MMP-028

New Jersey Department of Health
Medicinal Marijuana Program
PO 360
Trenton, NJ 08625-0360

MEDICINAL MARIJUANA PETITION
(N.J.A.C. 8:64-5.1 et seq.)

INSTRUCTIONS

This petition form is to be used only for requesting approval of an additional medical condition or treatment thereof as a "debilitating medical condition" pursuant to the New Jersey Compassionate Use Medical Marijuana Act, N.J.S.A. 24:6I-3. Only one condition or treatment may be identified per petition form. For additional conditions or treatments, a separate petition form must be submitted.

NOTE: This Petition form tracks the requirements of N.J.A.C. 8:64-5.3. Note that if a petition does not contain all information required by N.J.A.C. 8:64-5.3, the Department will deny the petition and return it to petitioner without further review. For that reason the Department strongly encourages use of the Petition form.

*This completed petition must be postmarked **August 1 through August 31, 2016** and sent by **certified mail** to:*

New Jersey Department of Health
Office of Commissioner - Medicinal Marijuana Program
Attention: Michele Stark
369 South Warren Street
Trenton, NJ 08608

Please complete each section of this petition. If there are any supportive documents attached to this petition, you should reference those documents in the text of the petition. If you need additional space for any item, please use a separate piece of paper, number the item accordingly, and attach it to the petition.

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1. Petitioner Information

Name: Roseanne Scotti JD & Steven Jenison MD, representing the Drug Policy Alliance

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City, State, Zip Code: Trenton, NJ 08608

Telephone Number: (609) 396-8613

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2. Identify the medical condition or treatment thereof proposed. Please be specific. Do not submit broad categories (such as "mental illness").

Chronic pain

3. Do you wish to address the Medical Marijuana Review Panel regarding your petition?

☒ Yes, in Person

☐ Yes, by Telephone

☐ No

4. Do you request that your personally identifiable information or health information remain confidential?

☐ Yes

☒ No

If you answer "Yes" to Question 4, your name, address, phone number, and email, as well as any medical or health information specific to you, will be redacted from the petition before forwarding to the panel for review.

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5. **Describe the extent to which the condition is generally accepted by the medical community and other experts as a valid, existing medical condition.**

Chronic pain is a common clinical diagnosis that is well accepted by the medical community. It is associated often with diseases of the central & peripheral nervous systems and the musculoskeletal system. In addition to pain signaling mediated by neural transmission, chronic pain can include components of neuroinflammation, neurodegeneration and emotional responses related to the experience of chronic pain. Chronic pain is differentiated from acute pain, which can be anticipated to resolve once the time-limited underlying cause resolves (i.e., post-surgical pain, bone fractures, childbirth). Chronic pain, for the purposes of this petition, includes common causes such as severe chronic back pain, chronic orthopaedic pain, acquired peripheral neuropathies, hereditary neuropathies, severe arthritis, severe traumatic injuries and others that are not included within currently approved conditions (i.e., cancer, multiple sclerosis, inflammatory bowel disease, intractable skeletal muscle spastiticy, and HIV/AIDS). Clinicians commonly provide long-term care to patients with chronic pain related to these conditions, and the management of chronic pain is often problematic. Please refer to the Supporting Document "Medical Cannabis in the Management of Chronic Pain" for more information.

6. **If one or more treatments of the condition, rather than the condition itself, are alleged to be the cause of the patient's suffering, describe the extent to which the treatments causing suffering are generally accepted by the medical community and other experts as valid treatments for the condition.**

The conventional treatments most commonly applied to chronic pain include opioid analgesics, other systemic analgesic / anti-inflammatory drugs, local injections of anesthetic and anti-inflammatory drugs, surgical procedures and physiotherapy. Side effects related to surgical procedures have been reported at rates between 10 to 24 percent while the long-term efficacy of surgical procedures has not been clearly demonstrated to be superior to non-surgical treatments. The widespread use of opioid analgesics for the management of chronic pain has been associated with a nationwide epidemic of opioid dependence and opioid overdose deaths. Other non-surgical treatments have lesser complication rates but also fail to provide lasting long-term relief for a high percentage of patients with chronic pain. Please refer to the Supporting Document for a more detailed discussion.

7. **Describe the extent to which the condition itself and/or the treatments thereof cause severe suffering, such as severe and/or chronic pain, severe nausea and/or vomiting or otherwise severely impair the patient's ability to carry on activities of daily living.**

Severe chronic pain can have profound impacts upon the ability of a person to work productively, socialize, remain physically active and enjoy life. The impacts of severe chronic pain are felt not only by the patient and their families but by society as a whole in terms of lost productivity and health care costs. The opioid dependence and overdose epidemic engendered in large part through the reliance upon opiates in the management of chronic pain has had tragic consequences and has been found recently to have contributed to overall decreases in life expectancy within certain demographic groups in the United States. Please refer to the Supporting Document for more information.

8. **Describe the availability of conventional medical therapies other than those that cause suffering to alleviate suffering caused by the condition and/or the treatment thereof.**

Conventional treatments with lesser complication rates as compared to surgical interventions and opioid analgesics include systemic non-opioid analgesics, local injections of anesthetic / anti-inflammatory drugs, anti-depressant medications, anti-epileptic medications, neuroablation treatments, physiotherapy, acupuncture, massage therapy, and others. While each may have a role in a given patient's treatment plan, either alone or in combination, many patients fail to respond to the available conventional treatments. Based upon population surveys, it is estimated that approximately 40 percent of people with chronic pain report inadequate relief. Please refer to the Supporting Document for a more detailed discussion.

9. **Describe the extent to which evidence that is generally accepted among the medical community and other experts supports a finding that the use of marijuana alleviates suffering caused by the condition and/or the treatment thereof.** *[**Note:** You may attach articles published in peer-reviewed scientific journals reporting the results of research on the effects of marijuana on the medical condition or treatment of the condition and supporting why the medical condition should be added to the list of debilitating medical conditions.]*

Please refer to the Supporting Document for more detail. Three meta-analyses published recently in major medical journals have concluded that medical cannabis is efficacious in the treatment of chronic pain: 1) Hill KP, "Medical Marijuana for Treatment of Chronic Pain and Other Medical and Psychiatric Problems: A Clinical Review", Journal of the American Medical Association (2015); 2) Whiting P et al., "Cannabinoids for Medical Use: A Systematic Review and Meta-Analysis", Journal of the American Medical Association (2015); and, 3) Koppel BS et al., "Systematic Review: Efficacy and Safety of Medical Marijuana in Selected Neurologic Disorders: Report of the Guideline Development Subcommittee of the American Academy of Neurology", Neurology (2014). These findings are consistent with the many clinical trials that constitute the basis for the meta-analyses as well as substantive pre-clinical animal and human data, and medical provider and patient experience (please refer to Letters of Support). Currently, 20 of 25 medical cannabis program states specifically name Chronic Pain as a qualifying condition for enrollment.

10. Attach letters of support from physicians or other licensed health care professionals knowledgeable about the condition. List below the number of letters attached and identify the authors.

Letters of Support (Clinicians):
1) Andrew Medvedovsky MD, Blackwood NJ
2) Joel Meer MD, Newark NJ
3) David Nathan MD, Princeton NJ
4) Jerry Alan Horowitz DO, Beesleys Point NJ
5) Belyn Schwartz MD FAAPMR, Santa Fe NM
6) Laura Brown MD MPH, Santa Fe NM
7) Wendy Johnson MD, Santa Fe NM
8) Anita Briscoe, MS APRN-BC, Albuquerque NM
9) Steven Jenison, MD, Dixon NM

Letters of Support (People living with Chronic Pain):
1) [redacted] Cape May County NJ
2) [redacted] Folsom NJ
3) South Jersey resident (anonymous)
4) Livingston NJ resident (anonymous)
5) [redacted] Santa Fe NM

Journal Articles:
1) Bachhuber MA, JAMA Internal Medicine, Vol. 174, p. 1668 (2014)
2) Boehnke KF, Journal of Pain, Vol. 17, p. 739 (2016)
3) Bradford AC, Health Affairs, Vol. 35, p. 1230 (2016)
4) Case A, Proceedings of the National Academy of Science USA, Vol. 112, p. 15078 (2015)
5) Hill KP, JAMA, Vol. 313, p. 2474 (2015)
6) Koppel BS, Neurology, Vol. 82, p. 1556 (2014)
7) Meier MH, JAMA Psychiatry, Vol. 73, p. 731 (2016)
8) Rudd RA, MMWR, Vol. 64, p. 1378 (2016)
9) Whiting P, JAMA, Vol. 313, p. 2456 (2015)
10) Wilsey B, Journal of Pain, doi: 10.1016/j.pain.2016.05.010. (2016)

I certify, under penalty of perjury, that I am 18 years of age or older; that the information provided in this petition is true and accurate to the best of my knowledge; and that the attached documents are authentic.

