Research Brief

Promoting consistent use of prescription drug monitoring programs (PDMP) in outpatient pharmacies: Removing administrative barriers and increasing awareness of Rx drug abuse

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Abstract

Background: Prescription drug monitoring programs (PDMPs) are proving to be valuable resources in fighting the prescription drug abuse epidemic through improved access to patient drug histories. Ninety-four percent of Indiana pharmacists have heard of Indiana's PDMP (INSPECT), only 71% of them reported using the program in 2012.

Objective: To identify barriers to PDMP use in outpatient pharmacies and determine the impact these barriers have on utilization.

Methods: A cross-sectional study examined pharmacists' knowledge and use of INSPECT. Bivariate analyses on utilization and perceived barriers were conducted using cross-tabulations and chi-squared tests. Multiple logistic regression examined the relationship between pharmacists' level of concern with prescription drug abuse and reported utilization.

Results: Pharmacists were significantly less likely to use INSPECT if they reported at least one barrier and 3 times more likely to use INSPECT if they reported no barrier. Pharmacists were 10 times more likely to use INSPECT and 18 times more likely to use it more consistently if they were extremely concerned about prescription drug abuse in their community as compared to those not at all concerned.

Conclusion: Strategies to improve utilization of PDMPs should look for innovative ways to limit barriers and build outpatient pharmacists' awareness of prescription drug abuse and misuse within their community.
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Keywords: Prescription drug abuse; Prescription drug monitoring program; Pharmacists; Outpatient pharmacists; Outpatient pharmacy; Pharmacy practice; PDMP; Barriers

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Introduction

In the 1990s, health care quality improvement initiatives focused on raising awareness for the problem of inadequately treated pain.[1] After the adoption of new standards for the management of pain, the United States saw an increase in prescribing of opioid analgesics. Between 1997 and 2007, the distribution of opioid drugs increased by over 7 times.[2] Overdoses from prescription opioid pain relievers (OPR) quadrupled between 1999 and 2010.[3] OPR overdoses remains a serious public health problem with 5.6 deaths per 100,000 individuals in 2012.[3] A national approach to addressing prescription drug overdoses attempts to "balance the desire to minimize abuse with the need to ensure legitimate access to these medications."[2] One section of this plan calls for the establishment of prescription drug monitoring programs (PDMPs) in all 50 states. A PDMP is a statewide electronic database that collects detailed data on controlled substance prescriptions (CSPs) in a state.[4,5] PDMPs have proven to be invaluable tools in fighting the prescription drug abuse epidemic by reducing drug diversion of controlled substances and improving clinical decision-making through increased access to detailed patient drug histories.[6]

Pharmacists have an important role in the effort to address prescription drug abuse and are the "last line of defense." A recent study suggested that more consistent use of PDMPs by pharmacists resulted in a higher number of refusals to dispense CSPs as a result of greater access to patient information.[7] "Limited access to information affects [outpatient] pharmacists in fundamental ways, most specifically having incomplete prescription information which can leave the pharmacist unable to fill the prescription."[8] Pharmacists' utilization of PDMPs may lead to a decrease in the morbidity and mortality associated with prescription drug abuse.[9] Utilization of PDMPs in pharmacy practice may be beneficial to reducing the impact of prescription drug abuse on the community, but a good portion of pharmacists do not utilize these programs. An evaluation of the Indiana Scheduled Prescription Electronic Collection and Tracking Program (INSPECT), Indiana's PDMP, showed that among the 94% of pharmacists who had heard of INSPECT only 72% of them reported actually using the program.[10] PDMPs may prove to be effective tools to increasing access to patient information and supporting clinical decisions regarding the dispensation of CSPs, but they can only be effective if they are used.

The primary objective of this study was to identify common barriers to INSPECT use reported by outpatient pharmacists and subsequently examine how these barriers influence PDMP utilization. The study also looked at a provider's level of concern with Rx drug abuse in the community to assess how awareness of Rx abuse and misuse translates to INSPECT utilization.

Methods

Study design

This cross-sectional study examined information on providers' practice characteristics, behaviors, and key information about their knowledge and use of INSPECT. The *2012 IPLA Knowledge and Use Survey* was conducted by the Indiana University Purdue University – Indianapolis (IUPUI) Center for Health Policy (CHP) as part of an initiative to evaluate Indiana's PDMP. Detailed methodology for the evaluation is described in an previous report.[10] The evaluation surveyed 10,606 pharmacists in the State of Indiana who held a valid license to dispense controlled substances in 2012. With 1582 pharmacists responding, the survey returned a 15% response rate. Basic demographics of the study sample were compared to Indiana's 2012 Pharmacist Workforce Data[11] in a previous study[7] to ensure the sample was representative of Indiana's total pharmacist population. The sample exhibited similar characteristics to Indiana's 2012 Pharmacist workforce in regards to age, years practicing, and gender.[7]

Study population

The study population included 1000 outpatient pharmacists who completed the *2012 IPLA Knowledge and Use Survey*. Pharmacists were considered to be working in an outpatient setting if they reported their primary practice setting as a community health center, diagnostic testing facility, outpatient clinic, outpatient surgery center, pharmacy (outpatient), retail medicine clinic, or an urgent care facility. Otherwise, the pharmacist was excluded from the study.

Study outcomes

The study consisted of 2 primary outcome measures. The first outcome measure, Used INSPECT, is a binary variable (Yes = 1, No = 0) indicating whether or not the pharmacist reported using INSPECT within the last 12