
Kyle Jorgensen
LEGAL DISCRIMINATION AGAINST ORGAN TRANSPLANT CANDIDATES: MEDICINAL MARIJUANA AND THE DOUBLE-EDGED SWORD

KYLE JORGENSEN*

I. INTRODUCTION .......................................................... 860
   A. The Ultimate Catch-22 ........................................ 860

II. BACKGROUND ......................................................... 862
   A. Problems Before National Regulation ....................... 863
   B. Technology of the Past ........................................ 864
   C. Shortage of Organs and a Call for Action ................. 864
   D. National Organ Transplant Act ............................. 865
   E. Who Sets the Rules? ........................................... 866
   F. History of Medicinal Marijuana .............................. 867
   G. Restrictive Policies ........................................... 868
   H. State Laws that Protect Medicinal Marijuana Users ....... 869

III. ANALYSIS .............................................................. 869
   A. Inconsistencies in Substance Use ............................ 870
   B. Reasons for Denying Candidates Who Use Medicinal Marijuana ........................................... 871
   C. New Research Shows Medicinal Marijuana Helps Organ Transplant Operations ............... 873
   D. THC is a Proven Immunosuppressant ........................ 873
   E. Illinois Taking a Proactive Approach ........................ 874
   F. No Unity Within the Few States Standing Up ............. 875

IV. PROPOSAL ................................................................ 877

V. CONCLUSION .......................................................... 880

Abstract

Discrimination in any facet is wrong, but it is especially egregious when committed against our nation’s most vulnerable citizens. Medicinal marijuana has been around for thousands of years – even if the United States just started to recognize it – and for many terminally ill patients it has become the ultimate catch-22. The very medicine that is keeping them alive is also the one thing preventing them from receiving the life-saving organ transplant operation they need to survive. Doctors all across the nation are prescribing medicinal marijuana to terminally ill patients knowing that it will restrict them from an organ transplant operation. What is even worse, is that our federal and state laws permit it, however, not every state. Several states, including Illinois, have enacted legislation that prohibits hospitals from discriminating against terminally ill patients on the sole basis of medicinal marijuana usage. This comment argues that the federal government should adopt legislation similar to Illinois that prohibits terminally ill patients from being turned down for organ transplants based on being prescribed medicinal marijuana. Every day, lives are lost due to these senseless and inhumane regulations. It’s time for a change.
I. INTRODUCTION

A. The Ultimate Catch-22

There are roughly 120,000 registered U.S. citizens on the organ transplant waiting list, with a new name added to the list every ten minutes, and twenty-two people on the list dying every day.¹ A resident of Maine, Garry Godfrey, had his name on the list for almost ten years, until one day in 2012, it was abruptly removed.² When he asked his transplant coordinator why he was removed, Garry was told it was due to his use of medicinal marijuana.³ The irony is he was prescribed medicinal marijuana – the only medicine that helps treat his symptoms – to help manage the painful symptoms of Alport syndrome, a disease causing his kidney to fail.⁴ Thus, the disease that put him on the transplant list was now the reason he was taken off.⁵ In 2009, the Maine legislature enacted the “Maine Medical Use of Marijuana Act,” which legalized marijuana for medicinal purposes.⁶ Unfortunately for Garry, however, the Maine Medical Center, which was in charge of his transplant operation, adopted a policy restricting organ transplant candidates from using medicinal marijuana, regardless of whether there were alternative medications available.⁷

Another example of discrimination faced by medicinal

---

¹ Juris Doctor, The John Marshall Law School, 2019. I want to thank my mom for all she has sacrificed to allow me to be where I’m at and become the man I am today, I love you.


³ Nick Keppler, Should Patients Be Denied Transplants for Using Medical Marijuana: Maine is Reviewing the Law, TONIC VICE NEWS (Apr. 3, 2017), tonic.vice.com/en_us/article/3dme9b/should-patients-be-denied-organ-transplants-for-using-medical-marijuana (describing the problems within the state of Maine and what has led to the recent legislation being passed which protects medicinal marijuana users in need of an organ transplant operation).

⁴ Id.


⁶ Id.

⁷ Maine Use of Medical Marijuana Act, 22 ME. REV. STAT. ANN. § 2421 (2009).

marijuana users is the story of Norman Smith, a California resident who succumbed to his liver cancer in 2012. Norman suffered from stage four liver cancer and used medicinal marijuana to help treat the side effects caused by his radiation and chemotherapy treatments. His cancer was inoperable and only a liver transplant would save his life. Unfortunately, he never received the operation. Due to Norman’s use of legally prescribed medicinal marijuana, he was taken off the transplant list shortly after being added, which ultimately contributed to his death. Sadly, Norman Smith is not the only one who lost his life due to the discriminating policies and unrealistic expectations of hospital organ transplant regulations.

Like the individuals referenced above, terminally ill patients nationwide are denied lifesaving operations and removed from organ transplant lists because of their use of legally prescribed medicinal marijuana. Once removed, these patients are allowed re-admission to the waiting list, but only once they have proven they are no longer using medical marijuana. The problem is, for a majority of those patients, marijuana is the only medication that works to alleviate their symptoms. For cancer patients, medicinal marijuana helps reduce pain, nerve damage due to chemotherapy, nausea and vomiting, as well as provides many other health benefits. However, regardless of the patient’s suffering and the effectiveness of the drug, they are unjustifiably prejudiced. As a
result, Illinois and several other states have recently passed legislation that prohibits discrimination against medicinal marijuana users. On August 1, 2013, Illinois passed the “Compassionate Use of Medical Cannabis Pilot Program Act,” which legalized marijuana for persons suffering from debilitating diseases. The Act also took a necessary proactive stance in protecting the soon-to-be medicinal marijuana users in need of an organ transplant.

