

Dr. Marion McNabb  
President, Cannabis Center of Excellence  
[marion@cannacenterofexcellence.org](mailto:marion@cannacenterofexcellence.org)

Mar 13, 2024

Governor Healey  
Office of the Governor  
Massachusetts State House  
24 Beacon St., Room 280  
Boston, MA 02133

Subject: "Cannabis as an Alternative" Policy Memo

Dear Governor Healey,

My name is Dr. Marion McNabb and I am reaching out to share the results of the recently concluded *iCount: Cannabis as an Alternative* research study results and policy recommendations resulting from key study findings prepared by the Cannabis Center of Excellence (CCOE) and study co-investigators Dr. Peter Grinspoon and Eva Rachel Tine, MSW. The enclosed policy memo presents the study's compelling findings regarding the potential of cannabis to serve as an alternative to unwanted medication use, including prescription opioid use. The study emphasizes the role of medical cannabis in harm reduction strategies that can impact preventing the use of and mitigating the impact on the opiate crisis.

The opioid epidemic has continually escalated in recent years, and despite commendable efforts by the Healey-Driscoll Administration, challenges in access to effective interventions persist. Our research findings indicate a promising association between adult medical or recreational cannabis use and reduction in individuals' use of opioids and other unwanted substances. The study includes specific emphasis on populations most affected by the opioid crisis, such as non-Hispanic Black residents, veterans, and individuals experiencing homelessness. The policy memo provides comprehensive insights into the study's methodology, results, and recommendations, aligning with the MA Opioid Settlement Funds' Permitted Uses for Harm Reduction. We believe that the findings and recommendations outlined in the memo offer innovative and evidence-based approaches to addressing the opioid crisis. To further discuss the implications of this research and explore potential avenues for implementation, we would be delighted to arrange a meeting at your earliest convenience. Dr. Marion McNabb is available for any inquiries and can be reached at [marion@cannacenterofexcellence.org](mailto:marion@cannacenterofexcellence.org) or 404-985-8149. We appreciate your time and consideration of this important research.

Sincerely, Dr. Marion McNabb, President, Cannabis Center of Excellence



**Cannabis Center of Excellence *iCount: Cannabis as an Alternative* Study**

**Policy Memo: Research Findings and Recommendations**

**March 13, 2024**

The Cannabis Center of Excellence (CCOE) is a 501c3 non-profit conducting cannabis research studies in Massachusetts under leadership of Principal Investigator Dr. Marion McNabb. The CCOE and colleagues recently completed a “Cannabis as an Alternative” (2023) research study, with results highlighting the potential of cannabis as an alternative to unwanted medication use, particularly prescription opioids, for the treatment of various health conditions and symptoms. Furthermore, the data suggests that cannabis could play an important role in harm reduction strategies, aiding individuals in reducing or stopping use of opioids and other substances. These findings shed light on potential pathways for cannabis to contribute to alleviating the ongoing opioid epidemic in Massachusetts.

**Background**

The opioid epidemic has concerningly escalated over recent years, both at the national level and locally in Massachusetts. According to the MA Department of Public Health, opioid-related overdose deaths rose 2.5% from 2021 to 2022, claiming an estimated total of 2,357 lives – a 9.1% increase from the pre-pandemic peak in 2016.<sup>1</sup> Notably, this increase in overdose deaths has disproportionately impacted non-Hispanic Black residents, with rates rising 41% among Black men and 47% among Black women.<sup>1</sup> In nearly all overdose deaths with a toxicology report available, other substances such as fentanyl (93%) and xylazine (5%, June-December 2022) were present.<sup>1</sup>

The Healey-Driscoll Administration has made commendable efforts in addressing this public health crisis by leading claims against responsible pharmaceutical companies and distributors as well as allocating funds and resources for prevention, harm reduction, treatment, and recovery in Massachusetts.<sup>2</sup> Among these include the issuance of over \$525 million in opioid resettlement funding to address the opioid epidemic in MA.

However, despite these initiatives, the opioid crisis persists at great cost to the state. Methadone and buprenorphine are effective FDA-approved interventions for opioid use disorder that generally serve as the first line of treatment for patients and have been shown to reduce overdose deaths by roughly 50%.<sup>3</sup> However, these treatment methods present challenges with access to prescribing providers, treatment adherence, experiencing unwanted side effects and health consequences, and associated stigma.<sup>3-4</sup>

Recent research indicates an association between increased access to adult medical and recreational cannabis and reduced opioid use and opioid-related mortality.<sup>5-6</sup> Respondents to a survey in California (n=2897) reported that using medical cannabis helped them to decrease opioid use – of the 30% that reported using opioid-based pain medications, 97% ‘strongly agreed’ or ‘agreed’ that they were able to decrease their opioid use when using medical cannabis.<sup>5</sup> Additional research conducted on medical cannabis patients in Canada (n=1145) suggests that cannabis use helped patients reduce daily use of prescription opioids and other medications and improved their overall quality of life.<sup>6</sup> Of participants who used cannabis substitution for opioid medications in this study, opioid use dropped from 28% to 11% between baseline and 6 months, and the average daily opioid dosage reduced by 78%.<sup>6</sup> In recent years, several states including New York, New Jersey, New Mexico, and Pennsylvania have expanded their qualifying conditions for medical marijuana cards to include opioid use.<sup>7</sup> While more time and research are necessary to understand how these specific policy changes will influence opioid-related outcomes, available data from New York State indicates that using medical marijuana for chronic pain has resulted in a 47-51% reduction of prescription opioid dosage.<sup>8</sup> This could potentially result in lower illicit opioid usage and overdoses that originate with long-term prescription opioid use for pain relief.<sup>7-8</sup>

## **Methods**

The *iCount: Cannabis as an Alternative* study explored the potential role of cannabis in harm reduction and treatment of medical conditions and symptoms. A survey programmed into an online data collection tool was developed for cannabis consumers and patients to report how they consume cannabis as an alternative. The survey was made available online and the Cannabis Center of Excellence promoted study enrollment through social media and local news articles.

