Nova Scotia

Prescription Monitoring Program

Annual Report 2006/07

Contents

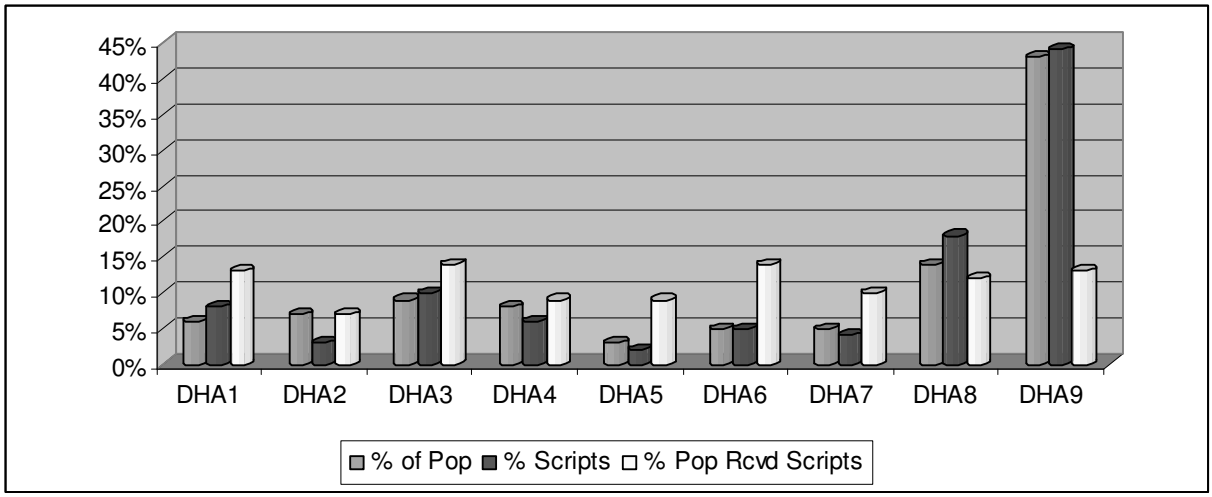
Introduction

The Nova Scotia Prescription Monitoring Program (NSPMP) has existed within the province since 1992. The recent evolution of the Program from a paper based system to an electronic format has moved the NSPMP ahead significantly in its ability to pursue its legislated mandate to '*promote the appropriate use of and reduce the abuse of, monitored drugs'*.

In preparing this report, a high level review of the prescribing trends of overall monitored drugs was completed. This reviewed indicated that each year, approximately 12% of the provinces population receive prescriptions for monitored drugs. The vast majority of these individuals (94%) receive between 1 -9 prescriptions within a year. The remaining 6% receive over 10 a year, with only one percent receiving over 21 prescriptions for monitored drugs in a year. These numbers are stable year over year from 2003 – 2006.

Review of available information also confirms that 98.19% of the prescriptions dispensed for monitored drugs in Nova Scotia are for Nova Scotia residents, while only 1.81% relate to out of province individuals.

Comparison by District Health Authority on a high level indicates that the percentage of population and the percentage of prescriptions for monitored drugs are typically consistent while the overall percentage of the population within a DHA receiving prescriptions for monitored drugs tends to fluctuate.



DHA 1	South Shore	DHA 6	Pictou
DHA 2	South West Nova	DHA 7	Guysborough Antigonish Strait
DHA 3	Annapolis Valley	DHA 8	Cape Breton
DHA 4	Colchester East Hants	DHA 9	Capital District
DHA 5	Cumberland		

In review of the 2006/2007 fiscal period, the most critical achievement has been the transition of the provinces pharmacies to the on-line system. While this progressed more slowly than anticipated, the end of the year witnessed an 80% level of stores on-line.

The following report has been formatted to provide an overview of the primary areas of activity for the NSPMP during 2007/2006.

