical cannabis. States are now moving toward a blanket allowance for medical cannabis as an alternative therapy for patient patients.

- New York: On June 18, 2018, New York State announced they are developing a regulatory
  amendment to add opioid use as a qualifying condition for medical cannabis. This was in
  response to a 180% increase in opioid related deaths in a 6-year period. If you are not familiar,
  New York modeled its medical cannabis program after Minnesota, learning from some of our
  mistakes, but still retaining the integrity of a research-based program.
- Pennsylvania: In May 2018, the Pennsylvania Department of Health approved temporary changes to the state's medical cannabis program adding OUD to the list of qualifying conditions giving physicians another tool for treatment of OUD. Pennsylvania also has a medical cannabis program that is considered "restrictive" and was developed and implemented after Minnesota's.
- Illinois: Lawmakers in Illinois passed legislation qualifying anyone with a prescription for opioids eligible for its medical cannabis program. The Alternatives to Opioids Act would allow millions of patients to apply for temporary access to the state's existing medical cannabis program. This bill is currently awaiting signature by the governor of Illinois.

According to a report published by Minnesota's Office of Medical Cannabis, in the first five months that intractable pain patients could access medical cannabis, 56% saw a reduction in pain and 7% noted a reduction of other pain medications as the most important benefit from medical cannabis. A total of 64% mentioned pain reduction as a benefit.

Further, according to data published by the Minnesota Department of Health, the opioid epidemic in Minnesota is worsening. There were 395 opioid overdose deaths in 2016 and over 2,000 nonfatal hospital-treated opioid overdoses. Further, in 2014, the hospitalization rate for OUD was 304.3 per 100,000. Preliminary numbers for 2017 show an increase in opioid-involved overdose rates, with 401 deaths recorded, according to the Minnesota Department of Health's Preliminary 2017 Drug Overdose Deaths Report. This is truly a crisis, and we strongly believe all remedies are available should receive serious consideration from policy and lawmakers alike.

Sensible Minnesota is dedicated to saving lives in Minnesota. While medical cannabis is not the panacea to the opioid epidemic, it is a tool that will reduce the prevalence of opioid use and curtail the upward trend of opioid-related overdose deaths in Minnesota.

On behalf of the organization, I strongly urge you to add opioid use disorder as a qualifying condition for medical cannabis in Minnesota.

Sincerely,



President, Sensible Minnesota

July 26, 2018

Commissioner Jan Malcolm Minnesota Department of Health Office of Medical Cannabis PO Box 64882 St. Paul, MN 55164-0882

Re: Petitions to add Opioid Use Disorder and Traumatic Brain Injury as Qualifying Conditions for Medical Cannabis

To Whom it May Concern:

I am a U.S. Army veteran, a Minnesotan, and a medical cannabis patient. For over a decade, I served as a Counterintelligence Special Agent for the US Army's Special Operations Community.

My first deployment to Iraq was from April 2007 through July 2008, where I was involved in two IED explosions and diagnosed with a "mild traumatic brain injury" (TBI) and a shoulder injury. When I returned, I was placed on chronic opioid medication for pain management. From August 2008 to October 2009, I received 46 prescriptions for various opioid preparations, including:

- 8/20/2008-11/6/2008 nine prescriptions;
- 11/12/2008-1/6/2009 eight prescriptions;
- 1/12/2009-4/19/2009 twelve prescriptions;
- 5/12/2009-7/14/2009 seven prescriptions; and
- 7/17/2009-11/1/2009 ten prescriptions.

The physical ailments quickly caught up to the anxiety, but that morphed into something I didn't recognize and couldn't control. I became extremely hostile and violent, and I wanted everyone to feel my pain and know what I live with. The Army pumped me full of happy pills for sadness and pain pills for the aching muscles, the ailing bones, constipation, sweating, dizziness... The pills just never ended.

I was once again deployed to Iraq from October 2009 to October 2010, and during this deployment sustained a third TBI. International deployments, austere environments, and national emergency response activations piled on stress and anxiety. I continued using prescribed opioids to control the pain while continuing my military career.

