Supplementary Report to the Auditor General's Phase One Report: "The City Needs to Ensure Adequate Detection and Review of Potentially Excessive and Unusual Drug Claims"

June 13, 2017
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## EXECUTIVE SUMMARY

| Phase One report on drug benefits was issued in October 2016 | In October 2016 the Auditor General issued a Phase One report on the City's employee drug benefits. During the Phase One audit, the Auditor General was not able to access claim files or information maintained by Manulife, which was the City's benefits administrator for the period under review. |
| No access to claim files in the initial 2016 analysis | Consequently, the audit findings in that report were based on an analysis of annual claims data and a number of anomalies that could not be fully verified or resolved at that time. |
| This supplementary report contains findings from a further review of anomalies previously identified | Subsequent to the issuance of the Phase One report, Manulife agreed to provide audit staff access to selected claim files and specific claim information pertaining to the anomalies identified. This supplementary report presents the findings from our subsequent review and analysis of additional information provided by Manulife. |
| Additional information and clarification obtained from Manulife | During our supplementary work, we obtained through Manulife additional claim information including physician identification numbers and days' supply for the drugs dispensed for a sample of claims. We were also able to review the supporting documents (e.g. drug receipts) maintained by Manulife, and discuss our observations with Manulife staff. |
| However, we did not have access to medical records or physician prescriptions held by dispensing pharmacies. This limited our ability to detect the risk of fraudulent drug prescriptions and to further investigate the legitimacy of the claims. |
| Focused on risk of "double doctoring" | With the physician identification information, one of the focuses of our supplementary review was on the risk of "double doctoring" whereby claimants obtain an excessive amount of prescribed drugs through various physicians. |
| Our key supplementary findings are summarized as follows: | |
Signs of over-prescription of fentanyl and oxycodone to City claimants

Overall, we did not find clear signs of double doctoring in the sampled claimants, but we noted many cases showing signs of potential over-prescription of fentanyl or oxycodone by physicians. Recent research in Ontario has shown an unfolding opioid crisis and increasing trend of opioid prescriptions, and clearly demonstrated the risk of over-prescription leading to addictions and overdoses.

Claimants were reimbursed exceedingly high doses of opioids

While the City has no legal obligation to report the potentially over-prescribing physicians to regulatory bodies (such as the College of Physicians and Surgeons of Ontario) or the pharmacists dispensing exceedingly large quantities of opioids to the Ontario College of Pharmacists (OCP) for further investigation, we believe the City, as a leading public sector organization and as part of the community efforts to combat the opioid crisis, should be vigilant and raise any concerns about unusual claim patterns. To this end, the City should request its benefits plan administrator to monitor and detect potential cases of opioid over-prescription among City claimants, and where appropriate, report these cases to the regulatory bodies for investigation.

Suspicious cases of over-prescribing should be reported to the regulatory bodies

In addition, the City should also work with its benefits administrator to provide employees at risk of opioid addiction with information of available employee assistance programs or services.

Important to assist employees at risk of opioid addiction

According to the Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain, 2010 (the Guideline), the optimal dose for most patients "will be well below a 200-mg morphine equivalent dose per day." This was considered a "watchful" dose for people with non-cancer pain. The Guideline was updated in May 2017 to lower the watchful dose from previously 200 mg to 90 mg morphine equivalents per day. We used the previous Guideline of 200 mg morphine equivalent dose for our analysis in the report.

The watchful dose of daily 200 mg morphine equivalents for non-cancer patients has been lowered to 90 mg
Fentanyl and oxycodone were one of the most commonly used prescription opioids by City’s claimants.

Fentanyl is a painkiller 100 times more potent than morphine and 750 times stronger than codeine. For those City plan members who were reimbursed fentanyl, the majority of them claimed fentanyl patches. Along with oxycodone, it was one of the most common prescription opioids used by members under the City employee benefits plans.

In our 2016 analysis of claim data, we identified 31 claimants (27 active employees and four retirees) who were reimbursed potentially excessive quantities of fentanyl patches.

27 non-cancer claimants were reimbursed for excessive fentanyl patches.

Subsequent to the 2016 analysis, we obtained additional information from Manulife which showed that four of the 31 claimants were cancer patients and 27 were non-cancer claimants. We reviewed in detail the 27 non-cancer cases and found:

- None of the 27 claimants presented clear signs of double doctoring but they were all reimbursed with large quantities of fentanyl patches.
- 14 physicians prescribed at least 800 mg daily morphine equivalents to nine of these 27 claimants. This is at least four times the previously recommended watchful dose, or nearly nine times the current recommended watchful dose.

14 physicians prescribed at least 4 times the watchful dose to nine claimants.

In our 2016 analysis, we identified 16 claimants who were reimbursed with large quantities of oxycodone. Among them, three were cancer patients and 13 were non-cancer claimants.

13 non-cancer claimants were reimbursed for large quantities of oxycodone.

- None of the 13 claimants presented clear signs of double doctoring but the individual prescribed quantities for all of them exceeded the guideline for watchful dose for non-cancer patients.
- 17 physicians appeared to have prescribed excessive dosages of oxycodone to these claimants. One of the claimants was prescribed over 800 mg morphine equivalents a day by a physician.

All exceeded the guideline for watchful dose for non-cancer patients.

- 17 physicians prescribed potentially excessive dosages of oxycodone.
Referring the names of physicians to the College of Physicians and Surgeons of Ontario

Based on our consultation with a medical specialist and information provided by the College of Physicians and Surgeons of Ontario about its processes relating to investigating complaints and reports, we are in the process of referring to the College the names of physicians who appeared to have prescribed excessive dosages of fentanyl and oxycodone. Our referral will not consist of any personal identifier information such as employee names as we did not obtain this information during our data analysis or file review.

Referring cases to the Ontario College of Pharmacists

After consultation with the Ontario College of Pharmacists about issues related to the provision of pharmaceutical care which may negatively impact on patient safety, we are referring to the College the cases where pharmacists dispensed potentially excessive dosages of fentanyl and oxycodone for further review and consideration.

Questionable claims for erectile dysfunction drugs

For claimants who were reimbursed for large quantities of erectile dysfunction drugs, Manulife could not provide further information to explain or validate the medical needs of these claims. Our supplementary work found that 10 claimants appeared to have obtained an excessive quantity of on-demand erectile dysfunction drugs from different doctors. This may be a sign of double doctoring and potential benefits abuse. Three examples are provided below:

10 claimants appeared to be "physician shopping" for on-demand erectile dysfunction drugs

Claimant #1

<table>
<thead>
<tr>
<th>Year 2013</th>
<th>Year 2014</th>
<th>Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 108 - Total number of tablets reimbursed</td>
<td>• 522 - Total number of tablets reimbursed</td>
<td>• 420 - Total number of tablets reimbursed</td>
</tr>
<tr>
<td>• Drugs: Cialis 10 mg and 20 mg</td>
<td>• Drugs: Cialis 10mg and 20 mg, Viagra 50 mg and 100 mg, and Levitra 20 mg</td>
<td>• Drugs: Cialis 20 mg, Viagra 50 mg and 100 mg</td>
</tr>
<tr>
<td>• Obtained from 1 pharmacy with prescriptions from 2 general practitioners</td>
<td>• Obtained from 6 pharmacies with prescriptions from 9 general practitioners, 3 of them seemed to work at the same clinic</td>
<td>• Obtained from 4 pharmacies with prescriptions from 5 general practitioners who appeared to work at 3 different clinics</td>
</tr>
</tbody>
</table>

In total, this individual was reimbursed about $15,300 over the three years for on-demand erectile dysfunction drugs. We also noted that the physicians and pharmacies in each of the three years were all different except for one physician and one pharmacy which were used in both 2014 and 2015.
Claimant #2

<table>
<thead>
<tr>
<th>Year 2013</th>
<th>Year 2014</th>
<th>Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 124 - Total number of tablets reimbursed</td>
<td>• 284 tablets of different on-demand drugs and 2,340 tablets of Yohimbine Hydrochloride 2 mg¹</td>
<td>• 360 tablets of Cialis 20 mg and 2,160 tablets of Yohimbine Hydrochloride 2 mg</td>
</tr>
<tr>
<td>• Drugs: Cialis 20 mg, Viagra 100 mg, Levitra 20 mg</td>
<td>• Drugs: Viagra 100 mg, Cialis 20 mg, Levitra 20 mg, and Yohimbine Hydrochloride 2 mg²</td>
<td>• Drugs: Cialis 20 mg, Yohimbine Hydrochloride 2 mg</td>
</tr>
<tr>
<td>• Obtained from 2 pharmacies with prescriptions from a general practitioner and a urologist at the same time</td>
<td>• Obtained from 3 pharmacies with prescriptions from 2 general practitioners</td>
<td>• Obtained from 2 pharmacies with prescription from 1 general practitioner</td>
</tr>
</tbody>
</table>

¹ Based on the claim information, the individual was reimbursed for on average six tablets a day for 390 days’ supply of Yohimbine Hydrochloride in the year 2014, and 360 days’ supply in year 2015.

