Report to
The Vermont Legislature

Improving the Effectiveness of the Vermont Prescription Monitoring System

In Accordance with Act 75, Section 13(d)
An Act Relating to Strengthening Vermont's Response to Opioid Addiction and Methamphetamine Abuse

Submitted to:	**House Committees on Human Services and on Health Care; Senate Committee on Health and Welfare**
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Executive Summary

Act 75 of 2013 directs the Commissioner of Health to maintain an Advisory Council to assist with the implementation and periodic evaluation of the Vermont Prescription Monitoring System (VPMS). The Advisory Council was asked to make recommendations for improving the utility of the system, specifically related to:

- New reporting capabilities for improving patient outcomes and avoiding prescription drug diversion, and
- The feasibility of obtaining real-time information from the VPMS and the benefits of increasing reporting frequency

The report presents the advantages and disadvantages of each of the above improvements, and discusses the following five specific improved reporting capabilities.

1. Updating software
2. E-mailing threshold letters
3. Adding threshold measures
4. Creating a user index
5. Marching mortality data to VPMS data

Each will be implemented during 2014.

The Advisory Council found that the few advantages of more frequent reporting did not warrant the additional burden of requiring providers to do so.

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Introduction

The Vermont Prescription Monitoring System (VPMS) was created in 2006 as an online health care tool designed to assist prescribers and dispensers manage their patients' use of controlled schedule II, III and IV prescriptions[1]. Since then, the use of VPMS by prescribers and dispensers has grown as have the number of dispensed scheduled drug prescriptions in the database.

In response to increased opioid addiction and methamphetamine abuse in Vermont, the Vermont General Assembly passed Act 75 in 2013. The law, *An Act Relating to Strengthening Vermont's Response to Opiod Addiction and Methamphetamine Abuse, ha*s a number of provisions applicable to both prescribers and dispensers of controlled substances. One of the requirements of Act 75, Sec. 13 is for the Commissioner of Health to maintain an Advisory Committee to assist with the implementation and periodic evaluation of VPMS, including making recommendations to improve the utility of the system.

[1] Controlled substances are substances which have potential for abuse, development of addiction or dependence. They are designated by the Federal Drug Enforcement Administration as Schedule I - V (C-I, C-II, C-III, C-IV and C-V) according to their medical use, potential for abuse, and safety or dependence liability. Refer to 21 CFR 1308 for the schedules of controlled substances.

The Act specifically asked the Advisory Council to make recommendations about the following potential improvement areas:

I. New reporting capabilities for improving patient outcomes and avoiding prescription drug diversion.

II. The feasibility of obtaining real-time information from the VPMS and the benefits of increasing reporting frequency.

This report presents the Advisory Council's response to the system improvement options, addresses the merits of each and makes recommendations about them.

Background

VPMS is a free, web-based, clinical tool available to pharmacists and prescribers. The purpose of VPMS is to reduce the incidence of prescription drug abuse and diversion among Vermonters while ensuring that patients receive adequate and timely medication for pain and other conditions that can benefit from a regimen of controlled substances. The data base provides prescribers with information about scheduled II, III, and IV controlled substances prescribed to individuals, and enables the identification of patterns of misuse. Information is collected and uploaded to the VPMS at least every seven days by all pharmacies licensed by the State of Vermont.

Advisory Committee Consideration of Legislative Questions

The VPMS Advisory Committee includes representative from state regulatory bodies and professional organizations, including the Vermont Medical Society, Vermont State Dental Society, Vermont Pharmacy Association, Vermont State Nurses Association, The American College of Emergency Physicians- Vermont Chapter, Vermont Substance Abuse Treatment Provider Association, the Vermont Board of Medical Practice, Vermont Board of Pharmacy, Vermont Department of Public Safety, Vermont Attorney General's Office, Vermont Substance Abuse Treatment Providers Association, a certified alcohol and drug abuse counselor and a consumer representative who is receiving medical treatment for chronic pain, as well as a consumer in recovery from prescription drug abuse. The Committee convened on October 08, 2013 to discuss the questions posed by Act 75.

Responses to Questions about VPMS System Improvements

I: What new reporting capabilities would improve the utility of the VPMS?

Act 75 questioned whether addition of new reporting capabilities to VPMS would enhance the clinical tool's usefulness for improving patient outcomes and avoiding prescription drug diversion. Six new reporting capabilities were discussed by the Advisory Council:

1. **Upgrading Software**: ASAP (American Society for Automation in Pharmacy) standards for software data fields and formats are used by all prescription monitoring systems. The versions used differ, however. The Committee discussed the advantages of upgrading Vermont's version to version from 3.0 to 4.2, the most current version, which would:

    - Make more fields available to the end user
    - Simplify data correction at the pharmacy level
    - Permit additional data reporting functionalities
    - Increase the effectiveness of the VPMS database by facilitating cross-state data sharing and multi-state data analyses.

