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# Words Can Be Deceiving: A Review of Variation among Legally Effective Medical Marijuana Laws in the United States

**Abstract:** When voters in two US states approved the recreational use of marijuana in 2012, public debates for how best to promote and protect public health and safety started drawing implications from states' medical marijuana laws (MMLs). However, many of the discussions were simplified to the notion that states either have an MML or do not; little reference was made to the fact that legal provisions differ across states. This study seeks to clarify the characteristics of state MMLs in place since 1990 that are most relevant to consumers/patients and categorizes those aspects most likely to affect the prevalence of use, and consequently the intensity of public health and welfare effects. Evidence shows treating MMLs as homogeneous across states is misleading and does not reflect the reality of MML making. This variation likely has implications for use and health outcomes, and thus states' public health.

**Keywords:** medical marijuana, healthcare law, medicinal cannabis, legal analysis

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## Introduction

As of October 2013, the medical use of marijuana is legal in 21 US states and the District of Columbia (DC; NCSL 2013). Since marijuana is still illegal under federal law, many scholars have focused on issues of federal preemption and the scope of states' rights. However, as policymakers and individuals on the

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ground in these states know very well, the current debate about federal versus state law is insufficient, as questions still remain about what exactly is legal according to state laws across all the states permitting medical marijuana (MM). The clarification of various provisions in state laws has important implications since policy debates and research have begun to focus on the effects that various medical marijuana laws (MMLs) have on health and safety, rather than on simply whether MM is permissible or not.

The protection provided by MMLs depends on legal details that are frequently overlooked and not well understood, including: who may recommend MM; who may use MM; the medical conditions for which MM may be used; and how individuals may obtain MM. The nature of the problem resides in the presumption that the use of marijuana for medicinal purposes is a binary conclusion, i.e. it is either legal or not. This article reveals this is clearly not the case. Jurisdictions differ widely on how they govern suppliers and consumers of medical marijuana. Some states explicitly allow for, and carefully describe the permissible activities of, dispensaries. Other state laws are silent on this matter, thus leaving the door open as to whether dispensaries are allowed and, if so, whether they can undertake potentially controversial activities, such as selling marijuana for profit or selling paraphernalia. Furthermore, the differences between states' laws on supplying MM are not immediately apparent. Some states define cooperatives/collectives and compassion centers in the same way as other states define dispensaries, bringing into question what these terms even really mean.

The diversity of state MMLs can be seen even within model statutes proposed by seemingly similar organizations. Americans for Safe Access (ASA) and the Marijuana Policy Project (MPP) have both produced model statutes intended to act as a guide for lawmakers considering enacting MMLs. Even though the model statutes are produced by similar groups with similar views on the safety and efficacy of medical marijuana, the legal language in these model statutes implies different implementation and regulation goals. Even if policymakers may agree that MM should be allowable, they tend to disagree on how to allow it.

Most inquiries to date have focused on nominal definitions of MM statutes: for example, whether law explicitly stated that MM use or dispensaries were permissible. However, there is a need for further inquiry into the legal language of state MMLs in order to fully understand the constraints on the availability of MM within each state. These constraints will depend on the functional definitions of MM statutes: for example, what legal protections are provided for MM use, or what restrictions are placed upon the operation of dispensaries. While the nominal definitions will tell what the law purported to do, the functional definitions reveal how the law actually changed status quo policies in order to

accomplish these goals. Even laws that are similar in one aspect may differ widely in others, resulting in completely different levels of legal protection and access to MM. The specifics of a jurisdiction's policies regarding registration, available supply sources, and oversight authority can greatly affect a patient's ability to obtain and use MM without legal repercussions.

The purpose of this paper is to provide a clear, definitional framework for understanding variation among legally effective MMLs within the United States as of January 1, 2012. By primarily analyzing the characteristics of the laws that are most relevant to consumers of MM, this article categorizes those aspects most likely to affect the prevalence of MM use, and consequently the intensity of public health and welfare effects. In order to identify effective policy levers, we first discuss the history and enactment of MMLs to better understand where states have been and where states may be going. Next, we define those aspects of the law that most affect availability of and access to MM and, for each aspect, categorize each law based on its functional impact on MM access. Where relevant, we also include comparisons to model statutes in order to provide greater understanding of how states align with what may be considered guidelines or best practice. We then conclude with a discussion of further avenues for research.