² Yohimbine Hydrochloride is a drug used to treat erectile dysfunction. It is a form of yohimbine, which is a chemical in the bark of an evergreen tree found in parts of central and western Africa.

Over the three years, the individual was reimbursed for about $15,000 for on-demand erectile dysfunction drugs.

Claimant #3

<table>
<thead>
<tr>
<th>Year 2013</th>
<th>Year 2014</th>
<th>Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 116 - Total number of tablets reimbursed</td>
<td>• 297 - Total number of tablets reimbursed</td>
<td>• 300 - Total number of tablets reimbursed</td>
</tr>
<tr>
<td>• Drugs: Cialis 20 mg, Viagra 25 mg and 50 mg</td>
<td>• Drugs: Cialis 20 mg, Viagra 50 mg and 100 mg</td>
<td>• Drugs: Cialis 20 mg, Viagra 50 mg and 100 mg</td>
</tr>
<tr>
<td>• Obtained from 4 pharmacies with prescriptions from a general practitioner and a psychiatrist</td>
<td>• Obtained from 3 pharmacies with prescriptions from a general practitioner and a psychiatrist</td>
<td>• Obtained from 5 pharmacies with prescriptions from 2 general practitioners and a psychiatrist</td>
</tr>
</tbody>
</table>

In total, the individual was reimbursed of about $10,300 over the three years for these drugs.

A claimant was reimbursed a large quantity of once-a-day and on-demand Cialis in a year

In addition, based on our research and consultations, the once-a-day Cialis should not be taken on the same day as the on-demand tablet, yet two claimants obtained both types on a continuous basis. For example, one claimant was reimbursed 398 tablets of the once-a-day Cialis and 136 tablets of on-demand Cialis in 2015.
<table>
<thead>
<tr>
<th>City's benefits plan has no limit on erectile dysfunction drugs</th>
<th>According to Manulife, many employee benefits plans impose a coverage limit (usually $500 a year) for this type of drugs. However, the City's benefits plans have no limit on erectile dysfunction drugs, which exposes it to unnecessary financial risk and risk of benefits abuse by a small number of plan members. We have recently provided details of our analysis results on the suspicious claims to City management staff for follow up.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some of the unusual claim patterns could be for vacation supply or splitting an expensive drug claim</td>
<td>Based on our sample file review and discussion with Manulife, some of the instances of questionable dispensing patterns noted in our 2016 analysis were for extra drug supplies for vacation, or splitting an expensive drug claim to allow for electronic claim submission under a certain dollar threshold.</td>
</tr>
<tr>
<td>Physician and pharmacy information from paper claims was not inputted into the claim system</td>
<td>Other instances were related to paper claims submitted manually by claimants. For paper claims, Manulife did not record the physician or pharmacy information in its system and its adjudicators approved the claims even when there were warning messages from the Express Scripts Canada's Drug Utilization Review program. Our review of a small sample of claims did not find any clear signs of double doctoring; however, this only represented a small fraction of the 60,000 paper claims reimbursed by Manulife over three years.</td>
</tr>
<tr>
<td>Total 25 recommendations to help improve oversight of drug benefits</td>
<td>Employee drug benefits is an important part of the City's benefits program costing the City approximately $60 million annually. Through our 2016 report and this supplementary report, we have provided a total of 25 recommendations to help improve the City's oversight of employee drug benefits.</td>
</tr>
<tr>
<td>Many instances of potential over-prescribing of fentanyl and oxycodone were noted</td>
<td>While we did not find clear evidence of double doctoring for prescription opioids in our small sample, there appeared to be many instances of potential over-prescribing of fentanyl and oxycodone for City claimants. We believe the City, through its benefits administrator, should report potential instances of over-prescribing of opioids as part of the community efforts to combat the opioid crisis.</td>
</tr>
</tbody>
</table>
Signs of potential double doctoring and benefits abuse for erectile dysfunction drugs were observed among a small number of claimants.

For the erectile dysfunction drugs, we found instances suggesting double doctoring and potential benefits abuse among a small number of claimants. Our findings underscore the importance of a fiscally sound plan design and ongoing monitoring of unusual claim patterns by the City's benefits administrator.

We wish to thank the following individuals and organizations for providing their expert advice and sharing information with us:

- Dr. Juurlink, MD, PhD, FRCPC, Scientist Sunnybrook Research Institute
- The Ontario Pharmacists Association's Drug Information and Resource Centre (DIRC)
- The College of Physicians and Surgeons of Ontario
- The Ontario College of Pharmacists
- The Toronto Public Health
- Pharmacists who wish to remain anonymous

We also express our appreciation for the co-operation and assistance we received from management and staff of Manulife and the City's Pension, Payroll and Employee Benefits Division.

At that time, Manulife (the City's benefits administrator for the period under review) did not provide the Auditor General with access to claim files, claim information (e.g., physician information, days' supply of drugs dispensed), or responses to anomalies identified. Consequently the audit findings and the anomalies identified in that report were based on an analysis of annual claims data without an opportunity to review supporting claim documents or discuss the anomalies with Manulife.

Subsequent to the Phase One report, Manulife agreed to provide access to selected claim files and the specific information relating to those claims. This supplementary report summarizes our follow up results from our review of claim files and additional information provided by Manulife.

Similar to Phase One when we conducted an analysis of claims data, during this supplementary phase, we did not obtain any personal identifier information when following up on the cases with Manulife.
SUPPLEMENTARY AUDIT RESULTS

During the Phase One audit we identified various instances of potentially excessive quantities of certain types of drugs, as well as unusual claims patterns. The following sections contain the results of our supplementary follow up review on the key anomalies followed by specific recommendations.

A. POTENTIALLY EXCESSIVE CLAIMS AND REIMBURSEMENTS FOR CONTROLLED SUBSTANCES

A.1. Potentially Excessive Claims and Reimbursements for Prescription Opioids

Opioids have high tendencies for abuse and diversion

Certain medications have a high tendency for misuse, among them are the opioid pain relievers. According to the Canadian Centre on Substance Abuse, opioid pain relievers, sedatives, and stimulants are the three classes of controlled substances most commonly misused and have high tendencies for abuse and diversion. Long term use of these drugs can "lead to the development of tolerance, which serves to reduce the effects of the drug and prompts users to increase the dose to reinstate the desired effects."

200 mg morphine equivalents per day used to be the watchful dose

According to the Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain, 2010 (the Guideline), the optimal dose for most patients "will be well below a 200-mg morphine equivalent dose per day." This was considered a "watchful" dose for those with non-cancer pain.

The watchful dose was recently lowered to 90 mg morphine equivalents a day

The Guideline was updated in May 2017, strongly recommending physicians to first consider treatments other than opioids for those with chronic non-cancer pain, and to limit the daily dose of opioids to under 90 mg morphine equivalents a day. For those already receiving 90 mg or more morphine equivalents daily, physicians are encouraged to embark on a gradual dose taper.
Long-term use of opioids can be addictive

According to the principal investigator for the Guideline development, "opioids are not first line therapy for chronic non-cancer pain". There is no strong evidence to support long-term use of opioids for people suffering from non-cancer chronic pain, such as back pain, nerve pain and fibromyalgia. It is noted that as many as one out of every eight people taking opioids for chronic pain develops an addiction.¹

Our review was based on the previous watchful dose of 200 mg morphine equivalents

The cases we selected for a further review were based on our initial analysis in 2016, when the recommended watchful dose at the time was 200 mg morphine equivalents. In light of the updated Guideline, this is likely a conservative representation of both the number of individuals and severity at risk of misuse.

Table 1 provides a summary of the major classes of controlled substances and the common types of drugs claimed by City plan members.

