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Examination of Experiences, Behaviors, and Outcomes of Medical Cannabis Patients and Providers in New Mexico

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Survey Report Summary and Interpretation

This report details the methods and results of three of studies commissioned by the New Mexico Department of Health (NM DOH), conducted between March and June of 2022. The studies were designed to examine the current status of the Medical Cannabis Program in New Mexico, empirically investigate how and why medical cannabis patients in New Mexico use cannabis for medicinal purposes, and gain insights into how medical providers and practitioners make decisions when recommending medical cannabis use to qualified patients. The methods, results, and implications of these studies are provided in the report below; a qualitative interview of patients **(Study 1)**, a quantitative survey of patients **(Study 2)**, and a quantitative survey of medical providers who recommend medical cannabis **(Study 3).** Prior to detailing these studies, we provide a brief outline of the existing scientific literature serving as current scientific evidence regarding the knowns and unknowns of patterns and outcomes associated with medical cannabis use.

Critical takeaways from the study include the following:

1. Most medical cannabis patients and medical cannabis providers perceive procedures and operations of New Mexico's Medical Cannabis Program to be usable and well-run.

2. Patients who receive medical cannabis recommendation(s) from their primary care provider (PCP) are significantly less likely to meet screening criteria for cannabis use disorder (CUD) compared to those who receive recommendations from other providers.

3. About half of medical cannabis providers in New Mexico report seeing 1-39 medical patients and half report seeing 40 or more patients. Also, patients reported commonly experiencing difficulties receiving a medical cannabis recommendation from their PCP, suggesting that there is likely a shortage of medical providers willing to recommend medical cannabis.

4. Medical providers report substantially higher prevalence of warning patients of risks associated with cannabis use than do patients, which suggests there is room for improvement for enhancing the quality and effectiveness of communication between patients and providers.

5. Patients average using medical cannabis for approximately 3 qualifying medical conditions and 4 non-qualifying medical conditions, which when combined with the finding that only 23% of participants were recommended medical cannabis by their PCP, suggests that much of the medical cannabis use among patients is likely not occurring in the context of patients' broader medical care.

6. Medical cannabis providers report leveraging information from scientific journal articles as their primary means of informing their recommendations regarding medical cannabis use, but also cite that a lack of access to scientific data on medical cannabis use benefits and harms is their chief barrier to such treatment. Together with the finding that 86% of providers are either moderately or very interested in receiving continuing education opportunities related to medical cannabis use, there is both a need and opportunity to further educate providers in New Mexico.

7. Medical providers and practitioners in New Mexico commonly try to use scientific literature in their clinical practice, but simultaneously suggest that they have insufficient data and scientific evidence available to fully inform their recommendations. Because medical providers and practitioners commonly expressed interest in continuing education webinars and opportunities related to understanding and implementing the most recent scientifically validated evidence related to medical cannabis use treatments, facilitating access to such content would be beneficial to providers and patients.

Medical Cannabis Literature Overview

Scientific, peer-reviewed studies that examine the effects of cannabis on various symptoms and underlying mechanisms of medical conditions rarely provide similar conclusions. However, it is widely recognized and generally agreed upon that cannabis can provide substantial medically important benefits to conditions such as epilepsy, seizure conditions, multiple sclerosis, acute pain, nausea and vomiting due to chemotherapy, among others.[1,2] In many cases, the use of cannabis to medicinally treat these conditions is helpful not only because it provides genuine treatment impacts, but because it is more available, and often more cost-effective, than alternative treatments. There is still relatively little research that leverages the rigorous and often time-intensive scientific methodology needed to make more clear conclusions regarding both the risks and benefits of medical cannabis use for many health conditions. However, in recent years, there are several important findings that have consistently emerged from many scientific studies examining how to best maximize the potential benefits and mitigate the potential harms of medical cannabis use. Like all scientific findings, these observations are not universal, but are consistent enough to warrant noting here as context for the subsequent studies performed to better understand the medical cannabis environment in New Mexico.

They include the following observations:

- Medical cannabis patients (as regulated within states with medical cannabis laws) tend to use cannabis for health conditions or symptoms *not* approved by their state as a qualifying medical condition for cannabis use.
- Medical cannabis patients are often at higher risk for developing problematic cannabis use, in part because they are more likely to use cannabis consistently, and in part because they are more likely to have vulnerable, pre-existing conditions.
- Medical cannabis providers reported that the most difficult aspect of being a medical cannabis provider is the lack of scientific data or consensus on the impacts of specific products and potencies.
- Simple and practical harm reduction strategies can considerably reduce potential for harm and further elevate the benefit to risk ratios of using cannabis to treat medical conditions or symptoms.

Qualitative Interview

IRB approval was obtained prior to the commencement of research activities. New Mexico Department of Health (NM DOH) contacted New Mexico residents enrolled as medical cannabis patients in their patient system via email to advertise the study. Interested individuals submitted a form through Qualtrics, and participants were enrolled on a first come first serve basis. Researchers scheduled and conducted interviews with 29 participants ages 21 and older via audio-only Zoom meetings. The interviews consisted of five parts which focused on different areas of cannabis use behavior, including their experience becoming a medical patient, reasons and methods of medical cannabis use, the role of their medical provider, etc. A selection of interview items and responses are included in Appendix A which were determined based on multiple collaborative meetings

[1] The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research |The National Academies Press
[2] Efficacy and adverse event profile of cannabidiol and medicinal cannabis for treatment-resistant epilepsy: Systematic review and meta-analysis - ScienceDirect

between CPPC and NM DOH. After all the interviews concluded, the researchers conducted a thematic analysis to systematize the qualitative data using a widely accepted approach[3]. Pre-determined questions regarding the qualitative interviews were provided by the NM DOH and were used to determine themes. All data was coded and imported into IBM® SPSS® statistical software for qualitative and quantitative data analysis.

Findings from the Qualitative Interviews

PARTICIPANT CHARACTERISTICS AND PATTERNS OF CANNABIS USE. Among the 29 individuals that participated in the qualitative interviews, 81% used cannabis every day, and 59% used cannabis four or more times per day. Over half (59%) reported using cannabis both medically and recreationally. Nearly all (97%) participants generally knew the amount of THC that was present in their medical cannabis in milligrams and/or percent. The most common milligram THC level was 10 to 20mg, reported by 17% of the sample. The most common percent THC level was 25 to 29%, reported by 28% of the sample. Overall, these patterns of use are relatively consistent with findings of other studies on medical cannabis use, specifically patients' placing high importance on potency[4] and using cannabis every day[4,5]. The patients in New Mexico may be using cannabis slightly more times per day than in other states, with studies showing one to four times per day as the national average of daily use[,5].

A total of 59% of the patients in the survey used cannabis for both recreational and medical reasons, referred to from this point on as "dual motives" cannabis use. It is worth noting that growing evidence links dual motives cannabis use to worse outcomes relative to only using for medicinal *or* recreational reasons. For example, studies have found that individuals who used both medical and recreational cannabis experience greater frequencies of daily cannabis use[6], mental health disorders[7], and hazardous cannabis use behaviors[8] than those who use only medical or only recreational cannabis. Further research that leverages larger samples and uses quantitative survey methods will help to inform the extent to which dual motives cannabis use represents greater risks of health harms.

> ***Our findings show that potency is an important factor in patients' purchasing and treatment decisions. Patients are commonly using cannabis daily, and many are also using cannabis recreationally. These patterns are relatively consistent with data from other states, though New Mexico patients may be consuming cannabis more times per day than the national average medical patient. DOH, medical providers, and patients should be aware of increased harms associated with using both medical and recreational cannabis.***

Table 1. Cannabis Use Characteristics from Qualitative Patient Survey

Variable	% Endorsed
Days of past month cannabis use	
Less than 30	14
All 30 days	81
Number of times per day using cannabis	
1 to 3	41

[3] Thematic Analysis: Striving to Meet the Trustworthiness Criteria
[4] A Cross-Sectional Survey of Medical Cannabis Users: Patterns of Use and Perceived Efficacy
[5] Self-reported cannabis use characteristics, patterns and helpfulness among medical cannabis users
[6] Overlapping patterns of recreational and medical cannabis use in a large community sample of cannabis users
[7] Use of marijuana exclusively for medical purposes
[8] Prevalence and correlates of medical cannabis patients' use of cannabis for recreational purposes

4 to 6	38
7 to 9	7
10 or more	14
Typical potency of cannabis in mg of THC	
Less than 10 mg	3
10 to 20 mg	17
60 mg	3
250 mg or more	7
Typical potency of cannabis in percent of THC	
17 to 18%	7
20 to 24%	20
25 to 29%	28
30 or above	7
Do you use medical only or medical and recreational cannabis?	
Medical only	41
Medical and recreational	59
What portion of your cannabis use is medical vs recreational?	
50% medical, 50% recreational	3
70% medical, 30% recreational	3
75% medical, 25% recreational	24
85% medical, 15% recreational	3
90% medical, 10% recreational	14
95% medical, 5% recreational	10
100% medical, 0% recreational	41

Approximately 69% of patients reported that had received a recommendation to use medical cannabis under the qualifying condition of Post-Traumatic Stress Disorder (PTSD), which was the most commonly cited qualifying condition. Interestingly, the second-most commonly cited health condition was anxiety or depression, despite the fact that neither anxiety nor depression is a qualifying condition in New Mexico. Larger samples of patient data are needed to better understand why patients may be confused regarding the qualification status of anxiety and depressive symptoms (see “Medical Patient Survey Findings” section below). Lastly, 59% reported receiving recommendations for more than one medical cannabis qualifying condition, and 69% reported using cannabis medically for more than one non-qualifying condition.

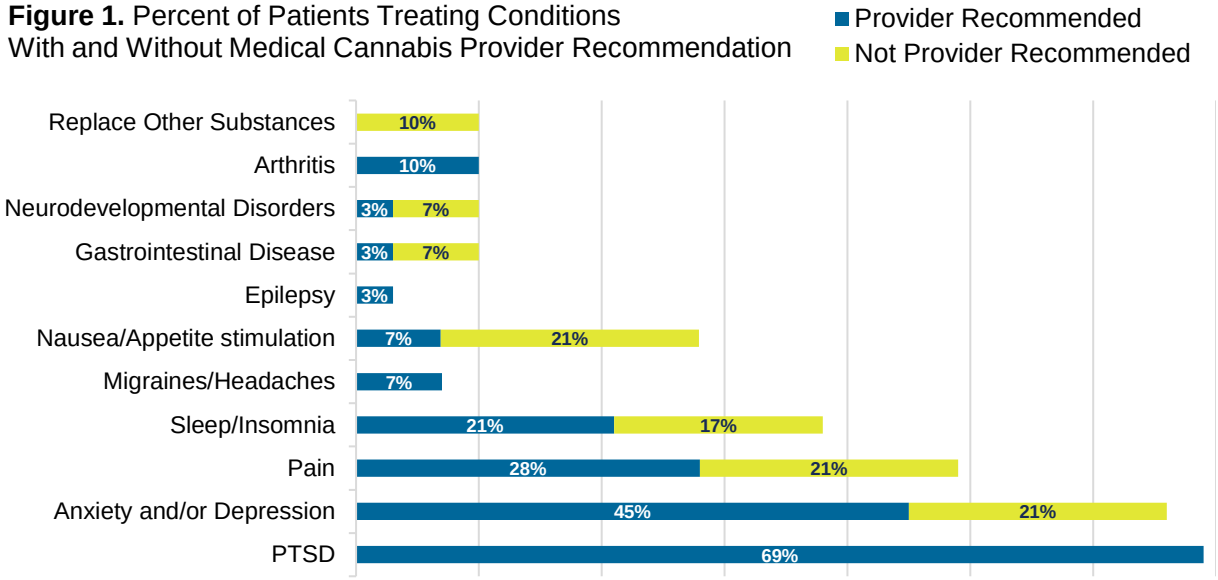
Table 2. Cannabis Qualifying and Non-Qualifying Conditions from Qualitative Survey

Variable	% Endorsed
What health conditions or symptoms has a medical provider recommended cannabis for?	
PTSD	69
Anxiety and/or depression	45
Pain	28
Sleep disorders	21
Arthritis	10
Migraines or headaches	7
Nausea or appetite stimulation	7
Epilepsy	3
Crohn’s Disease	3
Autism	3
Total number of recommended conditions treated with cannabis	
One	41
Two	38
Three	17

Four or more	3
What health conditions or symptoms have you used cannabis for that a medical provider did NOT recommend?	
Pain	21
Nausea or appetite stimulation	21
Anxiety and/or depression	21
Sleep disorders	17
Replacing other substances (e.g., opiates, alcohol)	10
Gastrointestinal issues	7
Autism	3
ADHD	3
Total number of non-recommended conditions treating with cannabis	
Zero	31
One	55
Two	7
Three	3
Four or more	3

Figure 1 provides a visual representation of how many participants are treating each condition with and without a provider's recommendation, which helped with identifying unusual patterns in the data. Interestingly, we found that PTSD was the most reported medical condition in the study (69%), but unlike the other common medical conditions, it was never identified as a condition being treated without provider or practitioner recommendation. For example, anxiety/depression was reported by 66% of the sample, but one-third of those individuals (21% of the total sample) were treating their anxiety/depression *without* the recommendation of a medical provider or practitioner. Pain, another common condition in 49% of the sample, shows a similar balance of provider recommended and non-provider-recommended treatment. This caused us to question whether PTSD was being overreported by providers and patients.

