

Minnesota Board of Pharmacy

Report to the Legislature: Impact of the Prescription Electronic Reporting System on Appropriate Prescribing Practices of Controlled Substances

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Introduction

The abuse and diversion of controlled prescription drugs is a significant and persistent problem in the United States. Data from the Substance Abuse and Mental Health Services Administration (SAMHSA) 2007 National Drug Survey on Drug Use and Health reveals that approximately 6.9 million individuals aged 12 or older are nonmedical users of controlled prescription drugs (opioid pain relievers, tranquilizers, sedative, or stimulants)¹. While the number of non-medical users has remained relatively stable over the past 5 years, the number of treatment admissions and deaths from overdose of controlled prescription drugs has increased significantly.

To begin to address prescription drug abuse in the State, on May 25, 2007, the Governor signed into law M.S. §152.126, which mandated the Minnesota Board of Pharmacy to establish an electronic system for the reporting of schedule II, III and IV controlled substance prescriptions, dispensed to residents of the state. The Board subsequently implemented the Minnesota Prescription Monitoring Program (PMP).. Daily data collection from dispensers of controlled substances began on January 4, 2010 with authorized access to the data commencing on April 15, 2010.

As of June 2011, almost 5,000 authorized prescribers and pharmacists, having direct access to timely prescription history data, have conducted over 160,000 queries of the more than 7 million records currently stored in the secure database. These queries have helped to determine appropriate medical treatment and interventions, or in some cases have detected "doctor shopping" behaviors. In addition, the data helps to identify patients who could benefit from referral to a pain-management specialist or those who are at risk for addiction and may be in need of substance abuse treatment.

Medical Examiners and Coroners, in an effort to determine an individual's cause of death, have requested more than 50 reports on decedents from the PMP since its implementation.

Through the PMP, personnel from the MN Department of Human Services, Restricted Recipient Program, performed approximately 3,000 queries of the database to identify recipients whose usage of controlled substances warrants restrictions to a single primary care physician, a single outpatient pharmacy, or a single hospital.

Additionally, through the PMP, individuals engaged in potentially unlawful possession and/or diversion of controlled substances have also been identified. Law enforcement officials have served more than 100 search warrants on the PMP, requesting an individual's controlled substance prescription history to support an investigation.

Continued outreach efforts by PMP staff and word of mouth promotion by PMP champions have resulted in a steady growth in the number of authorized system users and likewise in the volume of queries performed on the PMP data.

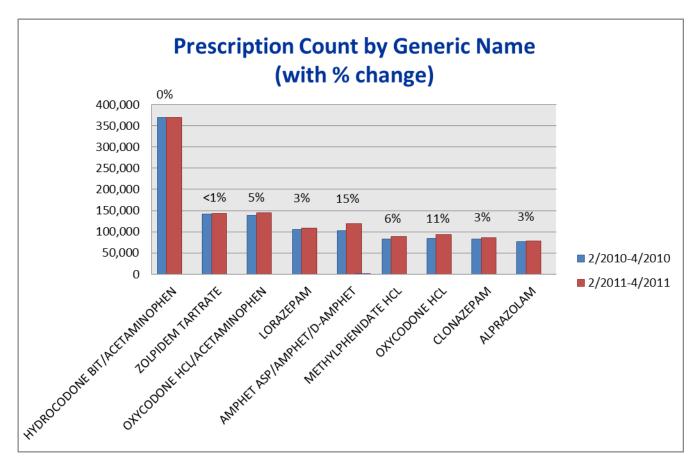
The purpose of this evaluation is to determine if the prescription electronic reporting system has had a negative impact on the appropriate prescribing practices of controlled substances.

¹ Results from the 2009 National Survey on Drug Use and Health: Volume I. Summary of National Findings see http://www.oas.samhsa.gov//NSDUH/2k9NSDUH/2k9ResultsP.pdf; last accessed June 20, 2011.

Data

The following data was derived from the MN PMP database for the period; 2/1/2010-4/30/2010 and 2/1/2011-4/30/2011, for comparison purposes².