Signature of Petitioner	Date
Roseann Scatti	08/29/2016

Medical Cannabis in the Management of Chronic Pain

Supporting Document for the Petition to add Chronic Pain to the list of conditions eligible for enrollment in the New Jersey Medicinal Marijuana Program

Petition brought by Roseanne Scotti JD & Steven Jenison MD
representing the Drug Policy Alliance

Supporting Document prepared by Steven Jenison MD, former Medical Director of the New Mexico Medical Cannabis Program and former Chair of the Medical Advisory Board to the New Mexico Medical Cannabis Program

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Chronic pain is a prevalent and debilitating condition that profoundly impacts quality of life. It is estimated that approximately a third of U.S. adults report experiencing chronic pain at some point in their lives (Johannes 2010). The medical management of severe chronic pain has no simple solution. An over-reliance on surgical interventions and opioids has been costly, both to the health care system in terms of medical costs (Gaskin 2012) and to individuals in terms of opiate addiction, overdose deaths and incompletely treated unremitting pain. It has become increasingly clear that opiate treatment for severe chronic pain is not effective in most cases, probably because the mechanisms of chronic pain are more complex than those of acute pain and include prominent neuroinflammatory and cognitive / emotional components (Beal 2016; Chou 2015).

Between 2000 and 2014, the rate of opioid deaths in the United States increased 200 percent owing mostly to increases in prescription opiate overdoses (Rudd 2016). 1,305 overdose deaths were reported in New Jersey in 2014 compared to 556 traffic fatalities in the same year, making drug overdose the leading cause of accidental death in the state. For the first time since consistent data have been available, the morbidity and mortality among white non-Hispanic Americans in the United States has increased in the period between 1999 and 2013, due largely to increases in suicides and overdose deaths (Case 2015). It is no exaggeration that this situation represents a crisis in the American health care system. In a study published by Bachhuber et al. in *JAMA Internal Medicine* in 2014, they compared trends in opioid overdose deaths between those states that had enacted medical cannabis programs compared to those states without those programs (Bachhuber 2014). They concluded, *"medical cannabis laws are associated with significantly lower state-level opioid overdose mortality rates."* Many clinicians who provide care to patients with severe chronic pain report that their patients have been able to significantly reduce or discontinue their use of opioid analgesics with the use of medical cannabis. The findings of Bachhuber et al. support the possibility that this manifests on a population level as a statewide-decline in overdose deaths. Indeed, in a recent paper by Bradford et al. where statewide Medicare Part D prescription rates were examined, it was *"found that the use of prescription drugs*

for which marijuana could serve as a clinical alternative fell significantly, once a medical marijuana law was implemented. National overall reductions in Medicare program and enrollee spending when states implemented medical marijuana laws were estimated to be $165.2 million in 2013. The availability of medical marijuana has a significant effect on prescribing patterns and spending in Medicare Part D." (Bradford 2016). These population-level findings are corroborated by a survey of chronic pain patients who were enrolled in the Michigan medical cannabis program (Boehnke 2016). Patients using medical cannabis as an adjunct to conventional treatments reported a 64 percent reduction in opioid use and a decrease in medication side effects that affected everyday functioning. A survey of 410 Canadian medical cannabis patients by Lucas et al. (Lucas 2016) showed that 87 percent patients reported substituting cannabis for other drugs that they had been using including prescription medications (80.3 percent), alcohol (51.7 percent) and illicit drugs (32.6 percent).

As of May 2016, 20 of 25 medical cannabis program states (Alaska, Arizona, California, Colorado, Delaware, Hawai'i, Maine, Maryland, Michigan, Minnesota, Montana, Nevada, New Hampshire, New Mexico, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont & Washington) specifically name chronic pain as a qualifying condition for their medical cannabis programs. Three additional states include common medical diagnoses that are associated with chronic pain (Connecticut includes ""Post-Laminectomy Syndrome with Chronic Radiculopathy" & "Complex Regional Pain Syndrome"; Illinois includes "Causalgia", "Chronic Inflammatory Demyelinating Polyneuropathy", "Complex Regional Pain Syndromes Types I & II", "Dystonia", "Fibromyalgia (severe)", "Residual Limb Pain", & "Spinal Cord Injury"; New York includes "Neuropathies" & "Spinal Cord Damage"). Only two medical cannabis states and the District of Columbia (Massachusetts, New Jersey & DC) do not currently include Chronic Pain, or multiple medical diagnoses commonly associated with chronic pain, as qualifying conditions for their programs.

Since the isolation of cannabinoid compounds from *Cannabis* sp. plants in 1965 (Mechoulam 1965; Budzikiewicz 1965), the identification of cannabinoid receptors in the central nervous system in 1990 (Matsuda 1990), and the isolation of the endogenous brain cannabinoid anandamide in 1992 (Devane 1992), the important role of endogenous and exogenous cannabinoids in modulating pain signaling and pain perception has been studied extensively. The modulation of pain transmission by cannabinoids in the CNS and peripheral nervous system occurs mainly through their action on the cannabinoid receptors called CB1, which are richly and widely distributed throughout the cortex, hippocampus, amygdala, basal ganglia and cerebellum (Herkenham 1990). Significantly, cannabinoid receptors are sparsely distributed in the lower brainstem regions that control respiratory and cardiovascular functions, accounting in part for the high therapeutic index and low fatal overdose potential that has been observed with the use of exogenous cannabinoids. Activation of CB1 receptors modifies neural transmission and pain perception in both acute and chronic

pain through mechanisms that are independent of, but interact and are synergistic with, opioid receptors (Abrams 2011; Kazantzis 2016; Meng 1998; Scavone 2013).

In addition to their direct short-term effects upon neural transmission, cannabinoids also have important longer-term effects through modulating, or damping, neuroinflammatory processes that contribute to chronic pain states. These effects result from the modulation of both CB1 and CB2 receptors by both endogenous and exogenous cannabinoids (McPartland 2015). CB2 receptors are present in the body predominantly on cells of the immune system, and in the brain are present on microglial cells that mediate neuroinflammatory reactions (Mecha, 2016). Both of the major cannabinoids contained in marijuana (Δ^9-tetrahydrocannabinol and cannabidiol) have effects on modulating CB1 and CB2 receptors in the brain, and many of their effects appear to occur through physiological mechanisms that are independent of cannabinoid receptors. Cannabidiol (CBD) is of particular interest as an agent that could have beneficial effects in chronic neuroinflammatory states through its significant anti-inflammatory, anti-oxidant and neuroprotective properties. Although the effects of cannabidiol in mitigating neuroinflammation may be mediated in part through its action on cannabinoid receptors, much of its influence appear to occur through other (possibly GPR55 and other "orphan" receptors) mechanisms as these effects are not blocked by cannabinoid receptor antagonists. These actions likely occur through complex interactions with microglial cells, modulating and dampening their pro-inflammatory tendencies through a "retrograde" process that down-regulates the expression of cellular inflammatory processes. [Alsasua del Valle 2006; Bisogno 2010; Booz 2011; Brotchie 2003; Croxford 2003; Downer 2011; Esposito 2006; Fagherazzi 2012; Fernández-Ruiz 2013; Froger 2009; García 2011; Glass 2001; Gowran 2011; Guzmán 2001; Hampson 2000; Hayakawa 2007; Iuvone 2009; Kozela 2011; Kwiatkoski 2012; Lastres-Becker 2005; Oddi 2012; Pacher 2012; Pope 2010; Pradhan 2013; Pryce 2003; Pryce 2012; Ramirez 2012; Rom 2013; Saito 2012; Scotter 2010; Skaper 1996; Skaper 2012; Touriño 2010; van der Stelt 2001; Zuardi 2008]. The effects of neuroinflammation on chronic pain are likely not limited to those diseases that have neurodegenerative processes as their underlying pathology (i.e., multiple sclerosis; Parkinson's disease). The neuropathic pain associated with spinal cord injury, for example, is now known to include a neuroinflammatory component (Walters 2014). Chronic pain and post-traumatic stress disorder (PTSD) are conditions that often co-exist. A recent study by Lerman et al. showed that standardized painful stimuli (capsaicin injections into the quadriceps muscle) elicited higher pain scores in PTSD patients as compared to controls and significantly higher levels of intrathecal pro-inflammatory cytokine IL-1β and delayed secretion of anti-inflammatory cytokine IL-10 (Lerman 2016). These finding suggest that microglial and astrocyte dysregulation contribute to the exaggerated pain response in the patients with PTSD.