Survey data was collected from August 15 to November 23, 2023 using a cross-sectional survey design with convenience sampling. Data was collected about participants’ cannabis usage patterns (medicinal vs. recreational vs. non-user), current health conditions and symptoms, medication usage, recreational use of opioids and other substances, and their experiences using cannabis to reduce unwanted use of medications, opioids, and/or other substances.

## **Results**

The respondent pool consisted of a national sample of 586 cannabis adult consumers or medical patients, as well as non-cannabis users who wished to learn more about cannabis use as a harm reduction alternative. Of significance, 67% of respondents were age 25-41, overlapping with the 25-44 age group cited in the 2022 Massachusetts DPH report as the group most affected by opioid-related mortality.

The specific populations of unhoused people and veterans were emphasized in this study – 41% of participants reported having been homeless in the past and 28% are currently homeless; 28% of participants are U.S. military veterans and an additional 21% are active duty service members.

Additionally, a sizable 76% of participants reported using cannabis as an alternative therapy for health conditions or symptoms (41% current; 35% past). The most common health conditions that participants found cannabis to be helpful in treatment were chronic and severe pain (27%), depression (24%), anxiety (22%), and PTSD (20%). Furthermore, over half of participants (52%) currently take prescription medication(s) to treat health conditions and/or symptoms. Many participants report actively using cannabis to reduce use of prescription medications; of importance, 15% of these individuals reported doing so to reduce use of prescribed narcotic/opioid medications.

A staggering two-thirds (69%) of participants in the study sample reported using cannabis to help self-treat opioid use disorder (31% current; 38% past) and 54% reported specifically using cannabis to reduce their opioid use (31% current; 23% past). Of those actively using cannabis to reduce use of narcotics/opioids, the most commonly reported substances were fentanyl (37%), codeine (35%), morphine (26%), Vicodin (26%), and heroin (22%). These findings underscore the potential role of cannabis in addressing opioid harm reduction strategies.

## **Discussion**

The *iCount: Cannabis as an Alternative* research study results show promise for cannabis as an approach for both opioid use prevention and harm reduction by serving as an alternative to prescription opioids for treatment of medical conditions/symptoms, and by helping people reduce existing unwanted opioid use.

Governor Maura Healey led the nation in suing the Sacklers and other pharmaceutical giants in causing the opioid epidemic. As a result, there is over \$500 million dollars available in Massachusetts to dedicate resources towards harm reduction and treatment for opioid addiction and recovery. In fact, the opioid resettlement funds could potentially allow for the research into cannabis as a harm reduction alternative. Specifically, the MA Opioid Settlement Funds Permitted uses of Opioid Remediation and Recovery funds allow:

- A program that: encourages innovation, fills gaps, and fixes shortcomings of existing approaches; supplements prevention, harm reduction, treatment, and recovery services; includes evidence-based, and promising programs; and takes advantage of the flexibility that is allowed for these funds.
- Use of Funds, Section 4: Harm Reduction: Support efforts to prevent overdose deaths or other opioid-related harms through strategies that: Promote efforts to train health care providers, students, peer recovery coaches, recovery outreach specialists, and other professionals that provide care to persons who use opioids or persons with OUD in crisis training and harm reduction strategies.

**Recommendations:**

1. Fund the development of evidence-based training & education materials for healthcare providers, recovery workers and front-line workers on the evidence, role, and risks of medical cannabis as a harm reduction alternative.
2. Conduct a three-month scoping review of possible interventions for the region or county, including developing and delivering training materials, in addition to outlining a possible pilot education program for healthcare providers and recovery workers to understand the science and role of medical cannabis as a harm reduction alternative.
3. Implement a research project to assess the scope of medical cannabis as a potential harm reduction alternative in Massachusetts.
4. Conduct a cost savings assessment of introducing cannabis as a harm reduction alternative on state costs for addiction and recovery.
5. Review options for developing regulations that support donations for medical and adult use cannabis for populations who suffer from addiction to alcohol, opiates, and other more harmful substances.

The Cannabis Center of Excellence would be happy to further explore these findings or help implement the recommendations resulting from this research. Please contact Dr. Marion McNabb at [marion@cannacenterofexcellence.org](mailto:marion@cannacenterofexcellence.org) or 404-985-8149 for more information.

**Study Authors:**

Dr. Marion McNabb, Principal Investigator; Dr. Peter Grinspoon, Co-Investigator; Eva Rachel Tine MSW, Co-Investigatior; DJ Ritter; Alyssa Pingitore. This study was financially supported by Ayr Wellness.

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