## Methodology

This paper analyzes the language of MMLs as they were enacted in public law versions of state statutes or constitutional amendments between the period January 1, 1990 and January 1, 2012. All 50 states and the DC (51 jurisdictions) are included. While there are numerous legal provisions on MM that can be considered, the legal database focuses on those reflecting economic theory of what drives access, availability, and regulation or enforcement of drug laws for both consumers and suppliers.

The legal database developed in this paper uses a definitional framework referencing the text of the laws as written. To do so, an initial review of the theoretical literature and LEXIS was conducted to identify jurisdictions with MMLs and to obtain copies of the appropriate laws. Since the aim of this paper is to understand when different aspects of each law were enacted and effectuated, it was necessary to use the public law versions of the laws[1]; these were

1 Since each state's legislative code only provides the most current version of the law, it cannot be used to obtain information about previous versions of the law that may have since been altered.

obtained directly from each state's online legislative archives. When a law was created through ballot initiative, rather than legislative action, we obtained copies of the text of law as passed through the appropriate state agency.

Once the appropriate legal documents were identified, they were analyzed using systematic content analysis. First, we identified what dimensions of the laws might be meaningful from a policy perspective, from a review of the literature and our understanding of the issues related to MM decriminalization and legalization. A codebook was created setting forth specific, replicable, and verifiable criteria for classifying each law along each dimension. This codebook was then applied to each law, and the results were recorded and organized. These results were then analyzed, and summary and descriptive statistics were calculated. As legal interpretation of state laws can be considered subjective, we compared assessments of the legality of provisions in this database to that of the National Conference of State Legislatures (NCSL) assessments and include such comparisons when possible.

One limitation of this approach is that the activities during the post-enactment processes, which can shape the availability of medical marijuana, are not included in this database. After laws are enacted, state agencies can promulgate regulations to carry out their intent. Although these regulations cannot change the rules created by law, they can greatly impact the way in which the original MMLs are implemented. Similarly, judicial interpretation of state laws may significantly alter the protections available for MM users and providers. For example, a Michigan appellate court recently determined that the Michigan Medical Marihuana Act [MMMA] did not prevent an MM dispensary from being closed as a public nuisance (State v. McQueen 2011). On appeal, the Michigan Supreme Court held that "the Court of Appeals reached the correct result when it ordered the defendants' business be enjoined as a public nuisance" because "the MMMA does not contemplate patient-to-patient sales of marijuana for medical use and that, by facilitating such sales, defendants' business constituted a public nuisance" (State v. McQueen 2013, 647). In order to limit the subjectivity of the database associated with implementation and to ensure every jurisdiction's state laws were assessed along the same criteria, e.g. as written in public version, this study does not include subsequent interpretations of courts or policies established by regulatory bodies. While beyond the scope of this paper, an avenue of further research would be to enhance the state law database by developing a wider regulatory database taking into consideration post-enactment court decisions and regulatory measures.

## History and enactment of medical marijuana laws

Starting in the mid-1990s, the first state MMLs aimed at patient use[2] mostly allowed for physician prescription or recommendation of medical marijuana. In Arizona (AZ), for example, voters passed Proposition 200 in 1996, which allowed "any medical doctor licensed to practice in Arizona may prescribe a controlled substance included in Schedule I of §36-2512 to treat a disease, or to relieve the pain and suffering of a seriously ill patient or terminally ill patient" (ADS 1996). It soon became clear that the federal government would seek to enforce federal drug laws prohibiting marijuana use, even for medical purposes, by "seek[ing] to revoke the DEA registrations of physicians who recommend or prescribe Schedule I controlled substances" (McCaffrey 1996). In response, a group of MM advocates sought to permanently enjoin the federal government from enforcing this policy. Although this case was never heard by the Supreme Court, the Ninth Circuit Court of Appeals eventually determined that, while federal law clearly prohibited the prescription of medical marijuana, the First Amendment prevented "the federal government from either revoking a physician's license to prescribed controlled substances or conducting an investigation of a physician that might lead to such revocation, where the basis for the government's action is solely the physician's professional 'recommendation' of the use of medical marijuana" (Conant v. Walters 2002, 632). Although states are unable to pass laws insulating physicians who write prescriptions for MM from legal consequences, they are able to provide protection to physicians who recommend MM to their patients. Therefore, although some states enacted laws allowing physicians to prescribe MM, these laws could not protect physicians from being penalized and could not be used to effectively implement an MM policy.