Chronic stress and a patient's emotional state affect the perception of pain. In animal models, it has been demonstrated that stress modifies pain pathways in part through cannabinoid receptors, suggesting that this too is a mechanism by which cannabinoids

have a positive impact upon chronic pain (Zheng 2015). Lee et al. demonstrated that the administration of purified Δ^9-tetrahydrocannabinol to human volunteers reduced the unpleasantness and intensity of capsaicin-induced pain and that this was associated with decreased activity in the anterior cingulate cortex and connectivity between the amygdala and the primary sensorimotor cortex (Lee 2013). In a recent survey of 100 consecutive patients returning for yearly recertification in the Hawai'i Medical Cannabis Program, 97 percent of whom were enrolled for chronic pain, the average reported decrease in pain was 64 percent (from 7.8 to 2.8 on a 1-10 scale) and 50 percent of patients also reported relief from stress and anxiety (Webb 2014).

In summary, endogenous and exogenous cannabinoids potentially affect pain perception through three general mechanisms: 1) direct action on neural transmission, mainly through action on CB1 receptors both in the central and peripheral nervous systems; 2) mitigation of neuroinflammatory processes associated with chronic pain, including actions on CB2 receptors; and 3) suppression of pathways between the anterior cingulate gyrus and the sensorimotor cortex that accentuate the perception of pain.

There are now many human clinical studies that support the efficacy of medical cannabis in the management of chronic pain (Abrams 2007; Abrams 2016; Aggarwal 2013; Haroutounian 2016; Jensen 2015; Lynch 2011; Mendoza Temple 2016; Wallace 2007; Ware 2015; Wilsey 2008; Wilsey 2013; Wilsey 2016). Three large meta-analyses on the subject have been published recently in major medical journals (Hill 2015; Koppel 2014; Whiting 2015).

The paper "Medical Marijuana for Treatment of Chronic Pain and Other Medical and Psychiatric Problems: A Clinical Review" by Kevin P. Hill MD appeared in the June 23/30, 2015, edition of *JAMA* (Hill 2015). Quoting from the paper:

"Use of marijuana for chronic pain, neuropathic pain and spasticity due to multiple sclerosis is supported by high-quality evidence. Six trials that included 325 patients examined chronic pain, 6 trials that included 396 patients investigated neuropathic pain, and 12 trials that included 1600 patients focused on multiple sclerosis. Several of these trials had positive results, suggesting that marijuana or cannabinoids may be efficacious for these indications."

Published in the same edition of *JAMA*, Whiting et al. (Whiting 2015) presented a different meta-analysis from that of Hill that reached similar conclusions:

"A total of 79 trials (6462 participants) were included; 4 were judged at low risk of bias. Most trials showed improvement in symptoms associated with cannabinoids but these associations did not reach statistical significance in all trials. Compared with placebo, cannabinoids were associated with a greater average number of patients showing a complete nausea and vomiting response (47% vs 20%; odds ratio [OR], 3.82 [95% CI, 1.55

– 9/42]; 3 trials), reduction in pain (37% vs 31%; OR, 1.41 [95% CI, 0.99 – 2.00]; 8 trials), a greater average reduction in numerical rating scale pain assessment (on a 0 – 10 – point scale; weighted mean difference [WMD], -0.46 [95% CI, -0.24 to 0.01]; 5 trials)."

The Guideline Development Subcommittee of the American Academy of Neurology published their report of a systematic review of the efficacy of medical cannabis in neurologic disorders in the journal *Neurology* in 2014 (Koppel 2014):

"The following were studied in patients with MS: (1) Spasticity: oral cannabis extract (OCE) is effective, and nabiximols and tetrahydrocannbinol (THC) are probably effective, for reducing patient-centered measures; it is possible both OCE and THC are effective for reducing both patient-centered and objective measures at 1 year. (2) Central pain or painful spasms (including spasticity-related pain, excluding neuropathic pain): OCE is effective; THC and nabiximols are probably effective."

Even though the causes of chronic pain, the duration of pain, patient demographics, cannabinoid preparations, duration of treatment and outcomes measures varied between studies, there is a clear pattern of benefit from the use of medical cannabis in many (but not all) patients with severe chronic pain.

As with all medical treatments, there are adverse events observed with the use of medical cannabis. However, these do not appear to reach the level of severity that is commonly associated with the use of opioid analgesics. The most comprehensive longitudinal study of long-term cannabis use was published recently by Meier et al. in the journal *JAMA Psychiatry* (Meier 2016). They found that long-term cannabis use was associated with poorer periodontal health but not other significant poor health outcomes, as compared to long-term cigarette smoking which was associated with worse outcomes in periodontal health, lung function, markers of systemic inflammation, metabolic syndrome, blood lipid abnormalities, glycated hemoglobin and self-reported health. Because the management of severe chronic pain is complex and experience in treatment with medical cannabis is limited, it is advisable that an ongoing clinician-patient relationship be established that can carefully monitor treatment outcomes and adverse events. Canadian physicians have recently published draft guidelines titled "Prescribing smoked cannabis for chronic noncancer pain" that offers clinicians guidance in this area of clinical practice (Kahan 2014).

In conclusion, it is rational public health policy that conditions should be added to the New Jersey Medicinal Marijuana Program when:

1. There is biological plausibility that cannabinoids act in a beneficial manner in affecting a significant disease process;

2. There are clinical data that support positive outcomes in patients with a serious medical condition through the use of medical cannabis;

3. Conventional treatments are either of limited benefit or do not benefit a significant subset of individuals with the condition;

4. Medical cannabis has a higher therapeutic index and lower toxicity profile as compared to conventional treatments.

By all of these criteria, chronic pain should be added to the list of conditions eligible for enrollment in the New Jersey Medicinal Marijuana Program.

Citations

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RA PAIN SERVICES
ANDREW MEDVEDOVSKY, M.D.

New Jersey Department of Health
Office of Commissioner – Medicinal Marijuana Program
Attention: Michele Stark
369 South Warren Street
Trenton, NJ 08608

RE: Chronic Pain, PTSD, and Opioid-Dependence

To Whom It May Concern:

My name is Andrew Medvedovsky, MD and I am a Board Certified Neurologist and Pain Medicine Specialist, full time physician with RA Pain services and director of New Jersey Alternative Medicine practicing in Blackwood, NJ. I am writing this letter to support adding Chronic Pain, PTSD, and Opioid Dependence as qualifying conditions for New Jersey Medical Marijuana Program.

RA Pain Services is a comprehensive Pain Management Practice with multiple locations in south NJ with 15 Physicians. I treat patients with extensive neurological and orthopedic conditions causing chronic pain including traumatic brain injury, headaches, neuropathy, spinal stenosis, and failed back surgery syndrome. We provide patients with various treatments including therapy, injections, appropriate medications, and counseling. Unfortunately, despite extensive treatments with conventional therapies so many of my patients continue to suffer with intractable chronic pain that is managed with long term opioid therapy that leads to dependence, addiction, and multitude of side effects. I offer patients counseling and addiction treatment, but that often fails are replaces one opioid with a different opioid (Suboxone).

According to the CDC from 1999 to 2014, more than 165,000 people have died in the U.S. from overdoses related to prescription opioids. Overdose rates were highest among people aged 25 to 54 years. In 2014, almost 2 million Americans abused or were dependent on prescription opioids. These statistics are alarming and these numbers are still on the rise. Observational studies are my personal

experience with treating thousands of patients with chronic pain, medical marijuana has offered patients dramatic benefits with pain control and the ability to significantly reduce the usage of chronic opioids.

Many of my patients are veterans who suffered extensive physical injuries while on duty and are prescribed opioids to manage their pain. Unfortunately, so many of veterans suffering chronic pain also suffer with PTSD which leads to prescription of multiple pain killers and medications to managed anxiety, depression and sleep. Veterans who suffer with PTSD are at increased risk to become opioid dependence and overdose on prescriptions medications.

In July of 2015 I registered with NJ department of health MMP Program. I currently have close to 600 patients enrolled in New Jersey Medical Program suffering with one of the qualifying conditions. The patients who are enrolled have dramatically reduced the usage of opioid pain killers, sedatives for sleep, anxiety and depression. Their quality of life and functionality has been significantly better. Most patients who are enrolled in the program have severe musculoskeletal spasticity secondary to spinal conditions, but also suffer with Chronic pain, PTSD from the injuries they suffered, and opioid dependence from long term usage. I have witnessed first-hand the drastic pain relief that medical cannabis provides patients, allowing them to reduce usage of opioids and live a productive and functional life.

During my Neurology and Pain Medicine Training at Virginia Commonwealth University in Richmond I spent four years working with Veterans at the Hunter-Holmes McGuire Veterans hospital. I evaluated and treated patients with head trauma, headaches, epilepsy, and chronic pain. Majority of the patients I treated also suffered with PTSD that did not respond to the multiple psychotropic medications they were prescribed. Many veterans shared their personal first-hand experience with how much cannabis helped with anxiety, nightmares, flashbacks, and improved their quality of life.

RA PAIN SERVICES
ANDREW MEDVEDOVSKY, M.D.