This comment will analyze the ungoverned organ transplant regulations and the resulting adverse discrimination faced by legally prescribed medicinal marijuana users. With no federal protection, the door is left wide open for hospitals to refuse lifesaving organ transplant operations to terminally ill patients using medical marijuana to ease their suffering. There is countless research on the benefits of medicinal marijuana and the amazing healing power it has. For many cancer patients, it is the only medication that allows them to live a pain free and somewhat normal life. Even though it is legally prescribed, many users are taken off or not allowed on an organ transplant waiting list. Part II of this comment will explore the inception of the United Network for Organ Sharing (“UNOS”) and the National Organ Transplant Act (“NOTA”), both of which act as federal guidelines. Part II will also explore the legalization of medicinal marijuana and the reasons behind the discriminating policies. Part III will analyze the competing argument for and against the restrictive policies. Part III will also take an in-depth look at the Illinois Compassionate Use of Medical Cannabis Pilot Program Act, as well as what has been done or is being done by other states to protect the rights of medicinal marijuana users in need of an organ transplant. Part IV proposes the federal government should adopt policies similar to the progressive policies enacted by Illinois and several other states. Part V concludes and reiterates the importance of enacting a federal law that protects the rights of medicinal marijuana users and guarantees their opportunity for survival.

II. BACKGROUND

There is a long history of humans attempting organ transplant

marijuana-organ-transplants-explainer/index.html (examining the difficult situation many terminally ill patients in need of an organ transplant operation face). Marijuana is the only medicine that works for them, but each organ transplant center is allowed to deny their operation based on their use. Id.

18. Id.


20. Illinois Compassionate Use of Medical Cannabis Pilot Program Act, 410 ILL. COMP. STAT. 130/40(2) (2013). This landmark act allowed for medicinal marijuana to be legally prescribed for Illinois residents. Id.
operations. As times have progressed, so has the regulation of the procedures and the medical technology used to perform them. This section will cover the history of organ transplant operations, explain the governing policies behind the industry, and give a brief overview of medicinal marijuana.

A. Problems Before National Regulation

Organ transplant operations have been attempted for thousands of years.\(^\text{21}\) Due to being largely taboo and unregulated, transplant operations in ancient times were performed by replacing the failed human organ or tissue with that from an animal.\(^\text{22}\) Ancient folklore even goes as far as to explain miracle limb and organ replacements due to magical powers and surgeons guided by supernatural forces.\(^\text{23}\) Our society has since come a long way, but surprisingly, for the better half of the nineteenth century, organ transplant operations were still dangerous, uncommon, and risky procedures.\(^\text{24}\) There was not even a successful operation until December 23, 1954, when two doctors from Brigham Hospital in Boston performed a successful kidney transplant.\(^\text{25}\) The operation involved twin brothers, with one brother giving his kidney to his other half.\(^\text{26}\) The operation was soon followed by another positive one, this time involving a lung transplant.\(^\text{27}\) In 1963, Dr. James Hardy successfully performed the world’s first lung transplant operation.\(^\text{28}\) Those two operations led the way for many other successful surgeries to be performed.\(^\text{29}\) In 1967, a groundbreaking heart transplant operation was successfully performed in South Africa.\(^\text{30}\) With lifesaving operations and a prolonged life now available, the future seemed bright for organ transplant operations,


\(^\text{22}\) Id.

\(^\text{23}\) Id.


\(^\text{26}\) Id.


\(^\text{28}\) Id.

\(^\text{29}\) Id.

but only recently have we really seen substantial improvement.\textsuperscript{31}

\textbf{B. Technology of the Past}

The slow progress of organ transplants was due largely in part to the technology and post-operation medications available to patients.\textsuperscript{32} Even when successful organ transplant surgeries were completed, the organs of the dead had no use to the living because their bodies would reject the organs.\textsuperscript{33} However, since 1962, advancements in pharmacologic immunosuppression have largely aided patients in preventing their bodies from rejecting the new organ.\textsuperscript{34} In the late 1970’s, a breakthrough immunosuppression drug, cyclosporine, was developed by Jean Borel and introduced onto the market, successfully preventing the rejection of organs more effectively than any other drug before its time.\textsuperscript{35} This revolutionary drug extended organ recipients’ lives and was the first medication to truly stabilize the control of rejection.\textsuperscript{36} With the use of cyclosporine and new technological advancements to aid the procedures, there was an incredible increase in the operations performed and in the demand for them.\textsuperscript{37} Consequently, this led to a whole new unforeseen and growing problem: the world shortage of healthy organs.\textsuperscript{38}

\textbf{C. Shortage of Organs and a Call for Action}

Once the technology and medication issues were resolved, a new problem emerged: the shortage of organs available.\textsuperscript{39} As of November 1, 2016, there were 121,678 people in need of an organ transplant, but only 5,538 living registered organ donors.\textsuperscript{40} With the demand far exceeding the supply, many new dangerous alternative means are being taken in order to obtain organs.\textsuperscript{41} These methods

\begin{itemize}
\item \textsuperscript{32} Grantham, supra note 24.
\item \textsuperscript{33} O’Carroll, supra note 31.
\item \textsuperscript{34} Id.
\item \textsuperscript{35} Id.
\item \textsuperscript{37} Id.
\item \textsuperscript{38} GM Abouna, \textit{Organ Shortage Crisis: Problems and Possible Solutions}, 40 TRANSPLANT PROC. 34, 34-38 (2008).
\item \textsuperscript{39} Id.
include organ harvesting, human trafficking, and a thriving black market. In response to the unethical means of receiving organs and to help control the high demand, Congress took action, and in 1968, passed the Uniform Anatomical Gift Act (“UAGA”). The Act was drafted and enacted in order to create unity between the fifty states, and to finally place federal regulations on organ transplants. By 1973, the UAGA or some form of it was adopted by all fifty states and the District of Columbia. The Act allowed for adults eighteen or older to legally decide whether they wanted their organs donated upon death, and it attempted to introduce a standard procedure for the donation of organs. Unfortunately, the UAGA was very ineffective and little at all was solved by its adoption.

