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Strengthening Workshop Summary Report

Team Grant: Partnerships in Cannabis Policy Evaluation (PCPE)

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Introduction

The role of cannabis research and policy evaluation has never been more crucial. The Canadian Centre on Substance Use and Addiction (CCSA) and the Canadian Institutes of Health Research (CIHR) are proud to be working together with researchers funded through the Partnerships for Cannabis Policy Evaluation (PCPE) program. This funding opportunity was developed under CIHR's *Integrated Cannabis Research Strategy* to produce the research evidence needed to inform current and future policy and regulatory models for non-medical cannabis use.

This report summarizes a virtual workshop that was held to bring together researchers from five teams seeking to evaluate the impact of provincial and territorial cannabis legalization from various perspectives. This research, funded by CCSA, will support future cannabis policies to enhance the benefits and minimize potential harms for Canadians.

The meeting book for this workshop is available upon request. Requests can be directed to the CIHR Contact Centre: support-soutien@cihr-irsc.gc.ca.

Workshop Objectives

The primary objectives of the workshop were to:

- Create a forum for dialogue and networking between researchers leading PCPE projects
- Provide an overview of the Cannabis Act and the importance of policy research to support the implementation of the cannabis legal framework in Canada
- Identify mutually beneficial opportunities for collaboration across funded projects

Overview and Context

Following welcoming remarks by Rita Notarandrea, Chief Executive Officer, CCSA and Dr. Samuel Weiss, Scientific Director, CIHR Institute of Neurosciences, Mental Health and Addiction (INMHA), meeting participants were presented with an overview of the PCPE funding opportunity by Dr. Nina Cluny, Team Lead, Partnered Initiatives, CIHR-INMHA. John Clare, Director General, Strategic Policy, Health Canada Controlled Substances and Cannabis Branch then provided a summary of how policy research can support the Cannabis Act. Key messages are highlighted below.

Overview of PCPE Funding Opportunity

Cannabis-related policies across jurisdictions have the potential to impact the health of Canadians. Robust, coordinated evaluation is required to monitor the health impacts of these policies, both positive and negative, so that policies can be adapted in near-real time to maximize benefits and minimize harms for Canadians. The PCPE program supports projects that evaluate and monitor the implementation and impact of cannabis-related policies at the provincial level, toward the identification of best practices from both public health and public safety perspectives. This evaluation research will also inform aspects of the mandated review of the Cannabis Act, required three years after coming into force.

Policy Research in Support of the Cannabis Act

The *Cannabis Act* creates a strict national framework that regulates the production, possession, distribution and sale of cannabis in Canada. Today, almost two years after the *Cannabis Act* and *Cannabis Regulations* came into force, there is still much to learn about the impact that this legislation has had in Canada.

There is a division of responsibility between federal and provincial/territorial governments. The federal government is responsible for the criminal framework, and for regulating production and licencing, whereas provinces/territories are responsible for when and how cannabis is sold and consumed. Variability among legislation between provinces/territories presents an interesting natural experiment that will help inform the implications of this policy.

Government of Canada investments in cannabis related research, as well as surveillance tools such as the Canadian Cannabis Survey, aim to monitor and assess the impacts of cannabis consumption patterns in Canada.

Preliminary observations indicate that while the overall purchase of cannabis remains the same, the legal market is displacing the illegal market. The frequency and prevalence of cannabis consumption hasn't changed dramatically and there doesn't appear to be a major shift in Canadian's perceptions of cannabis consumption as risky or not risky. There is also tremendous oversight over the industry and overall a high rate of compliance. Attitudes and behaviours around impaired driving are being monitored.

Comprehensive monitoring and surveillance efforts will inform a review of the legislature, which must start three years following the coming into force of the *Cannabis Act* (i.e. by October 17, 2021). The review will provide an opportunity to evaluate the *Cannabis Act* against its public health and safety objectives. As we enter the third year of the *Cannabis Act* and prepare for the legislative review, it will be important to take an evidence-based approach to measure the policy impacts and assess the success of the main objectives/outcomes set by the federal government.

Project Summaries

Five research teams were funded through the PCPE funding opportunity and each team provided a summary of their projects, specifically speaking to their project's objectives, approach, data management and opportunities for collaboration. Presentations are summarized below.

The Impact of Provincial Cannabis Policy on Impaired Driving

Presented by: Jeffrey Brubacher and Patrick Byrne

The four main objectives of this project are to:

- 1) Report the prevalence of impairing substances in injured drivers and passengers from BC and ON
- 2) Evaluate the impact of BC and ON traffic policy on driving under the influence of cannabis (DUIC)
- 3) Describe and contrast DUIC-relevant traffic policy in BC and ON
- 4) Explore evidence of a substitution effect: Will people substitute cannabis for alcohol when cannabis becomes more readily available; will there be a decrease in alcohol-related collisions?