As a Board Certified Neurologist and Pain Medicine Specialist I strongly believe that adding chronic Pain a qualifying diagnosis to NJ Medical Marijuana Program will benefit thousands of patients who are suffering with relentless chronic pain. It will allow patients to reduce the need for opioids and other dangerous medications.

I have experienced first-hand how medical marijuana has helped patients suffering with PTSD, who have failed to respond to multitude of prescription medications. Medical marijuana offers a safer treatment for thousands of veterans and other patients who suffer with PTSD that impairs their ability to function and live productive lives. I strongly support that adding PTSD as qualifying diagnosis will help thousands of patients.

The national opioid epidemic is a crisis that will continue to kill thousands of people unless a safer and alternative solution is available. I have seen first-hand the positive benefits of medical cannabis in helping patients wean off opioids, managing withdrawal symptoms of nausea, vomiting, diarrhea, anxiety, and pain. Using medical marijuana in a controlled environment under supervision of trained physicians will offer patients a much safer and alternative avenue.

In conclusion, please accept my recommendation and support in adding Chronic Pain, PTSD, and opioid-dependence on the list of NJ Medical Marijuana Program qualifying conditions.

Sincerely,

Andrew Medvedovsky, M.D.
Board Certified Neurologist
Board Certified Pain Medicine Specialist
Director New Jersey Alternative Medicine

Joel Meer, MD
Board Certified Physical Medicine & Rehabilitation

August 24, 2016

New Jersey Department of Health
Office of Commissioner
Medical Marijuana Program

Dear Program Representatives:

I am a New Jersey based physician writing in support of the addition of chronic pain and PTSD as qualifying conditions.

I am board certified in Physical Medicine & Rehabilitation. I did my residency in New Jersey at the nationally acclaimed Kessler Institute. My career, spanning 26 years, includes a 22-year stint as the Chairman of the Department of Physical Medicine and Rehabilitation at Newark Beth Israel Medical Center (RWJ-Barnabas Health).

Throughout my career, I have been treating acute and chronic pain of traumatic or non-traumatic etiologies. As people that treat chronic pain know, one often tries everything available and is left wanting for more tools in an attempt to provide the best care a physician is capable of giving. I have known for a long time that cannabis has a valid role to play in the management of chronic pain. It has also been apparent that many chronic pain patients carry concurrent mental health diagnoses including severe anxiety, PTSD, and depression.

When New Jersey developed the MMP, I was initially happy, until I realized that the 30% to 50% of my patients, who could benefit from medical cannabis, were not going to be eligible because chronic pain was an excluded diagnosis. There is a history of traditional herbal medicine dating back over 2000 years in China and India documenting cannabis as a treatment for chronic pain, among other uses. The validity and truth of these systems is evident to people with open eyes and open minds. Consider acupuncture: non-western, non-allopathic, yet an effective tool for treating/healing.

Though not as plentiful as we would wish, there is a growing body of scientific study supporting the use of cannabis in the above contexts (see reference articles included). This , together with the long history of traditional use, and an acceptable side effect profile (compared with many common pharmacological medications which we prescribe daily) make it reasonable and appropriate for you to include chronic pain and PTSD as qualifying conditions.

Sincerely,

Joel Meer, MD

Downtown Office • 34 Clinton Street • Newark, NJ 07102 • P: (973) 622-0888 • F: (973) 622-1610
Hospital Office • 201 Lyons Avenue • Newark, NJ 07112 • P: (973) 926-7270 • F: (973) 923-2357
Director of Physical Medicine and Rehabilitation, Newark Beth Israel Medical Center

August 29, 2016

Supporting Document for the Petition to add Chronic Pain to the list of conditions eligible for enrollment in the New Jersey Medicinal Marijuana Program

Petition brought by: Roseanne Scotti JD & Steven Jenison MD
representing the Drug Policy Alliance

Prepared by: David L. Nathan MD, DFAPA; Clinical Associate Professor of Psychiatry at Rutgers Robert Wood Johnson Medical School; Director of Continuing Medical Education for the Princeton HealthCare System; and Founder of Doctors for Cannabis Regulation

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About a third of all U.S. adults report having chronic pain at some point in their lives (Johannes 2010). While the medical management of severe chronic pain has no simple solution, it has become increasingly clear that opioid treatment of severe chronic pain is often ineffective in the long-term, and this may be explained in several ways. Patients become tolerant to opioids, and they may experience intolerable side effects. Also, the mechanisms of chronic pain are more complex than those of acute pain and include prominent neuroinflammatory, cognitive and emotional components (Beal 2016; Chou 2015).

It is a situation I've witnessed all too often in my adult psychiatric practice in Princeton, New Jersey. While I treat many patients with substance use disorders, I also treat patients whose main issue is chronic pain of a known or presumably neuropathic etiology. Among these patients, opioids often cause other psychiatric problems. Some of these individuals successfully reduce their use of opioid medications by supplementing them with cannabis use. They report fewer side effects and greater long-term efficacy on this combination than when taking higher doses of opioids.

I believe that patients who choose to consume cannabis in place of some or all opioids for chronic pain are generally making a reasonable and rational decision. Unfortunately, these otherwise law-abiding adults are criminals under current New Jersey law, and that is simply wrong. Their self-medication is without appropriate medical supervision, and the legal consequences of their behavior far outweigh the negative health consequences.

As of this writing, 20 of 25 medical cannabis program states (Alaska, Arizona, California, Colorado, Delaware, Hawai'i, Maine, Maryland, Michigan, Minnesota, Montana, Nevada, New Hampshire, New Mexico, Ohio, Oregon, Pennsylvania, Rhode Island, Vermont & Washington) specifically name chronic pain as a qualifying condition for their medical cannabis programs. It is my considered medical opinion that New Jersey should join that enlightened group of states.

According to a study in *JAMA Internal Medicine* (Bachhuber 2014), states with legal medical marijuana programs have a 25% lower incidence of fatal overdose on prescription opioid drugs, which suggests that patients with chronic pain are indeed using fewer opioids and experiencing dramatically lower mortality. In the midst of our current crisis of opioid overdoses, from which 28,000 Americans die annually, the lack of a chronic pain indication in New Jersey's Medicinal Marijuana Program may be killing chronic pain patients *every day*.

The modulation of pain transmission by cannabinoids in the central and peripheral nervous system occurs mainly through their action on the CB1 subtype of cannabinoid receptors, which are richly and widely distributed throughout the cortex, hippocampus, amygdala, basal ganglia and cerebellum (Herkenham 1990). In addition to their direct short-term effects upon neural transmission, cannabinoids also have important longer-term effects through modulating, or damping, neuroinflammatory processes that contribute to chronic pain states. These effects result from activation of both CB1 and CB2 receptors. CB2 receptors are present in the body predominantly on cells of the immune system, and in the brain are present on microglial cells that mediate neuroinflammatory reactions (Mecha, 2016).

Chronic stress and a patient's emotional state affect the perception of pain. In a recent survey of 100 consecutive patients appearing for their annual re-certification by Hawai'i Medical Cannabis Program, 97 percent of whom were enrolled for chronic pain, the average reported decrease in pain was 64 percent (from 7.8 to 2.8 on a 1-10 scale) and 50 percent of patients also reported relief from stress and anxiety (Webb 2014). To a psychiatrist like me, these are stunning and highly significant numbers. I can envision some of my patients benefiting enormously from a properly administered and rigorously monitored cannabis intervention.

In his paper "Medical Marijuana for Treatment of Chronic Pain and Other Medical and Psychiatric Problems: A Clinical Review" (Hill 2015), Kevin P. Hill MD states:

> *"Use of marijuana for chronic pain, neuropathic pain and spasticity due to multiple sclerosis is supported by* ***high-quality evidence.*** [emphasis mine] *Six trials that included 325 patients examined chronic pain, 6 trials that included 396 patients investigated neuropathic pain, and 12 trials that included 1600 patients focused on multiple sclerosis. Several of these trials had positive results, suggesting that marijuana or cannabinoids may be efficacious for these indications."*

In the same edition of *JAMA*, Whiting et al. (Whiting 2015) presented a different meta-analysis that reached similar conclusions:

> *"A total of 79 trials (6462 participants) were included; 4 were judged at low risk of bias. Most trials showed improvement in symptoms associated with*

cannabinoids but these associations did not reach statistical significance in all trials. Compared with placebo, cannabinoids were associated with a greater average number of patients showing a complete nausea and vomiting response (47% vs 20%; odds ratio [OR], 3.82 [95% CI, 1.55 – 9/42]; 3 trials), reduction in pain (37% vs 31%; OR, 1.41 [95% CI, 0.99 – 2.00]; 8 trials), a greater average reduction in numerical rating scale pain assessment (on a 0 – 10 – point scale; weighted mean difference [WMD], -0.46 [95% CI, -0.24 to 0.01]; 5 trials)."

While there were differences between the two patient populations studied, evidence strongly suggests the potential for benefit from the use of medical cannabis in many patients with severe chronic pain.