My third deployment was to Afghanistan from 2013 to 2014. While deployed, my opioid dependence escalated, and I was able to obtain heroin. Despite my addiction, I was a model soldier, even receiving one of six Bronze Stars awarded for this deployment, an award rarely given to soldiers of my rank.

After returning from deployment, on October 14, 2014, I attempted suicide by overdosing on opiates. Fortunately, the attempt failed, and I entered an intensive PTSD treatment program for 2

months. The program focused on prescribing more pharmaceuticals with side effects including suicidal ideations, depression, and anxiety. I was then medically retired from the Army in June of 2015 due to symptoms from my traumatic brain injuries and post-traumatic stress disorder.

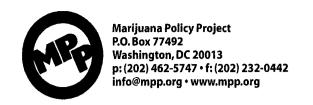
Upon retirement from the Army, I found cannabis and began the road to recovery and getting my life back. Over the past three years, with cannabis, I have built my own business as an organic farmer, volunteer within the community, and am here to support and care for my family.

I joined the medical cannabis registry in October 2016 and am grateful that I have safe and legal access to medical cannabis. This is an option that anyone suffering from opioid use disorder, traumatic brain injury, or post-traumatic stress disorder should have to treat their condition and set them on the road to better health.

Despite being shot 3 times with an AK-47 and hit with 21 improvised explosive device (IED) blasts, which resulted in five traumatic brain injuries, three deployments, and nearly a decade of opioid abuse, I am here today to tell you that cannabis saved my life. I hope it can save others' lives too.

Sincerely,

"We change laws."



July 27, 2018

Commissioner Jan Malcolm Minnesota Department of Health Office of Medical Cannabis PO Box 64882 St. Paul, MN 55164-0882

Re: Medical cannabis opiate use disorder petition

Dear Ms. Malcolm:

My name is and I am the director of state policies at the Marijuana Policy Project, the largest marijuana policy reform organization in the United States. MPP has been working to enact compassionate and sensible marijuana policies for more than 20 years. It was our honor and pleasure to work with patients and their loved ones as a leading partner in Minnesotans for Compassionate Care, which led the medical marijuana advocacy campaign in Minnesota until the enactment of the law in 2014.

Although we were grateful for the law's enactment, it was bittersweet because the initial program was exceptionally restrictive and left behind most patients who could benefit from medical cannabis. Since then, it has been heartening to see the Department of Health expanded the program by approving additional serious medical conditions.

We write today in support of the petition to add opiate substitution as a qualifying condition.

In the past year, states have increasingly begun to look at adding opiate substitution as a qualifying condition, and that trend will surely continue. In February, Dr. Rachel Levine, physician general for the Pennsylvania Department of Health, approved opiate-use disorder as a qualifying condition, following the recommendation of the state's advisory board. In New Jersey in June, the State Health Commissioner Shereef Elnahal announced the state was considering following suit. Hawaii's legislature approved a bill to allow medical cannabis for opiate substitution, but Gov. David Ige vetoed it on July 10, 2018, asserting the proper approach would be an administrative petition.

In New York, the health department added opioid replacement as a qualifying condition on July 12 — meaning any condition an opiate could be prescribed for

would qualify, even if it does not meet the definition of chronic pain, which is already a qualifying condition in New York.

As you surely know, the opiate epidemic has taken staggering numbers of American lives. In 2016 alone, more than 30,000 Americans died of opiate overdose,<sup>1</sup> with 376 opioid-involved deaths reported in Minnesota.<sup>2</sup>

Many people struggling with opiate addiction have found cannabis to be beneficial both at easing withdrawal and as a substitute. For many, having cannabis as an option could prevent a relapse, which can be the difference between life and death.

In 2016, an international team conducted one of the most comprehensive surveys of its kind, which examined 60 studies on cannabis and mental health, and found that, "Research suggests that people may be using cannabis as an exit drug to reduce use of substances that are potentially more harmful, such as opioid pain medication."