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Examples of Drug</th>
<th>Drug Purpose</th>
<th>Average Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioid pain reliever</td>
<td>Methadone, Methadose, Morphone, Oxycodone, OxyNEO, Fentanyl</td>
<td>Primarily used to treat acute and chronic pain, but they can be used to control persistent cough or diarrhea. They can also be used to treat opioid addiction under the supervision of a trained healthcare practitioner.</td>
<td>$1.93 million</td>
</tr>
<tr>
<td>Sedatives</td>
<td>Benzodiazepines: Clonazepam, Rivotril, Lorazepam, Ativan Non-benzodiazepine: Imovane Barbiturates: Nembutal, Amytal</td>
<td>Central nervous system depressants and are mainly used to relieve anxiety, nervousness, and assist with sleep problems.</td>
<td>$515,790</td>
</tr>
<tr>
<td>Stimulants</td>
<td>Methylphenidate, Ritalin, Concerta, Adderall</td>
<td>Increases the level of activity of the central nervous system and are most commonly used to treat individuals diagnosed with attention-deficit hyperactivity disorder.</td>
<td>$680,954</td>
</tr>
</tbody>
</table>

Source: Canadian Centre on Substance Abuse

¹ This column is not from the Canadian Centre on Substance Abuse. It was calculated by the Auditor General's Office using the City's 2013 to 2015 claims data.

¹ "9 Million Prescriptions: What we know about the growing use of prescription opioids in Ontario", 2017, Health Quality Ontario
No clear signs of double doctoring

"Double doctoring" is when an individual deliberately visits more than one physician to obtain prescriptions for more medications than would be prescribed by one physician.

Our further review found that the majority of the claimants were prescribed with fentanyl patches or oxycodone by a single physician. The few claimants who obtained prescriptions from various physicians appeared to be for changing physicians as there was no overlap in prescribing periods among the physicians.

Controls from the Provincial Narcotics Monitoring system

This could be a result of the Provincial Narcotics Monitoring System launched in 2012, which collects dispensing data on all narcotics, controlled substances and other monitored drugs irrespective how the prescription was paid. The system's edits identify potential cases of double doctoring, and then generates a warning to the dispensing pharmacists.

Claims and Reimbursements for Fentanyl

Results from our initial analysis of claim data

Fentanyl is 100 times more potent than morphine

Fentanyl is a painkiller 100 times more potent than morphine and 750 times stronger than codeine. Fentanyl patches are designed to provide hours of steady relief for people suffering from severe chronic pain. Along with oxycodone, it is one of the most common prescription opioids used by members under the City employee benefits plans.

Each fentanyl patch is in general effective up to 3 days

For those City plan members who were reimbursed fentanyl, the majority of them claimed fentanyl patches. According to the drug monograph, fentanyl patches are in general effective up to 72 hours, and therefore an expected yearly supply would be 122 patches per individual.
Based on our 2016 analysis of claim data, 31 claimants (27 active employees and four retirees) were reimbursed more than 18 months’ supply in at least one year between 2013 and 2015.

Results from supplementary review of claim files and additional information from Manulife

Of the 31 claimants who were reimbursed with potentially excessive fentanyl, Manulife indicated that four were cancer patients, and the remaining 27 were non-cancer cases.

We conducted a further review of the 27 non-cancer cases with the supplementary information provided by Manulife. We did not find clear signs of double doctoring, but there is potential of over-prescription of this controlled substance, where claimants were reimbursed exceedingly high doses of fentanyl patches.

According to the morphine equivalence table used by medical professionals, a 50 mcg/hour patch of transdermal fentanyl is equivalent to about 200 mg of morphine.

In addition, based on the drug monograph and the transdermal fentanyl user guide, each fentanyl patch can be effective over 48 to 72 hours. We have also confirmed this application interval with Manulife. As well a person generally should not apply more than one patch at a time unless prescribed by the physician.

Using the morphine equivalent dose of the fentanyl patches and the additional information on the frequency for replacing the patches, we calculated the average daily dosage per claimant. Exhibit 1 details our calculation method.

We originally reported 32 claimants in Phase One report. Our subsequent review found that Manulife created two identification numbers for one claimant who retired during the three years (i.e., one under the active plan and one under the retiree plan). As a result, there were only 31 unique individuals.
24 of the 27 non-cancer claimants were prescribed with fentanyl patches higher than 200 mg morphine equivalents

15 were reimbursed more than double the watchful dose

Based on our review, 24 of the 27 non-cancer claimants were reimbursed with fentanyl patches greater than the approximated 200 mg morphine equivalents per day, the watchful dose in the previous Guideline. The remaining three were reimbursed with fentanyl patches at the watchful dose level.

In particular, 15 of the 27 non-cancer claimants were reimbursed more than double the daily watchful dose, ranging from 100 mcg to 400 mcg /hour fentanyl patches (i.e., 400 mg to 1,600 mg morphine equivalents daily). Table 2 shows the breakdown on fentanyl patches and the daily morphine equivalents of these 15 individuals. Figure 1 provides a graphic display of the 15 claimants and their dosages.

Table 2: The Daily Morphine Equivalents and Number of Prescribing Physicians for the 15 Claimants Reimbursed at Least Double the Watchful Dose for a Year or More

<table>
<thead>
<tr>
<th>Strength of Fentanyl Patches Applied Every Two Days (Mcg/Hour)</th>
<th>Morphine Equivalents Daily (Mg)</th>
<th># of Claimants</th>
<th># of Prescribing Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>1,600</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>300</td>
<td>1,200</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>250</td>
<td>1,000</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>200 to 249</td>
<td>800 to &lt;1,000</td>
<td>5</td>
<td>9*</td>
</tr>
<tr>
<td>100 to 199</td>
<td>400 to &lt;800</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total Sample</strong></td>
<td></td>
<td><strong>15</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

Source: Audit analysis of 2013 to 2015 claims data from Manulife

*One of the claimants had four physicians prescribing 800 to <1,000 mg morphine equivalent daily fentanyl patches during the period
The large dosage was repeatedly prescribed for an entire year or longer. Based on their claim history, the high level of fentanyl prescriptions continued for all 15 claimants throughout an entire year or longer. Four of them were reimbursed for this level for the entire three years from 2013 to 2015. The following are examples of these cases.

Claimant #1 – Large quantities of 100 mcg/ hour fentanyl in one year:

A claimant was reimbursed a total of 763 patches of 100 mcg/ hour fentanyl in 2015, which is equivalent to 1,600 mg morphine per day. This is eight times the 200 mg watchful dose in the previous guideline, and nearly 18 times the 90 mg watchful dose in the current guideline.
Claimant #2 – Large quantities of fentanyl as well as oxycodone:

<table>
<thead>
<tr>
<th>November 2013 to September 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>165 patches of 150 mcg/hr fentanyl</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>October 2014 to December 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>255 patches of 150 mcg/hr fentanyl</td>
</tr>
</tbody>
</table>

Claimant #3 – Large quantities of 100 mcg/hour and 50 mcg/hour fentanyl patches:

<table>
<thead>
<tr>
<th>January 2013 to December 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,095 patches of 100 mcg/hr fentanyl</td>
</tr>
</tbody>
</table>

Claimant #4 – Large quantities of 100 mcg/hour and 50 mcg/hour fentanyl patches:

<table>
<thead>
<tr>
<th>February 2013 to December 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>976 patches of 100 mcg/hr fentanyl</td>
</tr>
</tbody>
</table>
According to a medical specialist we consulted, the dosage prescribed in some of these cases appeared exceptionally high for non-cancer patients.

As shown in Table 2, 14 physicians prescribed at least 800 mg daily morphine equivalents to nine claimants. While two of these physicians had specialty in internal medicine and another one had specialty in emergency medicine, the remaining 11 were general practitioners. These claimants were reimbursed for at least four times the previously recommended watchful dose, or nearly nine times the current recommended watchful dose.

Information will be forwarded to the College and the OCP for their respective review.

Based on our consultation with the medical specialist and staff of the College of Physicians and Surgeons of Ontario (the College), we are in the process of referring to the College the names of physicians who appeared to have prescribed at least 800 mg morphine equivalents a day.

After consultation with the Ontario College of Pharmacists about issues related to the provision of pharmaceutical care which may negatively impact on patient safety, we are referring to the College the cases where pharmacists dispensed potentially excessive dosages of fentanyl for further review and consideration.

Our referrals will not consist of any personal identifier information such as employee names as we did not obtain this information during our data analysis or file review.