2. **Emailing threshold letters**: When a patient has crossed a defined threshold for exceeding the use of a specified number of prescribers and pharmacies, VPMS sends out a quarterly Patient Threshold Report to providers who have prescribed controlled substances to the patient(s) listed on these reports. The purpose of the quarterly Patient Threshold Report is to ensure that each provider has an accurate picture of the patient's prescribed controlled substance history.

    To improve the utility of VPMS, The Committee discussed the merits of sending threshold letters via e-mail, rather than through the postal service. The practice would involve sending a prescriber an e-mail indicating that there is information about an individual patient waiting in the VPMS without disclosing the information. In order to view the information, the prescriber would log into the VPMS using their secure username and password. This would increase the effectiveness of the VPMS by

ensuring that crucial patient information reaches providers while maintaining patient confidentiality.

3. **Additional Threshold/risk Measurements:** To increase the health and safety of patients, additional information about risks and other factors could be added to the quarterly threshold letters. Examples of additional information include:
    - Morphine Equivalent Dose (MED) cutoffs- MED, or Morphine Milligram Equivalent (MME) is a way to standardize dose comparisons of opioid drugs. Studies show that a patient receiving more than 100mg of MED or MME is more likely to overdose, and these cases account for an estimated 20% of all prescription drug overdoses[2]. Identifying at- risk patients is a crucial first step towards improving patient safety and increasing prescriber awareness.
    - Overlapping prescriptions- When the duration of a prescription overlaps with the duration of a similar drug prescribed by another provider, there is a potential for misuse. Overlapping prescriptions may be an indicator of doctor shopping or diversion. The flagging of patients that are receiving overlapping days for refills of prescribed controlled substances may be beneficial to prescribers.
    - Adding new threshold criteria to system- The VPMS program sets a threshold trigger that will identify patients who are visiting a certain number of prescribers and pharmacies in a quarter. The system could accommodate other

[2] http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6101a3.htm

threshold criteria for notification. In the upcoming year, VPMS staff will analyze the advantages of adding thresholds for understanding or improving prescribing, such as information about patients who are receiving:

- Stimulants given by two or more doctors
- Benzodiazepines given by two or more doctors
- Opiates given by two or more doctors

4. **Creation of a User Index-** The creation of a user index in VPMS would enable program staff to monitor compliance with the requirement in Act 75, Section 11 (b)(1) that all prescribers of Schedule II, III or IV controlled substances register with the VPMS by November 15, 2013. It would also enable the program to produce statistical reports on how prescribers, pharmacists and their delegates are using VPMS. The creation of this functionality would require programming work by the VPMS vender.

5. **Match mortality data to the VPMS**: VPMS could match its data with death records in the Department of Health's Vital Records System. This would have two advantages. The first would be to determine if those who died of a drug overdose were also filling prescriptions for controlled substances. Second, data-matching with Vital Records would flag the names of deceased individuals who are filling active prescriptions, thereby indicating the likelihood of stolen identity of a deceased individual

Recommendation about Additional Reporting Capabilities:

The reporting enhancements discussed above were determined to be useful and practical; they will be implemented in the VPMS system during the upcoming year**.** Research on the feasibility and merits of adding new threshold criteria will also be done during the upcoming year.

II. How feasible, and how advantageous, would obtaining real-time information from VPMS be? Similarly, what would be the advantage of increasing the frequency of dispenser reporting to the VPMS from at least once every seven days to at least once every 24 hours?

The VPMS staff presented the advantages and disadvantages of this improvement area to the Committee for discussion. The Committee agreed that more frequent uploading is feasible but not a high priority for improving the utility of VPMS at this time. The reasons include:

1. The annual cost to VPMS vendor would increase;
2. VPMS would be required to pay for any upgrades to dispensers' systems that are not currently able to handle more frequent uploading;
3. More frequent reporting would be burdensome for independent pharmacies. Most corporate pharmacies have software vendors that automatically upload a controlled substance report to VPMS. The report lists all of the dispensed controlled substance II, through IV written and dispended to Vermont patients. However, independent pharmacies that do not have a software vendor need to upload their data manually. More frequent uploading would be burdensome for these pharmacies.

4. Moving to more frequent reporting would not necessarily increase the utility of VPMS because key indicators of abuse, doctor-shopping or diversion of prescriptions are patterns over time.

Recommendation about increasing reporting frequency

The disadvantages of more frequent VPMS reporting do not justify requiring it. Pharmacies will be encouraged to report more frequently if doing so is not too burdensome.

Conclusion

VPMS continues to be an important clinical tool to monitor the prescribing of controlled substances. The tool contributes to the identification of cases of misuse and diversion without interfering with the legitimate use of scheduled drugs to control pain. The Advisory Committee's role in the ongoing oversight of the program is valuable for providing input about potential system improvements. This report discusses several potential improvements, and weighs the advantages of certain changes against the disadvantages. The program plans to implement improvements that have identified merit within the next year. Reporting capabilities will be added, yet no changes will be made to the frequency with which pharmacies must report data to the VPMS.