Another study found that people adjusting to medication-assisted treatment for opioid addiction suffered less from withdrawal if they were consuming marijuana.<sup>4</sup>

If a physician believes cannabis could help their patient discontinue the use of opiates, Minnesota law should not stand in way of that option. It is also worth noting that some of these individuals who are struggling with addiction may otherwise self-medicate cannabis, accessing it on the robust illicit market. It is far better to bring them into the legal medical cannabis program, where cannabis is tested, regulated, and not sold by dealers who may also sell other drugs.

We respectfully urge you to approve the petition to approve opiate use withdrawal.

#### Sincerely,



<sup>1</sup> https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates

<sup>&</sup>lt;sup>2</sup> http://www.health.state.mn.us/news/pressrel/2017/opioid090717.html

<sup>&</sup>lt;sup>3</sup> University of British Columbia, "Marijuana could help treat drug addiction, mental health, study suggests," ScienceDaily, Nov. 16, 2016.

<sup>&</sup>lt;sup>4</sup> Jillian L. Scavone, et al., "Impact of Cannabis Use during Stabilization on Methadone Maintenance Treatment," Am. J. on Addiction Vol. 22 2013.



July 23, 2018

Minnesota Department of Health Office of Medical Cannabis P.O. Box 64882 St. Paul, MN 55164

To the Minnesota Department of Health,

My name is I graduated with a PhD in Neuroscience from the University of Texas Southwestern Medical Center at Dallas, and my research has focused on drug addiction and brain health. I am a professor with the Holistic Cannabis Academy, author of *Vitamin Weed: A 4-Step Plan to Prevent and Reverse Endocannabinoid Deficiency*, and CEO of Infused Health, a technology platform for certified cannabis coaches.

I strongly support adding Opioid Use Disorder (OUD) as a qualifying condition to the Minnesota medical marijuana program, due to strong published and anecdotal evidence of both the safety and efficacy of cannabis in short-term opioid withdrawal and long-term recovery. Finally, as a cannabis researcher I have written a study on cannabis to prevent Opioid Use Disorder in high-risk patients receiving knee-surgery.

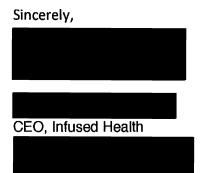
Cannabis substitution is an effective harm reduction method for those who are unable or unwilling to stop using prescription opioids or heroin, as evidenced by multiple published studies. <sup>1-3</sup> Cannabis use is common among opioid-dependent patients, but a recent study found that cannabis use either has no impact on those in naltrexone treatment or improved retention in those treatment programs. <sup>4-6</sup> One study established safety of oral CBD with fentanyl in humans. <sup>7</sup> Several clinical trials have completed or are in progress on the role of cannabinoids in treating Opioid Use Disorder and have found success in reducing drug craving and relapse. <sup>8-10</sup>

Cannabis containing low doses of THC or CBD-containing cannabis can relieve anxiety and mood issues, which are a key symptom of both short-term withdrawal from opioids and post-acute withdrawal syndrome (PAWS). Insomnia and inability to stay asleep are key symptoms of acute opioid withdrawal; cannabis treats insomnia better most over-the-counter or prescription sleep aids. Cannabis works to reduce vomiting, nausea, and diarrhea, all symptoms of opioid withdrawal.

The endocannabinoid system regulates every other neurotransmitter system, including the opioid system. Using cannabis to treat Opioid Use Disorder can accelerate the body's ability to make endorphins again, which is normally inhibited from long-term opioid use. This makes cannabis a preferred method for OUD as compared to methodone or suboxone, which is maintenance opioid therapy and has a laundry list of side effects and withdrawal syndrome.

In my personal experience as a cannabis educator and health coach, patients with opioid use disorder have responded well to cannabis products contain THC, CBD, or both for treatment of acute and long-term withdrawal syndromes as well as maintaining opioid sobriety for the long-term. It is impossible to die from respiratory depression or other causes from cannabis, making it safer to use than any other prescription or over-the-counter drug used for OUD, including suboxone or methadone.

