Narcotics Monitoring System
Overview

Ontario Public Drug Programs
Ministry of Health and Long-Term Care
November 2013
Faculty/Presenter Disclosure

• Faculty: Brent Fraser

• Relationships with commercial interests:
  – No commercial interests
Disclosure of Commercial Support

• This program has received no financial or in-kind support.

• Potential for conflict(s) of interest:
  – None
Mitigating Potential Bias

- N/A
<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Narcotic Strategy Work</td>
</tr>
<tr>
<td>• Narcotics Monitoring System (NMS) Background</td>
</tr>
<tr>
<td>• NMS Data Summary</td>
</tr>
<tr>
<td>• NMS Feedback</td>
</tr>
<tr>
<td>• NMS Data Review / Trends</td>
</tr>
<tr>
<td>• Other Findings</td>
</tr>
<tr>
<td>• Actions Taken to Date</td>
</tr>
<tr>
<td>• Narcotics Monitoring Working Group</td>
</tr>
</tbody>
</table>
Narcotic Strategy Work

Stemming from the work of the Narcotics Advisory Panel, the Ministry developed Ontario's Narcotics Strategy and has started work on a number of initiatives to support the appropriate prescribing, dispensing and use of monitored drugs in Ontario and to take a more integrated pain management approach.

OPDP Pain Medication Formulary Review – funding of opioids and other pain medications

- A subcommittee of the Committee to Evaluate Drugs (CED) is evaluating the efficacy, safety, abuse liability, place in therapy and utilization trends of the different pain medications, and providing advice on which pain drugs should be added or removed from the Formulary, which agents should be given more open or restricted funding, and whether other formulary tools (e.g. dose restrictions) could be instituted to promote appropriate prescribing.

Prescribing Patterns Mental Health and Addictions – addressing dependency Ministry invested $15M to increase access to opioid addiction services and treatment:

- $12M through the LHINs for interdisciplinary clinics to provide opioid substitution treatment as well as enhanced access to treatment for pregnant and parenting women with addictions
- $2M for Aboriginal and First Nations specific initiatives
- and $1M to support public education and awareness on opioids and increase real-time monitoring on the impact of opioids in emergency departments and at needle exchanges
- Initiating a working group to provide educational tools for prescribers & patients regarding opioids
Narcotic Strategy Work (continued)

Regulatory Requirements for Long-Acting Generic Oxycodone

- A new regulation requires a manufacturer of a long-acting oxycodone product to provide evidence that the product is manufactured in such a way to make it more difficult to alter, break, crush, chew, dissolve or otherwise manipulate (less likely to be misused or abused).

Canadian Centre on Substance Abuse (CCSA)

- Report entitled “First Do No Harm: Responding to Canada’s Drug Crisis” has been published and sets out 58 recommendations around five streams of action: Prevention, Education, Treatment, Monitoring and Surveillance, and Enforcement. Emphasis on recommendations to implement within 24 months.

Narcotics Monitoring System – tracking narcotic use

- Providing a centralized system to monitor and record the prescribing and dispensing of prescription narcotics and other controlled substances (“monitored drugs”) for all Ontarians.
Narcotics Monitoring System (NMS) Background

- The overarching goal of Ontario’s Narcotics Strategy is to make the prescribing and dispensing of narcotics and controlled drugs (“monitored drugs”) safer and more secure.

- Prior to the implementation of the Narcotics Monitoring System (NMS), there was no centralized system in place in Ontario to monitor and record the dispensing of monitored drugs.

- Therefore, the ministry developed the NMS to collect dispensing information for all prescriptions for monitored drugs dispensed for all Ontarians, regardless of whether the prescription is paid for under a publicly funded drug program, through private insurance or by cash. The NMS was built by leveraging the existing Health Network System (HNS) (the ODB claims adjudication system) as a short-term initiative. The long-term initiative is to consider integrating this database into the Medication Management System (MMS) once it is implemented.

  - **Note:** The NMS does not permit health care providers to access patient records at the point-of-care when a prescription is being written (i.e., they are not be able to view patient profile information, patient prescription history on the NMS), nor does it include diagnostic information (i.e., the reason for the prescription).

- The NMS was activated On April 16, 2012 and began to collect dispensing data from all Ontario pharmacies for all monitored drugs dispensed to people in Ontario. The NMS:

  - Records dispensing information for all monitored drugs dispensed to people in Ontario
  - Provides real-time Drug Utilization Review (DUR) responses to dispensers (e.g. double-doctoring, polypharmacy) at the time of dispensing
  - Enables retrospective reviews of dispensing information
NMS Data Summary

For every prescription for a narcotic or controlled drug that is dispensed in Ontario, pharmacists are required to submit all of the following information to the NMS:

- The prescriber’s registration number, issued by their College and number identifying the professional college to which they belong (i.e. CPSO)
- The patient’s name, date of birth, gender, and ID number
- The date on which the monitored drug is dispensed, the drug identification number (DIN), quantity of the monitored drug dispensed, and number of days required for the monitored drug
- The prescription number
- The pharmacist’s ID number (registration number from the Ontario College of Pharmacists) and Pharmacy ID number

