VIEWPOINT

Heterogeneous State Cannabis Policies
Potential Implications for Patients and Health Care Professionals

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Supplemental content

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As of November 2021, cannabis has become legalized for medical purposes in 36 states and the District of Columbia. Eighteen states also authorize nonmedical use of cannabis by adults. The rapid expansion of access to cannabis has coincided with increased use across a number of demographic groups. In 2019, an estimated 48 million people in the US reported using cannabis, a 60% increase from 2002.[1] Among adults aged 65 years and older, the prevalence of cannabis use increased 10-fold between 2006 and 2018, from approximately 0.4% to more than 4%.[2] Yet amid the increasing availability and use of cannabis nationwide, regulatory policies and sources of information for patients remain fragmented and inconsistent.

Approximately 10% of adults who use cannabis report using this drug primarily to treat a medical condition.[3] However, few reliable resources are available for patients and clinicians to facilitate evidence-based discussions about the effects of cannabis on health. An information vacuum created by limited public health messaging and restrictions on research has been filled instead by advertising campaigns, anecdotal information, and improvised health policy, which may be inaccurate and misleading. A 2020 survey of 10 popular websites found that only 3% of 30 claims about medical cannabis were written by a health professional, and 76% of the claims were rated as inaccurate.[4] The disconnect between state policies that regulate cannabis as a legal medical treatment, popular media reports, and health care professionals may lead to confusion for patients.

> Until rigorous evidence about the benefits and risks of medical cannabis is available, policy makers must ensure that transparency and safety are prioritized to support patients and clinicians alike.

Official sources of information such as state guidelines vary considerably and are often not based on strong evidence. By November 2021, state governments had cumulatively approved cannabis to treat more than 105 different health conditions, but most of these approvals have little or no supporting research. Marked differences exist among state medical cannabis policies (eTable in the Supplement). For example, 53% of the qualifying health conditions endorsed by various state guidelines are allowed by only a single state. South Dakota's guidelines identify only 6 qualifying medical conditions, whereas Illinois's guidelines include 48 eligible diagnoses. Adding to interstate variation are policies enacted by 12 states that allow individuals to have access to cannabis for any medical condition solely in accordance with a recommendation from a physician.

This heterogeneous approach to policy making can directly affect patients and clinicians because they are left to interpret mixed messages from lawmakers about the safety and efficacy of medical cannabis use. But legislators are at a disadvantage when trying to create evidence-based medical cannabis policy. Under pressure from both lobbyists and constituents (who in some cases may have circumvented state lawmakers and passed cannabis legislation through referendum), states have been left to cobble together cannabis policy from incomplete evidence. As cannabis legalization becomes increasingly widespread, there is a growing need for high-quality research and policy guidelines that state lawmakers can use to create safe and evidence-based legislation.

Supporting high-quality research is of the utmost importance in accomplishing this goal. Historically, cannabis research has been limited by strict legal regulations and insufficient access to a standardized and well-characterized product. However, recent federal legislation has sought to expand access to cannabis for researchers by licensing new producers and allowing for a wider variety of cannabis products to be used in clinical research.[5] Likewise, some states have included funding for research in their medical cannabis legislation. This funding could be used to improve local surveillance infrastructure and data tools development for both the public health effects of cannabis use and the characteristics of commercially available cannabis products over time. These advancements could enable researchers to fill important evidence gaps regarding the health effects of cannabis use to inform both state policy and clinical decision-making.

Meanwhile, state policy makers could take several steps to reduce potential health-related risks from cannabis use and increase clarity around current evidence for patients and clinicians. First, state guidelines could be required to include education highlighting the potential risks of cannabis use alongside state-approved medical indications. Several risks related to cannabis use, including impaired driving, addiction, intoxication, adverse psychiatric outcomes in adolescents and young adults, and pregnancy-related harms such as low birth weight, are well characterized.[6] However, without

explicit warnings patients may interpret state approval as indicative of relative safety. An informed consent model in which patients are required to learn about and acknowledge known risks during the application process to be approved for access to medical cannabis could help ensure appropriate expectations and caution. According to a 2017 review, the use of patient decision aids was associated with more informed choices about medical treatments, including more accurate perceptions of risk.[7] Such a tool could be implemented as a standardized video didactic or infographic developed by a national expert group such as the National Institute on Drug Abuse and embedded into online application platforms for medical cannabis across states. These materials could also be made publicly available as decision aids for clinicians to use with patients to guide evidence-based discussions on medical cannabis.

Second, a plain-language summary of existing evidence could be presented alongside each approved medical indication in state guidelines, with a strength-of-evidence rating if available. The 2017 National Academies of Sciences, Engineering, and Medicine (NASEM) report[8] provided a comprehensive overview of current evidence on both potential benefits and harms of cannabis use. The report highlighted numerous instances in which state policies are not aligned with current evidence. For example, 32 states currently endorse epilepsy as a qualifying health condition for medical cannabis use. Although the cannabinoid cannabidiol has shown promise in treating some pediatric epilepsy syndromes, there is no conclusive evidence demonstrating the beneficial effects of cannabis on epilepsy in adults. Additionally, posttraumatic stress disorder (PTSD) is an approved medical condition in 31 states, but limited evidence is mixed and suggests that cannabis use may be associated with worsening of PTSD symptoms in some individuals.[8,9] Without needed clarification, patients and clinicians may erroneously perceive that cannabis is an effective treatment for these and other conditions, perhaps even forgoing proven therapies.

Third, clinical practice guidelines could be developed to equip clinicians with principles to follow in counseling patients about cannabis use. These guidelines could direct clinicians to scientific evidence while allowing for patient-centered considerations within the context of specific state laws. Clear guidelines also could make it easier for legislators to integrate standardized clinician training into state cannabis policy. Currently, 9 states (Florida, Massachusetts, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Washington, and West Virginia) require clinicians to participate in continuing medical education before recommending medical cannabis, but training requirements and tools differ substantially among states. Periodically convening an expert committee to review current cannabis-related literature and update guidelines could help both clinicians and legislators remain informed in a rapidly evolving research and policy environment. Moreover, such a committee could help ensure an ongoing rigorous assessment of cannabis-related research on both potential medical benefit and harms, building on the work of the original NASEM report.

For many patients, cannabis represents hope as a novel therapy for health conditions that have been refractory to traditional medical treatments. But mixed messages, along with a reticence from many clinicians to provide counseling about medical cannabis,[10] may lead to confusion and unfounded expectations. High-quality research is needed to better define the therapeutic potential of cannabis. Until rigorous evidence about the benefits and risks of medical cannabis is available, policy makers must ensure that transparency and safety are prioritized to support patients and clinicians alike.

ARTICLE INFORMATION

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