**D. National Organ Transplant Act**

With the failure of the UAGA, Congress passed the National Organ Transplant Act to combat the low supply issues and the other problems faced by those in need of an organ transplant. The 1984 Act was designed to “strengthen the Nation’s healthcare system to provide organ transplant to thousands of patients across the country.” It created a task force to find solutions and established a systematic approach and methodical procedure in the procurement and donation of organs throughout the United States. Eventually, this task force helped create the national Organ Procurement and Transplantation Network (“OPTN”). The OPTN is responsible for maintaining the national waiting list containing people in need of an organ transplant. It is also in charge of regulating the allocation standards that organ procurement organizations (“OPO”) have to follow throughout the duration of the transplant process. The OPOs were also created by NOTA in order to streamline the execution of the patient-recipient procurement process. These organizations are responsible for

---

42. Id.
43. Grantham, supra note 24, at 753.
44. Id.
45. O’Carroll, supra note 31.
46. Grantham, supra note 24, at 754.
47. Id.
53. Id.
54. Minelli & Liang, supra note 51, at 935.
locating the organs and arranging the acquisition, preservation, and transportation of them to their final destination. They also work closely with hospitals to establish systems to help patient-donor status updates.

**E. Who Sets the Rules?**

Another important requirement of NOTA is that an OPO must be a “private non-profit entity which is not engaged in any activity unrelated to organ procurement.” As a result, the OPTN awarded the United Network for Organ Sharing (“UNOS”) the initial contract in 1986 and they have held it ever since. Prior to UNOS, independent procurement organizations and individual hospitals managed all aspects of the organ transplant process. This led to a mass amount of wasted organs because without one network, hospitals were unable to locate and match other suitable candidates. With the implementation of UNOS, a uniformed procedural code was in place that allowed for the preservation and utilization of more vital organs. Federal law gives broad discretion to UNOS, primarily maintaining that the system is done “equitably,” in accordance to a list which ranks “membership criteria and medical criteria.” In determining whether the system is done “equitably,” UNOS looks at three main principles: utility, justice, and respect. Following these principles, the system intends to provide fair treatment in organ allocation. UNOS is arguably the sole administrator of the organ procurement policies. However, in 2007, the Centers of Medicare and Medicaid added conditions of participation for organ transplants. These requirements focus on “an organ transplant program’s ability to perform successful transplants and deliver quality patient care as evidenced by outcomes and sound policies and procedures.”

55. Id.
57. Id. at § 274(b)(1)(A).
59. Id.
60. Id.
62. Id. at 3.
64. Id.
66. Id.
important to note that hospitals are still allowed to have their own requirements which must also be met.67

F. History of Medicinal Marijuana

The use of marijuana as medicine can be traced all the way back to 2900 B.C., with the first documented reference by Chinese Emperor Fu Hsi.68 Throughout the world, civilizations have benefitted from the healing powers of marijuana, and until the early 1920s, so did American citizens.69 At that time, temperance campaigners succeeded in persuading twenty-six states to pass laws prohibiting the use of marijuana.70 By the 1930s, the Uniform Narcotic Drug Act classified marijuana as an illegal drug in every state.71 Since that time, America has seen the peak of anti-marijuana propaganda. However, in 1996, a landmark act was passed.72 California passed Proposition 215, titled The Compassionate Use Act of 1996, which was the pioneer legislation officially legalizing medicinal marijuana in the state of California.73 The Act was enacted to “ensure that seriously ill Californians have the right to obtain and use marijuana for medical purposes … in the treatment of cancer, anorexia, AIDS, chronic pain … and any other illness for which marijuana provides relief.”74 The Act protected a qualified user and their caregiver from criminal prosecution, but other than that, it was quite purposefully vague.75 Still, the Act opened the door for medicinal marijuana, and to date, medicinal marijuana is legal in twenty-eight states, including the District of Columbia.76 Illinois became one of those states on August 1, 2013,

67. 42 CFR § 482.1-482.57 (2019).
70. Id.
73. Id.
75. Vitiello, supra note 73, at 707.
76. See generally Legal Medical Marijuana States and DC, PROCON.ORG, https://medicalmarijuana.procon.org/legal-medical-marijuana-states-and-dc/
when it passed the Compassionate Use of Medical Cannabis Pilot Program Act.\footnote{77} This Act legalized the prescription of medical marijuana for Illinois residents and also gave important protections to the those who qualified.\footnote{78} While many states have decriminalized medicinal marijuana, the federal government has not.\footnote{79} Currently, the manufacturing, distribution, and possession of marijuana is regulated by the Controlled Substance Act ("CSA").\footnote{80} Under the Act, marijuana is classified as a Schedule I substance, which is the most heavily restricted Schedule.\footnote{81} Schedule I drugs are labeled as having no medical benefits.\footnote{82}

\textbf{G. Restrictive Policies}

Almost every transplant center in the United States has a policy that restricts organ recipient candidates from using drugs, whether it be alcohol, marijuana, or another substance.\footnote{83} If the candidate tests positive for the prohibited substance they are either removed from the waiting list or not allowed on the list at all.\footnote{84} There are many reasons why candidates are removed, but the merits and reasons why will be discussed later on in the analysis section of this comment. The controversy lies in the fact that candidates legally prescribed medicinal marijuana are punished by the very hospitals that prescribed them the medicine.\footnote{85} Patients are allowed re-admission to the waiting list, but for many, it is either too late or their condition will not allow for the stoppage of marijuana use.\footnote{86} As long as a hospital adheres to the guidelines set forth by UNOS and the Centers for Medicare and Medicaid Services ("CMMS"), it is free to enforce any policy it wants, so long as it does