All 3,600+ pharmacies in Ontario are submitting dispensing data about monitored drugs to the NMS. As of October 31, 2013, the NMS has received:

- About 39.9M submissions
- Submissions for over 3.2M different patients
- Submissions attributed to over 54,000 different prescribers

Of the 39.9M submissions received by the NMS (data from April 16, 2012 to October 31, 2013)

- 97.14% (~38.7M) used the ON Health Card
- 1.87% (747,469) used the FNIAH status card
- 0.54% (213,685) used other approved ID
- 0.09% (34,248) are for out of country residents
- 0.07% (26,957) are for patients with no approved ID
- 0.09% (34,701) were submitted as Office Use prescriptions
NMS Feedback

• The Ministry has received positive feedback from stakeholders on the immediate impact of the NMS. Stakeholders have told us that they appreciate the information the NMS provides as an additional tool to help them to dispense monitored drugs more safely and appropriately.

• We have heard of several cases where the NMS provided pharmacists with the information they need to confirm previously suspected cases of narcotic or controlled drug abuse or misuse.
  • One example included a NMS alert that a methadone maintenance patient had also filled prescriptions for oxycodone authorized by two separate physicians. When contacted, not only were the physicians unaware of the oxycodone double-doctoring, they were also unaware the patient was taking methadone.

• We have also been told of several instances where a pharmacist received an NMS alert and contacted the patient’s prescriber to adjust the patient’s drug therapy.

• We have had reports from prescribers specializing in pain management who have become aware that some of their patients taking opioids for pain have been concurrently receiving methadone and the opiate prescriber has not been informed by the pharmacists (products were dispensed at the same pharmacy) or the physicians prescribing the methadone.
NMS Data Review

Initial NMS data review revealed a number of data integrity concerns including the following:

Use of the “Unknown Prescriber” mechanism for NMS submissions

- In July 2012, about 3.7% of NMS submissions made by pharmacists did not have a proper prescriber identification number (i.e. license number). Letters were sent to over 300 pharmacies requesting that this practice be corrected immediately to ensure compliance with the legislation. At present time, about 0.4% of NMS submissions do not have a proper prescriber ID.

Submission of incorrect days supply values

- When submitting a claim, pharmacists will indicate the number of days that are supplied with the prescription. This data field may not accurately reflect how the prescription is taken particularly with “PRN medications”.

Incorrect use of the “Office-Use” submission process

- Review of NMS submissions revealed many instances where submissions had been made for large and unusual quantities of narcotics using the Client ID number that is intended to be used for dispensing to prescribers for Office-Use prescriptions. These submissions did not include proper prescriber ID numbers. Follow up with pharmacies revealed that these submissions were not for Office-Use prescriptions but were transactions used to record inventory management processes such as: sales of monitored drugs to other pharmacies or institutions; destruction of expired monitored drugs; and returns to suppliers. These transactions should not be submitted to the NMS.

Incorrect use of the PIN for “Generic Monitored Drug Compound”

- A PIN was added to the Monitored Drugs List (MDL) to allow pharmacists to make the required submission for compounded prescriptions that include a monitored drug. Through review of NMS submissions as well as through pharmacies contacting the Help Desk, the ministry became aware that this PIN was incorrectly being used to record the dispensing of methadone. The MDL includes specific PINs for methadone that are required to be used for this product.
Difference in the use of drug products by ODB recipients versus those in the private market:

- About 73% of methadone (for MMT) submissions are reimbursed through the ODB program
NMS Data Trends

Difference in the use of drug products by ODB recipients versus those in the private market:

- About 37% of Suboxone submissions are reimbursed through the ODB program
NMS Data Trends

Difference in the use of drug products by ODB recipients versus those in the private market:

- About 48% of Oxycodone CR submissions are reimbursed through the ODB program
NMS Data Trends

Decrease in oxycodone controlled release product utilization in Ontario and nationally

Nationally, about 3% of oxycodone CR claims are for the generic product

[Chart showing monthly trends in claims for OxyContin, OxyNeo and generic OxyContin; Private and Public claims, Mar-2010 to Feb-2013.]
High Utilization of Benzodiazepines by ODB Patients
Other Findings: Patients Exceeding Watchful Dose

Report shows patients exceeding the recommended “watchful dose” of 200ME/day (e.g., some patients receiving over 5000ME/day). Note some of these calculations are skewed by incorrect days supply values entered on NMS submissions.