Figure 1. Percent of Patients Treating Conditions With and Without Medical Cannabis Provider Recommendation



We reviewed the scientific literature on the medical cannabis treatment of PTSD to assess whether our findings were unusual. Previous studies show that PTSD is typically reported in a much smaller proportion of medical cannabis patients, ranging from 0.5% to 19%[9,5,10] in large study samples. It certainly appears plausible that PTSD could function like a "catch all" qualifying condition in New Mexico. However, in the current study, the sample size was small (i.e., less than 30 patients), and other explanations could be facilitating this pattern. Further research is needed to determine whether PTSD is used as a "catch all" condition.

> ***Medical cannabis patients in New Mexico likely use medical cannabis in the treatment of two or more conditions or symptoms and it is likely that at least one of those conditions or symptoms is treated without a medical provider's recommendation. PTSD was the most reported condition in 69% of the study group, and unlike other common symptoms, we found that 100% of PTSD treatment was provider recommended. Due to the unusual nature of this trend, we reviewed scientific literature on medical cannabis use patterns and found PTSD to be much less commonly reported in previous studies. These findings may support the idea that PTSD is being used as the "catch all" condition in the New Mexico medical program but should be confirmed with further investigation.***

PATIENTS' UNIQUE TREATMENT METHODS. We interviewed participants about their treatment practices and found that 76% of study participants planned to use specific products for specific health conditions or symptoms. Participants were asked to explain further, and among the 29 participants in the study group, a list of 20 unique treatment methods were identified. Table 3 presents all the patient-identified treatment methods organized by condition or symptom. For example, in the treatment of pain, 21% of the sample used a concentrate, 17% used flower, 17% used an edible product, 17% used a topical preparation, and 3% used a CBD product. In sum, medical patients from this sample commonly report using highly unique patterns of cannabis products, administration methods, and potencies based on participants' perceptions of efficacy for

[9] Patterns of Medical Cannabis Use Among Older Adults from a Cannabis Dispensary in New York State
[10] Qualifying Conditions of Medical Cannabis License Holders in The United States

these characteristics for their respective health conditions or symptoms.

Table 3. Medical Cannabis Application

Variable	% Endorsed
Do you plan to use specific treatment methods (i.e., specific products for specific conditions or symptoms)?	
No	24
Yes	76
Identification of specific treatment methods by condition/symptom	
Pain	
Concentrate	21
Edible	17
Flower	17
Topical	17
CBD	3
Anxiety and/or Depression	
Concentrate	14
Edible	10
Flower	28
PTSD	
Concentrate	10
Edible	14
Flower	24
Sleep / Insomnia	10
Edible	14
Flower	
Replace opioids	
Flower	3
Replace alcohol	
Flower	3
Appetite stimulation / Nausea	
Flower	7
Crohn's Disease	
Edible	3
Autism Spectrum Disorder	
Flower	3
Edible	3
Epilepsy	
Flower	3
Total number of treatment methods used by study participants	
Zero methods	28
One method	21
Two methods	10
Three methods	17
Four or more methods	24

PATIENT CHALLENGES WITH PROGRAM AND PROVIDER ACCESS. We interviewed medical cannabis patients about the challenges they've experience in becoming a medical patient and in maintaining their medical patient status. Primary challenges were finding a provider to recommend cannabis (28%) and completing various requirements in the application process (28%). Specifically, participants identified the following application steps as challenging: finding information about requirements; having their provider fill out and submit paperwork; confusing patient paperwork; getting a copy of their state ID; obtaining documents from the VA; and proving residency. Other

challenges included cost (10%), the lengthy wait time after paperwork has been submitted (7%) and proving residency (3%). When we asked participants about the biggest challenges they faced in maintaining their medical patient status, we found the annual recertification and the requirement for an in-person evaluation were the most common challenges, each reported by 21% of participants, while finding a provider (17%) and cost (3%) were other common challenges.

It appears that patients could benefit from improved communication with their providers. While a medical provider would be an ideal source of information about medical cannabis, only 14% of patients reported utilizing their doctor for this purpose. When patients had questions about medical cannabis, they mainly went to the internet (62 %), dispensary budtenders (48%), and friends and family (21%). Other information sources were cannabis-specific websites, such as Leafly, (14%) and social media (7%). It is concerning that providers and practitioners, one of the most reputable and unbiased sources of information cited, are one of the least utilized. However, given patients' challenges to schedule with or even find a provider for required appointments, it is not surprising that they would decide to look elsewhere for everyday questions about their cannabis use.

Table 4. Medical Patient Sources of Difficulty and Informational Sources

Variable	% Endorsed
How did you find the process of getting your medical patient ID card?	
Easy	10
Neutral	28
Hard	62
Hardest thing about becoming a medical patient	
Finding a provider	28
Application requirements	28
Finding a provider	28
Cost	10
Wait time	7
Hardest thing about maintaining medical patient status	
Annual recertification	21
In-person evaluation	21
Finding a provider	17
Cost	3
What are your main sources of information about medical cannabis?	
Internet searches	62
Dispensary or budtenders	48
Friends and/or family	21
Cannabis-specific websites (e.g., Leafly)	14
Doctor or provider	14
Social media	7

Note: Sum of percentages for each question do not add up to 100%, as many responses were provided for each question

> ***Patients' treatment methods suggest many medical cannabis patients in New Mexico likely use medical cannabis for multiple conditions and demonstrate unique and diverse patterns of use across methods and conditions. The treatment methods and accounts of limited access to providers suggests a need for improved communication between providers and patients. Additional educational efforts are needed that bolster patient-provider communication. Patients experienced immense barriers in finding and scheduling with medical cannabis providers,***

> ***during both the enrollment and renewal stages. NM DOH should continue their ongoing efforts to increase provider numbers and encourage use of telemedicine.***

PATIENT CAREFULNESS IS CONNECTED TO PROVIDER DISCUSSIONS. An interesting connection exists between patients demonstrating caution with their cannabis use and various aspects of the patient-provider interaction. We asked participants, "Are there times or reasons that you choose to use less cannabis?" Participants responded to this question with events like traveling (7%), driving (17%), working (31%), when symptoms are under control (10%), and for budgetary reasons (10%).

This data was then used to develop a measure for patient "carefulness," where the number of reasons each participant identified was summed to get a "carefulness" score, and a higher number of reasons cited equates to greater carefulness in the patients' cannabis use. For example, if one participant said they use less cannabis when they are traveling and when their symptoms are under control, they reported *two carefulness reasons*. A total of 21% of the sample reported zero reasons, 59% reported one reason, and 21% reported two or more carefulness reasons, or reasons why they would choose to use less cannabis.

Across the study sample, we found a positive trend between patients' carefulness and whether their medical provider had discussed risks of harms associated with cannabis use, shown in Figure 2. As number of carefulness reasons increased, greater percentages of patients reported discussing risks of harms with their medical cannabis provider. This suggests that patients take provider messaging into consideration and in turn possess greater safety practices with cannabis use.

Figure 2. Greater patient carefulness reasons associated with provider discussing risks of harm

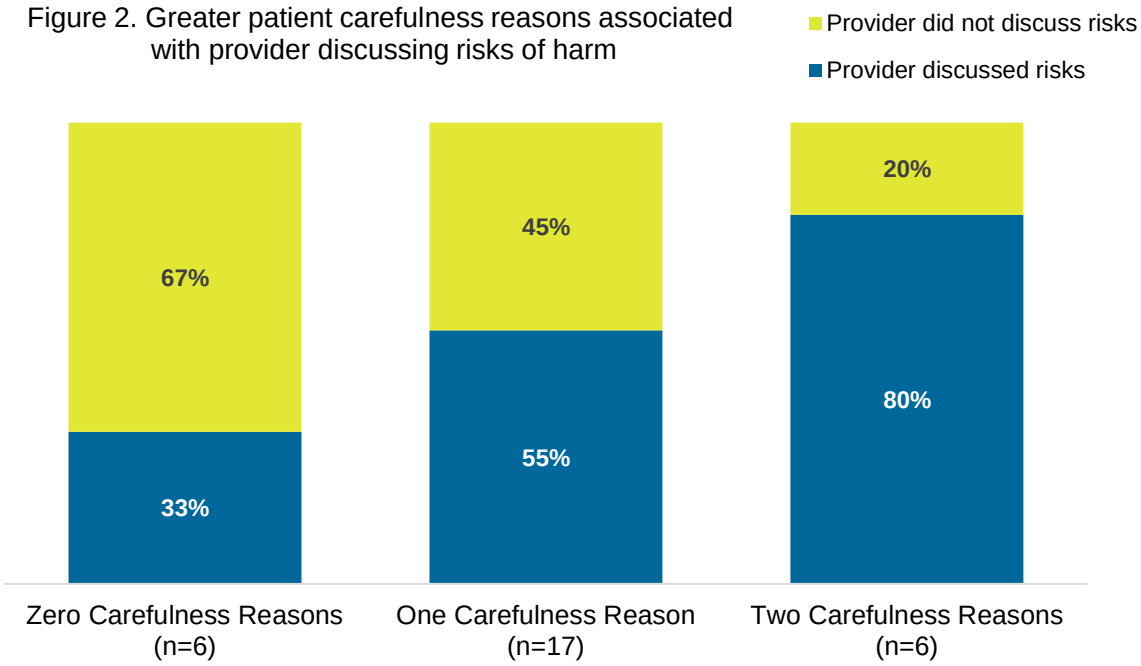


Figure 2 note: for example, of the 6 people who reported zero carefulness reasons (the far-left bar), 67% said that their provider did not discuss risks of harm associated with cannabis use, while the other 33% said that their provider *did* discuss risks of harm with them.

Additionally, we found that carefulness was significantly correlated with the number of recommended medical cannabis conditions but not the number of non-recommended conditions. Further, the number of recommended medical cannabis conditions, but not the not the number of non-recommended reasons demonstrates a trend towards a negative correlation with frequency of cannabis use days such that those who use less frequently report a greater number of recommend medical cannabis conditions. See Table 5 for these correlation figures.

Table 5 shows that the number of conditions for which medical cannabis use was recommended by a provider was strongly associated with medical patients taking a greater number of precautions (r =.58, p <.01), but the number of medical conditions that patients used cannabis to treat without provider recommendations showed no relationship with number of precautions. Together, these findings suggest that operating within provider recommendations may be related to careful and prudent efforts to risks related to cannabis use.

Overall, these findings emphasize the importance of medical cannabis providers' communication of risks associated with cannabis use to their patients. When providers present risks associated with cannabis use, patients tend to demonstrate better safety practices, including adhering to provider recommended uses for medical cannabis.

What is the hardest thing about becoming or remaining a medical patient?

"Trying to get ahold of a provider in town. There are only two in town that do consultations, so they are always booked.

"The fact that I have to see a provider every year."

"Telemedicine is not always available to recertify. For people in rural New Mexico that makes it hard because it's 85 miles to Albuquerque."

"The hardest thing is a lack of providers in general. There was a 60-mile one-way trip to a dispensary."