Currently, states can enact effective MMLs either as constitutional amendments or statutory provisions. States have predominately utilized the statutory route. To date, only Colorado (CO) and Nevada (NV) have added provisions to their constitutions allowing the medical use of marijuana. This may be due to the increased difficulty of enacting constitutional amendments. For example, voters in NV must approve a constitutional amendment in two consecutive elections before it is added to the NV constitution.

Just as constitutional amendments are more difficult to enact, they are correspondingly more difficult to amend or repeal. The method by which an MML is enacted determines the ease with which the laws can be subsequently

**2** As opposed to research purposes.

changed and thus, the extent to which states can increase or decrease accessibility to MM. MM statutes have been created both by state legislature and by voter referendum. Legislatively created statutes can generally be changed by the legislature that created them. However, the legislature's ability to change laws created by voter referendum varies from state to state. Some states are more flexible and allow the state legislature to amend ballot initiatives directly by statute. For example, neither the Maine (ME) constitution nor the Maine Revised Statutes place any limits on the legislature's ability to revise or revoke an initiated statute. Other states restrict, sometimes quite severely, the legislature's ability to change laws directly created by the voters. According to the AZ state constitution, for example, the legislature cannot repeal an initiative measure and can only amend it to "further the purposes of such measure" by a three-fourths vote of both houses of the legislature. Meaning, the legislature or voters of AZ cannot change details of the MML through the legislature system even if it may be an easier course to change the law. Either group would have to place the issue on a ballot and submit it to the voters. States have increasingly created MMLs through legislative processes. In the legal database for this study, there were relatively more MMLs for patient use adopted as ballot initiatives in every year between 1996 and 2001 (22 of 31 statutes, or 71% over the period) than set by the state legislatures. From 2002 onward, however, this trend was reversed such that in every year from 2002 to 2012, there were relatively more MMLs passed by the state legislatures (113 of 153, or 74% over the period) than as ballot initiatives.

## Functional definitions of key aspects of medical marijuana laws

### Obtaining permission to use medical marijuana

Since physicians face sanctions from the federal government for prescribing medical marijuana, physicians can only "recommend" the use of MM to patients and states have created legal protections for individuals who use marijuana with a medical recommendation. The circumstances under which medical professionals may recommend marijuana, however, vary from state to state (see Table 1). Jurisdictions may permit the use of MM for pain, although the language defining the permissible uses of MM for pain vary and can be categorized into one of the followings: (1) pain caused by a diagnosable medical condition, (2) any pain of unknown causes, and (3) upon recommendation of a physician.

**Table 1:** State laws on patient registry, pain, and home cultivation, 1997–2012

| Jurisdiction | Law | Effective year[†] | Patient registry protection | | | Pain | | | Home cultivation |
|---|---|---|---|---|---|---|---|---|---|
| | | | Some protection available if not registered | Only protected if registered | Registry provisions or requirements not provided | Unspecified cause of pain | Pain of unknown cause | Physician recommended | |
| Alaska | Meas. 8 | 2000 | x | | | x | | | x |
| | SB 94 | 2000 | | x | | x | | | x |
| Arizona | Prop. 203 | 2011 | x | | | x | | | x* |
| California | Prop. 215 | 1997 | | | | | x | x | x |
| | SB 420 | 2005 | x | | | | x | x | x |
| Colorado | Amend. 20 | 2002 | x | | | x | | | x |
| | HB 10-1284 | 2011 | | x | | x | | | x |
| | SB 10-109 | 2011 | | | | x | | | x |
| | HB 11-1043 | 2012 | | x | | x | | | x |
| Delaware | SB 17-de | 2012 | x | | | x | | | |
| District of Columbia | B 18-622 | 2011 | | x | | | | | |
| | Init. 59 | 2011 | | | | | | | |
| Hawaii | SB 862 | 2001 | | | x | x | | | x |
| Maine | Quest. 2 | 2000 | | | x | | | | x |
| | L.D. 611 | 2003 | | | x | x | | | x |
| | Quest. 5 | 2010 | x | | | x | | | x* |
| | L.D. 1811 | 2011 | x | | | x | | | x* |
| | L.D. 1296 | 2012 | x | | | x | | | x |
| Maryland | HB 702 | 2004 | | | x | | | | |
| | SB 308 | 2012 | | | x | x | | x | |
| Michigan | Prop. 1 | 2010 | x | | | x | | | x |

(*continued*)