Limited Review by Manulife

For 18 of the 27 non-cancer claimants, Manulife had information on the medical diagnosis such as fibromyalgia, chronic pain, musculoskeletal, and rheumatoid arthritis but no information on the medical conditions for the remaining nine. Manulife advised that a claimant's medical diagnosis is not required for reimbursement of narcotic drugs including fentanyl and oxycodone.
From 2013 to 2015, Manulife had selected 12 of the 27 non-cancer claimants for further reviews due to factors such as high utilizations and early refills. Manulife indicated all of the 12 claimants were under the care of a single primary physician and receiving consistent dosages of medication from a single primary pharmacy. This, according to Manulife, justified the large quantities of narcotics for claim reimbursement.

In our file review, we noted that Manulife staff contacted the prescriber or pharmacist for only two claimants. For the other 10, Manulife conducted a review of claim patterns but did not contact the claimants' physicians or pharmacies.

Figure 2 shows a breakdown of the 31 claimants (initially identified in our 2016 analysis) by their illness and Manulife's review.

According to Manulife, it was aware of between 40 and 60 high narcotic drug claimants among City plan members. These heavy users, according to Manulife, showed signs of drug management issues whereby over time the claimant's tolerance level increased in response to increases in the prescribed dosage. However, as an insurance carrier, Manulife does not consider that it has a role to "police" the industry and therefore had not reported any high prescribing cases to the College for investigation.

Source: Audit generated based on information from Manulife
Claims and Reimbursements for Oxycodone

13 of the 16 claimants with potentially excessive oxycodone were non-cancer claimants

Based on additional information from Manulife, three of the 16 individuals identified in the Phase One report with potentially excessive oxycodone were cancer patients and the remaining 13 were non-cancer cases.

Signs of over-prescription

All 13 non-cancer claimants were reimbursed oxycodone above the watchful dose

Nonetheless, all 13 individuals were reimbursed with oxycodone exceeding the 200 mg morphine equivalents daily watchful dose, which is now lowered to 90 mg in the new Guideline. All of them were reimbursed for this level of dosage repeatedly for at least a year, with 10 of them for two or more years.

10 claimants with double the watchful dose

As shown in Table 3, 10 individuals claimed more than double the 200 mg watchful dosage, and the majority of them were prescribed by general practitioners. Figure 3 shows the breakdown of these claimants by morphine equivalent dose.

Table 3: The Daily Morphine Equivalents for the 13 Non-Cancer Claimants Reimbursed Potentially Excessive Oxycodone

<table>
<thead>
<tr>
<th>Daily Dose (Morphine equivalents daily)</th>
<th># of Claimants</th>
<th># of Prescribing Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>800 mg or more</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>500 mg to 799 mg</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>400 mg to 499 mg</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>201 mg to 399 mg</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Source: Audit analysis of 2013 to 2015 claims data from Manulife
We consulted a medical specialist and were advised the dosage reimbursed for certain claimants appeared excessive. A total of 15 unique physicians potentially prescribed the excessive dosages of oxycodone to these claimants.

Similar to the cases involving fentanyl, we are in the process of referring the physician names to the College, and the cases of pharmacists to the OCP.

Our referrals will not consist of any personal identifier information such as employee names as we did not obtain this information during our data analysis or file review.

Limited Review by Manulife

For eight of the 13 non-cancer claimants, Manulife could identify that these individuals were likely suffering from conditions such as fibromyalgia, musculoskeletal, and lower back pain. It did not have any information on the medical diagnosis of the remaining five claimants.
Out of the 13 non-cancer claimants, Manulife had selected nine for further reviews due to factors such as high utilizations and early refills. Manulife indicated these nine claimants were under the care of a single primary physician and receiving consistent dosages of medication from a single primary pharmacy. Therefore it considered the high utilization of narcotics justified for reimbursement.

Manulife contacted three claimants or physicians for verification

However, based on our review of claim files, Manulife only contacted three claimants or their physicians for further information on the narcotic use or prescriptions. Figure 4 shows a breakdown on the 16 claimants by their illness and Manulife's own review.

Figure 4: Breakdown of Claimants with Potentially Excessive Oxycodone Claims

4 of the 13 non-cancer claimants not selected for further review by Manulife were reimbursed more than double the watchful dose

For the remaining four claimants who were not selected for further reviews by Manulife, they were reimbursed 480 mg or 540 mg morphine equivalents a day using the basis of 1 mg of oxycodone to 1.5 mg of morphine. Each of the four claimants was reimbursed for this dosage for a year to three years. These dosage levels were more than double the previously recommended 200 mg morphine equivalents, and far exceed the current 90 mg recommended watchful dose.
<table>
<thead>
<tr>
<th><strong>No clear signs of double doctoring but signs of potential over-prescriptions of fentanyl and oxycodone</strong></th>
<th>Overall, we did not find clear signs of double doctoring among the sampled claimants, but noted many cases where claimants were reimbursed exceedingly high doses of fentanyl or oxycodone, indicating potential over-prescription by physicians, questionable dispensing practices by pharmacists, or potentially fraudulent drug prescriptions. Since we did not have access to medical records or physician prescriptions (which are held by the dispensing pharmacies), this limited our ability to further investigate the legitimacy of these claims.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Findings dovetail with recent research on opioid crisis and trends</strong></td>
<td>Recent research has brought to light an unfolding opioid crisis and increasing trend of opioid prescriptions in Ontario, and has clearly demonstrated the harmful effects of opioid over-prescription leading to addictions and overdoses.</td>
</tr>
<tr>
<td><strong>Suspicious cases of over-prescribing should be reported to the regulatory bodies</strong></td>
<td>While the City has no legal obligation to report the potentially over-prescribing physicians or pharmacists dispensing exceedingly large quantities of opioids to their respective regulatory bodies (such as the College of Physicians and Surgeons of Ontario or the Ontario College of Pharmacists), we believe the City, as a leading public sector organization and as part of the community efforts to combat the opioid crisis, should be vigilant and raise these concerns. To this end, the City should request its benefits plan administrator to monitor and detect potential cases of opioid over-prescription among City plan members, and where appropriate, report these cases to the regulatory bodies for investigation.</td>
</tr>
<tr>
<td><strong>No information to assess the risk of possible drug diversion</strong></td>
<td>In addition, for claimants acquiring an exceedingly large quantity of drugs over a long period, there is the possibility of &quot;diversion&quot; where the prescribed drugs are not used for their intended prescribed purpose. We did not have access to the necessary information to assess this risk during our audit.</td>
</tr>
</tbody>
</table>
It is important that the City undertakes measures to pro-actively assist employees who may be at risk of opioid addiction. The City is restricted by privacy legislation from directly identifying or contacting employees at risk of opioid addiction. However, it should engage its benefits administrator in developing a strategy to provide these employees with the knowledge of and access to available employee assistance programs or services. The focus of this strategy should not be on discipline but on ensuring the health and wellbeing of its employees and the community at large.

**Recommendations:**

1. **City Council request the Treasurer to consult with the City's current benefits plan administrator and the appropriate legislative agencies to determine whether the benefits plan administrator should implement a practice of considering reporting to the appropriate regulatory body, physicians or pharmacists who prescribed or dispensed potentially excessive opioids to claimants.**

2. **City Council request the Treasurer to request the City’s benefits plan administrator to provide individual claimants, who exhibit patterns at risk of opioid abuse or addiction, with information about the available employee assistance programs or services.**

**A.2. Potentially Excessive Claims and Reimbursements for Prescription Sedatives and Stimulants**

Sedatives and stimulants are drugs that are subject to the standard prepayment edits by Express Scripts Canada's Drug Utilization Review (DUR) program, which assesses all electronic claims for potentially dangerous drug interactions, early refills, and duplicate drugs.

Express Scripts Canada is Manulife's pharmacy benefits administrator and is responsible for processing all electronic drug claims from pharmacies. Figure 5 shows the adjudication process of an electronic drug claim.
Prescription sedatives and stimulants are among the many classes of controlled substances that the federal government has “categorized as having a higher than average potential for abuse or addiction.”

During our Phase One audit, we assessed the utilization of the top five benzodiazepines and two non-benzodiazepine sedative drugs. A total of 44 claimants were reimbursed an equivalent of two or more years supply within a one-year period. Three claimants, in particular, were reimbursed annual quantities equivalent to four to six years of supply.