As with any medical treatment, there are adverse events associated with the use of medical cannabis. However, as borne out by my anecdotal evidence, these do not appear to reach the level of severity that is commonly associated with the use of opioid analgesics.

Rational public health policy and common sense dictate that conditions should be added to the New Jersey Medicinal Marijuana Program when:

1. Evidence suggests that cannabinoids act in a beneficial manner for a significant disease process;

2. Clinical data (though often limited by extant legal restrictions) supports positive outcomes in patients with a serious medical condition through the use of medical cannabis;

3. Conventional treatments are either of limited benefit or do not benefit a significant subset of individuals with the condition; and

4. Medical cannabis has a higher therapeutic index and lower toxicity profile as compared to conventional treatments.

Given the totality of the evidence, I believe that chronic pain should be added to the list of conditions eligible for enrollment in the New Jersey Medicinal Marijuana Program.

Respectfully submitted,

David L Nathan, MD, DFAPA
Distinguished Fellow, American Psychiatric Association
Director of Continuing Medical Education, Princeton HealthCare System
Director of Professional Education, Princeton House
Clinical Associate Professor, Robert Wood Johnson Medical School

Citations

Bachhuber, Marcus A., et al. "Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in the United States, 1999-2010." *JAMA Internal Medicine*, October 2014. http://archinte.jamanetwork.com/article.aspx?articleid=1898878

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New Jersey Department of Health

August 8, 2016

Medical Marijuana Program

Letter of Support for [redacted]

To Whom It May Concern:

I, Jerry Horowitz, DO, have a family practice in Marmora, Cape May County, New Jersey. I am writing this letter of support for medical cannabis on behalf of my patient of eighteen years, [redacted].

[redacted] has had ongoing chronic pain issues with his feet; probably related to a work related puncture trauma which occurred when he was around 25 years of age. This subsequently manifested into recurrent ganglion cysts arising from the third metatarsal of the right foot. [redacted] has had at least five surgical excisions and many aspirations which seem to have exacerbated his discomfort over the years. [redacted] has been prescribed hydrocodone and Lidoderm patches with which he responsibly manages his pain on a daily basis.

When discussing treatment options, [redacted] asked my opinion regarding the use of cannabis. I stated to him that I thought that it may be good for him; if and when it were legally available.

I feel that current medical literature supports the therapeutic use of cannabis for chronic pain. In my opinion, this would be especially indicated for this patient. By augmenting his current regimen to include cannabis, he may be able reduce his intake of his currently prescribed medications; which even in low, therapeutic doses can be construed as more harmful.

Please feel free to contact me with any concerns or questions. My office number is: 609-390-0693.

Sincerely,

Jerry Alan Horowitz

BEESLEYS POINT FAMILY PRACTICE
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Bélyn Schwartz, MD, FAAPMR
Santa Fe, New Mexico 87505
Phone: (505) 577-5791
Email: rehabmedassoc@aol.com

New Jersey Department of Health
Office of Commissioner – Medical Marijuana Program

August 12, 2016

To Whom It May Concern:

As the physician member representing the field of Pain Management on the New Mexico Medical Cannabis Advisory Board since 2014, I am writing in support of the addition of severe chronic pain to the list of conditions eligible for enrollment in the New Jersey Medical Cannabis program.

I am board certified in Physical Medicine and Rehabilitation (PMR) and have a subspecialty board certification in Pain Medicine. I have been treating patients with chronic pain since 1994 including patients with pain stemming from spinal cord injury, traumatic brain injury, neurological disorders such as multiple sclerosis and neuropathy, orthopedic issues such as arthritis, joint replacement and fractures, spinal (neck and back) pain and other trauma, work injury, personal injury or degenerative issues that result in chronic severe pain.

The treatment of chronic pain is complex and to be effective and result in maximal functional restoration for a patient (as is the goal of PMR) multiple strategies and interdisciplinary resources are often used. Physiatrists have long recognized and supported a biopsychosocial model of care for patients with chronic pain that includes both pharmacological and nonpharmacological treatments.

Nonpharmacologic pain management strategies including physical therapy and other therapeutic modalities, movement-based therapies, injection interventions for spinal and myofascial pain, and cognitive behavioral medicine techniques are conventional treatments in rehabilitation medicine that often play an integral part in pain management. Sometimes access to these treatments is limited by insurance considerations, financial limitations and geographical distances, etc.

Pharmacological treatment is often effective, however there are inherent limitations including risks and side effects. The use of nonsteroidal anti-inflammatory drugs (NSAIDs), for example, can cause nephrotoxicity, gastrointestinal toxicity, hepatotoxicity and even have cardiovascular risks. Antidepressant and antiepileptic medicines are often used in chronic pain management and can result in hypotension, constipation, weight gain, cognitive impairment and even mood alteration.

Opioid pain medicines have been the main stay of pain control during the last 2 decades and are now frequently prescribed for chronic non-cancer pain despite a lack of long-term evidence to support its use in chronic pain. In fact there has been an increase in abuse, misuse, addiction and overdose mortality linked to the increase in the quantities of opiates prescribed. Opiates are associated with many side effects including the short-term risks of nausea, constipation, drowsiness and respiratory depression, and the long-term risks of tolerance, dependence, addiction, hyperalgesia, hormonal changes, osteoporosis, depression and cognitive impairment.

Although opiate maintenance therapy has also been reported to be a "safe, salutary and more humane alternative to the options of surgery or no treatment in those patients with intractable non-malignant pain and no history of drug abuse," the recent heightened awareness of side effects and negative outcomes with the use of opiates makes complementary or alternative treatment options more germane.

Medical cannabis in the management of chronic pain can be another tool for the treatment of chronic pain as part of a multidisciplinary pain

management program. It has been shown to reduce pain, and also reduce muscle spasm, it as anti-inflammatory properties, it can provide an enhanced sense of well-being and reduce anxiety with potentially less overall side effects and certainly less mortality than with the use of opiates.

In my practice, I have had the opportunity to follow hundreds of patients who have chronic pain and who have been certified to use medical cannabis in New Mexico. I see patients regularly in follow up and always question them about the benefits and side effects from the use of medical cannabis. It has been my experience that patients have a period of time whereby they need to trial different cannabis products including topical preparations and edible products to find those that work best for them and their personal needs. Once they find the most effective products, the majority of these patients have a positive experience with few side effects. Most report improved sleep, less rumination and anxiety about having chronic pain, reduced pain, and/or reduced muscle spasm. I have had a significant number of patients be able to reduce their use of opiate pain medicines and at the least not need to increase their use of opiate pain medicines. I have had a few patients who have been able to actually get off of their opiate pain medicines altogether with the addition of medical cannabis. Not one of my patients has had a severe measurable side effect. Out of pocket costs have limited patient access however for many patients.

Considering that the vast majority of pain management is so complex with the need to have multiple tools in the toolbox of treatment, and given the relatively good benefit to side effect profile with medical cannabis, I support the addition of severe chronic pain to the list of conditions eligible for enrollment in the New Jersey Medical Cannabis program with the goal of alleviating pain and improving function in patients with chronic pain.

Thank you for your consideration,

B. Schwartz

Bélyn Schwartz, MD, FAAPMR

16 August 2016

New Jersey Department of Health; Office of Commissioner-Medical Marijuana Program

To whom it may concern:

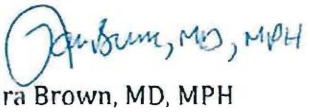
My name is Laura Brown, MD, MPH and I am a board-certified family physician working in addiction medicine here in Santa Fe, New Mexico. I am also a member of the New Mexico Department of Health Medical Cannabis Program Medical Advisory Board, a voluntary position I have held for the past 4 years. While I do not focus on chronic pain diagnosis and treatment in my work at Santa Fe Recovery Center, many of my inpatients and outpatients come to me with previous diagnoses of chronic pain. When I interview patients seeking buprenorphine medication-assisted treatment for their opioid use disorders, some patients will describe how their opioid use disorder developed after opioid analgesics were prescribed for acute or chronic pain. My anecdotal experience in this area supports the medical literature statistic of at least 15% of persons appropriately prescribed opioids for analgesia will develop an opioid use disorder, with many moving to heroin from prescription opioids over time.

I have been prescribing buprenorphine medication-assisted treatment for opioid use disorders since 2009 and have consistently noted that my buprenorphine patients with chronic pain using medical cannabis are more stable and functional than those not using medical cannabis. While buprenorphine itself is an excellent and safe analgesic alone, the adjunctive analgesia provided by medical cannabis is impressive. Moreover, the medical literature has noted the opioid-sparing effects of medical cannabis used for chronic pain, whereby patients using medical cannabis for pain effectively decrease the quantity of concurrent prescription opioids used by up to 50% or more, clearly improving patient safety by decreasing opioid risks including overdose.