In sum, I strongly urge you to add Opioid Use Disorder (OUD) as a qualifying condition for medical marijuana in Minnesota.



www.infused.health

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July 26, 2018

Commissioner Jan Malcolm Minnesota Department of Health Office of Medical Cannabis PO Box 64882 St. Paul, MN 55164-0882

Re: Support for additional disorders as qualifying conditions for Medical Cannabis

Dear Ms. Malcolm:

I am writing to you in support of Sensible Minnesota's request to add qualifying conditions to the Medical Cannabis Program, specifically for those living with Hepatitis C and those dealing with Opioid Use Disorder (OUD).

The Rural AIDS Action Network (RAAN) has been working with folks diagnosed with Hepatitis C for several years. While treatments have advanced and are less toxic to the individual, we still hear that folks are dealing with side effects, particularly related to decreased appetite and some pain related to their condition. While folks can successfully clear the Hepatitis C virus and go on to lead long productive lives, we know that treatment challenges can be a barrier to initiating medication and feel allowing those patients to access Medical Cannabis can reduce that barrier AND limit seeking other pain relief methods, including opioids.

For the past four years, RAAN has been actively involved in the Opioid Use Disorder (OUD) epidemic. Our work began training community members and distributing Narcan through our five offices in greater Minnesota. Last year that work expanded as part of DHS STR response and funding providing by SAMSHA. Our work now includes working more closely with communities to ensure much needed Narcan is available statewide. As experts in Harm Reduction, we know that minimizing risks is paramount and that is the basis for our request. Many of our clients began using opioids as a result of an accident or some other physical trauma. Some may become dependent while others truly have an ongoing need. Recovery from OUD can be difficult and painful at times so we promote Medical Cannabis, when available, to reduce opioid dependence and/or ongoing use while also minimizing side effects of detox. For many, the physical and emotional feelings experienced through detox are often enough of a deterrent that folks continue to use opioids, especially when other options are not available or supported.

Please consider this request as it will aid in providing those living with HCV and dealing with OUD other options for managing their conditions.

Sincerely,





#### Students for Sensible Drug Policy of MN

(651) 760-7727 1536 Hewitt Ave, MS-1808 St. Paul, MN 55104 ssdp.org

July 28, 2018

Commissioner Jan Malcom Minnesota Department of Health Office of Medical Cannabis PO Box 64882 St. Paul, MN 55164-0882

Re: Support for new qualifying conditions

To whom it concerns:

We are writing to you today in support of adding Opioid Use Disorder and Hepatitis C as qualifying conditions for medical cannabis in the State of Minnesota.

As a group of students from two of Minnesota's top universities who have personal, academic, and professional interests in studying and implementing science and evidence-based drug and harm reduction policies, we have reviewed and contributed towards these petitions extensively to ensure there is ample scientific evidence to support program expansion.

Our collective studies of drug policy have begun during the height of the opiate crisis, prompting our interest in and focus on principles of harm reduction. Opiate overdose is a leading cause of death among young people, and it is our classmates, friends, families, and neighbors who are paying the human price of this crisis. Though we recognize that access to medical cannabis is not in and of itself a solution to the opiate epidemic, by studying other states, we can see that cannabis is one of many tools for reducing the harms of opiate addiction that are not yet available in our state.

We are also alarmed by increased rates of new HCV infections in our state and across the country, especially among young adults who inject drugs. While preventative education and ongoing efforts to increase access to sterile injection materials in our state will help reverse the trend, we are most concerned with the health and wellbeing of those who have already been impacted but cannot access pre-existing treatments due to chemical dependency and / or economic constraints.

The approval of medical cannabis as a treatment for these conditions would have a positive impact on our state by allowing our medical professionals and recovery community to have all available tools to combat this issue, thereby improving and saving lives.

Sensibly,

Students for Sensible Drug Policy Hamline University chapter Students for Sensible Drug Policy University of Minnesota – Twin Cities chapter July 29, 2018

Commissioner Jan Malcolm Minnesota Department of Health Office of Medical Cannabis PO Box 64882 St. Paul, MN 55164-0882

Re: Petitions to add Opioid Use Disorder and HCV as Qualifying Conditions for Medical Cannabis

To Whom It May Concern,

My name is a second of the opioid epidemic. We watched in horror as my beautiful, handsome, son slowly killed himself for 14 1/2 years. He became a heroin addict because of my meds that was prescribed by a doctor, I had taken a traumatic fall off my front step in 2001.