"When I needed to renew my card, there's nowhere to look up providers."

Table 5: Correlations Between Provider Recommended Use, Carefulness, and Frequency of Use.

Measure	Recommended Uses	Not recommended Uses	Precautions Considered
Days of Cannabis Use in Past Month	-.289	.208	.000
Number of Precautions Considered	.579**	.118	

**. Correlation is significant at the 0.01 level (2-tailed).

> ***Patients who discuss risks with their providers tend to be more careful when using cannabis. For example, they will abstain from using cannabis when they need to drive, go to work, or travel. They are also more likely to use cannabis less frequently and only for treatment of practitioner or provider-recommended conditions. NM DOH might find ways encourage practitioners and providers to present risks of harms to patients.***

POTENTIAL IMPROVEMENTS TO THE DOH MEDICAL CANNABIS WEBSITE AND

RESOURCES. Despite the program challenges incurred, most participants (69%) reported using the DOH website to find information about enrolling in or better understanding the state medical program, and 45% said that they found the site easy to navigate. Participants suggested a variety of ways that DOH could improve educational resources on the website, including posting program updates to the site (24%). Participants recommended adding information around the science behind medical cannabis and products available for patients to use.

Other participants would like to see cannabis safety information on the site (10%). For example, one participant said, *"It would be nice to see more public communications from the state themselves on cannabis versus the one-sided conversation from the industry – it's basically being marketed without real risks and benefits."*

Another suggestion by 14% of the sample involved simplifying resources for easier comprehension—a participant explained, *"It was a little bit difficult to actually know how to apply for a medical marijuana card. Luckily for me, my doctor knew what she was doing. Generally speaking, the process for getting a medical marijuana card is a bit convoluted."*

Several participants (21%) suggested increasing visibility and public awareness of the site, as they believed that the website resources might be overlooked or forgotten by many patients, for example, *"Push the website more, I know about it but never really go on it. Everyone I know just deals with the budtenders and gets information from them or does research on their own."*

Finally, stigma emerged as a common theme throughout the interviews with medical cannabis patients. Internalized and societal stigma were identified as barriers in the process, and some participants observed feelings of stigmatization from medical professionals. Several participants suggested that the DOH focus future education and resources on destigmatization efforts that will help normalize the use of cannabis as a medical treatment.

> ***Most participants (69%) found the NM DOH medical cannabis website to be a useful resource, but they made several suggestions for improving educational resources. Patients would like to see program updates, cannabis safety information, and simplified program resources. Additionally, patients would like DOH to work on the stigma attached to medical cannabis use.***

SUBSTITUTION OF OPIOID AND OTHER SUBSTANCES. When we interviewed participants on cannabis use to replace other substances, over half (52%) reported starting using medical cannabis because they wanted to reduce their intake of prescription medicine and/or opioids, which is similar to another study that found the same intention in 46% of medical cannabis patients[11]. Of the New Mexico patients who had previously been using opioids, 50% stopped using opioids altogether, 33% reduced their intake by some amount, and 17% did not reduce opioid use by any amount. Furthermore, 34% of participants reduced alcohol and 14% reduced cigarette consumption after beginning cannabis use, which is consistent with the findings of similar large-scale studies on patterns of medical cannabis use[12].

[11] Cannabis as a substitute for prescription drugs – a cross-sectional study
[12] Medical cannabis access, use, and substitution for prescription opioids and other substances: A survey of authorized medical cannabis patients

Medical Patient (Cannabis) Quantitative Survey

Patient Survey Methods

IRB approval was obtained prior to conducting the survey. Emails were sent by NM DOH to registered medical cannabis patients in New Mexico to advertise the study. A brief overview of the study was presented to providers and practitioners in the email, and those providers and practitioners interested in participating clicked on the survey link which took potential participants to the survey landing page run by Qualtrics software. Participants were recruited in the late spring of 2022. There were 102 participants who completed the survey, and a total of 87 who reported being current medical cannabis patients and were verified to be in New Mexico. Frequency distributions for all questions and subsequent response options are presented in Appendix B.

Participants recruited for this survey came from at least 44 unique zip codes in New Mexico. Notably, all participants completed the survey after adult use cannabis was implemented in New Mexico beginning April 1, 2022.

Medical Patient Quantitative Survey Findings

Demographic characteristics of the study sample are presented in Table 6. The median age group for patients in the study was 41-50 years old, and median income was $40,000 to $49,999. Educational attainment of an associate degree or higher was reported by 49% of the sample. Over two-thirds (69%) of the sample identified as female, 86% identified as White, 63% identified as non-Hispanic or Latino, and none of participants reported Tribal residency.

PARTICIPANT CHARACTERISTICS AND PATIENT PROFILES.

Table 6.	Medical Cannabis Patient Characteristics	
	Variable	**% Endorsed**
Age		
	18-20	4.6%
	21-30	2.3%
	31-40	20.7%
	41-50	20.7%
	51-60	17.2%
	61-70	23.0%
	71-90	11.5%
Income		
	Less than $10,000	8.0%
	$10,000 to $19,999	13.8%
	$20,000 to $29,999	8.0%
	$30,000 to $39,999	13.8%
	$40,000 to $49,999	9.2%
	$50,000 to $59,999	16.1%
	$60,000 to $69,999	9.2%
	$70,000 to $79,999	5.7%
	$80,000 to $89,999	4.6%
	$90,000 to $99,999	1.1%
	$100,000 to $149,999	6.9%

	$150,000 and higher	3.4%
Education		
	Some HS - no degree	1.1%
	High school graduate	16.1%
	High school equivalency	6.9%
	Trade school after HS	4.6%
	Some college – no degree	21.8%
	Associates degree	10.3%
	Bachelor's	16.1%
	Master's or doctoral degree	23.0%
Identified Gender		
	Male	29.9%
	Female	69.0%
	Transgender man/transman/female-to-male (FTM)	1.1%
	Genderqueer/gender nonconforming	0.0%
Sex at birth		
	Male	29.9%
	Female	70.1%
	Other	0%
Race		
	American Indian or Alaskan Native	2.3%
	Asian	2.3%
	Black or African American	2.3%
	White	86.2%
	Native American	4.6%
	2 or more races	2.2%
Ethnicity		
	Hispanic or Latino	36.8%
	Not Hispanic or Latino	63.2%
Tribal resident		
	No	100%
	Yes	0.0%

PATIENT DIFFICULTIES OR BARRIERS IN THE ENROLLMENT, MAINTENANCE, AND ACCESS TO MEDICAL CANNABIS. Although the current survey was administered within the first 2-3 months of the implementation of adult use cannabis in New Mexico, Table 7 shows that most patients (61%) reported no issues in obtaining medical cannabis. Moreover, as detailed in Figure 3, patients from the survey on average perceived the process of enrolling as a medical patient as more easy than difficult across steps such as finding a medical provider or practitioner, completing required forms, and identifying how to figure out all required steps or the correct order in which to perform them. The degree to which participants reported any of these three aspects as easy or difficult correlated strongly with how easy or difficult they perceived the other two aspects, which suggests that participants often view all three of these enrollment factors as generally easy or difficult.

Notably, when examining correlations between age, household income, frequency of cannabis, and education with the perceived difficultly of the three enrollment factors, we found no evidence of statistically significant associations between being a member of a more vulnerably subgroup (e.g., lower education or household income) and any the measures of perceived ease or difficulty of any of the enrollment steps. Similarly, participant reports of overall quality of life, mental health satisfaction, physical health satisfaction, and problematic cannabis use did not significantly correlate with any of the three difficult characteristics. These findings suggest that medical patients from vulnerable subgroups are not more likely to experience issues with enrolling as medical cannabis patients.

Table 7. Self-reported regarding potential issues in obtaining medical cannabis

Response	***% Endorsed***
No	60.9%
Yes, there is often a lack of stock at the dispensary	18.4%
Yes, it is too expensive for me	12.6%
Other	8.0%

Figure 3 below shows that medical patients in this survey most commonly reported not experiencing any specific difficulties with either enrolling as a medical cannabis patient or maintaining their status. Cost was cited as the second most endorsed challenge when enrolling as a patient (31%), and the need for in-person visits was cited as the second most endorsed challenges associated with maintaining medical patient status (26%). The third most endorsed difficult for enrolling and maintaining medical patient status were having issues wherein the patients' primary care provider (PCP) would not recommend medical cannabis (21%) and cost (16%), respectively.

About 23% of medical cannabis patients in the survey reported going to their normal (PCP) in an effort to potential receive a recommendation for use for a particular qualifying condition. Interestingly, approximately the same proportion of patients reported speaking with their PCP as reported meeting with a cannabis consultant at a dispensary and receiving a recommendation from a friend, another patient, or a social worker.

Figures 3a and 3b

CONDITION-SPECIFIC PATTERNS OF USE AND RISK PROFILES. The current findings showed that over half (55%) of medical patients reported exclusively using cannabis for medicinal purposes. Similarly, over half (56%) of medical patients reported using medical cannabis for both qualifying and non-qualifying medical cannabis conditions, which suggests the many cannabis patients in New Mexico likely engage in some form of self-medication to treat conditions not otherwise supported as a qualifying condition to use medical cannabis under New Mexico law (See Figures 4a and 4b).

% of medical patients reported exclusively using cannabis for medicinal purposes

% of medical patients reported using medical cannabis for both qualifying and non-qualifying medical cannabis conditions

On average patients in this survey reported using about 8% potency for CBD and 36% potency for THC. Approximately 75% of the sample reported using specific strains for specific health conditions, and about 66% said that they use high-potency products for specific medical conditions.

When examining qualifying and non-qualifying conditions (Figure 5), we found that patients reported an average of 4 non-qualifying conditions and 3.4 qualifying conditions, or an average total of 7.4 medical conditions. Figure 5 below also shows that approximately one third of the sample reports using medical cannabis to treat 5 or more medical symptoms or conditions that are not approved as a qualifying condition.

When considered together with findings that a small proportion of patients received their recommendations for medical cannabis use from their PCP, it seems likely that many patients are attempting to self-treat multiple health symptoms or conditions without the oversight of a PCP.

Figures 4a and 4b.

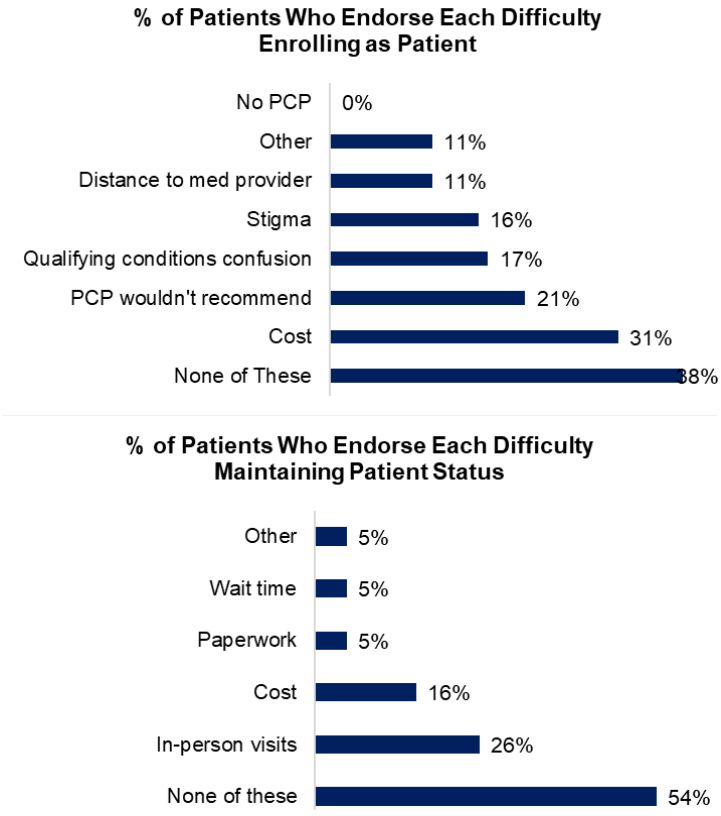


Figure 5.