Certainly, there are risks of development of cannabis use disorder with use of medical cannabis for any medical qualifying condition, which need to be thoroughly discussed with persons seeking medical cannabis, but in a state such as New Mexico with epidemic rates of opioid addiction and overdose, it would appear that the benefits of opioid overdose risk reduction clearly outweigh risks of cannabis use disorder development. I also always discuss the respective risks of substance use disorders, with cannabis at 9%, heroin at 23%, and tobacco cigarettes at 33% (Institute of Medicine, 1999).

I believe that medical cannabis is a very efficacious and safe option to consider in the treatment of chronic pain. Given that the vast majority of states with medical cannabis programs already include chronic pain as a "stand-alone" condition among their respective lists of medical qualifying conditions, I would strongly urge the state of New Jersey to add chronic pain to its list of medical cannabis qualifying conditions.

Sincerely,



Laura Brown, MD, MPH

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La Familia
MEDICAL CENTER
SANTA FE, NEW MEXICO

New Jersey Department of Health
Office of Commissioner
Medical Marijuana Commission

Dear Commissioner,

I am writing to express my strong support for the addition of PTSD and Chronic Pain to the list of qualifying diagnoses for medical marijuana. I am a family medicine doctor and medical director of a large community clinic here in Santa Fe, New Mexico. As you may know, we are one of the national epicenters of the opioid overdose epidemic.

Just this past week, two patients of my clinic died of suspected overdoses. Their stories are similar. Both had diagnoses of both chronic pain and PTSD. Both had been prescribed opioids and benzodiazepines for their pain and anxiety symptoms. Both had become addicted to these powerful medications. Both had tried to enter recovery programs but had failed to shake their addictions. Both were young, under 35 years old.

These patients both came to us after years of being shuffled around among doctors. They both came to our clinic seeking care through our medication assisted substance abuse program, but the damage had already been done and unfortunately, one last relapse proved fatal.

It is difficult for those of us who do not suffer under these diagnoses to understand the suffering that even one these conditions creates, let alone both. As a family doctor with over 20 years of experience in many cities across the county, I have seen how often mental health and chronic pain diagnoses co-exist, how often they lead down a path of addiction to opioids and benzodiazepines, and how devastating those three conditions together (addiction, mental health problems, and chronic pain) can be.

I have also struggled to treat those conditions before individuals become dependent on powerful and dangerous addictive drugs in my own practice. As you know, here in New Mexico, both PTSD and severe chronic pain are eligible conditions. This has given me a welcome option for my patients, a way to treat the anxiety from PTSD that often leads patient to "self-medicate" with alcohol or other illegal addictive substances. I have seen over and over that patients with access to medical marijuana are able to restore functionality to their lives, able to work, be productive members of their families, and have better social lives. I've seen the same with chronic pain patients. Access to medical marijuana helps so many limit and even eliminate dependence on narcotics, decreasing the risk of overdose.

This week has been devastating for me and my colleagues, but unfortunately, death from opioid overdose is not a rare event in my community. Death associated with medical marijuana of course is exceedingly rare, if not unheard-of. Providing this treatment option to the citizens and health providers of New Jersey will literally save lives. I hope you move forward with this important addition to the conditions for which medical marijuana can be used.

Thank you for your attention.

Sincerely

Wendy Johnson, MD MPH

(505)982-6924

1035 Alto Street

Santa Fe, New Mexico 87506

Date: August 12, 2016

To: New Jersey Department of Health, Office of the Commissioner – Medical Marijuana Program

From: Anita Briscoe, MS, APRN-BC Anita Briscoe, MS, APRN-BC

Re: Using Medical Cannabis for Pain Control

I am a Nurse Practitioner in New Mexico and I treat patients with chronic pain by referring them to New Mexico's Medical Cannabis Program.

I have been a nurse for 40 years, a nurse practitioner for 12 of those years. During my 40 years of nursing, I have helped treat patients with pain with opiates, and other medications such as Ibuprofen, Acetaminophen, and Tramadol. These treatments included intramuscular, intravenous, and oral doses. I have observed the patients obtain only partial relief from these medications. In the case of opiates, the patients' tolerance inevitably increases, necessitating need for higher and higher doses to achieve the same relief from pain. This can lead to addiction, and if the patient is no longer prescribed opiates, they then take to the streets to buy more pain pills, or worse, find a cheaper way to deal with their pain and addiction: heroin.

A side effect of the above-mentioned medications is damage to the kidneys and liver. Cannabis carries none of these side effects. There is also very little documentation of addiction to cannabis.

In my practice, I have 45 patients who have been able to completely stop taking opiates for their pain. They manage their pain with Cannabidiol, which is a component of the cannabis plant that does not cause the "high" which sometimes makes patients feel uncomfortable. They either smoke the flowers, eat it in edible form, use oils, or use it topically as ointment and lotion.

My professional opinion, and the research that backs this, is that Medical Cannabis is much less harmful than opiates. As mentioned above, the use of opiates is very risky, a slippery slope, and can cause serious side effects, including addiction. The benefits of the use of cannabis in New Mexico include the fact that is readily available (patients can even grow their own). I have never seen patients develop tolerance, in which they need higher and higher doses. My patients manage their pain from year to year, and their functionality increases, sometimes to the point that they can start working and going to school again.

In spite of the recent unfortunate decision by the DEA to keep cannabis in Schedule 1, research in the US and worldwide is finding that cannabis is a very effective treatment for pain. This is measurable, using instruments such as the Global Pain Scale.

Because cannabis is still in Schedule 1, many providers in NM large group practices cannot refer their patients to the Cannabis Program. As a result of this, I follow my patients closely to observe and document their pain relief, and I highly encourage them to tell their other providers that they take cannabis. I assess patients' pain with the Global Pain Scale, in order to also assess their functionality, and any mood effects they may be experiencing.

I have found that my patients do NOT want to be on opiates, they often refuse to take them. Cannabis is often the only other answer for them, and fortunately, New Mexico has a compassionate Medical

Cannabis Program in which these patients can have access to pain relief. It is my hope that New Jersey does the same thing for its citizens.

Anita Briscoe MS A'RN BC

STEVEN A. JENISON, MD, EMT-PARAMEDIC
MEDICAL EDUCATION & CONSULTATION

New Jersey Department of Health
Office of the Commissioner – Medicinal Marijuana Program

To Whom It May Concern:

I am working with the Drug Policy Alliance to submit petitions for the addition of Chronic Pain and Posttraumatic Stress Disorder (PTSD) to the list of conditions eligible for enrollment in the New Jersey Medicinal Marijuana Program. Roseanne Scotti JD of the New Jersey office of the Drug Policy Alliance and I will act as the Petitioners.

I am a semi-retired public health physician, currently a licensed Paramedic, Rescue Chief of a volunteer fire department and a part-time Instructor with the University of New Mexico Emergency Medical Services Academy. I received an MD degree from the University of Iowa College of Medicine in 1981, completed Internal Medicine Internship & Residency Training at the University of North Carolina at Chapel Hill, and completed Infectious Diseases & Clinical Virology Fellowship training at the University of Washington School of Medicine. After two years as a Staff Scientist at the Fred Hutchinson Cancer Research Center in Seattle, I joined the Infectious Diseases Faculty at the University of New Mexico Health Sciences Center. In 1995, I moved to the New Mexico Department of Health as Medical Director of the Infectious Diseases Bureau, a position that I held until I retired in 2010.

During my tenure with the Department of Health, I represented the positions of the Governor's Office (first Governor Gary Johnson, then Governor Bill Richardson) and the Department before the New Mexico Legislature in certain drug policy reform matters including the implementation of statewide syringe exchange programs, statewide naloxone distribution programs and a medical cannabis program. The Lynn & Erin Compassionate Use Act that established the medical cannabis program in New Mexico was passed in 2007, and I was appointed as the first Medical Director with responsibility for implementing the Patient Registry and Medical Advisory Board components. When I retired in 2010, I was appointed to the Medical Advisory Board and elected Chair. Except for an 18-month period, I served as Chair of the Medical Advisory Board from 2010 until March 2016, when I resigned from that position in order to concentrate on my increasing EMS patient care and teaching responsibilities.

Chronic Pain and PTSD were not included in the list of conditions named in the Lynn & Erin Compassionate Use Act in 2007. Both conditions were added by the New Mexico Secretary of Health in 2009 on the recommendations of the Medical Advisory Board to the Medical Cannabis Program following public hearings of petitions brought by members of the public. Since their approval, Chronic Pain and PTSD have become the most enrolled conditions in the Program.

As Medical Director, I was responsible for approving patient applications that included certifications from the patient's clinicians. Because there was limited national experience with the management of PTSD and Chronic Pain patients in the context of a state medical cannabis program at the time, I personally phoned every clinician who made new applications for their patients with these diagnoses to discuss their rationale and perspectives. Even though some expressed skepticism about the medical cannabis program overall, the clinicians enthusiastically supported the enrollment of their patients who had failed to derive adequate relief from pain and suffering with conventional treatments. The great majority stated that they believed and respected their patients' reports that cannabis had provided relief when other treatments had failed, and that at the very least they did not want their patients to be criminally liable for the use of the one thing that had brought them comfort.