Transition of the **P**rovincial Pharmacies to the **O**n-line **S**ystem

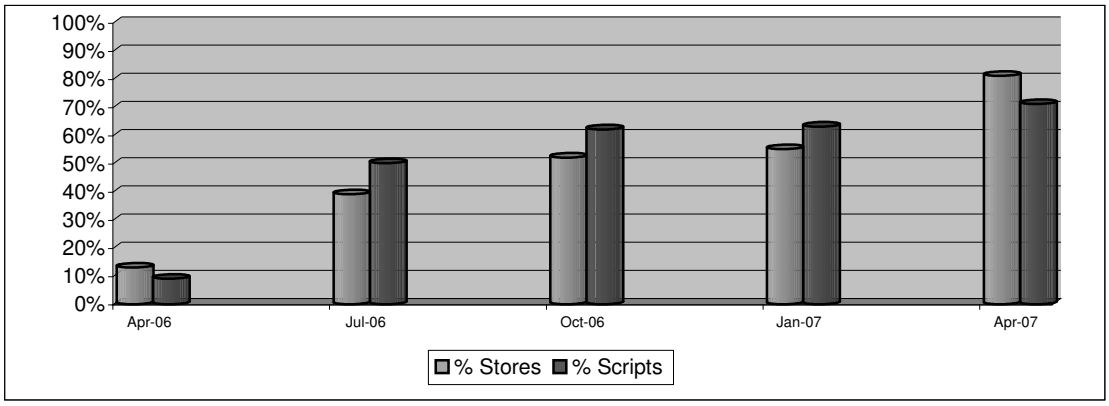
During 2006/2007 the administrative staff resources of the NSPMP remained keenly focused on engaging software vendors and pharmacies with the new on-line system. Areas of particular activity included the following:

Working with the software vendors:
The software certification process was completed for all major vendors in the 2005/06 period. The two remaining packages at the beginning of the current period were the QSI software package through Emergis and Wal-Mart's independent software. Regrettably, efforts to complete certification with these packages have been unsuccessful to date. Emergis reported a decision not to upgrade this software and to change stores to their new product, Simplicity Plus. Wal-Mart indicated that completion of the software changes would not be completed until it was a mandatory requirement.

Aside from the Wal-Mart and QSI software delays, the provinces software vendors worked with their customers and NSPMP during 2006/07 to complete pilot stores and to develop implementation schedules for the large pharmacy chains. Generally, a specific store was identified as a 'test' or pilot site for each software package and or pharmacy chain. The vendor representatives, program resources and pharmacy staff worked together to promote a smooth transition. This process involved provision and review of a detailed Pharmacy Implementation Guide, a pre- implementation teleconference or meeting, and close monitoring during the pilot period to ensure that the system was working properly for the pharmacy. Close contact was maintained with the pilot stores, and customer service representatives were available to assist them with any issues or questions.

Following completion of the pilot period, the vendor and pharmacy chain representatives worked with the NSPMP to develop an implementation schedule for remaining stores that would work for all parties. From a program perspective, this schedule provided an opportunity to ensure appropriate levels of support would be available to each store as it transitioned to the on-line system.

The percentage of the provinces stores on-line and the percentage of prescriptions being received electronically increased steadily over the 2006/07 period. Due to software vendor delays, the Program was unable to reach the business objective of 70% on line by October 2006; however, by the end of April 2007 the Lawton's/Sobey's Chain, with 75 stores, was finally able to transition and the Program reached 80% of stores on-line.



Transition of the **P**rovincial Pharmacies to the **O**n-line **S**ystem (cont'd)

Working directly with pharmacy chains:

Ensuring the availability of suitable resources to pharmacy staff during implementation of the on-line system and providing ongoing support were primary areas of concern for NSPMP staff members. This work included the development of various resources for pharmacists, such as the PMP ID and licence cross reference, a frequently updated Q&A document, group faxing process to advise them of any changes to the program and or processes involved, etc. These documents are accessible through the College of Pharmacists website and are updated on a regular basis. Any program bulletins or other information are also provided through this avenue. Open dialogue is promoted with pharmacists to obtain their suggestions and feedback on the system and potential developments.

Ensuring excellent customer service:

As the transition to the on-line system proceeded, the expectation of excellence in customer service was highlighted to program staff members. The customer service representatives work collaboratively to provide pharmacists, prescribers, and other customers with timely and accurate assistance. This assistance is available by phone, fax or email, all of which have service standards in place.