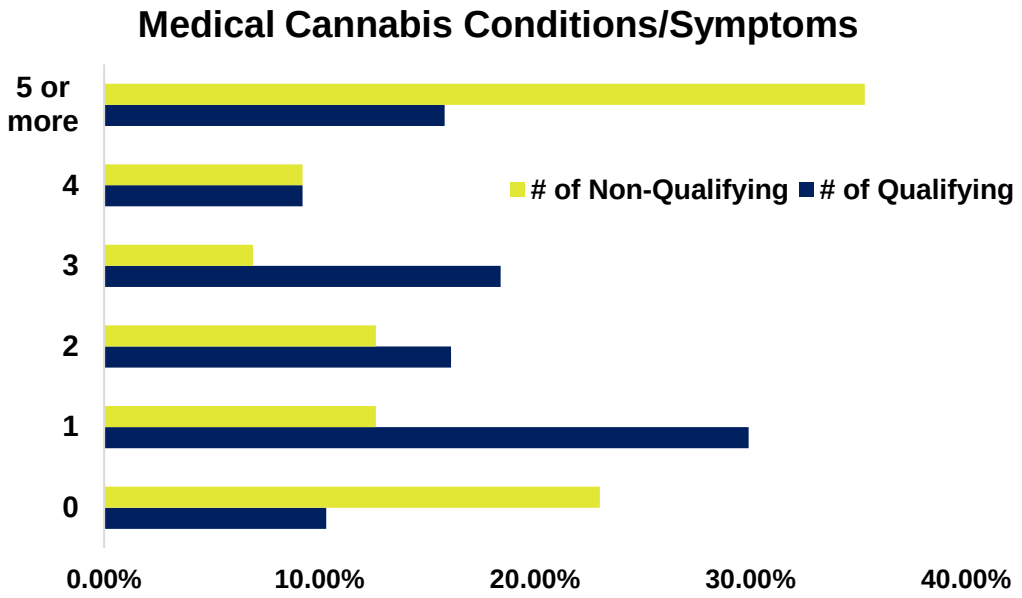


Table 8 shows data on patient qualifying health conditions or symptoms for which a medical provider recommended cannabis. Severe chronic pain was the most common symptom, occurring in 60% of the sample, and PTSD was the second-most common, occurring in nearly half (51%) of the sample. Painful peripheral neuropathy, inflammatory autoimmune-mediated arthritis, cancer, obstructive sleep apnea, and damage to the nervous tissue of the spinal cord were each reported by 16 to 28% of the sample. The remaining qualifying conditions were reported by 15% or fewer participants.

Table 9 shows frequency distributions on health conditions or symptoms for which patients are currently using cannabis that a medical provider did *not* recommend. Over half (52%) of participants reported using cannabis for improved sleep, and 48% reported using cannabis to treat pain. Anxiety and depression were each reported by 37% of the sample, and 34% reported using cannabis to treat inflammation. Headaches or eye pain, nausea, spasms, reducing prescription antidepressants, appetite or weight concerns, and reducing alcohol use were each reported by 11 to 29% of the sample.

See Table 8 for the frequency distributions of medical patients' use of cannabis for qualifying conditions. Notably, only 10% of participants reported using cannabis to treat a symptom of (non-qualifying conditions) or to treat opioid use disorder (OUD; a qualifying condition).

Table 8. Frequency Distributions of Qualifying Conditions

Variable	Endorsed
What health conditions or symptoms has a medical provider recommended cannabis for?	
Severe Chronic Pain	60%
Post-Traumatic Stress Disorder	51%
Painful Peripheral Neuropathy	28%
Inflammatory Autoimmune-mediated Arthritis	21%
Cancer	19%

Obstructive Sleep Apnea	17%
Damage to the Nervous Tissue of the Spinal Cord	16%
Epilepsy/Seizure Disorder	15%
Intractable Nausea/Vomiting	14%
Hospice Care	14%
Glaucoma	13%
Autism Spectrum Disorder	9%
Severe Anorexia/Cachexia	9%
Multiple Sclerosis	9%
Opioid Use Disorder	8%
Spinal Muscular Atrophy	7%
Crohn's Disease	6%
Spasmodic Torticollis (Cervical Dystonia)	6%
Ulcerative Colitis	6%
Alzheimer's disease	5%
Lewy Body Disease	5%
Parkinson's disease	5%
Amyotrophic Lateral Sclerosis (ALS)	3%
Friedreich's Ataxia	3%
HIV/AIDs	3%
Huntington's disease	3%
Inclusion Body Myositis	3%
Hepatitis C Infection currently receiving antiviral therapy	2%

Patients most commonly reported sleep as the medical condition or symptom they used cannabis for that was not previously approved by a health provider (54%), followed by pain (51%), anxiety (37%), depression (37%), inflammation (37%), headaches or eye pain (32%), nausea (28%), and spasms (26%). Interestingly, 13% or fewer patients reported using cannabis to reduce alcohol, tobacco, or other drug use.

Table 9. Frequency Distribution and Non-Qualifying Conditions

What health conditions or symptoms do you CURRENTLY use cannabis for that a medical provider did NOT recommend?	
Sleep	54%
Pain	51%
Anxiety	37%
Depression	37%
Inflammation	37%
Headaches or eye pain	32%
Nausea	28%
Spasms	26%
Reducing prescription antidepressants	21%
Appetite/Weight	16%

Reducing alcohol use	13%
Skin issues	10%
Reducing tobacco use	10%
Reducing other drug use	6%
Other	6%
Opioid withdrawal symptoms	5%
Opioid Use Disorder treatment	5%
Opioid withdrawal	3%
Another type of substance use disorder	3%

When asked whether their provider (who recommended their medical cannabis use) reported cannabis use disorder (CUD), driving under the influence, or potential medication interactions, fewer than 18% of patients reported that their medical cannabis provider warned them of risks associated with CUD or driving under the influence. The most common specific risk that patients were warned of by providers was risks of interactions with other medications at 25%. These findings would suggest that patients were in general were rarely told of these risks, or at least do not recall being told. Interestingly, these findings contradict those of the provider quantitative survey (described later in the report), in which providers reported more frequent discussion of risks of cannabis use with their patients.

Table 10. Provider discussing risks/harms experience

Risk Outcome	% Endorsed
They discussed Cannabis Use Disorder or problematic cannabis use	18.4%
They discussed driving under the influence of cannabis	11.5%
They discussed using cannabis during pregnancy	1.1%
My doctor does not know that I use cannabis	6.9%
They discussed potential medication interactions	25.3%
Other	36.8%

When comparing individuals who used a PCP to receive their recommendation for medical cannabis use to those who used other sources (e.g., cannabis consultant), those in the former group were significantly less likely to meet screening criteria for CUD than those in the latter group (i.e., 10% versus 50% prevalence of CUD, respectively).

This finding suggests that receiving medical cannabis from one's PCP may be associated with significantly lower risk of engaging in problematic cannabis use. Notably, there were no significant differences between these two groups when comparing family income and highest achieved education levels, which supports the idea that the availability of PCPs who recommend cannabis is not likely tied solely to such socioeconomic factors.

Provider Survey Methods

IRB approval was obtained prior to conducting the survey. Emails were sent by NM DOH to registered medical cannabis providers in New Mexico to advertise the study. A brief overview of the

study was presented to providers in the email, and those providers interested in participating clicked on the survey link which took potential participants to the survey landing page run by Qualtrics software. A total of 37 providers participated in the survey during the late spring and early summer of 2022. Frequency distributions for all questions and subsequent response options are presented in Appendix B.

Provider Survey Findings

PARTICIPANT CHARACTERISTICS AND PROVIDER PROFILES. Of the participants in this sample of individuals who recommend medial cannabis in New Mexico, about three-quarters of the sample was between the ages of 41-70, identified as female, and were not Hispanic or Latino. About 90% of the sample reported being white, and only 3% of the sample reported living on tribal land. Interestingly, 62% of the sample were nurses, 24% physicians, and the remaining 14% reported being either a physician's assistant, a pharmacist, or prescribing psychologist. Only 11% reported being employed in a retail location.

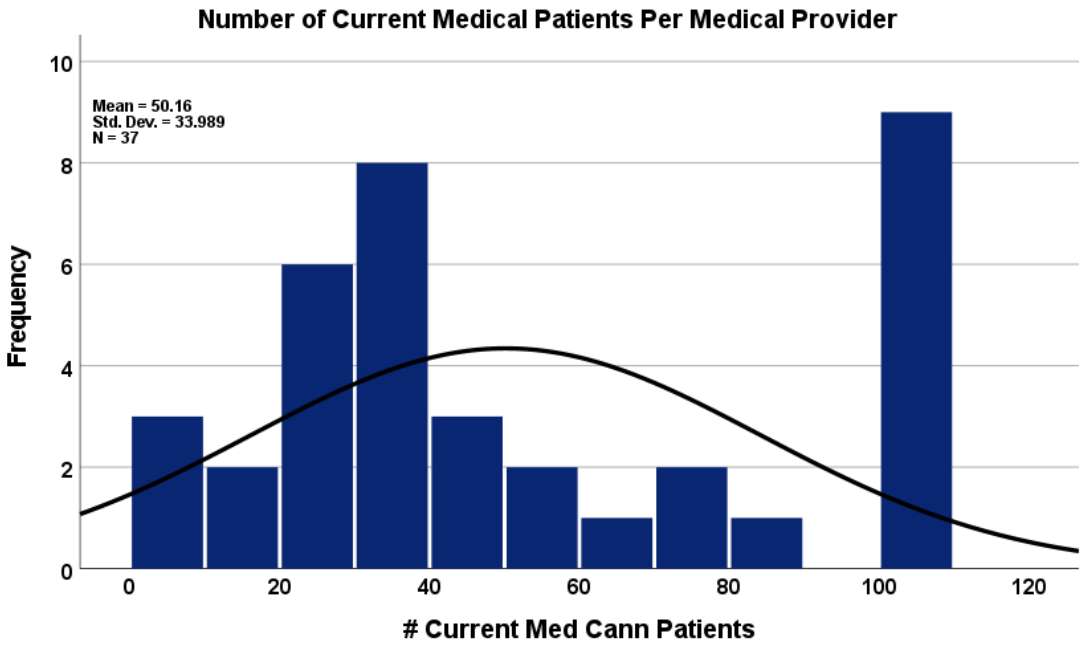
Table 11. Demographics of Medical Cannabis Providers in New Mexico

Variable		Frequency	Percent
Age			
	31-40	2	5.4
	41-50	9	24.3
	51-60	9	24.3
	61-70	11	29.7
	71-80	6	16.2
Education			
	Bachelor's	1	2.7
	Master's	22	59.5
	Doctoral degree	14	37.8
Gender identification			
	Male	8	21.6
	Female	27	73.0
	Other	1	2.7
	Decline to answer	1	2.7
Sex at birth			
	Male	8	21.6
	Female	28	75.7
	Other	1	2.7
Race			
	American Indian or Alaskan Native	1	2.7
	Asian	1	2.7
	White	33	89.2
	Native American	1	2.7
	2 or more races	1	2.7
Ethnicity			
	Hispanic or Latino	10	27.0
	Not Hispanic or Latino	27	73.0
Tribal resident			
	No	36	97.3
	Yes	1	2.7
Active Cannabis Patient			
	No	25	67.6
	Yes	12	32.4
Occupation			
	Physician	9	24.3

	Nurse Practitioner	23	62.2
	Physician Assistant	2	5.4
	Prescribing Psychologist	2	5.4
	Prescribing Pharmacist	1	2.7
Employer Type			
	Cannabis retail location	4	10.8
	Cannabis consultant practice	9	24.3
	Health center / out-patient clinic	10	27.0
	Private practice (not as consultant)	12	32.4
	Other	2	5.4

A frequency distribution of number of medical cannabis patients currently been seen by medical cannabis providers is shown in the Figure 6 below. On average, medical cannabis providers in this sample were currently seeing 50 patients, although there was a fairly wide range and the single most common number of patients seen by providers was 100. Further, approximately half of providers in this sample reported currently seeing 40 or more patients at the time. Together, these findings suggest that there are likely too few providers in New Mexico eligible to recommend medical cannabis.

Figure 6.



Provider Decision-making and Medical Context of Recommendation

Medical providers reported that the most difficult aspect of being a medical cannabis provider is the lack of scientific data or consensus on the impacts of specific products and potencies.

