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# Non-medical Cannabis Use Screening and Advising

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# Non-medical Cannabis Use Screening and Advising

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Central Vermont Medical Center

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# Problem Identification and Need

- “The legalization of recreational cannabis use in the US has substantially reduced the price of cannabis, increased its potency, and made cannabis more available to adult users” [1]
  - Legalization has increased the frequency of cannabis use among adults and has also increased emergency department attendances and hospitalizations for some cannabis-related harms. [1]
  - Recreational use dispensaries are slated to open in VT in 2022
- Just 18 percent of patients reported their clinician as a being good source of information regarding cannabis [2]
- While the growing body of evidence suggests cannabis use can relieve neuropathic pain and spasticity, clinicians are hamstrung by a lack of data on side effects, especially for older populations with more medical comorbidities and polypharmacy. [3]
- There is no gold standard for adapting substance use disorder screening for older patients [4]. Older adults may be prone to physical side effects and medical problems complicated by regular or heavy cannabis use and drug-drug interactions (e.g., injuries), even in the absence of a primary cannabis use disorder [3]
- A physician at the CVMC practice stated they were unsure how best to counsel patients who use marijuana recreationally .
- It is vital to comprehensive patient care that clinicians be as informed as possible about the physiologic effects of cannabis. Patients should be screened for cannabis use and, when appropriate, for cannabis use disorder (CUD).

# Public Health Cost and Unique Considerations

- [After legalization…] studies have shown the greatest increases in cannabis use among adults, especially those older than 25 years [3]
- Over 25 million adults in the US had pain for the last 3 months and about 40 million with severe pain […] Pain is correlated with worse health outcomes and greater healthcare system burden [5]
- Twenty percent of Vermont adults (18+) reported using marijuana at least once in the past 30 days in 2019. Past 30-day use has steadily increased since 2013, when 7% of adults reported using. Use in 2019 was significantly higher compared to 2018 (17%) [6]
  - Another survey showed up to 45% of adult primary care patients reported using Cannabis in the past year [2]
- Persistent pain impacts over100 million adults and costs approximately $635 billion annually. [5]
- 157 Vermonters died of an accidental opioid overdose in 2020 and, as of Sept. 13 2021 96 Vermonters had died of accidental opioid overdose in 2021 [7]
- In states with medical marijuana there was a statistically non-significant 8% reduction in opioid overdose mortality (95% confidence interval: − 0.21 to 0.04; $p = 0.201$) and a 7% reduction in prescription opioids dispensed (95% confidence interval: − 0.13 to − 0.01; $p = 0.017$). Legalizing marijuana for recreational use was associated with an additional 7% reduction in opioid overdose mortality in Colorado and 6% reduction in opioid prescriptions among fee-for-service Medicaid and managed care enrollees. [8]
- Twenty percent of Vermont adults (18+) reported using marijuana at least once in the past 30 days in 2019. Past 30-day use has steadily increased since 2013, when 7% of adults reported using. Use in 2019 was significantly higher compared to 2018 (17%) [6]
- As of June 25, 2021, there were 4,767 patients enrolled with the Vermont Marijuana Registry.
- “Governments that propose to legalize and regulate cannabis use need to fund research to monitor the impacts of these policy changes on public health and take advantage of this research to develop ways of regulating cannabis use that minimize adverse effects on public health.” [1]
- About 50% to 86% of pediatricians report routinely screening for substance use, and most screen using their clinical impressions rather than a validated screening tool [9]

# Community Perspective

Jacob Borodovsky, PhD

*Research Scientist, Center for Technology and Behavioral Health and the Department of Biomedical Data Science, Geisel School of Medicine at Dartmouth*

- "If youre a physician and you give a medication you generally know what he compound is. You know what they are and that they've gone through FDA clinical trials. There are over 150 identified cannabinoids, and we don't really understand what most of them do (if anything). We sort of know about THC and CBD but the >100 others we don't really understand."
- "We have observed that if you want the therapeutic effects of a cannabidiol, you need a little THC as part of it. High CBD cannabis usually contains some THC to enhance its effect. The diversity and potential for interactions is medically the most important thing to understand. This is a mountain of a task to disentangle."
- "If a physician is going recommend cannabis, start with CBD, because it contains mild sedative effects. In some trials they have given up to 600mg of CBD without notable adverse consequences. CBD related products have been approved by FDA. When considering cannabinoid-based treatment it is safer to start with CBD and observe how patients do. Track how the balance affects the patient. Essentially clinicians should try and track CBD and THC content of their patients' cannabis, observe how frequently they consume it and in what quantities. If this information starts to get documented clinically then you have created a dataset that could be studied. If not possible to track consumption of %THC it would be helpful to know if its plant material or concentrates that is being consumed (oil, wax, etc.), because this gives you a rough idea of higher vs lower THC concentration. A gestalt may be formed to aid clinicians as they consider this picture while we wait for further research to be conducted."