During the 2006/07 period, additional training was provided to the staff of the NSPMP on communication skills and particularly on dealing with difficult situations or upset customers. The focus of this training was to reinforce the widening customer base of the NSPMP, to highlight our need to fulfill our role as a valuable information service and to focus staff members on viewing the program as a resource for health care professionals. Particular attention was placed on ensuring that all customers be treated in the same manner, whether a prescriber or a patient, and that each call was viewed as an opportunity for customer service and problem solving.

Obtaining feedback from pharmacists:
Throughout 2006/07 the direct feedback from pharmacists has been overwhelmingly positive in terms of their use of the new on-line system. Some issues were identified in relation to batch processing for methadone and long term care facilities; however, these were more software related than program specific. Whenever a specific store or chain identified a potential problem, Program staff worked with the pharmacy and the vendor to reach resolution.

As the group of on-line stores climbed, a survey was completed to obtain feedback on the program, its services, and the provided level of customer service being received. This survey included both structured ratings questions and an open comments section. The overall response rate to the survey was 74%. Highlights included the following:

Respondent Groupings:

Length of time on-line	Percentage of Respondents
Less than one month	4%
One – two months on-line	47%
Two – Four months on-line	27%
Over four months on-line	22%

Transition of the **P**rovincial Pharmacies to the **O**n-line **S**ystem (Cont'd)

Structured 'rating' questions:

- 91.8% reported the system was easy to very easy to use.
- 94.9% reported that the messaging was useful to very useful.
- 99% rated the customer service as good to excellent.

Open Comments Section:

- A total of 57 comments were submitted.
- 28% (20) comments were specifically positive about the program and services.
- 14% (10) comments were store specific issues which were addressed individually once received.
- 10% (7) comments focused on the desire to receive additional information with messaging.
- 12% (9) comments related to extending the hours of service for the PMP.
- 12% (9) comments related to extending the monitored drugs to include benzodiazepines.

Ongoing feedback from pharmacies and other health professionals continues to be positive in terms of system use.

System Refinement

The various components of the PMP application were implemented during the 2005/06 period. As a new application; however, ongoing work was required throughout the 2006/07 period to refine the operation of the system, to address any potential improvements, and to optimize the functionality of the application. Towards this end, NSPMP staff members met on a weekly and more lately on a biweekly basis with assigned Medavie Blue Cross's IT Resources.

Through these meetings and subsequent work effort, many system refinements were accomplished. The majority of these relate directly to the efficiency of use for internal PMP staff when using reporting and case management functions. Specific examples include creating links between tabs in the case management component such that the PMP Consultant is able to review full prescription profiles without exiting one area and entering another and placing an indicator on a profile screen that will advise the Consultant that the individual is known to have more than one health card number. Another improvement in system efficiency was establishing an automatic feed from MSI information on deceased patients. This ensures that when we produce multiple doctoring or threshold analysis notifications, none are created on individuals who have passed away during the report period.

Other important current system modifications would relate to messaging provided to pharmacists and functions that affect pharmacist use of the system. Expanding the information included within a multiple doctoring notification to include the total tablets dispensed, and altering the process for reversing a script to work more effectively with software packages are two specific areas of focus.

Initiation of any new application required ongoing maintenance and evaluation. The regular meetings with our IT Team will continue throughout 2007/08 to monitor the working status of the application and to process changes required.

Monitoring & **R**eporting **A**ctivities

With the system components implemented during the previous period, the NSPMP was able to resume previous data analysis and reporting activities. This fiscal period also saw a focus on increasing the use of the system by health professionals.