In our subsequent file review, we did not find clear evidence of double doctoring among the majority of the 44 claimants with large quantities of sedative drugs. In most cases, the prescriptions appeared to have been issued by a single physician, or a specialist and a general practitioner.

With regard to the unusual large quantities dispensed, Manulife had not selected any of the 44 claimants for further review. Hence, it could neither explain nor validate the medical needs for such large quantities of sedatives.

In our file review, we noted three cases of large quantities of sedatives dispensed in unusual patterns:

No clear signs of double doctoring in the majority of cases

No other information could be provided to explain the large quantity reimbursed
A claimant obtained lorazepam (a benzodiazepine drug) with prescriptions from a psychiatrist and a general practitioner on multiple occasions over a four-month period. Manulife staff, in reviewing this case, advised that if it had a sedative monitoring tool similar to the one for narcotics, this case would have been identified for a further review by Manulife.

A claimant obtained three different sedative drugs – clonazepam, lorazepam, and zopiclone (the first two are benzodiazepines, a controlled substance) prescribed by two psychiatrists who seemed to work at the same clinic during the same period.

According to the Drug Information and Resource Centre (DIRC) of Ontario Pharmacists Association, typically a person would not need to take all these three drugs at the same time.

A claimant obtained prescriptions for a specific type of sedative (clonazepam) from 17 different general practitioners and another sedative (zopiclone) from a psychiatrist. The drugs were dispensed at four different pharmacies over the three-year period. These 17 general practitioners appeared to be practising in several walk-in clinics. It is not known whether all of the physicians were aware of the drugs prescribed by each other.

In addition, a total of six claimants were reimbursed for different sedatives prescribed by different physicians (in many cases a general practitioner and a specialist) at the same time. It is also not known if both physicians were aware of the drug prescribed by each other.

In summary, the large quantities of sedatives dispensed for a number of claimants continue to be a concern. Manulife's claim files did not contain any additional medical or review information that would allow us to assess the legitimacy of these claims.

As sedatives and stimulants are controlled substances with a higher than average potential for abuse or addiction, in our view, the City's benefits administrator should include this class of controlled substances in its ongoing monitoring.
It is important that the City's benefits plan administrator implements effective ongoing monitoring and controls for these types of drugs. This issue has been addressed in Recommendations 2 and 5 in our Phase One audit report.

B. POTENTIALLY EXCESSIVE CLAIMS AND REIMBURSEMENTS FOR ERECTILE DYSFUNCTION DRUGS

| The City’s benefits plan has no cap on erectile dysfunction drugs | The City reimbursed approximately $1.9 million for erectile dysfunction drugs in 2015. As was discussed in our 2016 audit report, the City’s benefits plan currently does not have an annual coverage limit on this type of drugs, which at least in part contributed to the large cost and quantities of claims observed. |

| On-demand Erectile Dysfunction Drugs | As part of our supplementary work we reviewed the claim files of 44 claimants who obtained at least 180 tablets of on-demand erectile dysfunction drugs in the years 2014 and/or 2015. According to Manulife, its general standard was to reimburse up to eight tablets of on-demand erectile dysfunction drugs per month, or up to 96 tablets per year. |

| Potential Cases of Double Doctoring | Among the 44 claimants, we found ten who appeared to have obtained an excessive quantity of this type of drugs from different physicians. This may be a sign of double doctoring and potential benefits abuse. Our review was based on the drug dispensing dates instead of the physician visit dates as the former was the only information available to us. |

| | Among these claimants there were different claiming patterns of erectile dysfunction drugs, such as obtaining different types of the drugs from different physicians at the same time, obtaining the same drugs from different physicians at the same time, or obtaining different types of the drugs from different pharmacies on the same day. |

| | Listed below are examples of these claims: |
Claimant #1

- In total, this individual was reimbursed about $15,300 over the three years for on-demand erectile dysfunction drugs. We also noted that the physicians and pharmacies used in each of the three years were all different except for one physician and one pharmacy which were used in both 2014 and 2015.

<table>
<thead>
<tr>
<th>Year 2013</th>
<th>Year 2014</th>
<th>Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 108 - Total number of tablets reimbursed</td>
<td>• 522 - Total number of tablets reimbursed</td>
<td>• 420 - Total number of tablets reimbursed</td>
</tr>
<tr>
<td>• Drugs: Cialis 10 mg and 20 mg</td>
<td>• Drugs: Cialis 10 mg and 20 mg, Viagra 50 mg and 100 mg, and Levitra 20 mg</td>
<td>• Drugs: Cialis 20 mg, Viagra 50 mg and 100 mg</td>
</tr>
<tr>
<td>• Obtained from 1 pharmacy with prescriptions from 2 general practitioners</td>
<td>• Obtained from 6 pharmacies with prescriptions from 9 general practitioners, 3 of them seemed to work at the same clinic</td>
<td>• Obtained from 4 pharmacies with prescriptions from 5 general practitioners who appeared to work at 3 different clinics</td>
</tr>
</tbody>
</table>

Claimant #2

- Over the three years, the individual was reimbursed for about $15,000 for on-demand erectile dysfunction drugs.

<table>
<thead>
<tr>
<th>Year 2013</th>
<th>Year 2014</th>
<th>Year 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 124 - Total number of tablets reimbursed</td>
<td>• 284 tablets of different on-demand drugs and 2,340 tablets of Yohimbine Hydrochloride 2 mg¹</td>
<td>• 360 tablets of Cialis 20 mg and 2,160 tablets of Yohimbine Hydrochloride 2 mg</td>
</tr>
<tr>
<td>• Drugs: Cialis 20 mg, Viagra 100 mg, Levitra 20 mg</td>
<td>• Drugs: Viagra 100 mg, Cialis 20 mg, Levitra 20 mg, and Yohimbine Hydrochloride 2 mg²</td>
<td>• Drugs: Cialis 20 mg, Yohimbine Hydrochloride 2 mg</td>
</tr>
<tr>
<td>• Obtained from 2 pharmacies with prescriptions from a general practitioner and a urologist at the same time</td>
<td>• Obtained from 3 pharmacies with prescriptions from 2 general practitioners</td>
<td>• Obtained from 2 pharmacies with prescription from 1 general practitioner</td>
</tr>
</tbody>
</table>

¹ Based on the claim information, the individual was reimbursed for on average six tablets a day for 390 days' supply of Yohimbine Hydrochloride in the year 2014, and 360 days' supply in year 2015.

² Yohimbine Hydrochloride is a drug used to treat erectile dysfunction. It is a form of yohimbine, which is a chemical in the bark of an evergreen tree found in parts of central and western Africa.
Claimant #3

- In total, the individual was reimbursed about $10,300 over the three years for these drugs.

Claimant #4

- Over the three years, the individual was reimbursed about $11,600 for these drugs.
  On many occasions, the claimant obtained different erectile dysfunction drugs prescribed by different physicians on the same day from the pharmacy.

Claimant #5

- This individual in total was reimbursed about $4,400 for these drugs over the two years.
Case information has been forwarded to City management

While the quantity of drugs, the number of physicians, and the number of pharmacies varied amongst the 10 cases, they all show questionable patterns that, in our view, should have been followed up by Manulife. We have recently forwarded our analysis results for these 10 claimants to the City’s Pension, Payroll and Employee Benefits Division (PPEB) for further review.

Manulife had no other monitoring tool for erectile dysfunction drugs

Similar to prescription sedatives, the erectile dysfunction drugs that were submitted directly by a pharmacy on behalf of the claimants were only subject to the standard prepayment edits by Express Scripts Canada. Manulife did not have other post payment system controls to flag this type of questionable pattern. As a result, Manulife could not provide further information to explain or validate the claims we identified, and had no other drug related information other than the claim data.

System allowed claimants to be reimbursed different erectile dysfunction drugs at the same time

These claims were not flagged or rejected by the Express Scripts Canada's drug claim processing system because drugs were assessed based on their chemical molecules. Since various erectile dysfunction drugs are made of different chemicals (e.g., Cialis is tadalafil while Viagra is sildenafil), the system therefore considered them different drugs although they have the same therapy class treating the same medical condition. Consequently, individuals can be reimbursed for different types of erectile dysfunction drugs at the same time.

