

Nova Scotia Prescription Monitoring Program

Annual Report 2005/06

Introduction

The Nova Scotia Prescription Monitoring Program (NSPMP) was engaged in a year of tremendous evolution during the fiscal period of April 1, 2005 – March 31, 2006. The passing of the Prescription Monitoring Act in July 2005, formation of the new Prescription Monitoring Board and the design completion and implementation of the new on-line system are a few of the defining points of 2005/06.

In addition to fulfilling its legislated mandate to *'promote the appropriate use of monitored drugs and the reduction of the abuse or misuse of monitored drugs'*, the NSPMP has this past year placed additional emphasis on its role as a resource for health care professionals in developmental activities and day to day operations. With the support and assistance of Board Members, licensing authorities and health care professional organizations, the NSPMP was able to achieve great strides in refining its focus, goals and operations.

Throughout the fiscal period, NSPMP resources were significantly focused on the development and implementation of the new system and in the refining efforts noted above. The NSPMP also remained active in the health care community, participating in various projects and committees. Promoting the value of the NSPMP and the services available were areas of attention, as well as obtaining feedback from various customers.

By March 31, 2006, the on-line system had successfully entered the implementation phase and significant achievements were realized in defining the developmental objectives for the Program. A detailed business plan was finalized for the current fiscal period, ensuring that the development of the NSPMP continues in a defined, outcome focused and measurable fashion.

The following report has been formatted to provide an overview of the primary areas of activity for the NSPMP during 2005/2006. Areas of significance included the completion and implementation of the new on-line system, the efforts undertaken to engage vendor/pharmacies and the actual transition process to the new system. The NSPMP annual monitoring & reporting activities, operational developments related to the new system, our ongoing involvement in the health care community, and our focus on business planning for 2006/07 were other key focal points.

Completion of the PMP System & Component Implementation

Completion of the new on-line PMP system and the implementation of the three PMP project components were key resource focuses throughout 2005/06. The work required was extensive and involved a variety of skill sets. In addition to internal business and technology resources, pharmacists, prescribers, and software vendors were involved in development of the new system. The goal was to define a system that was 'user friendly' and one which would minimize the impact on workflow within the pharmacy during use.

As the system moved towards completion and throughout the implementation phases, PMP staff conducted weekly project review meetings with all engaged internal resources to monitor progress and to address any potential issues. Ongoing testing of system functions and developmental efforts were also a primary requirement for Program staff. All three project stages were completed and implemented during this fiscal year.

Stage One, the Adjudication Engine, is the central component of the new system. This engine allows claims to be submitted directly to the NSPMP. By cross referencing the information with the patient history database the system is able to generate 'flags' regarding various potential issues. This comprehensive component was finalized, tested and implemented in June of 2005. While vendors (and thus the pharmacies) were not at that time prepared to use the system, it was activated internally for manual claim entry. The first on-line use of the adjudication engine occurred in November of 2005. This initial implementation and those following were overwhelmingly positive.

Stage Two of the new system was implemented in December 2005. This patient management engine is a tool used internally to maintain information on individual patients, to search out patient prescription histories or profiles, and to create groups for reporting purposes.

Stage Three of the PMP Project, the Intervention / Reporting Engine, was implemented in two phases. The reporting aspect of this engine was brought live in February 2006 and replaced the interim reporting mechanisms in place for multiple doctoring analysis and trend analysis. This aspect of the project has provided the PMP with increased flexibility and potential in data analysis.

The Intervention phase of this engine was implemented in April 2006. Again, this versatile component provides the NSPMP with much more robust data analysis capabilities. This engine provides the ability to set specific parameters and schedule both multiple doctoring and threshold analysis reports, to easily review all potential cases identified and to determine for which ones the system will generate pre-formatted and patient specific letters. In addition, the system creates intervention cases, in which all patient related information and correspondence can be stored electronically for monitoring and follow up purposes.

With all three project phases live as of April 2006, the PMP staff and project resources have continued to monitor and refine the various functions to ensure that the maximum benefits are derived. Weekly meetings occur, as well as frequent consultations. All system operations are closely monitored to identify and address any potential required modifications.

Engagement of Software Vendors & Pharmacies

The PMP project was initiated in late 2004, at which time communications began with the various pharmacy software vendors in Nova Scotia. The 2005/06 fiscal year saw the bulk of the activity in this regard.