**Table 1:** (*Continued*)

| Jurisdiction | Law | Effective year[†] | Patient registry protection | | | Pain | | | Home cultivation |
|---|---|---|---|---|---|---|---|---|---|
| | | | Some protection available if not registered | Only protected if registered | Registry provisions or requirements not provided | Unspecified cause of pain | Pain of unknown cause | Physician recommended | |
| Montana | Init. 148 | 2005 | x | | | x | | | x |
| | SB 423 | 2012 | | x | | | x | | x[*] |
| Nevada | Quest. 9 | 2001 | | | x | | | | |
| | AB 453 | 2002 | x | | | x | | | x |
| | AB 130 | 2004 | x | | | x | | | x |
| | AB 538 | 2010 | x | | | x | | | x |
| New Jersey | P.L. 2009 | 2011 | x | | | x | | | |
| New Mexico | SB 523 | 2008 | | x | | | | | |
| Oregon | Measure No. 67 | 1999 | x | | | x | | | x |
| | SB 1085 | 2007 | x | | | x | | | x |
| | SB 161 | 2009 | | x | | x | | | x |
| Rhode Island | SB 791 | 2008 | x | | | x | | | x |
| | SB 185 | 2010 | | x | | x | | | x |
| Vermont | SB 76 | 2005 | | x | | | | | x |
| | SB 7 | 2008 | | x | | x | | | x |
| | SB 17-vt-reg | 2015 | | x | | | | | |
| Washington | Init. 692 | 1999 | | | x | | x | | |
| | SB 6032[‡] | 2008 | | | x | | x | | |
| | SB 5073 | 2012 | | | x | | x | | x |
| | SB 5798 | 2011 | | | x | | x | | |

Notes: [*]With restrictions. [†]Effective date in public laws. [‡]Includes language for a "sixty day supply" that does not meet legally functional definitions. Blanks indicate no explicit mention in the statute, or the state is "silent" on the issue.

While it is difficult to determine whether there is any difference in availability of marijuana between the first and second definitions, the third definition clearly leaves the physician with more discretion to recommend medical marijuana. The MPP model law recommends law makers adopt definition one – allowing for marijuana use for "a chronic or debilitating disease or medical condition or its treatment that produces ... severe debilitating pain" (MPP 2011a, Sec. 3(d)(2)). The ASA model law instead appears to recommend definition two – by allowing for medical use for any individual with a "Serious Medical Condition" including "Chronic pain" (ASA 2013).

In practice, most states utilize definition one, allowing marijuana use only for pain caused by a diagnosable medical condition (72%, 13 of 18). Only Washington (WA) and California (CA) have consistently adopted other standards. Patients in WA are permitted to utilize marijuana for pain of the second definition. CA permits use for pain within definition three, i.e. when individuals received a recommendation from a physician. Another state, Maryland (MD), recently allowed for a medical necessity defense and permitted a physician to recommend the use of MM for pain (third definition). Montana's (MT) current law increased the difficulty of obtaining MM for pain. Specifically, MM may be recommended for pain provided the recommending physician can demonstrate "objective proof of the etiology of the pain, including relevant and necessary diagnostic tests that may include [...] the results of an x-ray, computerized, tomography scan, or magnetic resonance imaging" (S.B. 423 2011, § 2(2)) or confirmation of the diagnosis of pain by a second, independent physician.

## Available legal protections for patients, caregivers, and physicians

Some form of legal protection for MM physicians, patients, and caregivers is a fundamental aspect of MMLs. A state can offer two types of legal protections to MM participants: legal privilege or affirmative defense. Legal privilege prevents the state from bringing criminal charges against an individual for a particular activity, whereas a valid affirmative defense allows the individual to prevail against the criminal charges at trial. In other words, an affirmative defense protects against conviction, while legal privilege protects against both trial and conviction. On the one hand, jurisdictions may vote to provide legal privilege and thus confer "stronger" or "more" legal protection to individuals, given law enforcement would not have the power to arrest an individual for marijuana-related charges permitted in the MMLs (legal privilege protection). On the other hand, voters and legislatures may be concerned with the potential for

diversion or abuse/misuse, for example, and thus allow law enforcement to arrest individuals on suspicion of violating MMLs and require those individuals to provide their defense in the judicial system (affirmative defense protection).

