

Impact of prescription drug monitoring program implementation on rates and characteristics of people seeing multiple prescribers in primary care

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Introduction: Prescription drug monitoring programs (PDMPs) track the prescribing and dispensing of high-risk medicines, including identifying those seeing multiple prescribers. This study aimed to examine the changes and characteristics of primary care patients seeing multiple prescribers, following the introduction of Victoria's PDMP.

Methods: We examined prescriptions from 562 Victorian general practice clinics for PDMP-monitored medicines (opioids excluding tramadol, benzodiazepines, z-drugs, stimulants, cannabinoids, ketamine and quetiapine) and a comparison group of non-monitored medicines (e.g. antidepressants, antipsychotics, gabapentinoids, tramadol). Seeing multiple prescribers was defined as being prescribed monitored medicines from \geq four prescribers in a 90-day period. We compared changes monthly rates of seeing multiple prescribers for monitored versus non-monitored medications. The controlled interrupted time series was used to examine differences in step and trend changes over time after PDMP implementation between monitored and non-monitored medications. Logistic regression analyses investigated patient characteristics associated with seeing multiple prescribers for monitored medications.

Results: Following voluntary PDMP implementation (April 2019), a significant reduction in the differential step and trend changes in the rates of seeing multiple prescribers between people prescribed monitored and non-monitored medicines was observed (Differential step change: β , -3.55; 95% CI, -5.08 – -2.03. Differential trend change: β , -0.29; 95% CI, -0.46 – -0.12). Following mandatory PDMP implementation (April 2020), no significant further step change difference was observed, however, there was an increase in the differential trend change in the rate of seeing multiple prescribers between those prescribed monitored and non-monitored medicines (Differential trend change: β , 0.21; 95% CI, 0.05 – 0.37). PDMP implementation resulted in some people ceasing to obtain monitored medications from multiple prescribers, with those who were older, male, living in metropolitan areas, with greater socioeconomic disadvantage, and who had a substance use disorder diagnosis having significantly higher odds of seeing multiple prescribers only before PDMP implementation.

Conclusions: Implementation of PDMP led to meaningful reductions in people accessing monitored medicines from multiple prescribers.

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