Initial discussions with vendors in November and December of 2004 focused on the release and review of the software modifications required to accommodate the new PMP system. With the involvement of both pharmacists and vendors, the complexity and level of modifications required were minimized. With the new on-line system scheduled to be in production in June 2005, it was anticipated that providing this information to software vendors prior to year end would promote timely completion of the required modifications. The request to complete the required modifications was, however, met with inconsistent responses. Given that there was no mandated requirement to comply with the electronic system and no funding to support the changes, most vendors indicated that this would not be a business priority for them. All vendors agreed with the benefit of the new system however, and reported their commitment to complete the proposed changes. Estimated time frames were obtained from each vendor and the NSPMP continued to follow up with them in this regard.

Formal meetings were completed with each software vendor representative during March and April 2005 to review their modification status. Updated completion estimates were provided by each vendor and regular contact was maintained by PMP staff to monitor progress. Again, the level of importance software vendors placed on accomplishing these changes varied. More immediate business priorities were often noted as the cause of delay. This issue presented as the largest challenge to securing full implementation of the new system.

Propharm was the first vendor to complete the modifications and software certification process with the new system. Testing was completed and their first store was implemented on line in November of 2005. This process occurred without difficulty and Propharm moved all of their customer stores onto the Program by January 2006.

A strategic decision was made in January of 2006 to initiate direct contact with the large pharmacy chain management groups. The intent of this action was to increase the engagement at the pharmacy level and leverage their interest in the new system with the software vendor groups. Meetings were established to review the NSPMP, discuss the new on-line system, the benefits it would bring to the pharmacist / prescriber/patient and to address any questions or concerns. The primary issue identified in each group was the perceived risk of workflow interruption and delayed customer service. Discussion of the positive experience of all stores on-line to date was of great assistance in reducing this concern. Direct communications with on-line pharmacists was suggested and the efforts taken to ensure that the workflow impact would be minimized (if not altogether avoided) were also reviewed.

The NSPMP Manager and Consultant also offered educational sessions to the pharmacy chains, if this was deemed helpful. This was utilized by one of the provinces large chains, who invited the NSPMP to present to all of their pharmacy managers. This chain has now completed its pilot store and is determining an implementation schedule. The Program was also involved in the development of the Pharmacy Association of Nova Scotia's Educational Program on the NSPMP messaging, which was offered throughout the province in May/June 2005.

Engagement of Software Vendors & Pharmacies (Cont'd)

Through a combination of work with vendors and the pharmacy chain management groups, the NSPMP has secured software certification for all vendors with the exception of the Walmart chain which uses independent software. Interactions with this group continue to move forward slowly.

As noted previously, the prioritization of this project by the various software vendors has been the primary source of delay in full implementation of the system. Senior NSPMP staff members continue to work with vendors and their customers to promote progress. Our goal is to have those with software modifications remaining and those set to move into implementation, do so over the next few months.

Transition to the New On-Line System

As indicated above, the first store came on-line with the new system in November 2005. Since this time NSPMP staff members have been actively involved in promoting the new system, monitoring the progress, and supporting the stores as they make this transition.

Promoting the new system has been accomplished through various avenues, including 7 industry presentations, 3 media interviews, 2 PMP information bulletins, and communication with various health care professionals and groups. This will remain an ongoing area of attention for the Program, with planning now also in place for quarterly information bulletins.

Significant time and resource has been involved with supporting and monitoring stores as they transition to the new on-line system. In addition to providing a detailed implementation guide, teleconferences are completed with each pilot store to ensure that the main staff members in the pharmacy are comfortable with the information. To ensure that the implementation of stores proceeds smoothly, schedules are determined in conjunction with each chain of stores. PMP staff members monitor each stores activity on the date of implementation, make themselves immediately available to answer any questions, and follow up with them on day two to ensure that there are no issues. Detailed call logs are maintained by NSPMP to ensure that we are able to capture any issues that arise and the arrived at solution.

The majority of issues identified within the stores during implementation have related more to software than the PMP application, however, by working with the vendors to understand the set up of their programs, PMP staff members are able to work with stores under the various software packages and address some specific related questions. The response to this support process has been very positive. Pharmacy staff members have reported minimal workflow issues following implementation.

The number of stores on line has increased more rapidly in recent months, as has the number and percentage of overall claims being submitted electronically.

| Month | Manual | Electronic | Total | % of total |
|--------------|---------------|-------------------|--------------|-------------------|
| November 05 | 25,811 | 37 | 25,848 | 0.14% |
| December 05 | 21,523 | 78 | 21,601 | 0.36% |
| January 06 | 35,233 | 179 | 35,412 | 0.51% |
| February 06 | 31,330 | 583 | 31,913 | 1.83% |
| March 06 | 30,344 | 923 | 31,267 | 2.95% |
| April 06 | 22,557 | 2238 | 24,795 | 9.03% |
| May 06 | 26,877 | 8020 | 34,897 | 23.00% |

Based on current experience and resulting estimates, our expectation is that the level of claims submitted electronically will reach approximately 70% by October 2006.