Table 1. Number of Most Frequently Prescribed Controlled Substance Prescriptions Dispensed

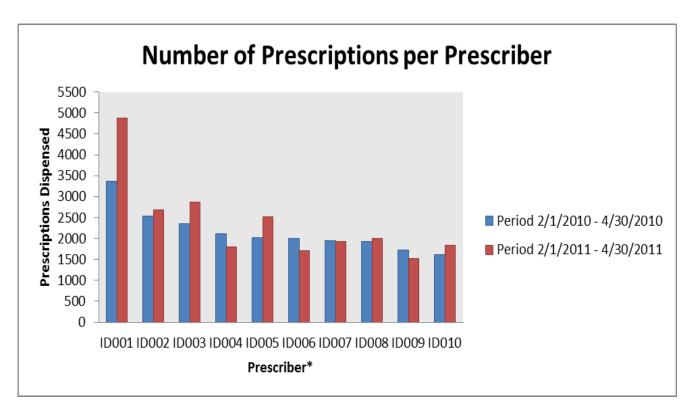


Prescription County by Generic Name	2/2010-4/2010	2/2011-4/2011
HYDROCODONE BIT/ACETAMINOPHEN	369,627	369,743
ZOLPIDEM TARTRATE	142,171	143,219
OXYCODONE HCL/ACETAMINOPHEN	138,455	145,335
LORAZEPAM	105,739	109,227
AMPHET ASP/AMPHET/D-AMPHET	103,200	118,766
METHYLPHENIDATE HCL	83,321	88,480
OXYCODONE HCL	83,992	93,211
CLONAZEPAM	83,716	86,397
ALPRAZOLAM	76,842	79,170

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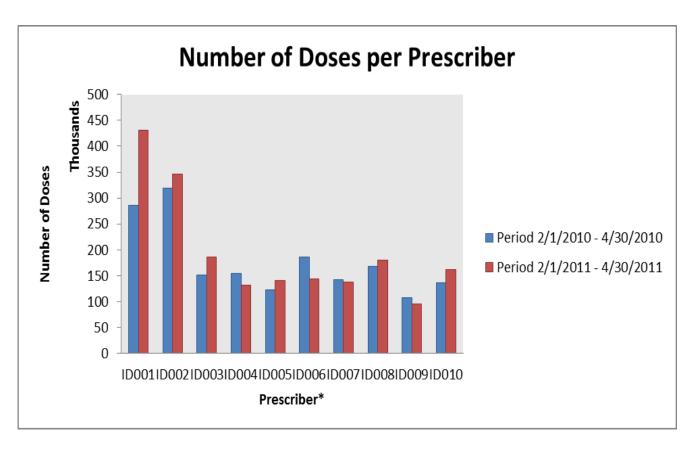
² Due to the unavailability of a minimum two (2) complete years of data, this small sampling should not be solely relied on to demonstrate changes in prescribing practices.

Table 2. Number of Controlled Substance Prescriptions Dispensed-for a randomly selected group of prescribers.



^{*}For purposes of this report prescriber ID numbers have been assigned. Minnesota Statutes 152.126, Subd. 6(e) prevents disclosure of the prescriber's name without their written consent.

Table 3. Quantity of Doses of Controlled Substances Dispensed-for a select group of prescribers.



^{*} For purposes of this report prescriber ID numbers have been assigned. Minnesota Statutes 152.126, Subd. 6(e) prevents disclosure of the prescriber's name without their written consent.

Data Analysis

Using information obtained from the PMP database, to compare the data in Table 1 for the number of controlled substance prescriptions dispensed between 2/2010 - 4/2010 and 2/2011 - 4/2011, it appears there has been minimal change in the volume for a majority of the more frequently prescribed controlled substances. The data in Table 2 suggests an increase in the number of controlled substance prescriptions written and subsequently dispensed, after access to the PMP data was made available in April 2010. Table 3 suggests an increase in the number of doses for the same prescriptions as identified in Table 2.

Informal Survey of Prescribers

An informal survey of a small group of prescribers, who have authorized access to the MN PMP database was completed by PMP staff. The prescribers were asked; What is the biggest benefit of the PMP to your practice?

Responses included:

- Enabling them to provide pain control to those who truly need it;
- Allowing them to prescribe safely and not be part of the problem;
- The ability to view medication history while considering treatment; and
- Allows for a comprehensive view of records in an emergency medicine setting, which was never possible to get from a single source in the past.

The same group was also asked: In what others ways has the PMP been found to be a benefit to your practice?