Cases of Excessive Quantities

Of the 44 claimants we reviewed, they were reimbursed between 180 and 522 on-demand tablets within a year compared to Manulife's standard practice of reimbursing 96 tablets. According to the Drug Information and Resource Centre (DIRC), there is no yearly threshold for on-demand erectile dysfunction drugs. There are a number of off-label usages for this type of drugs besides erectile dysfunction. For instance, Cialis (tadalafil) 20 mg daily or Viagra (sildenafil) 20 mg can be used up to three times daily for treatment of Raynaud Phenomenon. The off-label purposes would require a patient to take the drug on a daily basis. We could not verify the need for large quantities of these drugs because Manulife did not collect any health related information prior to approving reimbursements.
14 claimants showed a significant year-to-year increase in reimbursed quantities

Among the 44 claimants we reviewed, 14 exhibited a significant year-to-year increase in their claims for this type of drugs even though they had no signs of "double doctoring". For example,

- A claimant was reimbursed for 113 tablets of on-demand drugs in 2013. This was increased 45 per cent to 164 tablets in 2014, and further increased 71 per cent to 280 tablets in 2015.

- Another claimant was reimbursed for 44 tablets of on-demand drugs in 2013. This was increased 164 per cent to 116 tablets in 2014, and further increased 121 per cent to 256 tablets in 2015.

Based on research and our discussion with a pharmacist, a person should not take different types of erectile dysfunction drugs at the same time. According to the Drug Information and Resource Centre (DIRC), when a person switches between sildenafil (generic of Viagra) and tadalafil (generic of Cialis), the washout period between these two drugs would be one to two weeks.

5 claimants obtained different types of on-demand drugs at the same time

We found five claimants who obtained different types of on-demand erectile dysfunction drugs at the same time from a pharmacy on a continuous basis over the audit period. For example, a claimant, who on many occasions obtained both Cialis and Viagra at the same time from a pharmacy, was reimbursed a total of 108 tablets of Cialis and 108 tablets of Viagra in a year.

No further information available to validate these claims

Since Manulife had no other monitoring tools to assess these claims, it could not provide further information to explain the significant increases, large quantities, or unusual claim patterns. Also, as we had no access to medical records or physician prescriptions held by dispensing pharmacies, we were limited in our ability to further investigate the legitimacy of these claims.

After consultation with the Ontario College of Pharmacists (OCP), we are considering referring the cases where there appeared to be questionable dispensing patterns to the OCP for further review.
Once-a-day Cialis

In our Phase One data analysis, we identified that 16 claimants were reimbursed more than 13 months’ supply (i.e. more than 395 tablets) of once-a-day Cialis in at least one year between 2013 and 2015. Our further review found that, based on the specialty of prescribing physicians, five of these 16 claimants likely had medical reasons to obtain this type of drugs. The prescribers for the remaining 11 claimants were general practitioners.

Based on the drug information, the once-a-day Cialis should not be taken on the same day as the on-demand tablet. The Drug Information and Resource Centre (DIRC) also confirmed there is no information to suggest that on demand and once-a-day Cialis should be taken on the same day.

Among the 11 claimants with prescriptions from general practitioners, we noted two claimants in particular:

- A claimant was reimbursed 398 tablets of once-a-day Cialis and 136 tablets of on-demand Cialis in 2015.
- A claimant was reimbursed 416 tablets of once-a-day and 36 tablets of on-demand Cialis in 2014. The individual was reimbursed 278 tablets of once-a-day and 36 tablets of on-demand Cialis in 2015.

In addition, one claimant was reimbursed for 600 tablets of 5 mg once-a-day Cialis for 200 days' supply in 2015, suggesting a daily dosage of three once-a-day tablets per day. The drug monograph indicated that only one tablet of 5 mg should be taken per day.

Based on the prescription history and prescribing physicians, none of the 16 claimants showed clear signs of double doctoring as their claims were prescribed by either a single physician, or multiple physicians without overlapping.

In total, 20 unique claimants showed questionable claim patterns for erectile dysfunction drugs, including significant year-to-year increases, obtaining different types of on-demand drugs, and obtaining once-a-day and on-demand drugs at the same time.

<table>
<thead>
<tr>
<th>Claimant Pattern</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>None presented clear signs of double doctoring</td>
<td>Based on the prescription history and prescribing physicians, none of the 16 claimants showed clear signs of double doctoring as their claims were prescribed by either a single physician, or multiple physicians without overlapping.</td>
</tr>
<tr>
<td>One claimant was reimbursed 600 tablets of once-a-day Cialis in a year</td>
<td>In addition, one claimant was reimbursed for 600 tablets of 5 mg once-a-day Cialis for 200 days' supply in 2015, suggesting a daily dosage of three once-a-day tablets per day. The drug monograph indicated that only one tablet of 5 mg should be taken per day.</td>
</tr>
<tr>
<td>A claimant was reimbursed large quantity of once-a-day and on-demand Cialis in a year</td>
<td>Among the 11 claimants with prescriptions from general practitioners, we noted two claimants in particular:</td>
</tr>
<tr>
<td>While 5 of the 16 claimants likely had medical reasons, there was no clear medical justification for the remaining 11 claimants</td>
<td>In our Phase One data analysis, we identified that 16 claimants were reimbursed more than 13 months’ supply (i.e. more than 395 tablets) of once-a-day Cialis in at least one year between 2013 and 2015. Our further review found that, based on the specialty of prescribing physicians, five of these 16 claimants likely had medical reasons to obtain this type of drugs. The prescribers for the remaining 11 claimants were general practitioners.</td>
</tr>
</tbody>
</table>

30
We were informed by Manulife that many employee benefits plans impose a coverage limit (usually $500 a year) for erectile dysfunction drugs. However, the City's benefits plans have no limit on this type of drugs, which exposes it to unnecessary financial risk and risk of benefits abuse.

Recommendations:

3. City Council request the Treasurer to clarify with the City's benefits plan administrator its practice of adjudicating erectile dysfunction drugs to identify anomalies such as excessive dosage, significant year-over-year increases, and obtaining multiple types of drugs at the same time.

4. City Council request the Treasurer to follow up on the claimants identified in this supplementary report whose claims for erectile dysfunction drugs appeared to be questionable and to determine whether there was waste or abuse of employee drug benefits by these claimants.

C. UNUSUAL CLAIMS AND DISPENSING PATTERNS

In our initial data analysis, we identified unusual patterns of claims where:

- Multiple claims for the same class of controlled substances were dispensed within seven days at different pharmacies.

- Multiple claims for the same drug were dispensed at the same or different pharmacies on the same day.

- Multiple claims for methadone were dispensed at different pharmacies on the same day.

Since there was limited information in the system data, to follow up on these claims, we could review only a small number of individual claim files and supporting documents at Manulife’s premises during our supplementary review.
Based on our sample review, some of the unusual patterns could be attributable to reasons such as:

- Claimants obtaining extra drugs for vacation supply
- Pharmacists splitting the cost of an expensive drug to multiple claims to bypass the dollar limit for electronic claim submission\(^3\)
- Claimants receiving multiple injections of the same drug on the same days
- Claimants submitting additional claims for the same drugs so that they can be reimbursed for the costs for brand name drugs deemed necessary by their physicians

Notwithstanding the above, in some cases, our initial concern about the unusual dispensing patterns may still be valid, because the automatic drug claim processing system (i.e. DUR edits) did generate messages to the dispensing pharmacists warning issues such as the prescription being refilled too soon. However, the pharmacists could override the warnings and still process the claim. In these instances, we have no means of verifying the legitimacy of these claims.

In addition, a number of the sampled cases consisted of a combination of electronic and paper claims from the same pharmacy. When a claimant submitted a paper drug claim directly to Manulife for reimbursement, Manulife adjudicator did not record the prescriber or pharmacy information in the system.

\(^3\) While not ideal from a control perspective, we believe this is due to system limitations rather than any impropriety on the pharmacists' part.
Warning messages from the claim processing system were overrode by adjudicators for paper claims

Irrespective of whether the claims were filed electronically or via paper submissions, the drug claim processing system would normally generate warning messages for various reasons including when the drugs were refilled too early. However, among all of the sampled cases we reviewed, Manulife adjudicators overrode the warnings and reimbursed the claims. Manulife staff explained that these claims were reimbursed because the claimants had already paid out-of-pocket and the drugs had already been dispensed by the pharmacists. Over the three years under review, there were about 60,000 paper claims from City plan members totaling $3.8 million in reimbursements.

Because we could only review a small number of claim files on site, the vast majority of claims with unusual patterns were not within our sample and therefore we could not determine whether these claims involved multiple physicians or pharmacies.