States can offer these legal protections to patients, caregivers, and/or physicians. However, when states were establishing MMLs throughout the country, they did not always create coordinated protections for physicians, patients, dispensaries, and caregivers. While model MM statutes endorse protections for patients, caregivers, and physicians, the types of legal protections differ for each party and differ between the MPP and ASA. The MPP model statute provides an affirmative defense for all MM patients and caregivers, and legal privilege to those patients and caregivers who register with the state. Physicians can only rely upon legal privilege to avoid consequences for recommending medical marijuana; there is no affirmative defense available to physicians. In contrast, the ASA model statute only advises legal privilege to patients, caregivers, and physicians. If any of these parties' conduct falls outside the protections offered by this privilege, the model statute does not allow for the alternate route of an affirmative defense.

Currently, nearly all jurisdictions, except DC and New Mexico (NM), have provisions allowing patients to introduce an affirmative defense for medical use of marijuana. In these two jurisdictions, MM patients and caregivers enjoy a legal privilege that appear to protect them from arrest and prosecution. Additionally, DC provides an affirmative defense to alternative caregivers who assist an MM patient "only when the caregiver was not reasonably available to provide assistance" (B18-622 2010, § 9(c)). Therefore, nearly every jurisdiction differs from MPP and ASA in the provision of legal protections for patients and caregivers, except for NM which reflects ASA.

With respect to physicians, the statutory language of legal protections has perhaps changed more significantly over the years than for those toward patients and caregivers. The first state MM statutes tended to provide for either legal privilege or affirmative defense for the prescription of MM. However, as states moved away from a physician prescription model and toward permitting recommendations of MM, they shifted the legal protections available to physicians. In all but five states with effective MM statutes, physicians and other health care professionals currently have a legal privilege protecting them from both criminal arrest and disciplinary penalties for recommending medical marijuana. As such, these states follow both MPP and ASA model statutes. Four states, CO, NV, New Jersey (NJ), and Oregon (OR), provide protection against civil and disciplinary penalties, although no explicit protection against criminal prosecution. The state of MD does not provide legal protections for health care professionals who recommend medical marijuana.

States appear to differentiate between the legal protections for patients and caregivers and for recommending physicians. Physicians tend to have protections that prevent the state from bringing criminal charges against them (privilege), whereas patients and caregivers can still be charged yet states tend to provide a legal protection in which they can introduce evidence preventing conviction (affirmative defense). While this distinction may be an unintentional byproduct of the law's passage, it may also represent an attempt by voters and legislators to balance the interests of individuals gaining potential health benefits of MM and yet discourage diversion and misuse behaviors of each party. Therefore, the differences between legal protections offered to MM recommenders and users may not be contradictory; instead, they may represent a policy judgment that the issues presented by MM use are more nuanced than those presented by MM recommendations.

## Consumer regulation: patient and caregiver registries

States may vote for the creation of a registry system to ensure that MM patient and caregivers are known to public officials or to allow law enforcement to confirm that an individual is entitled to possess or use medical marijuana. There are a number of variations in the way registry laws were written that may affect access, availability, and enforcement.

These registry systems may encompass patients, caregivers, or both. While most jurisdictions' laws by 2012 explicitly describe some form of registry system (89%, 16 out of 18), the extent to which patient registration is mandatory varies. Neither WA nor MD has established patient registries, yet WA protects MM users from being "arrested, prosecuted, or subject to other criminal sanctions or civil consequences" (S.B. 5073 2012, § 401) provided they comply with state law and MD has only a very limited medical necessity defense (S.B. 308 2012, § 5-601).

By 2012, eight jurisdictions provided legal protections only for registered patients. Seven jurisdictions indicate "recommending" patient registration, meaning additional legal protections are provided if registered, yet it is not legally mandatory to register. Three states, Hawaii (HI), WA, and MD, do not require registry and have not established a patient registry system. The WA state legislature passed a law in 2011 that would have established a patient registry system; however, the governor vetoed these provisions because they were intertwined with provisions establishing a regulated dispensary system. The MD law indicates medical necessity only may be considered an affirmative defense against possession charges in certain circumstances; therefore, patients in MD cannot register, as the laws do not fully permit marijuana for medical use.

All states extend their registry provisions to apply to caregivers as well as patients. Caregivers are individuals tasked with the care of an MM patient, either solely with respect to their MM use[3] or with respect to a broader range of personal and medical needs.[4] By registering caregivers as well as patients, states ensure that all authorized possessors of MM are registered with the state and, if necessary, their status as authorized possessors can be confirmed by public officials. However, by requiring caregivers to register, states may discourage caregiving by otherwise qualified individuals who are hesitant to register. Additionally, given the dynamic needs of seriously ill patients, the registered caregiver may not always be the person providing care, and the unregistered persons providing services may not have legal protections under the law, as may have been intended by voters or legislatures.