In this sample of medical providers, 5% reported beginning to certify patients more than 10 years ago, 19% said in the last 10 years, 54% said in the last five years, 11% said in the last two years, 8% said in the last year, and 3% said in the last six months. Interestingly, about 1 in 4 providers indicated that they see 50% or more of their patients purely in telemedicine context, whereas 25% said they see 35% of their patients in this context, and about 50% said they never see patients via telemedicine.

Perhaps surprisingly, none of the 37 providers reported considering training provided by their employer, which suggests that for the participants in this survey, there may be a separation between providers and organizations in the context of recommending medical cannabis use.

Figure 7a. Perceived Most Difficult Aspects of Being a Medical Cannabis Provider

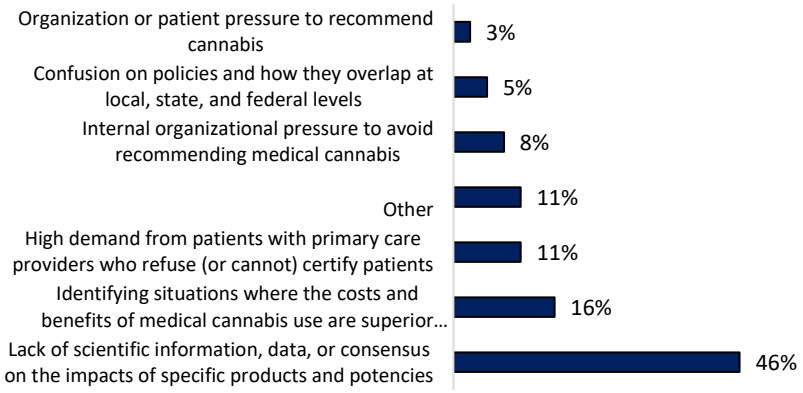
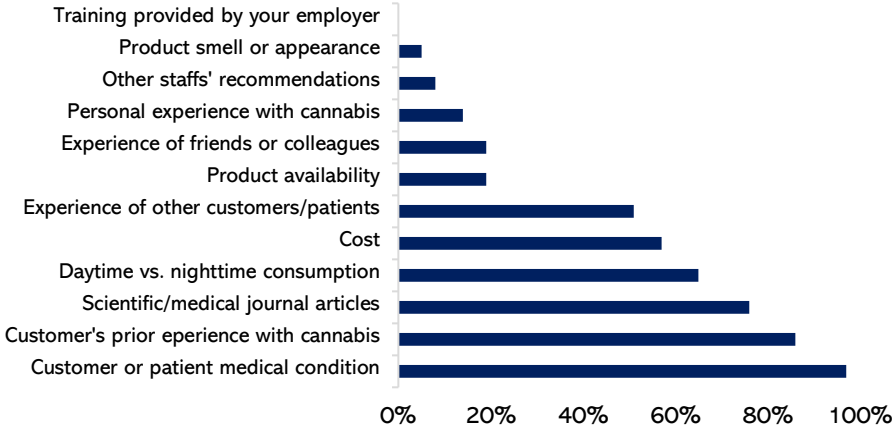


Figure 7b. Factors Providers Consider When Recommending Medical Cannabis % That Consider



Our findings suggest providers did not serve as the patients' primary care provider (PCP) prior to recommending medical cannabis for over half of the patients that they see.

Moreover, almost half of physician providers and nurse providers reported not seeing any of their current patients as the patients' PCP prior to recommending cannabis for them.

Medical providers who at least sometimes recommend medical cannabis to patients that they serve as a PCP more frequently recommend their patients to specialists to provide treatment to accompany medical cannabis use (p <.05).

Moreover, table 12 below shows that medical providers reported that they often discuss risks of CUD, driving under the influence of cannabis, and other risks with patients. However, this appears to strongly contrast with the previously mentioned medical patient data wherein 18% or fewer patients reported being warned about risks of CUD or driving under the influence of cannabis.

Although medical patients were not asked about being warned about potential risks such as

psychosis, risks related to anxiety and depression, and others, the clear discrepancy between provider reports and patient reports on how often providers present risks of cannabis use to patients suggests that either patients are not recalling or believing in such warnings after visiting with their provider or providers are not warning patients as often as they believe. Regardless, there is likely a need for providers to engage in more effective strategies of remembering to warn patients or to convince patients of the potential risks. Moreover, there may be additional need for public health messaging campaigns target medical patients before and after they visit with medical providers to further generalize appropriate perceived risks of harm associated with cannabis use.

"…the clear discrepancy between provider reports and patient reports on how often providers present risks of cannabis use to patients suggests that either patients are not recalling or believing in such warnings after visiting with their provider or providers are not warning patients as often as they believe. Regardless, there is likely a need for providers to engage in more effective strategies of remembering to warn patients or to convince patients of the potential risks."

Table 12. How Commonly Medical Providers Discuss Risks of Cannabis *(1=Never, 5=Always)*

	Mean	SD
Cannabis use disorder	3.59	0.86
Driving under the influence of cannabis	4.54	0.51
Psychosis	3.95	0.78
Safe storage for children and pets	4.49	0.65
Risks for anxiety and depression	4.03	0.93
Other side effects	4.43	0.60

Appendix A: Qualitative Patient Interview Data

Table A1. Initiation and Maintenance of Medical Cannabis Patient Status, Rationale for Medical Use, and Qualifying Conditions

Variable	Frequency	Percent
What steps did you have to go through to get your medical patient ID card?		
See a physician	26	89.7
Use DOH website	5	17.2
Go to medical dispensary	6	20.7
Other	1	3.4
When did you become enrolled in the medical cannabis program in New Mexico?		
2022	1	3.4
2021	10	34.5
2020	3	10.3
2019	4	13.8
2018	3	10.3
2017	4	13.8
2016	1	3.4
2014	1	3.4
2011	1	3.4
2009	1	3.4
When did you first purchase medical cannabis from a medical dispensary in New Mexico?		
Immediately/soon after getting card	24	82.8
A month or more after getting card	5	17.2
What health conditions or symptoms has a medical provider recommended cannabis for?		
PTSD	20	69
Anxiety and/or depression	13	44.8
Pain	8	27.6
Insomnia or sleep	6	20.7
Arthritis	3	10.3
Migraines or headaches	2	6.9
Nausea or appetite stimulation	2	6.9
Epilepsy	1	3.4
Crohn's Disease	1	3.4
Autism	1	3.4
What health conditions or symptoms have you used cannabis for that a medical provider did NOT recommend?		
Pain	6	20.7
Loss of appetite	6	20.7
Anxiety and/or depression	6	20.7
Insomnia or sleep	5	17.2
Replacing another substance/drug	3	10.3
Gastrointestinal issues	2	6.9
Autism	1	3.4
ADHD	1	3.4
What is the primary reason you got a medical card?		
Medical advice	18	62.1

Legal	13	44.8
Tax purposes	1	3.4
What are other reasons (if any) why you got a medical cannabis card?		
Medical advice	5	17.2
Legal	6	20.7
Tax purposes	4	13.8
What is/was the hardest thing about becoming a medical patient?		
Wait time	2	6.9
Application requirements	8	27.6
Cost	3	10.3
Finding a provider	8	27.6
What is the hardest thing about maintaining your medical patient status?		
In-person evaluation	6	20.7
Annual recertification	6	20.7
Finding or changing providers	5	17.2
Cost	1	3.4

Table A2. Medical Cannabis Use Patterns

Variable	Frequency	Percent
What do you consider to be recreational use?		
Fun or in social situations	20	69
Nonmedical purposes	12	41.4
Using all the time or any time	3	10.3
Using large amounts of cannabis	3	10.3
To get high	2	6.9
What do you consider to be medical use?		
Treating a condition or symptom	23	
Routine use	6	20.7
Use of specific products	4	13.8
Using for medicinal benefits	2	6.9
Using smaller amounts of cannabis	2	6.9
Do you use cannabis recreationally, medically, or both?		
Medical only	12	41.4
Medical and recreational	17	58.6
How much of your cannabis use is medical versus recreational		
50% medical	1	3.4
70% medical	1	3.4
75% medical	7	24.1
85% medical	1	3.4
90% medical	4	13.8
95% medical	3	10.3
100% medical	12	41.4
Do you typically know how much THC or CBD is in your medical cannabis?		
No	1	3.4
Yes	28	96.6
Generally, how much THC is in your cannabis in milligrams?		

no answer	20	69
5	1	3.4
10	2	6.9
15	1	3.4
20	2	6.9
60	1	3.4
250	1	3.4
500	1	3.4
Generally, how much THC is in your cannabis in percentage?		
no answer	11	37.9
17	1	3.4
18	1	3.4
20	5	17.2
24	1	3.4
25	7	24.1
28	1	3.4
30	1	3.4
79	1	3.4
How many days have you used cannabis in the past month?		
up to 30	4	13.8
all 30 days	24	82.8
How many times per day do you use cannabis?		
1 to 3	12	41.4
4 to 6	11	37.9
7 to 9	2	6.9
10 or more	4	13.8
Do you have a strategy for identifying when you might have used too much THC or CBD?		
No	11	37.9
Yes	18	62.1
If yes, what strategy do you use for identifying when you've used too much THC or CBD?		
Feeling tired	6	20.7
Feeling nauseous	3	10.3
Feeling dizzy	5	17.2
Feeling anxious	4	13.8
Headache	1	3.4
Are there times or reasons that you may not use as much or less?		
No	5	17.2
Yes	24	82.8
If yes, when/why would you use less?		
Work or other responsibilities	9	31
In a public setting or appointment	6	20.7
Budgetary restrictions	3	10.3
While driving	5	17.2
When trying a new cannabis product	1	3.4
During travel	2	6.9
Symptoms are under control	2	6.9

New non-cannabis medication	1	3.4
Do you plan to use specific products (potencies, THC/CBD) for health condition or symptoms?		
No	7	24.1
Yes	22	75.9
Which products do you plan to use for which conditions/symptoms?		
Pain		
Concentrate	6	20.7
Edible	5	17.2
Flower	5	17.2
Topical	5	17.2
CBD	1	3.4
Anxiety and/or Depression		
Concentrate	4	13.8
Edible	3	10.3
Flower	8	27.6
PTSD		
Concentrate	3	10.3
Edible	4	13.8
Flower	7	24.1
Gastrointestinal Disorders		
Edible	1	3.4
Insomnia/sleep issues		
Edible	3	10.3
Flower	4	13.8
Appetite stimulation and/or nausea		
Flower	2	6.9
Autism Spectrum Disorder		
Flower	1	3.4
Edible	1	3.4
Epilepsy		
Flower	1	3.4

Table A3. New Mexico DOH Medical Cannabis Program Website

Variable	Frequency	Percent
What are your main sources of information about medical cannabis?		
Friends and/or family	6	20.7
Social media	2	6.9
Internet search	18	62.1
Dispensary or budtenders	14	48.3
Cannabis-specific websites (e.g. Leafly)	4	13.8
Doctor	4	13.8
Why do you rely on those information sources?		
For knowledge and/or education	14	48.3
They are trustworthy and/or reliable	17	58.6
Unaware of other sources	4	13.8

If somewhere was to ask you about info on medical cannabis in New Mexico, what would you tell them?		
Share personal experience	10	34.5
Refer to DOH website	18	62.1
Refer to a doctor	10	34.5
Refer to dispensary	8	27.6
Recommend enrolling in the program	3	10.3
What would make you trust the DOH Medical Cannabis site more than you do now?		
Destigmatization efforts	2	6.9
Product testing	3	10.3
Make it more or less legal	3	10.3
Make it more or less political	6	20.7
Make it more or less scientific	7	24.1
Not sure or nothing	15	51.7
How do you think education and resources from DOH could be improved?		
Provide facts, science, and news updates	7	24.1
Include cannabis safety information	3	10.3
Increase visibility and awareness of the site	6	20.7
Provide instructional videos	1	3.4
Destigmatization efforts	3	10.3
Simplify the resources	4	13.8
Not sure or nothing	10	34.5
Have you ever used the DOH medical cannabis website to find information related to becoming or better understanding participating as a medical cannabis patient?		
No	7	24.1
Yes	20	69
Unsure	2	6.9
How hard or easy have you found navigating the DOH medical cannabis website?		
Easy	13	44.8
Neutral	3	10.3
Not easy	4	13.8
Cannot remember/not been on site recently	3	10.3
When you first see the NM DOH medical cannabis webpage, what are your eyes first drawn to?		
DOH logo	6	20.7
Banner	8	27.6
Header and/or navigation menu	6	20.7
COVID-19 update	5	17.2
Search function	1	3.4
Unsure	3	10.3
Does the organization of the site seem easy and sensible?		
No	2	6.9
Yes	23	79.3