Recommendation:

5. **City Council request the Treasurer to ensure that the City's benefits administrator records the necessary prescriber and pharmacy information from paper claims, and has in place effective monitoring and tools for analysis of claim patterns accounting for both electronic and paper submissions.**

**D. OTHER AREAS**

**D.1. Over-the-Counter Drugs**

In addition to coverage for prescription drugs, the City’s benefits plans also cover certain over-the-counter drugs as long as they are for life sustaining purposes.

Our 2016 analysis of claim data identified approximately $64,205 in reimbursements for 69 different over-the-counter drugs that did not appear to have a life sustaining purpose, including drugs for skin conditions, miscellaneous eye diseases, allergy, sunscreen agents and coughs and colds.
During our subsequent review, we selected a sample of eight of the 69 over-the-counter drugs for further review, and noted the lack of a formal process for authorizing or documenting individual exceptions.

One claimant has been reimbursed for purchases of non-life sustaining over-the-counter sunscreen agents. Manulife had documented in its system notes that the claimant was granted exception since 2003. However, Manulife indicated that its retention period has passed and hence, no formal documentation was kept to support such an approval from City staff. We followed up with the City staff overseeing the administration of employee benefits, and were advised that they were not aware of and have no record of such an approval.

The City currently has no procedure in place for authorizing or waiving specific coverage limits for individual plan members under certain medical circumstances. In our latest audit of the City's extended health benefits, we highlighted the need for the City to develop a formal approval process for granting benefits exceptions and this should be extended to include drug benefits approval.

**Dispensing fee for over-the-counter drugs**

Over-the-Counter drugs are medications that can be purchased without a prescription such as off-the-shelf Aspirin. However, in order to have the purchases reimbursed under the benefits plan, Manulife required that the purchases be processed by licensed pharmacists following the same claim submission process for prescribed medication.

In our 2016 audit report we highlighted that, from 2013 to 2015, the City paid a total of $564,590 for over-the-counter drugs, in which about 67 per cent, or $375,906, was for dispensing fees charged by pharmacies.

We have been informed by PPEB management that they have since been working with the current plan administrator (Green Shield Canada) to develop ways to minimize the dispensing fees for over-the-counter drugs.
Some of the issues relating to over-the-counter drug reimbursements have already been addressed in Recommendation 7 in our previous audit report. One new recommendation is included in this supplementary report due to the additional issues noted in our file review.

**Recommendation:**

6. City Council request the Treasurer to put in place a written policy and procedure on granting of exception cases for employee drug benefits. The reason, the specific drug, and period in effect should be documented and retained.

**D.2. Dispensing Fees Over the Plan Coverage Maximum**

The City’s benefits plans include coverage for drug dispensing fees to a maximum limit. The benefits administrator should reimburse dispensing fees according to the maximum limit stipulated in each benefits plan.

| The majority of drugs are subject to a $9 maximum dispensing fee paid by the City | For active employees, their spouses and dependents, and certain groups of retirees, the majority of drugs are subject to a maximum dispensing fee of $9 under the City’s benefits plans. Exceptions to this limit are either compound drugs for which a pharmacist combines, mixes or alters ingredients of a drug to create a medication tailored to the need of the individual, or an exception approval is granted to allow a higher dispensing fee amount. |
| Pharmacists can charge more than $9 maximum dispensing fee for compound drugs or vacation supply | As part of our 2016 claim data analysis, we noted that a total of 22,269 drug claims were reimbursed for dispensing fees higher than the $9 maximum. In our subsequent review of a sample of claims and discussion with Manulife, the majority of the sampled claims with dispensing fees over $9 were coded by pharmacists as compound drugs, or for vacation supply. The compound drug code was not included in the claim data set provided to us in 2016. |

For vacation supply, we were informed that it is Manulife's practice to allow a pharmacy to charge up to double the $9 plan maximum. It will be prudent for City staff to clarify with its current benefits administrator how and the dollar limit it applies for reimbursing dispensing fees for vacation supply.
Recommendation:

7. City Council request the Treasurer to clarify with the City’s benefits plan administrator its practice of reimbursing dispensing fees for vacation supply to ensure it is consistent with the City’s benefits plans.

D.3. Reversal and Offsetting Entries

In our 2016 claims data analysis, we identified approximately $2 million in reversal transactions from 2013 to 2015 that needed to be discussed with Manulife in greater detail.

Explanations obtained for a small sample of reversal transactions

During our supplementary work, we selected a sample of 20 reversal entries for further discussion with Manulife. Based on Manulife’s further explanations and information, most of these entries were for replacement cheques, corrections of paid history, and adjustments for overpayment made to claimants due to adjudication errors and fraud identified. As a result, Recommendation 13 in our previous report regarding the review of cases of billing reversal with Manulife is no longer needed.

City does not receive periodic report on overpayments

We were informed by the City PPEB staff that it does not receive periodic reports from Manulife on overpayments made to claimants. As a result, the City would not know if Manulife had applied the correct credit entries to the City for recovery of overpayment from claimants.

The need for the benefits administrator to provide City staff with necessary information to facilitate reviews of accuracy of invoiced amounts, and reasonableness of billing reversals and related recoveries has already been addressed in Recommendation 14 in our 2016 audit report.
D.4. Applicability to City Agencies

While we did not conduct a specific audit of employee drug benefits of the Toronto Police Service or the Toronto Transit Commission, the findings and recommendations contained in this report may be applicable to the two agencies as they use the same benefits administrator as the City, and share a number of common provisions in their respective benefits plans.

Recommendation:

8. City Council request the City Manager to forward a copy of the audit report to the Toronto Police Services Board and the Toronto Transit Commission Board for their information.

CONCLUSION

25 recommendations to help improve oversight of employee drug benefits

Employee drug benefits is an important part of the City's benefits program costing the City approximately $60 million annually. Through our 2016 report and this supplementary report, we have provided a total of 25 recommendations to help improve the City's oversight of employee drug benefits.

While we did not find clear evidence of double doctoring for opioids prescriptions in our small sample, there appeared to be instances of potential over-prescribing of fentanyl and oxycodone for City claimants.

Cases of potentially over-prescribing or dispensing of opioids are being referred to the regulatory bodies

We are in the process of referring, to the appropriate regulatory bodies, the names of the physicians who appeared to have prescribed exceedingly large quantities of opioids (fentanyl and oxycodone), and the pharmacists who dispensed exceedingly large quantities of such drugs to City's claimants.
Cases of potential double doctoring and unusual patterns of erectile dysfunction drugs have been referred to City staff. For the erectile dysfunction drugs, we found instances suggesting double doctoring and potential benefits abuse among a small number of claimants. Our findings underscore the importance of a fiscally sound plan design and ongoing monitoring of unusual claim patterns by the City’s benefits administrator. We have recently referred the unusual cases of erectile dysfunction drugs to City staff for a further review.

**AUDIT OBJECTIVES, SCOPE AND METHODOLOGY**

This report presents the findings from our subsequent review and analysis of additional information to the Phase One audit. The Auditor General’s Office issued the Phase One audit report on City’s employee drug benefits in October 2016 as part of the Auditor General’s 2016 Audit Work Plan. This report is a supplementary to the Phase One audit, and it summarizes the findings from our review and analysis of additional information provided by Manulife subsequent to the issuance of the Phase One audit report.

**Phase One audit objectives**

The objective of the Phase One audit was to assess whether the City’s Pension, Payroll and Employee Benefits Division (PPEB) has effective systems and procedures in place to:

- Manage employee drug benefits in a cost effective manner,
- Ensure the City receives effective and timely claims administrative services for drug benefits, and
- Monitor the benefits plan administrator’s performance for effectiveness and compliance with the contract.

**Supplementary audit work**

The supplementary audit included work in the following areas:

- Drug claims data for the three years from January 2013 to December 2015
- City policies, procedures, guidelines, negotiated agreements
- Manulife’s claims adjudication and ongoing monitoring processes related to City’s drug benefits claims
<table>
<thead>
<tr>
<th>Audit methodology</th>
<th>The audit methodology included:</th>
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<tr>
<td></td>
<td>• Analysis of drug claims and reimbursements for 2013 to 2015</td>
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<td>• Review of the City’s policies and benefits plans</td>
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<td>• Review of literature and studies</td>
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<td>• Review of drug monographs and relevant information on utilization of specific drugs</td>
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<td>• Review of claim file information on specific claims at Manulife’s premises</td>
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<td>• Meetings with Manulife staff</td>
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<td>• Consultations with a medical specialist and licensed pharmacists</td>
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<td>• Consultations with staff at various regulatory bodies</td>
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| Compliance with generally accepted government auditing standards | We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. |
Although each fentanyl patch is effective for up to 72 hours, from review of additional information provided, we found that a person could replace a fentanyl patch every 48-hour. Our consultation with the expert advisor indicated that, at most a fentanyl patch could be replaced every two days but it would not be reasonable to replace it on a daily basis or on a more frequent basis.