\footnotesize{(last updated July 24, 2019) (providing an expansive list of the current states and the medicinal marijuana laws which govern the citizens of each participating state).}

\footnote{77. Implementation of P.A., supra note 19.}
\footnote{78. Id.}
\footnote{79. See Vitaliy Mkrtchyan, Initiative 692, Now and Then: The Past, Present, and Future of Medical Marijuana in Washington State, 47 GONZ. L. REV. 839, 841 (2011/2012) (documenting the history of Washington State’s marijuana legislation and the restrictions the federal government places on the drug and discussing the progress proponents of medicinal marijuana have made regarding the enactment of legalized medical marijuana).}
\footnote{80. Id.}
\footnote{81. Id.}
\footnote{82. Id.}
\footnote{83. Arthur L. Caplan, Deny Organ Transplants to Marijuana Users?, MEDSCAPE (Sept. 23, 2013), www.medscape.com/viewarticle/811265#vp (analyzing the restrictions placed on organ transplant centers and the ethical guidelines they must also follow when making a decision by Dr. Caplan who is the head of the Division of Medical Ethics at NYU Langone Medical Center in New York).}
\footnote{84. Id.}
\footnote{85. Id.}
\footnote{86. Howard, supra note 17.}
not discriminate by race or gender.\textsuperscript{87} According to Dr. John Fung, chief of transplantation surgery and director of the Transplantation Institute at the University of Chicago Medicine, “No rule says you have to transplant any given population... each center basically evolves their own criteria.”\textsuperscript{88} Transplant centers are allowed to enforce these drug policies because the OPTN policies are silent on the topic as it pertains to candidates.\textsuperscript{89}

\section*{H. State Laws that Protect Medicinal Marijuana Users}

While marijuana is still illegal under federal law, as of 2016, seven states now prohibit transplant centers from denying candidates operations based solely on their use of medicinal marijuana.\textsuperscript{90} California joined Arizona, Delaware, Illinois, Minnesota, New Hampshire, and Washington when it passed Assembly Bill 258, which took effect in January 2016.\textsuperscript{91} Titled the Medical Cannabis Organ Transplant Act, it strictly prohibits transplant centers from discriminating against candidates legally prescribed medicinal marijuana.\textsuperscript{92} The Act is similar to the Illinois Compassionate Use of Medical Cannabis Pilot Program Act, which specifically acknowledges qualified users of medicinal marijuana in need of a transplant operation.\textsuperscript{93} While the aforementioned laws do protect organ transplant candidates who use medicinal marijuana, closer interpretation of the statutes reveals more that needs to done, which will be addressed later in this comment.

\section*{III. Analysis}

This section of the comment will take an in-depth look at the arguments in favor of denying organ transplants to medicinal marijuana users, as well as the arguments against such discrimination. By analyzing both sides of the argument, this comment will show that organ transplant candidates who use

\begin{footnotes}
\footnotetext[87]{Id.}
\footnotetext[88]{Id.}
\footnotetext[89]{Policies, ORGAN PROCUREMENT & TRANSPLANTATION NETWORK, optn.transplant.hrsa.gov/media/1200/optn_policies.pdf (last visited Oct. 12, 2017) (referencing that in the actual policies governing UNOS and all of the organ transplant centers in the United States, there is nothing in the policies that prohibits candidates from using drugs or alcohol).}
\footnotetext[90]{Sue Pondrom, Transplantation and Marijuana Use, 16 AM. J. TRANSPLANTATION 1, 1-2 (2016) (covering news and issues that affect organ and tissue transplantation, touching on the seven states which now have legislation that prohibits the discrimination of organ candidates that are medicinal marijuana users).}
\footnotetext[91]{Id.}
\footnotetext[92]{A.B. 258, 2015 Assembl. (Cal. 2015).}
\footnotetext[93]{410 ILL. COMP. STAT. 130/40(2) (2019) (protecting medicinal marijuana users who are in need of an organ transplant operation).}
\end{footnotes}
medicinal marijuana need more protection, and soon. The benefits enjoyed by candidates who use medicinal marijuana far outweigh the potential risk associated with the alleged problems it may cause. This section will also explore the Illinois Compassionate Use of Medical Cannabis Pilot Program Act and the public policies in favor of its inception. It will then discuss the legislation other states have passed restricting discriminating policies against medicinal marijuana users in need of an organ transplant operation.

A. Inconsistencies in Substance Use

With hospitals and transplant centers allowed to implement their own regulations, there is a vast range of candidate selection criteria, especially when it comes to substance use. For instance, one of the leading reasons for a liver transplant is due to alcohol cirrhosis, a disease which is easily preventable by abstaining from drinking alcohol. Yet, even though this is a self-induced illness, there are still transplant centers that will complete an organ transplant operation for a patient with liver cirrhosis. Even more alarming, about twenty percent of these recipients continue to use alcohol after the transplant, ultimately leading to organ failure again. Perhaps the largest discrepancies and most controversial candidate selection policies revolve around the smoking of cigarettes and marijuana. Cigarettes are responsible for 480,000 deaths in the United States every year and have a detrimental effect on nearly every organ in the body. In contrast, there have been zero reported deaths attributed to the use of marijuana, whether it be for recreational or medicinal purposes. The effect marijuana has on human organs is one of beneficial healing, not a devastating one. However, even with the lopsided statistics, candidates who