I was diagnosed at Mayo Clinic in 2001, with Pudendal Neuralgia, a rare nerve disorder that involves the pudendal nerve, the main motor and sensory of the pelvis. It innervates the vagina, the rectum, hip, and low back and inner thighs. I was given the option of three CT guided injections at Mayo, and secondary, surgery in Nantes, France, yes, the country France. I chose both, the injections first, to confirm the diagnoses, then I went to France per Mayo Clinic's advice to have the decompression and transposition surgery. This type of pain is comparable to stage 4 cancer. I needed something for this kind of pain, without it I for sure would have killed myself.

While I was dealing with my son's demise, watching him slowly kill himself for 14 1/2 years, I also watched myself gain 140 lbs., I became bed ridden after my surgery in France, they went in two inches, made two five-inch incisions in each buttock, cut through the sacrospinous and sacrospinous ligament in order to release the entrapped nerve, that was done bilaterally. The right side was damaged quite severe Professor Robert told me, he didn't' hold out for much hope.

I was on so many opioids, methadone 80 plus methadone 3 times a day plus muscle relaxers, antidepressants, trazadone to help me sleep, 600 mg of gabapentin 3 times a day, I was in bed for five years from that surgery, I was lost to my family and was lost to us all and himself.

My son suffered greatly with Opioid Use Disorder, at the end of his life, he was having multiply seizures a week, he had been in and out of so many treatment places, I literally lost count, we tried tough love, we tried no love, we tried wiping the slate clean, to being used multiply times over and all the while terrified that I would get the call that I had always dreaded. I got that phone call numerous times, overdosed multiply times over the course of those years. Nothing seemed to help.

He was in severe pain, his muscles ached, he looked jaundice a lot of the time, and that's when we found out he had contracted Hepatitis C from his IV drug use. Because of the severe prolonged exposure, which was left untreated for a number of years, he could not hold down a job, he couldn't function. He couldn't remember anything, He would cry in pain some days, he would become very bloated, confused, he would shake violently some days, especially towards the end of his life.

In 2016 when Minnesota opened their medical cannabis program up to those of us who suffer with intractable pain, I enrolled immediately. Since using medical cannabis, I have been able to get off so many medications, deadly, highly addictive medications. I went from 80 mg of methadone a day to only needing 20 mg of methadone total for the day. I was able to cut the majority of my other breakthrough meds, my clonazepam, and also my hydromorphone. That is huge, I never thought I'd be able to do that.

You can't imagine how awful it is to live everyday knowing that it was your fault, it was your ignorance of the dangers of these drugs, not knowing the severity of harm that these drugs can do to someone if fallen into the wrong hands. I live my life every day, trying to end my 16 plus year usage of opioids. I need pain control, and medical cannabis has helped me get off of my meds and also has helped what little meds I do take work better.

I wish there would have been a medical cannabis program when my son was alive. I know he would have benefited greatly from it. Some people can't get off of everything. Some people need some help, and cannabis is that help for so many. I have countless stories of people using harm reduction as a power tool to step away from opioids. It's awful what these drugs to your brain, how I perceive pain, is different than someone who hasn't been on these drugs for as many years as I have.

My son refused to get treatment for his Hepatitis C because at the time of his diagnosis, the treatment caused a lot of discomfort. He was also going through withdrawal so many times I lost count. To watch your child in that state, is torture. It was torture for him and it was torture for those who loved him.

PLEASE, I'm begging you, please add Opioid Use Disorder and hepatitis C to the Minnesota's Medical Cannabis Program. We have yet to see the peak of this epidemic and there is not time to wait. Cannabis has been shown to greatly reduce the symptoms associated with Hep C and Opioid Use Disorder. If I can cut down to 20 mg of methadone a day from 240 mg a day after 16 years of use, someone who's struggling to stay sober the conventional way, could greatly benefit from cannabis.

Harm Reduction works.

Thank you for reading my plea, and I hope you add Opioid Use Disorder and Hepatitis C to the program

Sincerely,