Table A4. Cannabis Medical Provider

Variable	Frequency	Percent

How did you choose what provider to recommend medical cannabis for you?		
Met with consultant at dispensary	10	34.5
Spoke with primary care physician	5	17.2
Spoke with a physician other than PCP	3	10.3
Recommendation from friend or patient	11	37.9
Price was a main deciding factor	9	31
Have you ever been asked about CUD in a medical setting?		
No	25	86.2
Yes	2	6.9
Did your medical cannabis provider present any risks of harm associated with use?		
No	12	41.4
Yes	14	48.3
Did your medical cannabis provider discuss CUD or driving under the influence with you?		
No	1	3.4
Yes	13	44.8
Does cannabis worsen any of your health conditions or symptoms?		
No	19	65.5
Yes	10	34.5
If yes to the previous question, which conditions/symptoms does it worsen?		
Anxiety	4	13.8
Memory or concentration	4	13,8
PTSD	1	3.4
Sleep/insomnia	1	3.4
Weight	1	3.4
Epilepsy	1	3.4
Blood pressure	1	3.4
Does the use of medical cannabis ever cause issues for you getting medical care or services?		
No	27	93.1
Yes	2	6.9
In what ways does your medical cannabis patient status cause issues getting medical care or services?		
Stigma	1	3.4
Problems getting prescriptions (e.g., pain medication)	1	3.4
Did you start using medical cannabis in order to start reducing prescription medicines and/or opioids?		
No	13	44.8
Yes	15	51.7
Have you been able to reduce the number of prescribed medicines, alcohol, opioids, cigarettes, etc., after beginning your cannabis use?		
Prescribed medicine	19	65.5
Alcohol	10	34.5
Opioids	6	20.7
Cigarettes	4	13.8
OTC Ibuprofen	1	3.4
Why do you think your medical cannabis helped with reducing use other substances or prescriptions?		
Improves anxiety and/or depressive symptoms	11	37.9
Replaced tobacco and/or alcohol	10	34.5

Improves pain	6	20.7
Improves sleep	2	6.9
(In people who reported starting cannabis to reduce opioid use) how much have you been able to reduce opioid use?		
None	1	3.4
All	3	10.3
Some	2	6.9

Table A5. Cannabis Medical Provider

Variable	Frequency	Percent
From what sources do you usually get your medical cannabis?		
Dispensary	28	96.6
Grow	5	17.2
Friends and/or family	2	6.9
From what sources do you usually get your recreational cannabis?		
Dispensary	12	41.4
Friends and/or family	3	10.3
Grow	3	10.3
Inapplicable/does not use recreationally	14	48.3
Do you think adult use sales will increase, decrease, or keep price for medical cannabis the same in one year from now?		
Increase	10	34.5
Stay the same	9	31
Decrease	6	20.7
Unsure	4	13.8
Why do you expect the change in medical cannabis price in one year from now?		
Supply and demand	12	41.4
Reference another state's cannabis market (e.g., Colorado, Arizona)	6	20.7
Tax reasons	6	20.7
State-mandated prices will enforce consistency	4	13.8
Unsure	2	6.9

Appendix B. Quantitative Provider Survey Data

Table B1. Demographics of Medical Cannabis Providers in New Mexico

Variable	Frequency	Percent
Age		
31-40	2	5.4
41-50	9	24.3
51-60	9	24.3
61-70	11	29.7
71-80	6	16.2
Education		
Bachelor's	1	2.7
Master's	22	59.5
Doctoral degree	14	37.8
Gender identification		
Male	8	21.6
Female	27	73.0
Other	1	2.7
Decline to answer	1	2.7
Sex at birth		
Male	8	21.6
Female	28	75.7
Other	1	2.7
Race		
American Indian or Alaskan Native	1	2.7
Asian	1	2.7
White	33	89.2
Native American	1	2.7
2 or more races	1	2.7
Ethnicity		
Hispanic or Latino	10	27.0
Not Hispanic or Latino	27	73.0
Tribal resident		
No	36	97.3
Yes	1	2.7
Active Medical Cannabis Patient		
No	25	67.6
Yes	12	32.4
Occupation		
Physician	9	24.3
Nurse Practitioner	23	62.2
Physician Assistant	2	5.4
Prescribing Psychologist	2	5.4
Prescribing Pharmacist	1	2.7
Employer Type		
Cannabis retail location	4	10.8
Cannabis consultant practice	9	24.3

Health center / out-patient clinic	10	27.0
Private practice (not as cannabis consultant)	12	32.4
Other	2	5.4

Table B2. Patient Engagement Activities

Variable	Frequency	Percent
For what percent of your medical cannabis patients do you exclusively meet with online		
0%	19	51.4
25%	8	21.6
50%	4	10.8
75%	4	10.8
100%	2	5.4
When did you start certifying patients for enrollment in the New Mexico Medical Cannabis program?		
In the last six months	1	2.7
In the last year	3	8.1
In the last two years	4	10.8
In the last five years	20	54.1
In the last ten years	7	18.9
More than 10 years ago	2	5.4
Do you actively seek out working with individuals potentially interested in enrolling in medical cannabis in New Mexico?		
No	21	56.8
Sometimes	12	32.4
Yes	4	10.8
How many New Mexico medical cannabis patients are you currently (past year) treating?		
Zero to 20 patients	7	18.9
21 to 40 patients	13	35.1
41 to 60 patients	4	10.8
61 to 99 patients	4	10.8
100 or more patients	9	24.3
For what percentage of the New Mexico medical cannabis patients you treat did you serve as their primary medical care provider before certifying them for the program?		
0%	16	43.2
25%	8	21.6
50%	3	8.1
75%	4	10.8
100%	6	16.2
For medical cannabis patients you treat, how often do you provide a referral for other health specialists to manage their condition(s) for which they use cannabis?		
0%	8	21.6
25%	18	48.6
50%	5	13.5

75%	6	16.2

Table B3. Training and Education

Variable	Frequency	Percent
Which of the following do you most rely on to stay informed and educated on the benefits and risks of medical cannabis use?		
I rely on my previous professional/education training	5	13.5
I look up scientific, peer-reviewed articles	17	45.9
I take continuing education credits	9	24.3
My patients' experience with cannabis	2	5.4
Other	4	10.8
How frequently do you complete continuing education requirements related to recommending medical cannabis?		
Never	4	10.8
Annual or more frequently	17	45.9
In the last two years	16	43.2
How interested are you in completing webinars, seminars, or similar opportunities to receive continuing education requirements?		
A little interested	5	13.5
Moderately interested	13	35.1
Very interested	19	51.4

Table B4. Cannabis Recommendation and Related Considerations

Variable	Frequency	Percent
To what extent do you think that different cannabis product types (smokable flower vs. vaping for example) are relevant for treating specific health conditions or symptoms on a scale of 1-100 where 1 = no impact and 100 = very impactful?		
Zero to 20	3	8.1
21 to 40	1	2.7
41 to 60	9	24.3
61 to 80	8	21.6
81 to 99	7	18.9
100	9	24.3
To what extent do you think that different cannabis potencies (10% vs. 40% THC for example) are relevant for treating specific health conditions or symptoms on a scale of 1-100 where 1 = no impact and 100 = very impactful?		
Zero to 20	5	13.5
21 to 40	3	8.1
41 to 60	6	16.2
61 to 80	4	10.8
81 to 99	9	24.3

100	10	27
What factors do you consider when recommending cannabis to patients?		
Patient's medical condition	36	97.3
Patient's prior experience with cannabis	32	86.5
Scientific/medical journal articles	28	75.7
Daytime vs. nighttime consumption	24	64.9
Cost	21	56.8
Experience of other customers/patients	19	51.4
Product availability	7	18.9
Experience of friends or colleagues	7	18.9
Personal experience with cannabis	5	13.5
Recommendations from other staff	3	8.1
Product smell or appearance	2	5.4
Training provided by employer	0	0

Table B5. Efficacy of Cannabis Treatment for Specific Conditions or Symptoms

Variable	Frequency	Percent
On average, how helpful do you think cannabis is for each of these conditions/symptoms?		
Chronic pain		
Not helpful	0	0.0
A little helpful	1	2.7
Somewhat helpful	4	10.8
Helpful	13	35.1
Very helpful	20	54.1
Headache		
Not helpful	0	0.0
A little helpful	8	21.6
Somewhat helpful	7	18.9
Helpful	13	35.1
Very helpful	10	27.0
Muscle spasms		
Not helpful	1	2.7
A little helpful	5	13.5
Somewhat helpful	5	13.5
Helpful	18	48.6
Very helpful	9	24.3
Poor appetite or weight loss		
Not helpful	0	0.0
A little helpful	2	5.4
Somewhat helpful	5	13.5

Helpful	14	37.8
Very helpful	16	43.2
Nausea or vomiting		
Not helpful	1	2.7
A little helpful	2	5.4
Somewhat helpful	3	8.1
Helpful	14	37.8
Very helpful	17	45.9
Anxiety		
Not helpful	2	5.4
A little helpful	1	2.7
Somewhat helpful	8	21.6
Helpful	14	37.8
Very helpful	14	37.8
Insomnia		
Not helpful	0	0.0
A little helpful	0	0.0
Somewhat helpful	5	13.5
Helpful	11	29.7
Very helpful	21	56.8
Stress		
Not helpful	1	2.7
A little helpful	3	8.1
Somewhat helpful	7	18.9
Helpful	14	37.8
Very helpful	12	32.4
Depression		
Not helpful	3	8.1
A little helpful	7	18.9
Somewhat helpful	10	27.0
Helpful	14	37.8
Very helpful	4	10.8
Cancer		
Not helpful	2	5.4
A little helpful	3	8.1
Somewhat helpful	4	10.8
Helpful	10	27.0
Very helpful	18	48.6
Autism		
Not helpful	10	27.0
A little helpful	3	8.1
Somewhat helpful	10	27.0
Helpful	9	24.3

Very helpful	6	16.2
PTSD		
Not helpful	1	2.7
A little helpful	3	8.1
Somewhat helpful	2	5.4
Helpful	12	32.4
Very helpful	19	51.4
Other		
Not helpful	12	32.4
A little helpful	4	10.8
Somewhat helpful	3	8.1
Helpful	9	24.3
Very helpful	9	24.3

Table B6. Provider-Patient Discussion Topics

Variable	Frequency	Percent
How often do you talk to patients about the following topics		
CUD/addiction		
Never	0	0
Rarely	6	16.2
Occasionally	6	16.2
Often	22	59.5
Always	3	8.1
DUI, safe driving		
Never	0	0
Rarely	0	0
Occasionally	0	0
Often	17	45.9
Always	20	54.1
Psychotic reactions		
Never	0	0
Rarely	1	2.7
Occasionally	9	24.3
Often	18	48.6
Always	9	24.3
Safe storage away from children and pets		
Never	0	0
Rarely	0	0
Occasionally	3	8.1
Often	13	35.1
Always	21	56.8

Risks of use with those with anxiety or depression		
Never	0	0
Rarely	3	8.1
Occasionally	6	16.2
Often	15	40.5
Always	13	35.1
Potential cannabis side effects		
Never	0	0
Rarely	0	0
Occasionally	2	5.4
Often	17	45.9
Always	18	48.6
Other		
Never	9	24.3
Rarely	0	0
Occasionally	7	18.9
Often	10	27
Always	11	29.7
How often do you first recommend an approach other than medical cannabis for your medical cannabis patients to try to help with a condition prior to using medical cannabis?		
1	6	16.2
2	6	16.2
3	6	16.2
4	6	16.2
5	13	35.1
How often in the past month have you recommended that a patient replace their existing prescription medication for medical cannabis?		
1	24	64.9
2	1	2.7
3	8	21.6
4	4	10.8
How often in the past month have you recommended that a patient replace their medical cannabis with a prescription medication?		
Never	24	64.9
Once	4	10.8
A few times	8	21.6
Weekly or more	1	2.7

Table B7. Provider Challenges

Variable	Frequency	Percent
Which of the following aspects of being a health professional who recommends cannabis is most difficult?		