A 50 mcg/hour patch of transdermal fentanyl is equivalent to 180 to 224 mg of morphine.

Manulife did not have the prescribing information such as the prescribed replacement interval for each patch. Hence to be conservative, we estimated the daily morphine equivalents for these claimants on the basis of replacing a patch every two days unless the claims data showed a strong pattern of replacing a patch every three days.
Appendix 1: Management’s Response to the Auditor General’s Supplementary Report to the Auditor General’s Phase One Report: "The City Needs to Ensure Adequate Detection and Review of Potentially Excessive and Unusual Drug Claims"

**Recommendation #1:** City Council request the Treasurer to consult with the City's current benefits plan administrator and the appropriate legislative agencies to determine whether the benefits plan administrator should implement a practice of considering reporting to the appropriate regulatory body, physicians or pharmacists who prescribed or dispensed potentially excessive opioids to claimants.

**Management Response:** ☒ Agree ☐ Disagree

**Comments/Action Plan/Time Frame:**

The City's current benefit plan administrator has advised that the industry uses an electronic claims standard (Canada Pharmacist Association - CPhA v.3) that does accommodate a field for pharmacy to render the prescriber ID (maximum 5 characters). Although this field is mandatory for transmitting a claim, it is not a verifiable field. Entering of the prescriber ID is the responsibility of the pharmacist at the time of electronic submission. Although regulations mandate that all Ontario prescriber prescriptions contain the prescriber ID, there is always the concern that entry errors at the pharmacy level can render the information invalid.

The plan administrator’s narcotic policy has a process for reporting over-prescribers that do not provide adequate responses when questioned about their prescribing to the College of Physicians and Surgeons of Ontario.

Note that Ontario has a Narcotic Monitoring System in place through the Ministry of Health to detect over-prescribing of opioids. All prescriptions whether paid for by public or private drug plans need to be submitted to this system. Any anomalies in the prescribing of opioids are then flagged and the respective regulatory College is notified of the pattern.

It is believed that these systems provide appropriate oversight of physicians prescribing opioids and that custom reporting will bring no additional value.

Q4, 2017

The Treasurer and Director of Pension, Payroll & Employee Benefits will consult with the benefits plan administrator and the Ministry of Health to consider the appropriateness of the benefit plan administrator reporting to the regulatory bodies.

**Recommendation #2:** City Council request the Treasurer to request the City's benefits plan administrator to provide individual claimants, who exhibit patterns at risk of opioid abuse or addiction, with information about the available employee assistance programs or services.

**Management Response:** ☒ Agree ☐ Disagree

**Comments/Action Plan/Time Frame:**

The City’s current benefits provider advised that through their control process the plan administrator will monitor the following aspects:

- Plan members exceeding the watchful dose as established by the prescribing guidelines for narcotics, of opioid use for pain
• High quantities of opioids dispensed, but not necessarily hitting the narcotic process due to lower dollar value.
• Plan members being dispensed quantities that don’t support the treatment plan (i.e. treatment plan would support a total quantity of XX amount of tablets to be needed but the physician is prescribing higher quantities)
• Multiple doctors
• Multiple pharmacies
• Early dispensing

The plan administrator’s narcotics policy functions in a manner that rather than referring the employee to EAP, it refers them back to their physician for a discussion on whether this level of prescribing is appropriate.

The plan administrator has also confirmed that they cannot disclose any personal information to the City about individual claims, except where there is fraudulent behavior.

Q3, 2017

The Director, Pension, Payroll & Employee Benefits will work with the plan administrator to also include information about the City’s EAP program when they refer an employee back to their physician, having regard to the applicable legislation and collective agreements.

Recommendation #3: City Council request the Treasurer to clarify with the City’s benefits plan administrator its practice of adjudicating erectile dysfunction drugs to identify anomalies such as excessive dosage, significant year-over-year increases, and obtaining multiple types of drugs at the same time.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:
Q3, 2017
The Director, Pension, Payroll & Employee Benefits, will meet with the current benefits plan administrator to discuss their administrative policies for erectile dysfunction and opportunities to include appropriate assessments tools and monitoring to identify anomalies and that, where applicable, the anomalies are reviewed and assessed.

Recommendation #4: City Council request the Treasurer to follow up on the claimants identified in this supplementary report whose claims for erectile dysfunction drugs appeared to be questionable and to determine whether there was waste or abuse of employee drug benefits by these claimants.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:
Q4, 2017
The Treasurer and the Director, Pension, Payroll & Employee Benefits will contact Manulife and follow up on the 14 claimants to request a review of the files to determine if there has been any waste or abuse and to ensure that the claims have been adjudicated in accordance with the City’s benefit plans.
Recommendation #5: City Council request the Treasurer to ensure that the City's benefits administrator records the necessary prescriber and pharmacy information from paper claims, and has in place effective monitoring and tools for analysis of claim patterns accounting for both electronic and paper submissions.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:
The City's current benefit plan administrator has advised that the industry uses an electronic claims standard (Canada Pharmacist Association - CPhA v.3) that does accommodate a field for pharmacy to render the prescriber ID (maximum 5 characters). Although this field is mandatory for transmitting a claim, it is not a verifiable field. Entering of the prescriber ID is the responsibility of the pharmacist at the time of electronic submission. Although regulations mandate that all Ontario prescriber prescriptions contain the prescriber ID, there is always the concern that entry errors at the pharmacy level can render the information invalid.

The physician’s CPSO number does not appear on pharmacy receipts therefore the prescriber information cannot be captured. Although the prescriber’s name is provided, recording a name would not be relevant if there are several prescribers in the province with the same name and no other identifier available on the receipt for verification.

Note that paper claims only represent approximately 2% of all drug claims, therefore this would not change any conclusions on who is prescribing inappropriately.

Q4, 2017
The Director, Pension, Payroll & Employee Benefits, in consultation with Legal, will meet with the current benefits plan administrator to discuss any potential opportunities of recording the prescriber and pharmacy information and ensure they have in place effective monitoring and tools for analysis of claim patterns for both electronic and paper submissions.

Recommendation #6: City Council request the Treasurer to put in place a written policy and procedure on granting of exception cases for employee drug benefits. The reason, the specific drug, and period in effect should be documented and retained.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:
Q3, 2017
The Director of Pension, Payroll & Employee Benefits, in consultation with Employee & Labour Relations and Legal Services, will develop a protocol and process to be followed when considering changes to the City's health benefits and/or processes.

Such protocol will include: proper documentation of the issues and the recommended changes; the appropriate approval process; and the appropriate record retention of the documentation in accordance with the City retention by-laws.

The protocol will include provisions for the appropriate process for granting exceptions. The protocol will also include follow-ups and checks to ensure that any change is implemented by the benefits administrator according to the City's direction.
**Recommendation #7:** City Council request the Treasurer to clarify with the City's benefits plan administrator its practice of reimbursing dispensing fees for vacation supply to ensure it is consistent with the City's benefits plans.

**Management Response:** ☒ Agree ☐ Disagree

**Comments/Action Plan/Time Frame:**
Q3, 2017
The Director, Pension, Payroll & Employee Benefits will meet with the current benefits plan administrator to discuss the administration of the dispensing fee reimbursement for drug claims for vacation supply to ensure that the reimbursements are paid in accordance with the City's benefit plans.

**Recommendation #8:** City Council request the City Manager to forward a copy of the audit report to the Toronto Police Services Board and the Toronto Transit Commission Board for their information.

**Management Response:** ☒ Agree ☐ Disagree

**Comments/Action Plan/Time Frame:**
Immediately After Council Approval

The City Manager will forward a copy of the audit report, as adopted by City Council, to the Toronto Police Services Board and the Toronto Transit Commission Board. The Strategic and Corporate Policy Division, through its governance liaison function, will follow up with both Boards to coordinate responses to any questions or concerns.