Annual Program Activity:
Overall program activity compared to the previous fiscal period is provided below. Areas impacted by resource limitations in the previous period are marked with a '*':

Item	2005/06	2006/2007
Prescriptions Processed	337,804	411,843
Requests for Patient Profiles	528	668
Requests for Prescriber Profiles	15	18
Referrals – Medical Consultant	36	47
Referrals – POC*	0*	7
Referrals – Licensing Authorities*	0*	3
Multiple Doctoring Notifications*	1318	1154
Alert Letters / DUR inquires	0*	251
Missing/Stolen Prescriptions	25	129

A review of the activity indicates that the overall usage of the program by prescribers, pharmacists, and other groups has increased over the last fiscal period. The key indicator is the increase in requests for patient profiles. As well, the frequency of general inquiries regarding the program services and operations has increased steadily. The Program Operation Committee was re-established in late 2006, and has to date worked both with referrals from the Program as well as with data analysis projects, which will be reviewed later.

Analysis of Multiple Doctoring Notifications:
Review of data collected through the NSPMP over the last three years demonstrates that the level of multiple prescriber involvement with patients in the province has been stable:

Multiple Prescriber Involvement	2004	2005	2006
Receiving prescriptions from 1-2 prescribers	94%	94%	94%
Receiving prescriptions from 3-5 prescribers	6117 (5.4%)	6015 (5.4%)	5809 (5.4%)
Receiving prescriptions from 6-11 prescribers	400 (0.4%)	421 (0.4%)	394 (0.4%)
Receiving prescriptions from 12+ prescribers	16 (0.02%)	19 (0.02%)	15 (0.01%)

While 94% of patients on average receive monitored drugs from only 1-2 prescribers a year, the number of individuals involved with multiple prescribers (between 3 – 20) involves approximately 6% of patients.

Monitoring & **R**eporting **A**ctivities (Cont'd)

Many legitimate situations can account for cases that appear to represent multiple doctoring activities. Examples of members of this 6% group whose activity may not be intentionally illegal/ inappropriate include the following:

- Individuals without a general practitioner, who seek treatment through emergency rooms to obtain required pain medication.
- Individuals with acute conditions that require numerous investigations and treatments to determine an appropriate diagnosis and treatment plan
- Individuals who are treated in a large clinic by numerous physicians.

As part of its mandate, the NSPMP strives to identify and address the situations within this 6% group that relate to criminal offences of drug abuse or diversion.

The completion of multiple doctoring analyses has been greatly refined by the new system functionality. When identifying situations where multiple doctoring activities may be occurring, we are now able to consider broad variables. For example, the NSPMP is able to differentiate between independent prescribers vs. those who work in the same clinic, as well as between general practitioners and types of specialists. Additional logic parameters allow the program to more accurately identify potential situations of inappropriate behaviours.

Each year the overall effectiveness of the multiple doctoring notifications is analyzed. To complete this analysis, all individuals on which a notification was sent out are identified. The number of prescribers in the 6 months prior to the notification and the number of prescribers in the 6 months following notification are compared. For the 2006/07 period, there was a 46% decrease in the number of prescribers involved with these individuals in the 6 month period following notification in comparison the number of prescribers involved in the 6 months prior to the notifications being forwarded.

In completing this analysis, patients who had multiple prescribers prior to the period and no prescribers following, or who died in the following period were removed from the analysis.

Re-establishment of the Program Operation Committee:
The POC had been inactive during the transition from the PMANS to the NSPMP Board arrangement. By late 2006, new members were appointment to sit on this committee. The initial meetings of the POC in February focused on providing committee members with an understanding of the new system and the function of the POC. As in the past, the primary focus of this committee has been to act as a peer review structure. The work completed during this calendar year included review of seven referrals from the Program. Of these, three were forwarded to licensing authorities as formal complaints. These remain under investigation.

In addition to coordinating the peer review function of this committee, the NSPMP staff resources engaged the POC members in completion of some initial data analysis in effort to potentially identify trends in prescribing that required attention. The Committee reviewed de-identified data on the following:

- The top 30 overall prescribers of monitored drugs in the province.
- The top 30 prescribers of oral meperidine (Dilaudid).

Monitoring & **R**eporting **A**ctivities (Cont'd)

On review of the results, information was forwarded to specific high prescribers with their prescribing profile in comparison to their peers in their DHA and their peers within Nova Scotia. Information on the recommended use of oral meperidine was also enclosed in appropriate cases.

