

Influence of physician networks on the implementation of pharmaceutical alternative to a toxic drug supply in British Columbia.

Category: Oral Presentation

Abstract Body

Background: We aimed to characterize the diffusion of adoption of a novel provincial policy guideline to prescribe opioids, stimulants, and benzodiazepines to individuals who were at high risk of a COVID-19 infection and drug overdose at the onset of the COVID-19 pandemic and determine the extent to which ‘Risk Mitigation Guidance’ (RMG) uptake operated through established networks of prescribers in British Columbia, Canada.

Methods: We executed a retrospective population-based study using linked health administrative data that captured all clinicians who prescribed to at least one client with a substance use disorder from 03/27/2020-08/31/2021. Social network analysis was implemented to create a network with connections between prescribers based on their shared clients. Our outcome was a clinician’s uptake in a given calendar month. Our main exposure was the proportion of connected physicians that had prescribed RMG in the month prior. Generalized linear mixed modeling was used to characterize RMG uptake through the networks of clinicians.

Results: Among 14,137 prescribers treating clients with SUD, there were 228 early adopters of RMG (initiated before 04/30/2020) and 1,062 adopters through the end of study follow-up. Prescribers with over 25% of their peers prescribing RMG was associated with a nearly 4-fold increase in the odds of RMG prescription (OR: 3.79 95% CI: (3.15, 4.56)), when compared to those with no connected RMG prescribers.

Conclusion: RMG uptake in BC was highly dependent on the behaviour of prescribers’ peer networks. These findings provide insights into the diffusion of policy uptake which can be used to improve future policy implementation strategies.

Key Words

- Epidemiology
- Primary Care
- Safe Supply
- Substance Use Disorder (general)

Learning Objective # 1

Evaluate the impact of prescribers' peer networks on their prescribing decisions and uptake of new policies.

Learning Objective # 2

Examine how administrative data can be used to track and follow prescribing patterns and uptake of guidelines and policies.

Reference # 1

Nosyk B, Slaunwhite A, Urbanoski K, et al. Evaluation of risk mitigation measures for people with substance use disorders to address the dual public health crises of COVID-19 and overdose in British Columbia: a mixed-method study protocol *BMJ Open* 2021;11:e048353. doi: 10.1136/bmjopen-2020-048353

Reference # 2

Keating NL, O'Malley AJ, Onnela J, Gray SW, Landon BE. Association of Physician Peer Influence With Subsequent Physician Adoption and Use of Bevacizumab. *JAMA Netw Open*. 2020;3(1):e1918586. doi:10.1001/jamanetworkopen.2019.18586

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