<table>
<thead>
<tr>
<th>ME Range (X 100.0)/day for 1 month period</th>
<th>Prescriber Count</th>
<th>Recipient Count</th>
<th>Submission Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,000.0</td>
<td>3</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>4,100.0</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>4,400.0</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>4,500.0</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>4,700.0</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>4,800.0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5,100.0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5,200.0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5,700.0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6,000.0</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6,800.0</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
### Other Findings: Patient Seeing 15 Prescribers and 10 Pharmacies

<table>
<thead>
<tr>
<th>Client</th>
<th>Date</th>
<th>Pharmacy</th>
<th>City</th>
<th>DIN</th>
<th>Trade Name</th>
<th>Strength</th>
<th>Quantity</th>
<th>Days Supply</th>
<th>Prescriber</th>
<th>NMS Response Message #1</th>
<th>NMS Response Message #2</th>
<th>NMS Response Message #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>20120418</td>
<td>Pharmacy #1</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>120.0</td>
<td>10</td>
<td>Prescriber #1</td>
<td>NMS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120424</td>
<td>Pharmacy #2</td>
<td>BRANTFORD</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>112.0</td>
<td>14</td>
<td>Prescriber #2</td>
<td>NMS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120503</td>
<td>Pharmacy #3</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>7</td>
<td>Prescriber #3</td>
<td>NMS:MH120503 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120503 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120507</td>
<td>Pharmacy #4</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>10.0</td>
<td>5</td>
<td>Prescriber #4</td>
<td>NMS:MH120507 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120507 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120508</td>
<td>Pharmacy #5</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>30.0</td>
<td>3</td>
<td>Prescriber #5</td>
<td>NMS:MH120505 XXXXXXXXXX 00010.0 0608165</td>
<td>NMS:MH120505 XXXXXXXXXX 00010.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120517</td>
<td>Pharmacy #6</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>6</td>
<td>Prescriber #6</td>
<td>NMS:MH120507 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120507 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120512</td>
<td>Pharmacy #7</td>
<td>TOORNO</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>45.0</td>
<td>7</td>
<td>Prescriber #7</td>
<td>NMS:MH120512 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120512 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120514</td>
<td>Pharmacy #8</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>14</td>
<td>Prescriber #8</td>
<td>NMS:MH120507 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120507 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120517</td>
<td>Pharmacy #9</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>5</td>
<td>Prescriber #9</td>
<td>NMS:MH120517 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120517 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120514</td>
<td>Pharmacy #10</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>2</td>
<td>Prescriber #10</td>
<td>NMS:MH120507 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120507 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120528</td>
<td>Pharmacy #11</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>3</td>
<td>Prescriber #11</td>
<td>NMS:MH120515 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120515 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120528</td>
<td>Pharmacy #12</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>2</td>
<td>Prescriber #12</td>
<td>NMS:MH120516 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120516 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120529</td>
<td>Pharmacy #13</td>
<td>TOORNO</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>3</td>
<td>Prescriber #13</td>
<td>NMS:MH120526 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120526 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120529</td>
<td>Pharmacy #14</td>
<td>ETOBICOKE</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>10</td>
<td>Prescriber #14</td>
<td>NMS:MH120527 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120527 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>20120529</td>
<td>Pharmacy #15</td>
<td>TOORNO</td>
<td>608165</td>
<td>RATIO-OXYCOCET</td>
<td>5MG &amp; 325MG</td>
<td>20.0</td>
<td>5</td>
<td>Prescriber #15</td>
<td>NMS:MH120528 XXXXXXXXXX 00020.0 0608165</td>
<td>NMS:MH120528 XXXXXXXXXX 00020.0 0608165</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** XXXXXXXXXX replaces the phone number of the pharmacy where the prescription which triggered the alert was dispensed.
Actions Taken to Date

- Communications to pharmacies regarding the requirement and importance of proper NMS submissions (submissions with improper prescriber ID’s have decreased from about 3.7% to about 0.4%)
- Sharing some information relevant to specific regulatory colleges (e.g., College of Nurses of Ontario and Ontario College of Pharmacists)
- A small number (9) of patient referrals to the Ontario Provincial Police for possible investigation
- Ministry inspections at specific pharmacies
- Narcotics Monitoring Working Group
Narcotics Monitoring Working Group

Establishing Processes for NMS Data Sharing and Referrals

- The review of profiles revealed a number of complexities which require further input and evaluation before any action is taken. For example:
  - Concurrent use of methadone and other opioids
  - Patients who appeared to be treated by a number of specialists and/or hospital based prescribers
  - Patients for whom a review of ODB claims revealed a number of non-monitored psychoactive medications, which are not captured in NMS data

- The Narcotics Monitoring Working Group has been established to review NMS utilization profiles and provide advice regarding:
  - Standard data queries and indicators to identify potential areas of concern;
  - Educational recommendations, which may include broader system-wide initiatives, or educational recommendations for specific practitioners; and
  - Further action for specific files, both at a patient level and/or a prescriber level, which may include referrals to the OPP and/or providing information to Regulatory Colleges if required.

- Based on the recommendations of this working group, other health professionals will be added as appropriate. In addition, it is expected that this group will make recommendations to the Executive Officer regarding a more permanent process for ongoing data review.