Monitoring & Reporting Activities

During 2005/06 extensive demands were placed on key resources during the development, testing and implementation of the three system stages. As a result, the availability of these individuals to focus on monitoring and reporting activities was impacted. Program operations were maintained to the extent possible; however, there were several points during the fiscal year where reporting activities were curtailed and or unavailable due to development and system activation requirements. Program staff ensured that services to prescribers and pharmacists were not impacted by internal resource issues.

Annual Program Activity

Overall program activity compared to the previous fiscal period is provided below. Areas impacted by resource limitations are marked with a ‘*’:

| Item | 2005/06 | 2004/05 |
|------------------------------------|----------------------------|-----------------------|
| Prescriptions Processed | 337,804 | 320, 325 |
| Requests for Patient Profiles | 528 | 416 |
| Requests for Prescriber Profiles | 15 | 14 |
| Referrals – Medical Consultant | 36 | 7 |
| Referrals – POC* | 0* | 15 |
| Referrals – Licensing Authorities* | 0* | 1 |
| Multiple Doctoring Notifications* | 1318 prescribers / 469 HCN | 6845 presc / 2431 HCN |
| Alert Letters / DUR inquires | 0* | 144 |
| Missing/Stolen Prescriptions | 25 | 6 |

A review of the activity indicates that the overall usage of the program by prescribers, pharmacists, and other groups has increased significantly over the last fiscal period. The key indicator is the increase in requests for patient profiles. As well, the use of the NSPMP Medical Consultant and the frequency of general inquiries regarding the program services and operations have increased steadily.

Analysis of Multiple Doctoring Notifications

Review of data collected through the NSPMP over the last three years demonstrates that the trend of multiple prescriber involvement with patients has been stable:

| Multiple Prescriber Involvement | 2003 | 2004 | 2005 |
|---|--------------|-------------|-------------|
| Receiving prescriptions from 1-2 prescribers | 94% | 94% | 94% |
| Receiving prescriptions from 3-5 prescribers | 5,857 (5.4%) | 6117 (5.4%) | 6015 (5.4%) |
| Receiving prescriptions from 6-11 prescribers | 420 (0.4%) | 400 (0.4%) | 421 (0.4%) |
| Receiving prescriptions from 12+ prescribers | 17 (0.02%) | 16 (0.02%) | 19 (0.02%) |

Monitoring & Reporting Activities (Cont'd)

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

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 clearly relate to criminal offences. Application of the new system will greatly aid in this goal.

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 2005/06 period, there was a 59% decrease in the number of prescribers involved with these individuals in the 6 month period following notification.

As we move forward with the new reporting parameters, this measure will be regularly monitored. It is anticipated that the availability of up to date data on patient activity will have a positive impact of multiple doctor notifications.

Operational Developments

The system and legislative changes in the 2005/06 period were instrumental in allowing the NSPMP to achieve significant operational developments. Throughout the fiscal year, all program activities and services were reviewed for effectiveness, efficiency, and potential improvements. The results of this process included several accomplishments in data analysis / reporting, and service availability:

Expansion and Refinement of Data Analysis & Reporting

Realizing the maximum benefit from the data available through the NSPMP was a key area of interest during the last fiscal year. All of the NSPMP analysis and reporting processes were re-examined and refined using the more robust features of the new system. With the ability to consider numerous variables and apply expanded logic, the NSPMP has improved the processes involved with both the multiple doctoring analysis and threshold analysis functions. For example, individual drugs of specific interest, such as methadone, can now be assessed individually, which allows greater opportunity to review specific profiles to determine the potential risk of misuse. The numerous parameters available in the system allow the NSPMP a much greater ability to identify those situations which are most likely the result of misuse or abuse, versus innocent activity.

The efficiency of the new system has provided the Program with the ability to devote more resources to the analysis of profiles vs. the completion of manual reports and letter production. This has resulted in a decreased need to request information from prescribers on a broad scale, which has been a concern expressed with regards to the program in the past.

Another area of particular focus in reporting was the development of trend analysis capabilities. Late in 2005/06, with the system components implemented, efforts were undertaken to design trend reporting for prescribers and pharmacies. This reporting will allow individual prescribers to review their own prescribing profiles (for monitored drugs in general and or for specific monitored drugs) in relation to other prescribers within their DHA and within the province. This same DHA and provincial comparison was designed for a specific prescribers patients and how many received controlled drugs from 2, 4, 6, or more other prescribers. From the pharmacy perspective, individual stores will be able to review the multiple pharmacy trends of their patient groups.

These trend reports will provide prescribers with an increased awareness of their overall prescribing patterns in comparison to their peers. As well, it is anticipated it will lead to individual prescribers seeking out additional information in relation to their patient's use of monitored drugs.