There is now accumulated an experience with thousands of patients in New Mexico enrolled with Chronic Pain and PTSD since both conditions were added in 2009. The New Mexico Department of Health encourages physicians to report all adverse events that might be related to the use of medical cannabis in the state. To date, no adverse events have been reported, including among patients with PTSD and Chronic Pain.

In my opinion, Chronic Pain and PTSD are conditions that are fully consonant with the goals of a medical cannabis program. Both are prevalent and serious conditions that cause significant pain and suffering. Although conventional treatments are available, side effects and adverse events are common and can be serious. And a high percentage of patients fail to derive adequate relief. The beneficial actions of cannabinoid compounds are biologically plausible based upon extensive pre-clinical data, and human clinical trials have confirmed the positive effects that have been long reported by patients who use medical cannabis. These patients should be protected and supported.

Sincerely,

Steven A. Jenison, MD, NRP
Dixon, New Mexico

ph: [redacted]
email: [redacted]

August 8, 2016

Chronology of Chronic Pain and Treatment for [redacted]

Dear Medical Review Board Members:

Thank you for your interest involving the utilization of medical cannabis for the treatment of chronic pain.

My name is [redacted], I am a 56 year old male and I reside in [redacted] county New Jersey with my family. My wife of 25 years, [redacted] is an RN at a local health care provider. I have three children, [redacted] attending [redacted] University; [redacted], attending University [redacted] and [redacted], attending [redacted] High School.

I am the owner/operator of [redacted] and have recently picked up a part time job to help pay for college tuitions. The physical nature of my new job is exacerbating the painful foot condition which I have been enduring now for several decades.

I have been self employed for the last 15 years (aside from my recent part time work) and when I cannot work, my bills don't get paid. I only mention this because if I am in pain or going to medical specialists, this has a serious negative impact on our household income.

I have suffered from chronic pain (right foot) for at least thirty years. My best guess is that my recurrent ganglion cysts (on top of foot) were caused by the trauma of the tearing of the middle metatarsal tendon sheath from stepping on a large nail.

With my first ganglion cyst excision occurring in 1996, I have subsequently endured an additional five attempts at repair; with the last surgery leaving me with constant neuropathic

pain. Between surgical procedures, countless aspirations and cortisone injections have been performed.

My pain during the last thirty years has been managed effectively most of the time with a low, daily dose of hydrocodone. There have been times when complications, due to infection and cellulitis, have occurred which made the pain completely unmanageable. Stronger opiates were then justifiably prescribed until I could walk again. At present, my ganglion cysts appear semi annually and with the aid of sterile equipment and Lidoderm patches, I aspirate the cysts myself. I attempt to manage my daily pain with a relatively low, therapeutic dosage of hydrocodone, but it does not always work.

During this time, relatives in medical cannabis States or friends in N.J. have suggested that I try whole plant cannabis flowers to augment my oral medication. I have only needed a very small amount to notice significant beneficial results.

My physical pain was reduced noticeably upon the inhalation of small amounts of the dried flower. The unintended side effects were more impressive. Cannabis gave me a feeling of well being and hope for the future. Instead of letting the pain control me, I found that with the occasional use of this plant, I could feel that positive attitude and optimal health may once again be attainable.

With the encouragement of my primary physician, I took up distance walking again. Although at times it's tough on my foot, I have managed to reduce my weight from 210 pounds to 190 pounds over the last two years. This weight loss has helped me to feel better.

I feel strongly that whole plant cannabis and its tinctures should be made widely available; especially to patients currently using opiate based medications. The only side effect I have noticed is that I get a great night's sleep.

I also feel that it is New Jersey's moral obligation to make Cannabis the first course of therapeutic action when it comes to chronic pain; as opposed to opiates, or in my opinion the more lethal stronger dosage non steroidal anti inflammatory class drugs. If patients do not

respond to cannabis, or prefer something else, then pharmaceutical medications should be addressed.

Cannabis has given me hope for my future treatment. If whole plant cannabis were legal as part of my medical 'tool kit', I would hope to someday reduce or eliminate my current opiate regimen. I know that being tolerant to opiates may impede their effectiveness when extreme pain is one day inevitably encountered again and my end time arrives. But until then, cannabis shows that there is life to be lived and that pain can be managed with a smile.

I would be happy to meet with you in person in the near future and please feel free to call on myself or my physician, Jerry Horowitz, DO at any time.

Kind regards,

[redacted]

August 23, 2016
To Whom It May Concern:

I am writing in reference to RSDS or CRPS, this is one of the most painful diseases known to man which causes severe chronic pain. Between pain, opiates and narrow minded workers' compensation, this has ruined my life for sixteen years. You think about it 24/7, it never really stops hurting, just gets numbed by pain killers. It has affected my marriage, what I can do with my family and grandchildren (which is nothing) and has also financially broken me. It is important that chronic pain be added to the list of conditions for which a patient can access medicinal marijuana in New Jersey.

I had numerous sympathetic nerve blocks that did not work. I was talked into a spinel cord stimulator that worked for about one year and then I had to turn it up so high that it made my left leg go numb and the burning pain would travel up my leg into my hip and to the surgical site for the stimulator. That stimulator was implanted in 2004 and the battery died in 2008. It took until October 2015 to get that thing out of me, the workers compensation insurance. The company wanted me to go to a surgical center to have it removed, not Jefferson Hospital where it was put in. I take MS Conttin 30 Mg 3 a day, Percocet 10/325 2 a day, Gabapentin 800 Mg 3 a day, Klonipin 1MG 2 a day.

I have lost all my teeth because of opiates. And the pills are slowly killing me. The constipation, dehydration and sleep deprivation are all from the opiate pills I eventually became addicted to

In comparison, marijuana has helped with my chronic pain without the horrible side effects of opiates. Unfortunately, I have only been able to use low grade marijuana that I get from one friend. But this is the one thing that helps pain, nausea, anxiety, appetite, stress with no side effects.

Marijuana has done more to help me keep my sanity then any other drug. I cannot understand why it is taking so long to have conditions added to a list. Please do the right thing and add chronic pain to the list. Thank you very much.

August 17, 2016

Dear Medical Review Board Members:

I write this testimony today as a wife, mother, and longtime South Jersey resident. First, I will start with my role as a wife. For the past ten plus years, I have watched my husband's health deteriorate. He has had numerous surgeries, 13 to be exact.

The first three surgeries my husband had were for torn meniscus. This ultimately led to him needing bi-lateral knee replacement at an unusually young age. He was in his late 40's. There is approximately a 2% failure rate with TKR and he falls in that category after numerous trips back to various specialists and the surgeon who did the surgery. His surgeon is well known and affiliated with Pennsylvania Hospital.

Prior to and following he also suffered two torn rotator cuff surgeries.

Approximately a year or so later after the TKR he needed the first of 4 back surgeries. Two were laminectomies and two were fusions. The two fusions were 8 hour surgeries.

After all these surgeries and during and prior to, he was in constant pain. He was prescribed an opioid to be able to just function. He eventually could no longer do his job due to the pain. He had a very physical job which highly contributed to his degenerative bone disease and osteoarthritis.

Various nerve medications were tried as well, such as Neurontin and Gralise. They had horrible side effects and in fact one day I was very lucky to have come home when I did as he was having a horrible reaction to the Neurontin.

They then tried a spinal cord stimulator by Medtronics. The trial one worked great, however when they surgically implanted the permanent one he did not get any relief at all and in fact ended up with two additional problems.

First, the machine caused him to suffer with migraines. Secondly, the pharmaceutical rep in the operating room was too anxious to get the machine programmed and leave that she helped a nurse yank my husband up before fully awake from anesthesia causing him to have 3 torn muscles similar to a hernia in his abdomen area due to the position he was in when they did this. One year later a general surgeon had to go in and repair this under exploratory surgery. This was surgery number 13.

We finally went to a neurologist who sent him for many tests and came back with the diagnosis of RSD Reflex Sympathetic Dystrophy. This neurologist was affiliated with Jefferson University and sadly passed away over a year ago from liver cancer. However, his recommendations to my husband's pain management doctor was to have nerve ablations and acupuncture. Unfortunately, Medicaid does not cover the acupuncture.

All along his tolerance to the Percocet he is on has gotten higher so the dosage just to be comfortable had to be increased. They even tried a Fentanyl patch, but due to his asthma, he was unable to wear this as it hindered his breathing too much.