Lindsey Wells, B.S.

*Marijuana Program Administrator, VT Department of Public Safety*

- "Regarding recreational dispensary regulations, rule writing will start next year. We are seeking input from providers on what we can do in drafting the rule process that will help providers have the level of involvement that they want."
- "We would love to hear from providers about what they would like to see from the program, especially since the program is changing. Getting providers involved in the conversation is going to be a big piece of the puzzle. Just opening up the conditions isn't going to fix provider hesitancy to endorse medical marijuana for their patients."
- "Addition of cannabis to the VPMS could make providers more comfortable with the system and allow for monitoring of use, which could be of real statistical value. Retail employees provide anecdotal evidence on what works for patients. We don't just let people go to the pharmacy and pick out what they want for other drugs. Providers and the registry can share information regarding history, but we do not have their purchase history immediately available."

# Intervention and Methodology

- Created a dot phrase (.cannabiscounseling) within EPIC electronic health record to give providers quick access to clinically relevant resources including:
  - Non-medical cannabis flowsheet from Ontario Centre for Effective Practice (https://cep.health/media/uploaded/20181015-Non-Medical-Cannabis-Rev-6.3.pdf) [10]
    - Screening for cannabis use and resources if concerned about cannabis use disorder
    - Harm Reduction and Patient Counseling
    - Medical benefits and harms for patients using cannabis
    - Advising Special populations
  - CUDIT (Cannabis Use Disorder Identification Test): a tested 10 question screening tool for Cannabis Use Disorder
  - Flow-sheet for practical approach to medical cannabis treatment in older adults [11]
- What patients need to know: Common effects experienced by patients due to cannabis use include dizziness, euphoria, drowsiness, confusion, and disorientation [11]
  - It is critical to attend to these effects in the elderly population with conditions such as dementia, frequent falls, mobility problems, hearing, or vision impairments [11]
  - Cannabis may cause acute cardiovascular effects such as increased sympathetic activity that causes an increase in heart rate, cardiac output, and myocardial oxygen demand. Tolerance to these effects develops quickly in young people but care must be taken in older adults since they have more cardiovascular comorbidities and risk factors. [11]
- Additional provider resources/ longer reads:
  - Care of the patient using cannabis: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8148298/#R5 [12]
  - State of the research on the health effects of marijuana: https://www.ncbi.nlm.nih.gov/books/NBK425741/ [13]

# Results/Response

- Physicians at CVMC stated having these resources readily available would be useful to their practice and that they would use them to better counsel their patients who use recreational cannabis.
- Community members highlighted the need for physicians to be involved in counseling their patients on cannabis use as well as in the process of how it should be regulated at the state level.
- As providers become more comfortable asking more detailed questions about their patients' cannabis use, they should improve their ability to recognize when it may be causing negative health effects

# Evaluation of Effectiveness and Limitations

- Evaluation of Effectiveness
  - Follow-up interview for providers on confidence in advising patients on cannabis use
    - Compare providers who have used the resources contained in this project vs those that have not
  - Assess patient perceptions of provider knowledge regarding cannabis use
  - Track use of .cannabiscounseling phrase created in this project
- Limitations
  - Timeline for completion of this project was very brief
  - Resource dissemination is limited to those who know about it and to the UVMMC EHR.
  - Limited understanding of the many different cannabinoids and their effects.

# Recommendations for future interventions

- Similar project more focused on adolescent and young adult population with emphasis on screening for cannabis use disorder, given negative long-term effects of cannabis abuse and higher rates of CUD among populations who use at an earlier age
- More research into dosing and the effects of different cannabinoids in available products.
  - Provide a model or flowsheet for providers to track more specifically how their patients use cannabis
- Update resources contained in .cannabiscounseling phrase as the literature is dynamic
- Standardize cannabis use screening
- Academic detailing and continuing medical education for providers
- Create a handout for patients for cannabis education, including information on differences in types of cannabis products

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# Interview Consent Form

- Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.
- Consented __x___
- Name: Jacob Borodovsky
- Name: Lindsey Wells