As these initiatives were undertaken in 2007, it is early to determine whether a change in prescribing has occurred for any of the specific individuals who received information from the POC. This review will be completed 6 months post notification (September 2007).

While this data analysis process has not been a typical role for the POC, it is a process that holds value in identifying and educating prescribers where appropriate.

Expanded use of Prescribing Profiles:
The prescribing profiles originally designed as part of the DEANS Chronic Non-Pain Management initiative have been refined and made available for the Program to use on an ongoing basis. These profiles were used, for example, to provide those prescribers identified in the above noted analysis with specific information on their own prescribing of monitored drugs as well as specific drug groups in comparison to their peers. Feedback from prescribers who received this information was predominantly positive. The POC views the use of these profiles as educational information for a prescriber, which will be provided in individual cases as appropriate. These are also available to prescribers on individual request.

Data Reporting & Releases 2006/07:
During the 2006/07 period, the NSPMP Consultant worked with several organizations to clarify information requests, extract the appropriate data and provide information reports in a timely fashion. These included the following:

Requested By	***Information Requests***
Addictions Services	Multiple requests for large data sets on methadone, oxycodone and hydromorphone utilization in Nova Scotia.
Dalhousie University Continuing Medical Education – CNCP Project	Various follow up requests from initial project
Department of Community Health & Epidemiology - Dalhousie	Oxycodone utilization
Cape Breton Community Partnership	Requests for data on methadone and oxycodone utilization
QEII Pain Clinic Specialist	Oxycodone utilization in Cape Breton
Individual Prescriber	Multiple reports on his prescribing of narcotics
Individual Prescriber	Information on his patient population
Department of Community Health & Epidemiology - Dalhousie	Follow up data for research project on stimulant use in adolescents
Individual Prescriber	Demerol use within his patient population.

Operational **D**evelopments

During the 2006/07 period, the NSPMP resources continued to refine the services provided to health care professionals and to identify potential developmental opportunities. The following have been important areas of achievement in the previous 12 months:

Development & Distribution of Resource Materials:
With the transition of the pharmacies to the on-line system, and the increasing use of the PMP by prescribers, work was undertaken to establish PMP resource areas of the website of each licensing authority. The information available for review includes the general information about the program and its services, bulletins and notices, patient information, pharmacy support and system use guidelines, etc. This information is updated and distributed as appropriate. Ongoing extension of the information fro various health care professionals and groups is anticipated.

Quality Assurance Process Expansion:
Ensuring the integrity of the information contained within the PMP database is of primary concern for the Program. Errors in data entry, whether they occur at the PMP office or at the pharmacy, impact both patient profile information and reporting accuracy. While the program was a strictly manual data entry based system, data integrity processes were in place to ensure that the information entered by the staff resources was correct. Monthly auditing was completed for each data entry resource in which manual scripts were randomly pulled from filing and checked against the data entered into the system for accuracy. Any identified errors were corrected. The accuracy rate was over 99% consistently. Accuracy of filing, physician and pharmacy registration and other administrative work was also completed on a regular basis to ensure a high level of information integrity.

As stores transitioned to the on-line system, the PMP staff developed processed through which the data integrity of the electronically submitted information could be reviewed. As each store initiates use of the Program, their daily processing of claims and reversals are reviewed to determine if any system use errors appear to be occurring on a regular basis and assistance is provided to address such items. As well, the use of PINS and DINS is assessed. The Product Information Number (PIN) is an identifier unique to the PMP for compounds that are made at the pharmacy. Information on the use of these identifiers is provided in the guide document. Errors in the use of these identifiers (for example, ranges of methadone) are more common and thus require review.

The ongoing monitoring of the use of PINs is a required internal process. Whenever a patient profile is created, the customer service representative reviews it to ensure that the information contained in the profile appears consistent. In some situations, incorrect PINS are mistakenly entered at the pharmacy, which impacts patient profile and reporting accuracy. When this is suspected, the customer service representative will contact the pharmacy to clarify the situation and correct the information prior to release.