Responses included:

- Helps them see a pattern in controlled substance use that might change how they treat a patient in the future;
- Allows them to talk with their patient regarding evaluation and treatment, if the information is suggestive of addiction;
- Reinforced policies the clinic has in place with their patients;
- Allows them to educate residents in training and medical students as to the importance of appropriate narcotic prescribing habits and the very real problem of narcotic seeking behaviors

When asked if they have made any changes in their practice as a result of obtaining patient profiles from the PMP, their responses included:

- They now routinely check the PMP to support or refute their suspicions;
- The concrete information allows them to explain why a particular narcotic is not a good alternative:
- They now review the PMP for approximately ¾ of all their patients prior to sending them home with a prescription.

Overall it appears that the use of the PMP has allowed the prescribers surveyed to provide a different level of treatment and care to their patients that they may not have been able to provide in the past.

Other Resources

In a 2010 independent evaluation of the impact and effectiveness of the Kentucky All Schedule Prescription Electronic Reporting Program (KASPER)³, it was found that KASPER does not have a chilling effect on appropriate prescribing practices. This study revealed that the number of reports requested from KASPER increased significantly since its inception in 2000. Likewise the number of controlled substance prescriptions written by prescribers that registered to use KASPER significantly increased. The report's authors concluded that the use of KASPER may increase confidence in making prescribing and dispensing decisions and confirm decisions to prescribe and dispense when patients have a legitimate medical need and are not "doctor shopping". The evaluation also found that members of professional licensure boards were unanimous in their support of KASPER and based on the information collected during their evaluation, KASPER was perceived as an effective tool to reduce drug abuse and diversion. Those that use KASPER regularly find the information in the reports to be valuable for making treatment decisions.

Additionally, other State's PMP Administrators, such as Ohio and North Dakota, have reported increasing numbers of controlled substance prescriptions and increasing numbers of doses being dispensed, which in their opinion, is an indication that PMP's do not adversely impact appropriate prescribing practices.

Conclusion

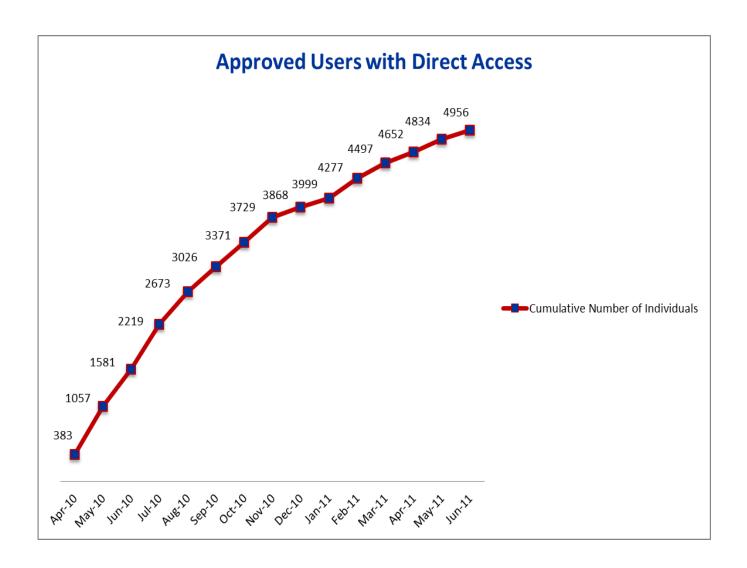
Direct access to the PMP data was opened to authorized prescribers and pharmacists on April 15, 2010. Queries of the data in the PMP database continue to grow (Appendix 1) and approval for direct access to the PMP database for authorized users is on the rise (Appendix 2).

Statistical information derived from the MN PMP database along with informal survey data suggests that the PMP has very little impact on appropriate prescribing practices of controlled substances among MN prescribers however, with the PMP being fully operational for only 15 months, there is a lack of comprehensive data to properly determine the true impact.

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³ Independent Evaluation of the Impact and Effectiveness of the Kentucky All Schedule Prescription Electronic Reporting Program (KASPER), see http://www.chfs.ky.gov/NR/rdonlyres/24493B2E-B1A1-4399-89AD-1625953BAD43/0/KASPEREvaluationFinalReport10152010.pdf Last accessed June 21, 2011

APPENDIX 1



APPENDIX 2