This difference across states as to whether patients and caregivers are required to register in order to obtain MM is also observed in the model statutes. The MPP's model statute includes a voluntary registry for both patients and caregivers (MPP 2011a). By participating in this registry, patients and caregivers are afforded extensive legal privilege, which protects them against "arrest, prosecution, or denial of any right or privilege," provided they possess less than the maximum allowable amount of marijuana (MPP 2011a). For those who do not join the registry, legal protections in the form of an affirmative defense are available to both patients and caregivers (MPP 2011a). In effect, this creates a two-tiered system of protection: a higher level of protection for patients and caregivers who have joined the registry and a lesser, although still meaningful, level of protection for those who have not. Since this system allows for some legal protection without registration, we will refer to it as only "recommending" patient and caregiver registration. In contrast, the ASA's model statute only provides legal protections for patient and caregivers who have joined the registry. This model statute explicitly provides a legal privilege protecting both patients and caregivers against "arrest for possession, transportation, delivery, or cultivation of medical cannabis in an amount established pursuant to this article" (ASA 2013, 326). However, there is no affirmative defense available, for either registered or unregistered patients and caregivers. Since there is

3 For example, Vermont law defines a registered caregiver as "a person who is at least 21 years old ... who has agreed to undertake responsibility for managing the well-being of a registered patient with respect to the use of marijuana for symptom relief" (S.B. 76 2004, § 2).

4 For example, California state law defines a primary caregiver as "the individual ... who has consistently assumed responsibility for the housing, health, or safety of that patient" (S.B. 420 2003).

no legal protection available without registration, we will refer to it as "requiring" patient and caregiver registration.

## Sources of medical marijuana: home cultivation

A key issue is whether, and under what circumstances, patients are allowed to grow or cultivate MM at home. Laws are characterized as permitting home cultivation if they specify that: (a) qualifying patients may cultivate marijuana at home, (b) the allowable quantity of marijuana includes marijuana plants, or (c) medical use includes the cultivation of marijuana. Under these criteria, ~72% of jurisdictions (13 out of 18) permit home growing by patients as of January 2012. Most states follow ASA and MPP model statutes since the ASA model statute is classified as allowing home cultivation because it defines the allowable quantity of marijuana to include "no more than 12 cannabis plants per qualified patient" (ASA 2013, 324) and the MPP model statute defines medical use to include cultivation (MPP 2011a).

Two states, WA and NV, have changed their laws on home cultivation – originally they did not allow, and have since passed laws that functionally allow, home cultivation. In WA, the first law – Initiative 692 – did not include text regarding cultivation. While it provided legal protections for qualifying patients and primary caregivers who possessed no more than a 60 day supply, this supply allotment was not defined in the statute, and so it did not explicitly include plants.[5] Therefore, the language in the statute is insufficient to meet legally functional definition criteria. In NV, the first state law, Quest. 9 passed in 2000, was a brief constitutional amendment that did not include home cultivation language in any sense. Rather, the state legislature was tasked with authorizing "appropriate methods for supply of the plant to patients authorized to use it" (NV Quest. 9 2000). The legislature did so with the subsequent passage of AB453 in 2001, which allowed for home cultivation. Jurisdictions may have laws containing restrictions on home cultivation of medical marijuana. Three jurisdictions, AZ, ME, and MT, have included restrictions at some point over the years. The state of AZ requires a patient must live at least 25 miles away from a dispensary in order to cultivate at home and MT requires that a patient engaging in home cultivation not purchase MM from other sources. Two states have changed their legal restrictions on home cultivation. The state of ME no longer

5 The Washington State Department of Health subsequently defined "sixty-day supply" to include plants; however, this definition was not included as part of the original statute (MPP 2011)

has restrictions[6] and MT added restrictions to home cultivation. These restrictions also exist in the model statutes, as the MPP envisions excluding cultivation "by a registered designated caregiver or registered qualifying patient who is not designated as being allowed to cultivate" from the definition of medical use (MPP 2011a).