The NSPMP continues to encourage the input of various health care professionals and organizations in the area of data analysis.

Expansion of Available Services

Review of the services offered through the NSPMP in light of the program changes highlighted several opportunities for development. The following items were completed during the 2005/06 period:

Increased information included in patient profiles:

The new legislation enabled the NSPMP to provide the name of all prescribers involved in a patients profile to the requesting prescriber/pharmacist. All system generated letter formats and profiles were

Operational Developments (Cont'd)

altered to provide this information. Feedback indicates that both groups find this very useful in attempting to ensure appropriate patient care and management.

Development of Resource Materials

To assist physicians, pharmacists, and other interested parties in understanding the NSPMP and the implementation of the new system, resource materials were developed and provided. A detailed implementation guide was developed and provided to all pharmacies as they prepared to implement the system. This comprehensive document provides pharmacists with information on managing various situations, such as working with federal penitentiaries, working with double DINS, and handling part fills. Information on various health card formats within Canada is provided, as well as detailed explanations of all on line messaging that they may receive when entering a claim. This guide is also now available to pharmacists on-line through the PANS website.

In addition to the above, handouts on the Program and available services have been completed for a variety of groups, and arrangements have been made to provide regular electronic communications regarding the program status and any changes that occur.

Definition of Instant Messaging at Time of Dispensing

Once a store is on-line, the NSPMP provides them with instant messaging at the time of dispensing. These messages alert pharmacists to possible multiple doctoring situations and provide them with the name and phone numbers of the other pharmacies involved. Other messages include information on the status of prescribers and prescriptions. As the system has been implemented, some messages have been updated and a few have been added to better serve the pharmacist. To date, feedback on this service has been overwhelmingly positive. This feature is viewed as one which promotes dialogue and one which provides health care professionals with support for informed decision making.

Profile & Treatment Agreement Monitoring

During the 2005/06 period, the NSPMP initiated a development within the system to allow patient grouping for reporting purposes. This provides prescribers with the ability to request that patients at a higher risk for misuse of monitored drugs be reviewed automatically. Patients involved in a treatment agreement would also be of interest for this service. In such cases, the physician will request specific parameters of interest and if any activity occurs outside the parameters, the Program will advise them accordingly.

Methadone Clinic Reporting & Profile Monitoring

As outlined above, the NSPMP has initiated a patient grouping function for reporting purposes. This has allowed us to work with methadone clinics to provide monitoring and reporting on patients enrolled in the program. Specifically this service helps ensure compliance with the programs parameters for other drug use.

Communications Process

Throughout the 2005/06 period, consideration was given to the methods of efficiently communicating information to various stakeholders. A communications process has been defined, which will include quarterly bulletins geared to prescriber groups and pharmacy groups specifically, electronic distribution through professional bodies, and sharing of PMP resources with health care organizations and groups.

Community Involvement

Involvement with various organizations and groups in the health care community is an important aspect of building the profile of the NSPMP and in developing the NSPMP's ability to serve as a resource. During 2005/06, 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 Association of Nova Scotia.
- Participation in the DEANS panel discussion program on chronic non cancer pain management
- Participation in the development and implementation of the Pharmacy Association's educational program on the use of PMP messaging.
- Communications and information sharing with the Cape Breton Community Partnership.
- Attendance at industry conferences and seminars.
- Engaging professional associations in the development of PMP related information updates and identification of useful resources to be provided.

Business Planning: 2006/07

In developing a business plan for the 2006/07 fiscal year, NSPMP staff members, the Department of Health and the Board of Directors have considered the current environment in both Canada and the United States. Trends in drug abuse, prescribing patterns, health care practices, prescription monitoring, and the current legislative environment must all be considered in determining the key business objectives for this important program.

Based on a review of information presented with regards to the noted areas, the objectives of the NSPMP, and the functionality brought to the Program by the new on-line system, the following key business objectives have been identified:

- Completing the transition of pharmacies to the on line system;
- Refining data analysis and reporting processes;
- Building our profile in the health care system and in our communities;
- Determining Program outcome measures;
- Developing a service agreement/contract between the Department of Health, the Board of Directors and Medavie Blue Cross.

The various actions involved within each of the above categories have been outlined, along with overall milestone planning. This process will allow Medavie Blue Cross and the Board to review the progress in meeting established business goals throughout the 2006/07 fiscal business year.

By implementing a business planning process, the Board, the Department of Health and Medavie Blue Cross strive to ensure that the maximum benefit of the Program is derived. The overall effectiveness of monitoring controlled drugs will be enhanced and greater utilization of the NSPMP information and resources will be achieved.