Prescription drug monitoring programs: a response to the opioid epidemic

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Abstract

Background: The non-medical use of prescription opioid misuse is a significant health problem in the United States. Prescription drug monitoring programs (PDMPs) are intended to reduce the incidence of drug diversion activities.

Objective: Describe the existing literature on the impact of PDMPs on opioid-related outcomes

Methods: Peer-reviewed primary literature on PDMPs from 2000-2017 were identified. Data from included literature was synthesized and divided into three distinct opioid-related domains.

Results: Results were inconclusive whether PDMPs provided any benefit in any of the three opioid-related domains studied.

Conclusions: As PDMP implementation continues to expand, there needs to be continued focus on specific PDMP characteristics to determine what is most effective at reducing opioid-related outcomes.

Background

- Pain is the most commonly cited reason that Americans utilize the healthcare system.
- The rise in utilization of opioids is accompanied by an upsurge in drug diversion activities.
- PDMPs serve to function as easily-accessible electronic databases that collect prescribing and dispensing data of controlled substances.
- As of 2017, there are 50 states and Washington D.C. that have operational PDMPs. Missouri remains the only state without a state-wide operational PDMP.

Methods

- Articles were divided into 3 distinct domains: (1) opioid prescribing behavior, (2) patient behavior, and (3) opioid-related health outcomes.

Notes:

- 166 unique articles found from PubMed search
- Systematic reviews and editorials were excluded.
- 19 relevant articles + 5 articles from references

Results

- Figure 1. Evidence of PDMP impact on opioid prescribing behavior
- Figure 2. Evidence of PDMP impact on patient behavior
- Figure 3. Evidence of PDMP impact on opioid health outcomes

Literature Characteristics

Conclusions

- Differences in outcome measurements, study design (across-state versus within-state comparisons), data sources, exposures, and statistical approaches lead to mixed conclusions about the impact of PDMPs on opioid-related outcomes and make direct comparison of results between studies difficult.
- PDMPs are similar in basic elements, but many characteristics of these programs vary from state to state. Inconsistencies between PDMP characteristics among states can provide valuable insight on specific features that are more effective at impacting opioid behavior.

References


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