The approach taken in this study will include toxicology testing (cannabis, alcohol and 80-90 other impairing substances) by taking blood samples from injured drivers and passengers from the hospital emergency department. Prevalence will be reported (how many positive tests for cannabis, alcohol and other substances in drivers and passengers) and compared (drivers vs. passengers and drivers vs. general population). Collision reports will be analyzed pre/post cannabis legalization to determine the effect of cannabis legalization on alcohol-related collisions.

Researchers will gather primary data including clinical (demographic, collision information, ambulance records, medical records) and toxicology (THC, alcohol, impairing medications, recreational and newly emerging drugs) data, as well as secondary data including enforcement (administrative, police reports, traffic violation) and National Cannabis Survey (demographics, per capita cannabis consumption) data.

With respect to opportunities for collaboration, the researchers are able to share data (though there are some limitations due to privacy restrictions) and note that they are interested in collaborating with others on policy analysis and knowledge translation activities in order to make this information as useful and accessible as possible. Some examples may include: policy briefs, drug impaired driving workshops and research symposia. The researchers are also able to lend impaired driving research expertise.

An Integrated Process and Outcomes Evaluation of Cannabis Legalization Policies in Newfoundland and Labrador to Examine Public Health and Safety Impacts of Sales, Consumption and Enforcement Regulations

Presented by: Jennifer Donnan and Debbie Curtis

The four main objectives of this study are to:

- 1) Describe cannabis use by biological and social determinants of health in NL compared to national patterns pre- and post-legalization.
- 2) Examine the unique four-tiered private model (unique to NL) and the online public framework in NL on meeting provincial government goals, and inform policy refinement
- 3) Determine the uptake and impact of public education campaigns regarding provincial policies and health and public safety consequences of cannabis use
- 4) Identify the health and safety implications of cannabis legalization by biological and social determinants of health

This study will follow a citizen and stakeholder engaged approach. Citizen and stakeholder advisory panels will be developed to advise the team throughout the term of the evaluation. Additionally, the team will conduct a series of needs assessment workshops to understand the needs of the local population and help to identify research priorities. Multiple data sources will be utilized, including: surveys, focus groups and interviews to gather qualitative data, social media to understand opinions and perceptions of cannabis, and administrative data such as emergency room triage, hospital/lab databases and enforcement and sales data. Data will be gathered and held on secure servers at Memorial University of Newfoundland (MUN).

The researchers identified several opportunities for collaboration with other teams, including: literature reviews, designing survey questions, developing a national look at cannabis-related driving events, evaluating public education campaigns, identifying cannabis-related attributes (e.g. packaging) that may influence purchase choice, and identifying common approaches and additional opportunities for data sharing. Impaired driving was highlighted as a potential opportunity for collaboration with other teams based on information provided through this workshop.

Triangulating Evidence to Evaluate the Impact of Cannabis Policy in Ontario

Presented by: Tara Elton-Marshall

The main objective of this study is to evaluate the intended and unintended impacts of cannabis policies in Ontario on the following outcomes:

- 1) Consumption of cannabis (patterns and cannabis use disorder) and other psychoactive substances, cannabis-related harm to others, and impacts on mental health
- 2) Impact on the health care and treatment systems
- 3) Cannabis-impaired driving and injuries
- 4) How policy implementation may mitigate the negative consequences or enhance the positive consequences of cannabis use

This study will analyze and triangulate findings from multiple data sources including: CAMH-led (provincially-relevant) surveys, a longitudinal cohort study of young adult cannabis users, sales data, provincial data capturing cannabis-attributable health care utilization and addiction treatment utilization, provincial cannabis impaired driving data and qualitative research to examine cannabis legalization implementation through the regulatory environment.

Data gathered for this study will be managed using the Cannabis Informatics Monitoring System (CIMS) as a template and will house a variety of indicators including usage, exposure and public opinion. Data will be accessible through an independent online portal, and knowledge users will have the option of selecting the available data source including year, allowing for trend comparisons. Data tables and user-friendly charts will be available.

Opportunities for collaboration with this study include sharing policy context findings with other teams to examine impacts in Ontario as well as amongst provinces. Additionally, complementary approaches to data collection may allow important comparisons of key measures, and there is a potential to link market scan data with survey data from this work. There may also be an opportunity to link driving data, as this is a commonality amongst several PCPE projects.