Identifying situations where the costs and benefits of medical cannabis use are superior to alternative treatment options	6	16.2
Lack of scientific information, data, or consensus on the impacts of specific products and potencies	17	45.9
Internal organizational pressure to avoid recommending medical cannabis	3	8.1
High demand from patients with primary care providers who refuse (or cannot) certify patients	4	10.8
Confusing or burdensome administrative requirements	0	0
Confusion on policies and how they overlap at local, state, and federal levels	2	5.4
Organization or patient pressure to recommend cannabis	1	2.7
Other	4	10.8
Have you ever experienced negative professional consequences due to recommending medical cannabis as a part of your job?		
Never	31	83.8
In the last two years	3	8.1
In the last year	3	8.1
What do you think is the most reasonable timeframe for the Medical Cannabis Program to require patients to obtain a certification for the program?		
Six months	7	18.9
1 year	20	54.1
2 years	5	13.5
3 years	5	13.5

Appendix C. Quantitative Patient Survey Data

Table C1. Demographics of Medical Cannabis Patients in New Mexico

Variable	Frequency	Percent
Age		
18-20	5	4.9
21-30	2	2
31-40	24	23.5
41-50	21	20.6
51-60	17	16.7
61-70	20	19.6
71-80	8	7.8
81-90	5	4.9
Education		
Some high school—no diploma	1	1
High school graduate	15	14.7
High school equivalency	8	7.8
Trade school following high school	4	3.9
Some college—no degree	23	22.5
Associate degree	12	11.8
Bachelor's degree	17	16.7
Master's degree	18	17.6
Doctoral degree	4	3.9
Gender identification		
Male	29	28.4
Female	71	69.6
Transgender man /female-to-male (FTM)	1	1
Genderqueer/gender nonconforming	1	1
Sex at birth		
Male	29	28.4
Female	73	71.6
Race		
American Indian or Alaskan Native	2	2
Asian	3	2.9
Black or African American	2	2
White	87	85.3
Native American	6	5.9
2 or more races	2	2
Ethnicity		
Hispanic or Latino	39	38.2
Not Hispanic or Latino	63	61.8
Resides on Tribal or Native American Land		
No	102	100
Active Medical Cannabis Patient		
No	15	14.7
Yes	87	85.3
Household income		

Less than $10,000	8	7.8
$10,000 to $19,999	12	11.8
$20,000 to $29,999	11	10.8
$30,000 to $39,999	14	13.7
$40,000 to $49,999	8	7.8
$50,000 to $59,999	15	14.7
$60,000 to $69,999	10	9.8
$70,000 to $79,999	6	5.9
$80,000 to $89,999	6	5.9
$90,000 to $99,999	1	1
$100,000 to $149,999	8	7.8
$150,000 to $199,999	2	2
$200,000 or higher	1	1

Table C2. Cannabis Use Characteristics

Variable	Frequency	Percent
How many days have you used cannabis in the past month?		
Zero days	12	11.8
1-2 days	6	5.9
3-5 days	4	3.9
6-9 days	6	5.9
10-19 days	6	5.9
20-25 days	8	7.8
26-29 days	6	5.9
All 30 days	54	52.9
Was at least part of why you started using medical cannabis because you wanted to reduce opioid use or treat opioid cravings or withdrawal?		
No	82	80.4
Yes	20	19.6
Which of the following options best describes when you enrolled as a medical cannabis patient and received your medical card from New Mexico's Medical Cannabis Program.		
In the last month	3	2.9
1-3 months ago	4	3.9
4-6 months ago	2	2
7-12 months ago	11	10.8
Between 1 and 2 years ago	21	20.6
2 to 3 years ago	24	23.5
More than 3 years ago	37	36.3
Generally how much THC is in the cannabis you typically use?		
Less than 5%	2	2
6-10%	10	9.8
11-15%	10	9.8
16-20%	17	16.7
21-30%	29	28.4
31-40%	1	1
41-50%	3	2.9

Greater than 50%	9	8.8
Generally how much CBD is in the cannabis you typically use?		
Less than 5%	27	26.5
6-10%	20	19.6
11-15%	7	6.9
16-20%	5	4.9
21-30%	2	2
31-40%	2	2
41-50%	2	2
Greater than 50%	7	6.9
Who helped you choose the product you typically use for your medical cannabis use?		
Personal choice	22	21.6
My medical provider	9	8.8
Budtender or dispensary consultant	54	52.9
Friend/family member	4	3.9
Other	13	12.7
What is your favorite part of the product you typically use for medical reasons?		
Its low cost	4	3.9
I think it works the best for my condition	66	64.7
Taste/flavor	5	4.9
Serving size works well for me	3	2.9
I really like that method of use	8	7.8
I buy whatever is on special	8	7.8
Other	8	7.8
Have you ever felt like you have used too much cannabis in a given sitting?		
No	75	73.5
Yes	27	26.5
How often do you feel like you use too much cannabis in the last 3 months?		
1-2 times	94	92.2
3-5 times	2	2
6-10 times	2	2
11-20 times	1	1
More than 20 times	3	2.9
How many times have you reached out to emergency services after feeling like you've used too much cannabis in the last 3 months?		
Never	31	30.4
1-2 times	70	68.6
3 or more times	1	1
How many times have you reached out to emergency services after feeling like you've used too much cannabis in your lifetime?		
Never	8	7.8
1-2 times	93	91.2
3 or more times	1	1
What symptoms do you feel when you feel like you've used too much cannabis?		
Feel too tired	23	22.5
Feel nauseous	6	5.9
Feel dizzy	5	4.9
Feel anxious	10	9.8
Headaches	2	2

Paranoid	5	4.9
Other	51	50
Has cannabis worsened any of the following symptoms or experiences?		
Anxiety	7	6.9
Memory or concentration	8	7.8
PTSD	2	2.0
Sleep/insomnia	4	3.9
Weight	13	12.7
Epilepsy	1	1.0
Blood pressure	2	2.0
Headaches	4	3.9
Paranoia	5	4.9
Dizziness	5	4.9
Nausea	3	2.9
Other	8	7.8

Table C3. Patient Challenges

Variable	Frequency	Percent
Have you experienced problems in obtaining cannabis for your medical needs?		
I have not purchased cannabis for medical needs	1	1
No	57	55.9
Yes, there is often a lack of stock at the dispensary	16	15.7
Yes, it is too expensive for me	18	17.6
Other	10	9.8
Overall, how did you find the process of finding a medical provider to recommend medical cannabis if 0 is "Extremely Easy" and 10 is "Extremely Difficult"?		
0	3	2.9
1	23	22.5
2	17	16.7
3	4	3.9
4	4	3.9
5	13	12.7
6	6	5.9
7	6	5.9
8	8	7.8
9	5	4.9
10	9	8.8
Other than finding a medical provider, how did you find the process to enroll as a medical cannabis patient if 0 is "Extremely Easy" and 10 is "Extremely Difficult"?		
0	4	3.9
1	18	17.6
2	17	16.7
3	7	6.9
4	4	3.9
5	13	12.7
6	6	5.9

7	3	2.9
8	9	8.8
9	8	7.8
10	6	5.9
How did you find the process for each of the following parts of New Mexico's medical cannabis patient enrollment process?		
Finding a medical provider		
Very easy	29	28.4
Easy	31	30.4
Neutral	20	19.6
Difficult	17	16.7
Very difficult	4	3.9
Completing required forms		
Very easy	27	26.5
Easy	35	34.3
Neutral	20	19.6
Difficult	18	17.6
Very difficult	2	2
Figuring out what steps I needed to do, or what order I had to do them		
Very easy	19	18.6
Easy	36	35.3
Neutral	27	26.5
Difficult	13	12.7
Very difficult	7	6.9
Using the online portal		
Very easy	11	10.8
Easy	20	19.6
Neutral	22	21.6
Difficult	7	6.9
Very difficult	4	3.9
Other		
Very easy	11	10.8
Easy	11	10.8
Neutral	17	16.7
Difficult	7	6.9
Very difficult	5	4.9
Did any of the following factors make the process of enrolling as a medical cannabis patient in New Mexico more difficult		
Stigma	16	15.7
Cost	32	31.4
Distance to medical provider	11	10.8
Confusion about qualifying conditions	21	20.6
I do not have a primary care provider (PCP)	0	0
PCP would not recommend cannabis	22	21.6
None of these factors made the process difficult	38	37.3
Other	11	10.8
Do any of these issues make it difficult to maintain your medical patient status?		
In-person visits	25	24.5
Difficulty completing paperwork	4	3.9

Cost	22	21.6
Waiting time	4	3.9
None of these made it difficult to maintain my status	53	52
Other	6	5.9
How did you choose what provider to recommend medical cannabis for you?		
Met with consultant at dispensary	20	19.6
Spoke with my primary care medical provider	24	23.5
Recommendation from friend, patient, social worker	27	26.5
Price was a main deciding factor	3	2.9
Spoke to a medical specialist	9	8.8
Distance to medical provider	3	2.9
Other	15	14.7
Has the use of medical cannabis ever cause issues for you getting medical care or services?		
Never	94	92.2
One time	3	2.9
In the last year	5	4.9

Table C4. Percent Cannabis Use for Medical and Recreational Purposes

Variable	Frequency	Percent
What percent of the cannabis you use is typically for medical reasons?		
40 to 49% medical	3	2.9
50 to 59% medical	3	2.9
60 to 69% medical	1	1
70 to 79% medical	6	5.9
80 to 89% medical	11	10.8
90 to 99% medical	23	22.5
100% medical	55	53.9
What percent of the cannabis you use is typically for recreational reasons?		
0% recreational	41	40.2
1 to 9% recreational	24	23.5
10 to 19% recreational	19	18.6
20 to 29% recreational	6	5.9
30 to 39% recreational	3	2.9
40 to 49% recreational	1	1
50 to 59% recreational	5	4.9
60 to 69% recreational	1	1
70 to 79% recreational	1	1
What percent of the cannabis you use medically is for your qualifying conditions		
10 to 20% for qualifying medical conditions	3	2.9
30 to 39% for qualifying medical conditions	4	3.9
40 to 49% for qualifying medical conditions	1	1
50 to 59% for qualifying medical conditions	11	10.8
60 to 69% for qualifying medical conditions	1	1
70 to 79% for qualifying medical conditions	7	6.9
80 to 89% for qualifying medical conditions	7	6.9

90 to 99% for qualifying medical conditions	22	21.6
100% for qualifying medical conditions	46	45.1
What percent of the cannabis you use medically is for nonqualifying conditions		
0% for nonqualifying conditions	25	24.5
1 to 9% for nonqualifying conditions	18	17.6
10 to 19% for nonqualifying conditions	13	12.7
20 to 29% for nonqualifying conditions	10	9.8
30 to 39% for nonqualifying conditions	4	3.9
40 to 49% for nonqualifying conditions	6	5.9
50 to 59% for nonqualifying conditions	10	9.8
60 to 69% for nonqualifying conditions	2	2
70 to 79% for nonqualifying conditions	3	2.9
80 to 89% for nonqualifying conditions	1	1
90 to 99% for nonqualifying conditions	3	2.9
100% for nonqualifying conditions	7	6.9

Table C5. Treatment Methods

Variable	Frequency	Percent
Do you choose specific cannabis strains to treat specific medical conditions?		
No	28	27.5
Yes	74	72.5
Do you choose specific high-potency cannabis to treat specific medical conditions?		
No	40	39.2
Yes	62	60.8
For each of the symptoms below, please mark which product type you typically use for treating those symptoms.		
Pain		
Concentrates	19	18.6
Edibles	23	22.5
Flower	31	30.4
Topicals	15	14.7
I do not use cannabis to treat this symptom	14	13.7
Anxiety		
Concentrates	17	16.7
Edibles	21	20.6
Flower	36	35.3
I do not use cannabis to treat this symptom	28	27.5
Low mood/depression		
Concentrates	7	6.9
Edibles	12	11.8
Flower	35	34.3
Topicals	2	2
I do not use cannabis to treat this symptom	46	45.1
Insomnia		
Concentrates	13	12.7
Edibles	30	29.4