Now that you understand my husband's medical history, I will begin to explain that all along and currently he is able to smoke marijuana to help with the pain. It is honestly the only thing that truly helps and will allow him to take less opioids in fact. Obviously, this is illegal in our state and why I am writing this letter as it is unconscionable that New Jersey does not have chronic pain in their list of conditions where someone can have medical marijuana. Unfortunately, due to obtaining this illegally it is not always accessible. Therefore, my husband suffers because of this and all they can do is prescribe a much more harmful dosage of opioids.

It is upsetting to him to have to be on as much opioid medication for various reasons when he knows that marijuana could be used in lieu of or in addition to opioids but at much lower dose which would give him more relief, and rid him of the many side effects from opioids. One is Opioid Induced Constipation. Yes this is also a real thing. He has to get up with an alarm clock at 6 a.m. every morning to take medicine to be able to move his bowels, otherwise he is bloated for the day which only puts more stress on his fragile back and knees.

Now I will talk to you from the perspective of a mother for both my husband and I. We both suffer from PTSD. We lost our 19 year old son from a heroin overdose in 2006. Many people feel that marijuana is a gateway drug and that having medical marijuana legal and having a longer list would somehow get this in the hands of those who don't need it, have obviously never sat outside any pain management office. Honestly, you do not want to hear the cell phone conversations that go on. So at first glance and knowing only this of our family you would probably think we are the last people to fight for medical marijuana and include chronic pain. Sadly, we know first hand that marijuana did not kill our son but an illegal opiate did. I'm certain that my son started out with pills.

So, I plead to you to open your minds and read the facts, no one dies from a marijuana overdose. It DOES help people with chronic pain and those same people would not have to take opioids or half as much depending on the severity of their condition, hence having less of this highly toxic and lethal medicine out there being sold in a pharmacy right next door to your home. That seems to be okay and we are losing an entire generation of kids. But a medical marijuana dispensary and having chronic pain management on the list to obtain this seems to be okay. I do not understand the rationale here.

Anonymously but Sincerely from South Jersey

To: New Jersey Department of Health, Medicinal Marijuana Program

Please add this letter with my name as Anonymous, to help persuade Governor Christie to add P.T.S.D. and pain to the list for medical marijuana:

I graduated from [redacted] high school [redacted]

The plaque over [redacted] High School, before some recent renovations used to read something like this:

Enter to learn.

Knowledge is power.

Go forth and serve.

After graduating [redacted] high school [redacted], I attended and graduated from [redacted] University, where I studied everything from Eastern mythology, Western mythology, cinema studies and screenwriting.

But when I was a senior at [redacted]HS, I had a debilitating testicular torsion which was then surgically untwisted. To this day, I have had extreme pain in my testicles, almost every day.

I was in the emergency room for testicular pain more than once in my life from swelling of the epididymis.

And before I attended [redacted]HS, I was almost murdered when I was 9 years old by a drunken 17-year-old summer camp counselor in the state [redacted]. He sexually assaulted me in the shower, and also while I was in bed, and he strangled me and had tried to murder me. Somehow I survived his physical and sexual assaults. He was never prosecuted because he was a minor, and I was a small child afraid to speak out against him.

Every night I have nightmares, ringing in my ears, physical pains that cannot be described despite 2 mg of clonazepam and Advil. Sometimes my doctor even wants me to take 3 milligrams of clonazepam. Sometimes I cannot sleep through the night even when my doctor gives me 3 mg of clonazepam, Advil and even small amounts of diphenhydramine.

But cannabis helps me to relax and sleep and reduces pain for me and for millions of other people, for me and many others more effective than clonazepam, diphenhydramine or Advil.

I know that cannabinoids as tinctures, convected ('vaporized') are much more safe than opiate pharmaceuticals for testicular pain, especially over long periods, so I have been avoiding opiates completely my entire life except for immediately post-testicular torsion reversal surgery. Cannabis alone or combined with clonazepam is the only thing that helps me sleep and reduces my physical and mental pains and other symptoms.

[redacted], I know that the State of Israel has done extensive research for many years into cannabis treatment for neuropathic pain, and for nightmares, sleep disorders, and for Post Traumatic Stress disorder, as well as for anxiety disorders, and even to treat glaucoma. (At least I don't have glaucoma.)

I know from my own experience that cannabis works synergistically with clonazepam to create efficient and safe treatment for my symptoms. Because of the pain relief and relief from constant stress, nightmares, anxiety, I have never needed to try opiate pharmaceuticals, even when my testicles hurt. Cannabis is a superior substance, safe and effective, especially in edibles and sublingual tinctures, with little to no withdrawal symptoms, therefore it is technically not addictive.

In Israel, the Israeli Health Ministry distributes high-grade cannabis to thousands of patients through groups such as 'Tikkun Olahm', Hebrew, which translates as 'Healing the World'.

Long term studies reviewed by Dr. Grinspoon of Harvard, Dr. Raphael Mechulam of Israel, as well as the health ministries of the Kingdom of the Netherlands, have shown that cannabis is a safe and therapeutic substance with many mental and physical health benefits improved, restful sleep, in vasodilation, suppression of nightmares, reduction of pain, migraines, and of nausea,

Please legalize medicinal use of cannabis for Post Traumatic Stress Disorder and for pain. I was almost murdered when I was a child, and I am in constant psychological and physical pain. Cannabis has probably saved my life. Legalize cannabis for pain and P.T.S.D., and help to heal the world.

Knowledge is power, go forth and let my doctor prescribe me cannabis sublingual tincture, edibles and cannabinoid vapors so I can have a decent life.

Sincerely,

Anonymous from [redacted] N.J.

[redacted]
Santa Fe, New Mexico
[redacted]

August 20, 2016

To Whom It May Concern:

My name is [redacted] and I am a 60-year-old female traumatic brain injury survivor as the result of a motor vehicle accident that occurred in 1984 when I was 28 years of age. I have lived with multiple disabilities for 32 years as the result of the accident with the most major symptom being unremitting chronic pain which became completely debilitating.

By 2007, I found myself in the place where my life had become completely unbearable not only due to the chronic pain, but also due to the fact that I had developed a long list of secondary conditions. The physician team treating me had reached a point where they were prescribing me 27 different chemical medications, including multiple narcotics, on a daily basis in an attempt to simply help me cope. This complex polypharmacy was silently starting to cause severe unintended consequences.

With the slow development of numerous secondary conditions over time that I didn't start out with; extreme obesity (ballooning from 105 to 200 pounds), diabetes, hypoxia (low oxygenation), high cholesterol, gall bladder disease, fatty liver disease, chronic depression, narcolepsy, complex dermatological conditions, incontinence, mild seizures, RLS (Restless Legs Syndrome), ventricular arrhythmias (abnormal heartbeats), anemia and chronic nausea; my life had become unbearable. I finally ended up hospitalized with acute cholecystitis (gallbladder disease) resulting in necrosis (the precursor to gangrene) of my abdominal cavity and nearly died. To save my life, I was taken off of all medications that were deemed unnecessary to treat the crisis at hand. After a long and arduous 18-month recovery, my primary goal became to live well with a disability and find a way to avoid the traps that traditional chemical pharmaceutical treatments had caused me.

One of my physicians suggested that I try medical cannabis, which had recently become legal for qualifying patients with chronic pain in my state. I was reluctant at first, having never used cannabis before, but decided that I had nothing to lose. I consulted with one of the medical cannabis producers at length and applied for a state card that would permit me to purchase medical-grade cannabis that had a high CBD content, allowing me to obtain the pain-relieving qualities of cannabis with very little psychoactive side effect.

Since 2009, the availability of medical cannabis to me under the care of my physicians has facilitated the management my chronic pain and several other symptoms with a much milder form of treatment. We have been able to cut my daily medication intake to six with another two used only on an as needed basis. Not only have my number of prescriptions decreased and my number of doctor visits has gone down from almost seven per week to often less than one. I've lost over 65 pounds, am exercising regularly and actively engaging in my community as a disability advocate. This has been enormously positive for me and has also meant huge economic relief both to my insurance companies, including Medicare and Blue Cross Blue Shield and me. More than anything else, I am no longer addicted to narcotics because I have alternative tools at my disposal and I've been able to re-engage in life.

The scenario of one medication treating one symptom, another treating one more, and another medication being added to the mix to combat medication side effects can be a deadly trap. This snowball effect frequently happens to people with severe chronic illness leading to even more complex medical presentations. Narcotics are often prescribed and tolerance quickly builds while simply seeking relief from pain. The complexity of treatment is magnified beyond proportions that most people can comprehend. The innocent desire to simply live without pain causes the undesired consequence of secondary problems including addiction, which in turn creates a nightmare for patients, family and friends. Both of these scenarios happened to me.

Today, I am eternally grateful that I've been offered another chance at life because I tried medical cannabis as a potential solution to successfully treat my chronic pain and related conditions. I urge the New Jersey Medicinal Medical Marijuana Program to add chronic pain to its list of eligible conditions and welcome you to contact me if you have any questions for me about my own experience.

Sincerely,

[redacted]