## Sources of medical marijuana: dispensaries

Unlike traditional prescription drugs, no state can enact an effective law allowing patients to obtain MM from a pharmacist without running afoul of federal restrictions. Instead, there are a number of state statutes, and subsequent regulations, describing the type of entities that can supply and conditions under which those entities may supply MM. Dispensaries and organizations that are functionally equivalent to dispensaries, such as compassionate care centers and collectives/cooperatives, may be considered suppliers of MM. The types of dispensaries and their permissible activities are fairly similar across states with a few significant differences in wording (see Table 2). We categorize a state statute as permitting dispensaries if:

1. the statute or agency rules explicitly allow for dispensaries, or
2. the statute or agency rules allow for organizations that are functionally equivalent to dispensaries.

Applying these criteria to state laws through January 1, 2012, all states can be categorized as either allowing or not allowing a dispensary in a manner consistent with findings of the NCSL. Of the 18 jurisdictions allowing medical marijuana, 10 states have statutes permitting dispensaries.

The primary statutory description of dispensary activities is to "acquire, possess, cultivate, manufacture, deliver, transfer, transport, sell, supply, or dispense marijuana, paraphernalia, or related supplies and educational materials." Delaware (DE) permits all activities; Vermont (VT) permits all activities except delivery. However, four other states differ slightly from this description. The states of NJ and RI do not explicitly permit a dispensary to "sell", although they do allow for "supply or dispense". Furthermore, they do not explicitly permit the supply of paraphernalia or marijuana-infused products, yet they do allow for "related supplies". Similarly, AZ and ME do not explicitly permit the sales of paraphernalia. The state of NM does not utilize the primary description, although generally the law allows for production and distribution of cannabis.

**6** An individual must obtain a registry identification card (ID) and provide the department of public health and human services with the ID, address where cultivating, and statement that he or she will be cultivating for personal use and not divert any home grown marijuana.

**Table 2:** Statutory characteristics of states permitting dispensaries (or equivalent entities)[a]

| Jurisdiction | Law | Enactment year | Effective year[†] | Entity | Permissible activities |
|---|---|---|---|---|---|
| Arizona[b] | Prop. 203 | 2010 | 2011 | D | Description B |
| California | SB 420 | 2003 | 2005 | Co-op | Does not specify activities; but mandates that qualified persons "who associate within the State of California in order collectively or cooperatively to cultivate marijuana for medical purposes, shall not solely on the basis of that fact be subject to state criminal sanctions" |
| Colorado | Amend. 20[*] | 2000 | 2002 | D | The state MM registry does "not have a formal relationship" with dispensaries established within the state, and contends "[t]he Colorado Medical Marijuana amendment, statutes and regulations are silent on the issue of dispensaries." |
| | HB 10-1284 | 2010 | 2011 | MMC | "a person licensed … to operate a business as described … that sells medical marijuana to registered patients or primary caregivers … but is not a primary caregiver" |
| Delaware | SB 17 | 2011 | 2012 | CC | Description A |
| District of Columbia | B 18-622 | 2010 | 2011 | D | "an organization or business. … at which medical marijuana is possessed and dispensed and paraphernalia is possessed and distributed to a qualifying patient or a caregiver" |

(*continued*)

**Table 2:** (*Continued*)

| Jurisdiction | Law | Enactment year | Effective year[†] | Entity | Permissible activities |
|---|---|---|---|---|---|
| | Init. 59[*] | 1998 | 2011 | | Dispensary not legal |
| Maine | Quest. 5 | 2009 | 2010 | D | Description B |
| New Jersey | P.L. 2009 | 2010 | 2011 | ATC | Description C |
| New Mexico | SB 523 | 2007 | 2008 | LP | "produce, possess, distribute and dispense cannabis" |
| Rhode Island | SB 185 | 2009 | 2010 | CC | Description C |
| Vermont | SB 17 | 2011 | 2012 | D | Description A |

Notes: [a]Only statutes with text regarding dispensary-type entities are included in the table. [b]Arizona Prop. 200 removed criminal sanctions for pharmacies that possess marijuana for sale; however, because this law required a doctor's prescription, rather than recommendation, it provided no consequential legal protections (MPP 2011b). [*]Using an alternative interpretation of the law; not as explicitly written in law. Note the lengthy difference between effective and enactment dates was due to Congressional interference delaying implementation of the law. See, for example, Lipscomb (2009). [†]Effective by 1st of January in public law. Entities: Dispensary (D), Compassion Center (CC), Collective/Cooperative (Co-op), Licensed Producer (LP), Medical Marijuana Alternative Treatment Center (ATC), Medical Marijuana Center (MMC). Description A: "acquires, possesses, cultivates, manufactures, delivers, transfers, transports, sells, supplies, or dispenses marijuana, paraphernalia, or related supplies and educational materials." Description B: "acquires, possesses, cultivates, manufactures, delivers, transfers, transports, sells, supplies, or dispenses marijuana or related supplies and educational materials." Description C: "acquires, possesses, cultivates, manufactures, delivers, transfers, transports, supplies, or dispense marijuana or related supplies and educational materials."