94. Minelli & Liang, supra note 51, at 680.
95. See K.A. Bramstedt & N. Jabbour, When Alcohol Abstinence Criteria Create Ethical Dilemmas for the Liver Transplant Team, 32 J. MED. ETHICS 263 (2006) (describing how even though alcoholism is a self-induced disease, alcoholics still have a higher chance at receiving an organ transplant over a candidate who uses medicinal marijuana).
96. Id.
97. Id.
98. Minelli & Liang, supra note 51, at 682.
99. Fast Facts, CTBS. FOR DISEASE CONTROL & PREVENTION, www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm (last visited Oct. 23, 2017). Cigarettes are the deadliest substance in the world, however, there are less restrictions in place against cigarette smoking compared to the restrictive policies against medicinal marijuana users. Id.
100. Kim Bellware, Here’s How Many People Fatally Overdosed on Marijuana Last Year, HUFFINGTON POST (Dec. 30, 2015), www.huffington post.com/entry/marijuana-deaths-2014_us_56816417e4b06fa68880a217. There have been no confirmed overdose deaths from marijuana use. Id.
101. What Are the Health Benefits of Medical Marijuana?, INHALE MD, inhalemd.com/massachusetts-medical-cannabis-guide/what-are-the-health-
smoke cigarettes have a far greater chance at receiving an organ transplant as compared to marijuana users.\textsuperscript{102} No argument is going to be made regarding the policies enacted in states that still prohibit marijuana, since marijuana is a banned substance under federal law.\textsuperscript{103} But as of October 2017, medicinal marijuana is currently legal in 29 states, so why are organ candidates prescribed marijuana under a physician’s care still being denied operations?\textsuperscript{104}

\textbf{B. Reasons for Denying Candidates Who Use Medicinal Marijuana}

The leading arguments against candidates using medicinal marijuana pertain to post-operation care.\textsuperscript{105} The number one argument in favor of denial is a rare fungal infection known as invasive aspergillosis (“IA”).\textsuperscript{106} Aspergillus is a fungus which does not normally cause illness. In fact, its spores are in the air that we breath and in the soil where we grow our food.\textsuperscript{107} However, for people with a weakened immune system the fungus can cause disease, specifically IA.\textsuperscript{108} Patients that have completed treatment for cancer or had an organ transplant are much more susceptible to contracting the disease.\textsuperscript{109} This is of grave concern to physicians because it is one of the leading causes of “infected related death in immunocompromised patients.”\textsuperscript{110} Proponents of denying candidates transplants who use medicinal marijuana argue that the candidates pose a greater risk of contracting IA because they use marijuana.\textsuperscript{111} Their judgment is based on the fact that some strands of marijuana contain a high amount of aspergillus and once the patient uses the drug, the spores go into their body and counteract

\textsuperscript{102} Minelli & Liang, supra note 51, at 682.
\textsuperscript{104} Legal Medical Marijuana States and DC, supra note 76.
\textsuperscript{105} Minelli & Liang, supra note 51, at 684.
\textsuperscript{106} Id.
\textsuperscript{107} What is Aspergillus?, ASPERGILLUS, www.aspergillus.org.uk (last visited Oct. 23, 2017). Aspergillus, a fungal bacteria, is the number one health concern of physicians. Id. Aspergillus can grow on the buds of marijuana and when smoked by patients can turn into a deadly disease. Id.
\textsuperscript{108} Id.
\textsuperscript{109} Id.
\textsuperscript{110} See David N. Fredricks, Causes of Death in a Contemporary Cohort of Patients with Invasive Aspergillosis, 10 PLOS ONE 1 (2015) (describing how some patients who use medicinal marijuana do develop invasive aspergillosis, however, this is a rare disease and does not occur often).
the necessary immunosuppression drugs. While there have been deaths in organ recipients linked to their use of medicinal marijuana, the research is far from conclusive. In an interview with CNN, Dr. David Klassen, the chief medical officer of UNOS, was asked about the risk of IA and medicinal marijuana, to which he responded, “[h]ow likely is it? Those questions are less well understood.”

The other main argument against transplant patients’ use of medicinal marijuana is patients who use the drug will not take the immunosuppression drugs prescribed to them post-surgery. Since marijuana is still illegal under federal law, marijuana-using patients are viewed as non-compliant, which suggests they will not comply with their post-operative medication plan. It is a strictly subjective view of the psychological effects marijuana has on a person’s brain. The fear is that due to using marijuana, a patient’s memory will be impaired, resulting in them not following through on their necessary post-operative regime. This argument is also not supported by an overwhelming amount of research, particularly because much of the research is conflicting. There is research that shows marijuana has significant effects on a person’s cognitive ability, positive and negative. Some research shows there is no effect on memory, some research shows that it only effects short term memory, and some shows only permanent memory is affected.

112. Minelli & Liang, supra note 51, at 684.
113. See Bertram Joyner, Cannabis Users Routinely Denied Organ Transplants, PULSE (Apr. 13, 2017), marijuanapackaging.com/blogs/news-1/cannabis-users-routinely-denied-organ-transplants (analyzing the policies used by organ transplant centers and hospitals which prohibit candidates in need of an organ transplant from using legally prescribed marijuana).
114. Id.
115. See Aimee Kuvadia, People Using This Health Remedy Are Often Denied Organ Transplants, ATTN (July 15, 2016), www.attn.com/stories/9502/marijuana-use-can-lead-to-denial-of-organ-transplant (exploring the problems patients who use medicinal marijuana face and the reasons they are denied an organ transplant operation).
116. Id.
117. Caplan, supra note 83.
118. Id.
119. What are Marijuana’s Long-term Effects on the Brain?, NAT’L INST. ON DRUG ABUSE, www.drugabuse.gov/publications/marijuana/what-are-marijuanast-long-term-effects-brain (last visited Oct. 23, 2017). Research has been done which shows conflicting and mixed results as to the effects of marijuana on the brain. Id. There is no consensus on whether the effects are positive, negative, long term, or short term, which allows physicians to use their own discretion in denying an organ candidate based solely on their use of medicinal marijuana. Id.
120. Id.
121. Id.
C. New Research Shows Medicinal Marijuana Helps Organ Transplant Operations