Flower	31	30.4
I do not use cannabis to treat this symptom	28	27.5
Nausea		
Concentrates	13	12.7
Edibles	10	9.8
Flower	30	29.4
Topicals	1	1
I do not use cannabis to treat this symptom	48	47.1
PTSD		
Concentrates	10	9.8
Edibles	10	9.8
Flower	35	34.3
Topicals	1	1
I do not use cannabis to treat this symptom	46	45.1
Crohn's Disease		
Concentrates	3	2.9
Edibles	2	2
Flower	8	7.8
Topicals	1	1
I do not use cannabis to treat this symptom	88	86.3
Inflammation		
Concentrates	9	8.8
Edibles	9	8.8
Flower	23	22.5
Topicals	10	9.8
I do not use cannabis to treat this symptom	51	50
Opioid withdrawal		
Concentrates	1	1
Edibles	2	2
Flower	7	6.9
I do not use cannabis to treat this symptom	92	90.2
Opioid craving		
Concentrates	2	2
Edibles	2	2
Flower	6	5.9
I do not use cannabis to treat this symptom	92	90.2
Limited appetite		
Concentrates	9	8.8
Edibles	4	3.9
Flower	19	18.6
I do not use cannabis to treat this symptom	70	68.6
Low energy		
Concentrates	7	6.9
Edibles	4	3.9
Flower	26	25.5
I do not use cannabis to treat this symptom	65	63.7
Other		
Concentrates	3	2.9

Edibles	3	2.9
Flower	12	11.8
Topicals	1	1
Suppository	1	1
I do not use cannabis to treat this symptom	82	80.4

Table C6. Opioid Questions

Variable	Frequency	Percent
How old were you when you first used opioids?		
Never used opioids	4	3.9
10 or younger	12	11.8
11-20 years old	25	24.5
21-30 years old	21	20.6
31-40 years old	15	14.7
41-50 years old	7	6.9
51-60 years old	2	2
61-70 years old	6	5.9
71 and older	10	9.8
How many days in the past month did you use opioids intravenously and how many days did you use opioids another way?		
Intravenous opioid use (IV)		
Zero days	101	99
1-4 days	1	1
Used opioids another way besides intravenous		
zero days	90	88.2
1-4 days	4	3.9
11-19 days	2	2
All 30 days	6	5.9
Intravenous use of a drug other than opioids		
zero days	100	98
5-10 days	1	1
All 30 days	1	1
Which of the following best describes your use of medications prescribed to treat opioid use or opioid use disorder (OUD).		
I have used these in the past month	3	2.9
I used them in the past but have stopped	4	3.9
I have never used these medications	94	92.2
I use them whenever I can get access to them	1	1
Have you experienced an opioid overdose in the last year?		
No	101	99
Yes	1	1
Which of the following treatments have you used for opioid use or opioid use disorder (OUD) in the past month?		
Cannabis NOT recommended by a medical professional	2	2
Cannabis recommended by a medical professional	8	7.8

Other	14	13.7
Have you had consistent pain for the last 3 months?		
No	27	26.5
Yes	75	73.5
On a scale of 0-10 with 0 being no pain and 10 being extreme pain, how intense has your pain been in the last 3 months?		
0	1	1
2	1	1
3	7	6.9
4	5	4.9
5	7	6.9
6	5	4.9
7	16	15.7
8	18	17.6
9	7	6.9
10	8	7.8

Table C7. Provider Engagement

Variable	Frequency	Percent
Has a doctor ever spoken with you about cannabis use disorder (CUD) or risks of developing problematic cannabis use before?		
No	75	73.5
Yes	27	26.5
Other than obtaining your cannabis card certification, do you feel the visit with the medical provider was beneficial?		
No	34	33.3
Yes	68	66.7
Which of the following statements best describes your experience with your doctor discussing risks/harms of cannabis use with you?		
They discussed CUD or problematic cannabis use	19	18.6
They discussed driving under the influence of cannabis	10	9.8
They discussed using cannabis during pregnancy	1	1
My doctor does not know that I use cannabis	6	5.9
They discussed potential medication interactions	27	26.5
Other	39	38.2

Table C8. Conditions and Purchase Patterns

Variable	Frequency	Percent
When did you first purchase medical cannabis from a dispensary in New Mexico		
Before I received my medical card	2	2
The same day I received my medical card	4	3.9
The same week I received my medical card	34	33.3
The same month I received my medical card	41	40.2

The same year I received my medical card	19	18.6
I have never been to a medical dispensary in NM	2	2
What health conditions or symptoms has a medical provider recommended cannabis for?		
Alzheimer's disease	4	3.9
Amyotrophic Lateral Sclerosis (ALS)	3	2.9
Autism Spectrum Disorder	9	8.8
Cancer	18	17.6
Crohn's Disease	5	4.9
Damage to the Nervous Tissue of the Spinal Cord	15	14.7
Epilepsy/Seizure Disorder	14	13.7
Friedreich's Ataxia	3	2.9
Glaucoma	11	10.8
Hepatitis C Infection	2	2
HIV/AIDs	3	2.9
Hospice Care	12	11.8
Huntington's disease	3	2.9
Inclusion Body Myositis	3	2.9
Inflammatory Autoimmune-mediated Arthritis	21	20.6
Intractable Nausea/Vomiting	14	13.7
Lewy Body Disease	4	3.9
Multiple Sclerosis	8	7.8
Obstructive Sleep Apnea	16	15.7
Opioid Use Disorder	7	6.9
Painful Peripheral Neuropathy	26	25.5
Parkinson's disease	4	3.9
Post-Traumatic Stress Disorder	48	47.1
Severe Anorexia/Cachexia	9	8.8
Severe Chronic Pain	59	57.8
Spasmodic Torticollis (Cervical Dystonia)	5	4.9
Spinal Muscular Atrophy	6	5.9
Ulcerative Colitis	5	4.9
What health conditions or symptoms do you CURRENTLY use cannabis for that a medical provider did NOT recommend? Please select all that apply.		
Sleep	53	52
Pain	49	48
Anxiety	38	37.3
Depression	38	37.3
Inflammation	35	34.3
Appetite/Weight	16	15.7
Nausea	28	27.5
Spasms	25	24.5
Headaches or eye pain	30	29.4
Skin issues	9	8.8
Opioid withdrawal symptoms	4	3.9
Reducing prescription antidepressants	20	19.6
Reducing alcohol use	11	10.8
Reducing tobacco use	9	8.8
Reducing other drug use	5	4.9

Opioid Use Disorder treatment	4	3.9
Opioid withdrawal	3	2.9
Another type of substance use disorder	3	2.9
Other	5	4.9
What is the primary reason you obtained a medical cannabis card?		
For medical reasons	90	88.2
It is otherwise illegal to use	6	5.9
Other	6	5.9

Table C9. Patterns of Regular Cannabis Users

Variable	Frequency	Percent
How much money have you spent in the last month on cannabis?		
$0	13	12.7
$50	19	18.6
$100	21	20.6
$150	10	9.8
$200	12	11.8
$250	6	5.9
$300	11	10.8
$350	1	1
$400	1	1
$450	0	0
$500	0	0
More than $500	8	7.8
Which of the following methods have you used to consume cannabis in the past month?		
Smoked/dried herb or flower	63	61.8
Concentrates (butane, honey oil, butter, shatter, etc.)	32	31.4
Edibles	61	59.8
Vaping	38	37.3
Tinctures	29	28.4
Topicals	41	40.2
Other	14	13.7
How many times per day did you typically use cannabis?		
1 time	38	37.3
2 times	17	16.7
3 times	24	23.5
4 times	7	6.9
5 times	4	3.9
6 times	3	2.9
7 or more times	9	8.8
How many grams of cannabis per day did you typically use in the past month?		
Less than 1 gram	49	48
1-2 grams	23	22.5
3-5 grams	16	15.7
6-10 grams	5	4.9

11-15 grams	4	3.9
16-20 grams	1	1
More than 20 grams	4	3.9
How many total grams of cannabis did you typically use per week in the last month?		
Less than 1 gram	26	25.5
1-2 grams	7	6.9
3-5 grams	20	19.6
6-10 grams	23	22.5
11-15 grams	6	5.9
16-20 grams	7	6.9
More than 20 grams	13	12.7
How many grams of flower/bud (smokeable) cannabis do you use in a typical week?		
Less than 1 gram	51	50
1-2 grams	12	11.8
3-5 grams	12	11.8
6-10 grams	13	12.7
11-15 grams	6	5.9
16-20 grams	5	4.9
More than 20 grams	3	2.9
How many grams of cannabis concentrates do you use in a typical week?		
Less than 1 gram	66	64.7
1-2 grams	15	14.7
3-5 grams	10	9.8
6-10 grams	4	3.9
11-15 grams	2	2
16-20 grams	3	2.9
More than 20 grams	2	2
How many grams of cannabis edibles do you use in a typical week?		
Less than 1 gram	49	48
1-2 grams	19	18.6
3-5 grams	12	11.8
6-10 grams	10	9.8
11-15 grams	2	2
16-20 grams	1	1
More than 20 grams	9	8.8
What is the typical potency (THC) of the cannabis that you have used in the past month?		
Less than 10%	13	12.7
10-15%	11	10.8
15-20%	16	15.7
20-25%	22	21.6
25-35%	14	13.7
35-50%	1	1
Over 50%	6	5.9
I don't know	19	18.6
What is the typical potency (CBD) of the cannabis that you have used in the past month?		
Less than 10%	36	35.3
10-15%	15	14.7

15-20%	7	6.9
20-25%	3	2.9
25-35%	3	2.9
35-50%	2	2
Over 50%	6	5.9
I don't know	30	29.4
How would you rate your quality of life?		
Very poor	2	2
Poor	8	7.8
Neither poor nor good	23	22.5
Good	44	43.1
Very good	25	24.5
How satisfied are you with your mental health?		
Very dissatisfied	2	2
Dissatisfied	14	13.7
Neither dissatisfied or satisfied	21	20.6
Satisfied	48	47.1
Very satisfied	17	16.7
How satisfied are you with your physical health?		
Very dissatisfied	7	6.9
Dissatisfied	34	33.3
Neither dissatisfied or satisfied	24	23.5
Satisfied	28	27.5
Very satisfied	9	8.8
How beneficial or harmful do you believe weekly cannabis use to be to your mental health? (-100 equals very harmful and 100 equals very beneficial)		
-39	1	1
-38	1	1
-20	1	1
-7	1	1
0	5	4.9
1 to 9	5	4.9
10 to 19	3	2.9
20 to 29	4	3.9
30 to 39	2	2
40 to 49	4	3.9
50 to 59	3	2.9
60 to 69	3	2.9
70 to 79	7	6.9
80 to 89	8	7.8
90 to 99	10	9.8
100	44	43.1
How beneficial or harmful do you believe weekly cannabis use to be to your physical health? (-100 equals very harmful and 100 equals very beneficial)		
-100	1	1
-80	1	1
-44	1	1
-30	1	1
-23	1	1

-21	1	1
-20	1	1
-10	1	1
-6	1	1
-1	3	2.9
0	4	3.9
1 to 9	7	6.9
10 to 19	1	1
20 to 29	5	4.9
30 to 39	1	1
40 to 49	7	6.9
50 to 59	1	1
60 to 69	5	4.9
70 to 79	3	2.9
80 to 89	10	9.8
90 to 99	7	6.9
100	40	39.2
CUDSF-1. If you have tried to stop using cannabis in the past six months, how many times have you tried to stop?		
N/A, did not try to stop	94	92.2
Less than monthly	3	2.9
Monthly	1	1
Daily or almost daily	4	3.9
CUDSF-2. How often in the past 6 months have you devoted a great deal of your time to getting, using, or recovering from cannabis?		
Never	78	76.5
Less than monthly	7	6.9
Monthly	3	2.9
Weekly	7	6.9
Daily or almost daily	7	6.9
CUDSF-3. How often in the past 6 months have you had a problem with your memory or concentration after using cannabis?		
Never	74	72.5
Less than monthly	16	15.7
Monthly	4	3.9
Weekly	6	5.9
Daily or almost daily	2	2