The International Cannabis Policy Study: Cannabis Policy Evaluation in Ontario

Presented by: David Hammond and Erin Hobin

The main goal of this project is to monitor the impacts of cannabis policies in Ontario. The study will focus on:

- 1) Prevalence and patterns of use
- 2) Purchase sources and price
- 3) Risk behaviours and problematic use
- 4) Policy-relevant outcomes (illegal vs. legal sources, advertising exposure, public education campaigns, product labelling, product standards and price)

This study will use an international (Canada and the US) cannabis policy survey. Started in 2018, the survey has between 40-50,000 respondents and provides a comparison between before and after legalization. It has data on legal and illegal markets and includes postal codes in order to obtain regional data. Twice annually, a national scan of the market will be conducted for legal and illegal retail sources to collect information on products (type, price and ingredients) and to map how far people live from legal and illegal sources across Canada.

Data gathered is open access, including data collected on the cannabis market that is done every six months (will be shared online in 3-4 months). Survey data is also available upon request. Although this project is focused in Ontario, data is being collected in every province, including a lot of data on consumption. Data sharing and comparing estimates for key outcomes (e.g. prevalence, consumption and policy-relevant outcomes) with other teams may be key opportunities for collaboration.

More information is available online at: www.cannabisproject.ca

Evaluating the Impact of Local, Provincial, and National Cannabis Policies Among Youth in the COMPASS System

Presented by: Scott Leatherdale and Alle Butler

The main objectives of this study are to:

- 1) Understand how real-world changes to local, provincial, or national cannabis-related interventions affect youth over time (e.g. frequency of use, modes of use)
- 2) Examine how changes in cannabis use outcomes are related to the co-occurrence of other major modifiable risk factors for chronic disease and mental health among youth over time.

Using existing data infrastructure provided by the COMPASS prospective cohort study, the team will evaluate the impact that cannabis-specific program, policy and resource changes in and around schools, provincially and nationally have had on youth cannabis-related behaviours and outcomes over time. These national experiment evaluations will be guided and prioritized by more than 200 stakeholders including school principals, public health organizations, etc.

All COMPASS data is housed on secure servers at the University of Waterloo and is open access. Existing data use guidelines and application procedures allow the sharing of data in a robust and ethical fashion. Data is managed by the COMPASS data manager and the system allows clear, research-ready data. More information is available at: <https://uwaterloo.ca/compass-system/information-researchers>.

Data sharing presents an opportunity for collaboration and the researchers note that they also have a small sample from Nunavut, which is not part of this study but may be of use to others.

Opportunities for Collaboration and the Impact of COVID-19

A moderated discussion followed, which focused on identifying opportunities for collaboration, as well as the impact of the COVID-19 pandemic on the PCPE research projects.

Identifying common and complementary work

Several common themes emerged throughout the workshop, including the value and importance of open access data/ data sharing and key outcomes. Impaired driving research was highlighted as a particularly strong opportunity for collaboration.

The use of surveys was also emphasized and sharing/collaboration here may help fill in blanks about downstream changes and behaviours including changes in use, links between cannabis use and mental health, and the impact of policy-relevant variables such as price or health knowledge (e.g. warnings) on consumption changes over time. There is also a need for alignment and common indicators across surveys in order to improve comparability, and to inform consistent and accurate messaging for policy development and public education.

Impact of COVID-19 on PCPE Projects

For the COMPASS project, which relies on in-school data collection, COVID-19 presented some challenges at first. However, once surveys transitioned to an online format it was possible to add additional COVID-specific measures, providing a unique opportunity to assess cannabis use in a different environment. For example, additional research questions were able to look at whether youth cannabis use changed with students being at home full time with their parents.

Other surveys relying on school-based data collection were challenging, however the researchers noted that they were wanting to move surveys online anyway and the school closures simply accelerated that process.

COVID-19 has also resulted in months-long mass shutdowns of non-COVID research in research hospitals across Canada. This presents challenges and delays research projects.

Citizen-engaged approaches will be more challenging using an online model. There is a level of engagement that may only be possible with in-person conversations and virtual meetings may not offer the same quality of discussions.

Conclusion and Next Steps

Workshop participants agreed that there is value in holding additional workshops to continue to refine and align surveys and indicators. A suggestion was made to review surveys and look for areas of overlap, to try and find alignments and patterns.

A common goal is to synthesize the knowledge gained through these projects into something practical and digestible – providing a consistent and accurate message regarding the impact of cannabis policy in Canada.

There will be ongoing policy questions that will emerge over time, as well as new knowledge that will be acquired through other grants that are not part of the PCPE project. Therefore, there may be an opportunity to invite others to attend and enrich these meetings, perhaps holding semi-annual knowledge exchange events that are thematic.

Participants agreed to follow up with another virtual workshop in approximately six months' time, to zero in on specific topics and continue to facilitate collaboration, and policy-relevant data collection and knowledge exchange.