According to results published in the Journal of Leukocyte in June 2015, medicinal marijuana can have a positive effect on organ transplant operations.\(^\text{122}\) A team of researchers from the University of South Carolina School of Medicine conducted a lab test involving mice and THC.\(^\text{123}\) Tetrahydrocannabinol, commonly referred to as THC, is one of the main active ingredients in marijuana.\(^\text{124}\) The mice had a skin graft done to replicate a human organ transplant.\(^\text{125}\) While recovering, half of the mice were given THC and the other half were not.\(^\text{126}\) The mice that were not given the THC rejected the new skin immediately, whereas the mice given the THC had a delayed rejection.\(^\text{127}\) The study showed that THC significantly slowed down the T-cell proliferation and decreased early rejection indicators.\(^\text{128}\) Co-author of the study, Mitzi Nagarkatti said, “We are excited to demonstrate for the first time that cannabinoid receptors play in important role in the prolongation of rejection of a foreign graft by suppressing immune response in the recipient.”\(^\text{129}\) While the research is promising, this is the only study of its kind, and physicians are reluctant to trust the positive effects of THC because it has only been proven to work on mice.\(^\text{130}\)

D. THC is a Proven Immunosuppressant

THC acts as a psychoactive compound and is well known for being an effective immunosuppressant.\(^\text{131}\) This is extremely beneficial to recipients of organ transplants because once a new

\(^{122}\) See Arielle Gerard, Study: THC May Help to Prevent Transplant Rejection, MED. JANE, www.medicaljane.com/2015/06/09/new-study-thc-may-help-to-prevent-transplant-rejection/ (last visited Oct. 25, 2017) (describing the breakthrough research project that proves THC does have a positive effect on patients after an organ transplant operation).

\(^{123}\) Id.


\(^{125}\) Gerard, supra note 122.

\(^{126}\) Id.

\(^{127}\) See Guneet Bhatia, Marijuana May Help Organ Transplant Patients by Delaying Rejection, INT’L BUS. TIMES (Sept. 3, 2015), www.ibtimes.com/marijuana-may-help-organ-transplant-patients-delaying-rejection-2080873 (analyzing the positive effects of THC in the immune system and how it can delay organ rejection).

\(^{128}\) Ben Miller, Study: Cannabis May Help Organ Transplant Patients With Recovery, RESET (Sept. 21, 2015), reset.me/study/study-cannabis-may-help-organ-transplant-patients-with-recovery/.

\(^{129}\) Id.

\(^{130}\) Id.

\(^{131}\) Anna Wilcox, New Study Proves THC Improves Organ Transplant Success, HERB (July 9, 2016), herb.co/news/health/thc-organ-transplant/.
organ is placed inside of them, their body’s natural reaction is to reject this foreign organ. As a result, organ recipients are prescribed immunosuppression drugs and a strict regime to adhere to post-operation. This is also what THC can be used for. The cannabinoid can have a calming effect on a recipient’s immune system. When the human body attacks the new organ, it is primarily done with T-cells. Like the research involving the mice showed, when THC is administered into the body of a recipient, it delays the activation of T-cells, essentially “chilling” them out. One study showed conclusive evidence that cannabinoids delay the response of T-cells and can have a positive effect of immunosuppression.

E. Illinois Taking a Proactive Approach

Although Illinois is normally not a leading state in progressive policies, on August 1, 2013, then-Governor Quinn signed the Illinois Compassionate Use of Medical Cannabis Pilot Program Act ("Cannabis Act"). After signing the bill, Governor Quinn said, “[t]his new law will provide that relief and help eligible patients ease their suffering, while making sure Illinois has the nation’s strictest safeguards to prevent abuse.” Also in support of the bill was former prosecutor, Senator Bill Haine, who said, “[p]atients afflicted by the most unbearable conditions finally have a compassionate answer to their cries for help.” By passing the bill, Illinois went a step beyond decriminalizing marijuana by adding provisions to protect the rights of those legally prescribed medicinal marijuana.

Other states have passed legislation legalizing medicinal marijuana, but have neglected to protect the rights of those who

132. Living with Immunosuppression After an Organ Transplant, WEB MD, www.webmd.com/a-to-z-guides/organ-transplants-antirejection-medicines-topic-overview#1 (last visited Oct. 26, 2017). After a successful organ transplant operation, patients are placed on a strict routine of immunosuppressant drugs in order to stop their body from rejecting the organ. Id.
133. Id.
134. Wilcox, supra note 130.
136. Wilcox, supra note 130.
139. 2013 Legis. Bill Hist. IL H.B. 1. Illinois Governor Quinn signed the Illinois Compassionate Use of Medical Cannabis Pilot Program Act and had very powerful comments in favor of the bill. Id.
140. Id.
141. Id.
would legally qualify to use it. For example, when California passed Proposition 215, a landmark act, it legalized medicinal marijuana, however, the act had nothing in it to protect the rights of organ transplant candidates. This resulted in terminally ill patients using marijuana as medicine and then being denied a life-saving organ transplant operation. Rather than wait for this scenario to happen, Illinois preempted it by taking a proactive stance on the issue.