The states of CA and NM do not explicitly permit the distribution of cannabis supply-related products (e.g. paraphernalia). One jurisdiction, DC, does not use the primary description. Rather, the main distribution activities for MM and paraphernalia are explicitly included, and the other parts of the supply-chain, e.g. cultivation, are not mentioned. The remaining eight states explicitly do not allow dispensaries or equivalent entities to supply marijuana to patients.

Both model statutes include provisions allowing for entities that are functionally equivalent to dispensaries. The ASA model statute would allow for medical cannabis dispensing centers which may "cultivate and dispense cannabis and cannabis products through storefronts for medical use," where dispensing cannabis includes the "selection, measuring, packaging, labeling, delivery, or distribution or sale of cannabis" (ASA 2013, 322). The MPP model statute would allow for registered compassion centers, defined as "a not-for-profit entity registered [under state law] ... that acquires, possesses, cultivates, manufactures, delivers, transfers, transports, sells, supplies, or dispenses marijuana, paraphernalia, or related supplies and educational materials to registered qualifying patients" (MPP 2011a, Sec 3(n)). Therefore, states permitting dispensaries (or functional equivalents) generally appear to have language more similar to that of the MPP model statute. Although when examining closer, the ASA and MPP model statutes have created different names for organizations that are allowed to undertake similar activities, with two fundamental differences – as described by the MPP, registered compassion centers must be organized as non-profits and registered under state law.

### Reimbursement for costs related to medical marijuana

On the issue of who pays for MM, insurance reimbursement for MM is likely unmanageable throughout the United States within the current system. Several jurisdictions, and both model statutes, have provisions in place explicitly preventing health insurers from being held liable for claims associated with medical marijuana. Even in jurisdictions where health insurers are not explicitly free of liability, physicians cannot prescribe marijuana and thus, there are no claims to send to the insurer. Therefore, as of January 1, 2012, patients in every state with MMLs must still pay out-of-pocket for medical marijuana.

## Conclusions

This study presents functional definitions of key provisions in MMLs as of January 1, 2012, and compares and contrasts state laws with model statutes. The current state of affairs of treating all MMLs the same across states is misleading and does not

reflect the reality of MM lawmaking. While it is beyond the scope of this paper to determine the effects of differences in legal definitions, there are indications that there are health and safety implications. Recent research appears to find differential consumption effects across states, which may reflect differences in restrictions on home cultivation, dispensaries, or registry requirements, for example. While the theoretical effects on consumers and suppliers may be relatively straightforward to investigate, scholarly empirical investigation is needed to understand how consumers and firms respond to different MMLs. Such research could provide a better understanding of the mechanisms influencing health outcomes and thus identify more effective and efficient options for regulatory frameworks.

Such regulatory options may involve product regulation, e.g. labeling, quality, potency, which at the moment is limited if at all existent; rather, jurisdictions focus on issues of availability, accessibility, and enforcement. One reason for this may be due to the fact that medicinal products sold in the United States are regulated by the Federal Drug Administration (FDA).[7] However, since MM is still illegal at the federal level and thus not regulated by the FDA, states lawmakers are unclear about if and how to develop a product regulation system. One idea would be to learn lessons from other countries where MM has been legalized and regulated. In the Netherlands, for example, the Office for Medicinal Cannabis monitors the quality of medicinal cannabis at the grower and distributor levels.

This study is centered on state statutes and constitutional amendments in order to analyze differences at the state-level across states over time and in comparison to guidelines. Much the same as there are debates about state versus federal laws, there are differences between state-, local- and county-level ordinances. The extent to which there is intra-state variation is a relative unknown and a potentially vital avenue for further research. Such evidence may prove particularly important in states, such as CA, where significant aspects of policy-making occur at the local level. As more communities across the country implement MMLs, details from other localities would be useful for mitigating misuse and diversion in the implementation of MMLs.

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