



Title:	RADARS® System Poison Center opioid abuse and misuse rates over time in states with and without active prescription monitoring programs
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Abstract:

Background: Most states have implemented Prescription Monitoring Programs (PMPs) in attempt to curb prescription drug abuse and diversion; however, assessment of their impact, if any, on drug abuse is only beginning. PMPs are statewide databases, containing patient-level prescription data on select drugs, intended for medical professionals or other officials to use in identifying patients with prescription drug abuse history or providers engaging in illegal activities.

Study aim: To evaluate the relationship between PMPs and opioid abuse and misuse rates over time.

Methods: Data (2003 to mid 2009) are from the RADARS® System Poison Center Program (PC) which collects quality reviewed intentional exposure (IE) mentions from participating U.S. poison centers. PC IEs are considered surrogates of abuse and misuse. Information on each state's PMP was compiled using public documents. Unique recipient of dispensed drug (URDD, purchased from SDI) data were used as a measure for drug availability in calculating IE rates.

To predict opioid IE URDD rates, repeated measures negative binomial regression was applied, and PMP presence was modeled as a time varying covariate for each state.

Results: Results support that PMPs mitigate increasing IE rates over time. Model results display that without a PMP in place, state rates increase on average 2.2% per quarter, whereas rates increase 0.3% (p=0.002) per quarter with a PMP in place.

Conclusions: PC observational data offer preliminary support that PMPs are effective. Future efforts will evaluate the effectiveness based on PMPs characteristics across states, medical professional utilization, and drug abuse populations most impacted.

Learning Objectives:

Public health or related laws, regulations, standards, or guidelines

Public health or related public policy.

Learning Objectives:

1. Discuss general trends observed in opioid abuse and misuse in surveillance data.
2. Describe RADARS® System Poison Center Program intentional exposure data across states.
3. Examine Prescription Monitoring Programs as a tool to lower drug abuse and misuse rates.
4. Apply repeated measures modeling to time series rate data.