Pursuant to the Cannabis Act, “[f]or the purposes of medical care, including organ transplants, a registered qualifying patient’s authorized use of cannabis in accordance with this Act is considered the equivalent of the authorized use of any other medication used at the direction of a physician, and may not constitute the use of an illicit substance or otherwise disqualify a qualifying patient from needed medical care.” Thus, hospitals and organ transplant centers were no longer allowed to deny a patient an organ transplant based solely on the patient’s use of medicinal marijuana. As army veteran Jim Champion states, “I use medical cannabis because it’s the most effective medicine in treating my muscle spasticity with few side effects.” He, along with the other terminally ill citizens of Illinois, will no longer be forced to choose whether to use the only medicine that works or suffer in pain while waiting for an organ transplant.

F. No Unity Within the Few States Standing Up

Illinois is one of seven states that have enacted legislation to protect the rights of organ candidates using legally prescribed medicinal marijuana. California became the most recent state by passing the Medical Cannabis Organ Transplant Act, which prohibits “blanket restrictions of potential organ transplant donors and recipients based solely on reported or detected marijuana uses.” The Medical Cannabis Organ Transplant Act was a long

142. CAL. HEALTH & SAFETY CODE § 11362.5(b)(1)(A) (2017). California was the first state to legalize marijuana for medicinal purposes. Historical Timeline: History of Marijuana as Medicine – 2900 BC to Present, supra note 68.
143. Id.
144. Gorman, supra note 8.
145. 410 ILL. COMP. STAT. 130/40(2) (2019).
146. Id.
147. Id.
150. Pondrom, supra note 90.
151. See Gillian Mohney, California Has Finally Stopped Denying Organ Transplants to Medical Marijuana Users, VICE NEWS (July 11, 2015), news.vice.com/article/california-has-finally-stopped-denying-organ-transplants-to-medical-marijuana-users (declaring that California has finally
time coming and will surely save many lives, but for some patients it came twenty years too late.152 Ultimately, California did what was necessary to correct their omission in Proposition 215 and used language in the newly passed Act that unambiguously prohibited the denial of candidates using medicinal marijuana;153 just as Illinois explicitly did in the Cannabis Act.154 However, some of the other states with similar legislation have not been as thorough as needed in their provision of protecting organ candidates.155

For instance, New Hampshire passed the Therapeutic Cannabis Program, and while the legislation does mention organ transplant candidates, it does not do enough to protect them.156 Pursuant to the Act, "medical care, including organ transplants, a qualifying patient’s authorized use of cannabis in accordance with this chapter shall be considered the equivalent of the authorized use of any other medication used at the direction of a provider, and shall not constitute the use of an illicit substance."157 This is ineffective because it still allows for hospitals and organ transplant centers to discriminate against candidates using medicinal marijuana, by failing to prohibit the most common reasons for turning candidates down.158 The Act does afford candidates some protection, however, it still does not prevent the transplant centers from explicitly denying a candidate an organ based solely on their use of medicinal marijuana.159 This is the problem Garry Godfrey faced, whose story was examined earlier in this comment.160 Garry’s home state of Maine does not have legislation protecting organ candidates who use medicinal marijuana, at least not yet.161 On June 12, 2017, the Maine Senate approved a bill that would prevent transplant centers from denying candidates organs based solely on their use of medical marijuana.162 The bill, which was also passed in the Maine House, was sent to the Governor and is currently awaiting his signature.163 For Garry Godfrey, this is exactly what he needed, and “[he] should have never had to choose between a lifesaving organ transplant and

---

added much needed protection for organ candidates who are legally prescribed medicinal marijuana).

152. Id.
153. Id.
154. 410 ILL. COMP. STAT. 130/40(2) (2019).
156. Id.
157. Id.
159. Id.
161. Id.
163. Id.
a lifesaving medicine.”

Hopefully soon, he will not.

IV. PROPOSAL

This section will discuss a proposal to end the legal discrimination allowed by organ transplant centers and hospitals against organ candidates based solely on their use of medicinal marijuana. Illinois has taken a progressive approach to the issue and the Cannabis Act successfully protects organ candidates who use medicinal marijuana. Therefore, the federal government should adopt proactive policies similar to Illinois to ensure fair treatment to all terminally ill patients, thereby allowing them to use the most effective legal medicine available. The national policy should prohibit discrimination of organ candidates based solely on their use of legally prescribed medicinal marijuana.

A federal policy that creates unity throughout all fifty states regarding organ transplant candidates and medicinal marijuana is a necessity. The objective of this policy would be to end the current discrimination allowed by transplant centers and to preempt any future discrimination from occurring. As more states begin legalizing marijuana, the federal government needs to be proactive and set a uniform standard. This new standard would ensure equal access for all patients to crucial life-saving organ transplants, and end the unnecessary burden of choosing between vital medicine or an organ.

The policy should mirror the language of the Illinois Cannabis Act, specifically, the section that protects the organ candidates. A proposed federal policy should be titled, The Organ Candidate Protection Act (“the Protection Act”), and should read as follows, “Any United States citizen diagnosed with a terminal illness, or who has suffered a life-threatening injury resulting in the need of an organ transplant operation, shall not be denied access to an organ transplant operation or be removed from the waiting list based solely on their use of medicinal marijuana.” This policy would immediately provide organ candidates with the necessary protection they need, allowing them to freely use medicinal marijuana for healing purposes. It would not only protect patients diagnosed with terminal illnesses, but also patients in need of an organ transplant due to injury.