As the program moves towards 100% on-line status, the importance of data integrity review is essential. As such, additional guidelines have been created for ongoing auditing of electronically submitted data. Specifically, the customer service representatives run a monthly report to review the appropriate use of all PINS. In addition, stores are audited individually at least once in each fiscal period. This store audit involves a detailed review of all claims submitted within a randomly determined time period to identify potential errors.

Operational **D**evelopments (Cont'd)

In situations where an ongoing issue of errors is identified within a specific store, contact will be made with the pharmacy manager for discussion of the matter. Assistance and support is provided to reach resolution of any difficulties that may be contributing to the problem. To date, these situations have been infrequent and have resolved positively.

Alert Process for Multiple Doctoring Situations:

During 2006/2007, several situations arose in which individuals knowingly targeted stores that were not yet on-line to undertake multiple doctoring activities. While the program was aware of these situations, individuals were keeping 'ahead' of the Program and law enforcement authorities by travelling to various communities across the province and going to off-line pharmacies.

In keeping with legislative authority, the privacy policy and our mandate to reduce the abuse or misuse of monitored drugs, the NSPMP requested and obtained approval from the Board to initiate an alert process for prescribers and pharmacies in the province. Essentially, this alert provides information on an individual who is actively engaged in multiple doctoring activities, such that health professionals can make more informed decisions on prescribing and dispensing. This alert process is enacted when information available to the NSPMP is sufficient to indicate current multiple doctoring activity for the purposes of drug abuse or diversion. These situations may arise from a multiple doctoring report and follow up with the prescribers involved, where the patient's activity remains unchanged.

Perhaps one of the most significant results of the initial alert being forwarded to prescribers and pharmacists was the engagement of these professionals in contacting the program when subsequent situations arose of concern. The contact from prescribers and pharmacists regarding an individual's activity has allowed the program to investigate and appropriately initiate further alerts and curtail such action.

This process has been very successful and very well received by health care professionals. Feedback has been offered that this demonstrates that the program 'is working'. In one specific case the program was able to assist authorities in apprehending and charging an individual who had been multiple doctoring across Canada within a week of his arrival in Nova Scotia.

Addition of a Customer Services Coordinator:

The transition of the NSPMP to the on-line system has resulted in an evolution of the resource requirements and tasks. Traditionally the Program required 4-5 data entry resources. During transition to the on-line system, the requirement for resource evolved significantly to a customer service orientation. Staff resources fulfilled the important role of assisting pharmacies with the transition to the on-line system and addressing any data entry issues that arose. With the majority of pharmacies now on-line, two permanent customer service representatives provide day to day support for health professionals accessing the program and its services by telephone, email and fax.

As anticipated, an increasing focus for the NSPMP is its value as a resource to health care professionals and organizations. In recognition of this, and the ongoing development of services, the previous data entry resource positions have been replaced by a Customer Service Coordinator. This resource will be focused on working with all staff members and key customers to ensure that existing and new services are provided in a timely and appropriate manner. Specific responsibilities will be determined to compliment those of the PMP Manager and the Consultant.

Community Involvement

Involvement with various organizations and groups in the health care community remains an important aspect of building the profile of the NSPMP and in developing the NSPMP's ability to serve as a resource. During 2006/07, the NSPMP Manager and Consultant were involved in a variety of activities towards these ends. The most notable of these activities include the following:

- Successfully increasing the involvement of pharmacists and prescriber groups in the development and implementation of the new system.
- Attending various professional association meetings and providing updates on the PMP and its services.
- Continued involvement with the Drug Evaluation Alliance of Nova Scotia.
- Participation in the DEANS panel discussion program on chronic non cancer pain management
- Communications and information sharing with the Cape Breton Community Partnership.
- Attendance at industry conferences and seminars.
- Working with provincial licensing authorities to realize PMP related information resources on websites.
- Completion of an initial meeting with provincial law enforcement officials to discuss information sharing opportunities and processes. Initiation of regular and direct contact with various agency representatives.

Business **P**lanning: 2007/08

At the current time the Board of Directors is engaged in strategic planning for the NSPMP. Through this process, both long term and short term goals will be defined for the Program. The completion of a service agreement between the Board and the Administrator is anticipated to occur during this period, which will allow all parties to define roles, responsibilities and outcome measures.