For added protection, the policy should also have a clause,
similar to Illinois\textsuperscript{169} and New Hampshire,\textsuperscript{170} that declassifies medicinal marijuana as an illegal substance, thus, not allowing the transplant centers or hospitals to deny organ candidates operations, on the basis of their use of an illegal substance. This clause would save more lives because it would allow for organ candidates using medicinal marijuana to expand their search for an organ by eliminating the fear of being denied a transplant in a state that has not legalized marijuana. This situation is best explained by the story of Riley Hancey, a nineteen-year-old who recently passed away due to his denial of an organ transplant.\textsuperscript{171} Riley was diagnosed with severe pneumonia in November 2016 which caused both of his lungs to collapse, and required him to have a double lung transplant to survive.\textsuperscript{172} He was denied the life-saving operation by the University of Utah Hospital because he had THC\textsuperscript{173} in his system.\textsuperscript{174} As a result, Riley was forced to look to other states, specifically, those that did not discriminate against patients who used marijuana. Eventually, Riley did receive the double lung transplant, performed by the Hospital of the University of Pennsylvania,\textsuperscript{175} but it was too late.\textsuperscript{176} His father said Riley did not smoke marijuana regularly, but only occasionally, and did so on Thanksgiving night with some friends.\textsuperscript{177} Although Riley Hancey was denied the organ transplant operation due to his recreational use of marijuana, it is easy to see the same scenario playing out, but with the use of medicinal marijuana. An organ candidate legally prescribed medicinal marijuana should be able to have an organ transplant operation in every state and not be limited to only states that have legalized medicinal marijuana. This would allow for more organ candidates to potentially receive the life-saving procedure needed and also indirectly save more lives like Riley Hancey’s.

The Protection Act would be implemented retroactively\textsuperscript{178} in all

\begin{itemize}
\item \textsuperscript{169} 410 ILL. COMP. STAT. 130/40(2) (2019).
\item \textsuperscript{170} Therapeutic Cannabis Program, supra note 155.
\item \textsuperscript{172} Jackie Salo, Teen Denied Life-Saving Transplant for Smoking Pot, N.Y. POST (Apr. 12, 2017), nypost.com/2017/04/12/teen-denied-life-saving-transplant-for-smoking-pot/.
\item \textsuperscript{173} Gerard, supra note 122.
\item \textsuperscript{174} Salo, supra note 172.
\item \textsuperscript{175} See generally, Jan Murphy, It’s Official: Medical Marijuana Now Legal in Pennsylvania, PENN LIVE (Apr. 17, 2016), www.pennlive.com/politics/index.ssf/2016/04/its_official_medical_marijuana.html (explaining that medicinal marijuana is now legal in Pennsylvania).
\item \textsuperscript{176} Loria, supra note 168.
\item \textsuperscript{177} Id.
\item \textsuperscript{178} Retroactive, FREE DICTIONARY, legal-dictionary.thefreedictionary.com/retroactive (last visited Nov. 18, 2017). \textsuperscript{4}A retroactive or retrospective law is one that takes away or impairs vested rights acquired under existing laws, creates new obligations, imposes new duties, or attaches a new and different legal effect
fifty states. By doing so, people such as Garry Godfrey would be immediately protected.\textsuperscript{179} The first day the Protection Act goes into effect, all organ candidates who had been removed from the waiting list due to medicinal marijuana usage would automatically be placed back on it. At that point, the transplant centers and hospitals may still screen the newly added candidates, but the new candidates would not be removed from the waiting list due solely to their use of medicinal marijuana. Patients who were immediately remaining marijuana free in order to comply with the transplant centers readmission policies would immediately be able to start using their medicinal marijuana again without having to face any consequences.\textsuperscript{180} Furthermore, because the organ candidates would be placed back on the waiting list instantly, it would make up for some of the crucial time lost as a result of being wrongfully removed from the original waiting list.

Another added benefit of the Protection Act would be the unity throughout the states. This is important because it will not only add protection in states that have already legalized marijuana, but it will add protection in states that will soon legalize medicinal marijuana as well. Although more and more states are legalizing marijuana each year,\textsuperscript{181} a substantial problem still remains for organ candidates using marijuana. Out of the twenty-nine states that have currently legalized marijuana, only seven of them have laws that protect organ candidates who use medicinal marijuana, and some of those laws fail to do even that.\textsuperscript{182} As previously addressed above, the Therapeutic Cannabis Program, which was passed by New Hampshire, fails to adequately protect organ candidates using medicinal marijuana.\textsuperscript{183} The policy only prohibits transplant centers and hospitals from classifying marijuana as an illegal substance, thus, providing a reason to deny a candidate an organ transplant operation if they use marijuana.\textsuperscript{184} Since that is not the primary reason organ candidates are denied the operation, much more needs to be done.\textsuperscript{185} Under the proposed Protection Act, citizens of New Hampshire and other states that have failed to protect their citizens who use medicinal marijuana, will be immediately covered. This will not only solve the existing
problematic state legislation, but also preempt any future legislation or lack thereof. Every United States citizen in need of an organ transplant will be allowed to use medicinal marijuana and have equal access to life-saving organs in all fifty states.

V. CONCLUSION

The obstacles faced by patients in need of an organ transplant operation are unimaginable and there are few signs of relief. For some, medicinal marijuana is the only relief they have, the only medicine that works, and the only thing keeping them from receiving the life-saving organ transplant operation they require. Currently, there are hospitals that prescribe medicinal marijuana to organ candidates and then deny those same patients the life-saving operation they need for using the legally prescribed medicine.

A uniform federal policy is needed and a change must be made. More and more states are legalizing marijuana for medicinal purposes, however, very few of the “green” states have enacted legislation to protect terminally ill patients in need of an organ transplant. Even states that have attempted to protect organ candidates who use legally prescribed marijuana have failed to do so. As a result, many candidates are in the ultimate catch-22, use the only medicine keeping them alive or quit taking it and play Russian roulette with their life. This is a choice they should not have to make.

186. Therapeutic Cannabis Program, supra note 154.
187. Legal Medical Marijuana States and DC, supra note 76.
188. Howard, supra note 17.