

AU6.4 Attachment 1



Dental Benefit Claims

Continuous Controls Monitoring Program: Opportunities to Reduce Cost of Dental Benefits

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Auditor General

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Executive Summary

The City provides extended health and dental benefits coverage to its employees

Out of \$152 million benefits cost for 2019, \$51.9 million was for dental benefits

Five years dental benefits expenses

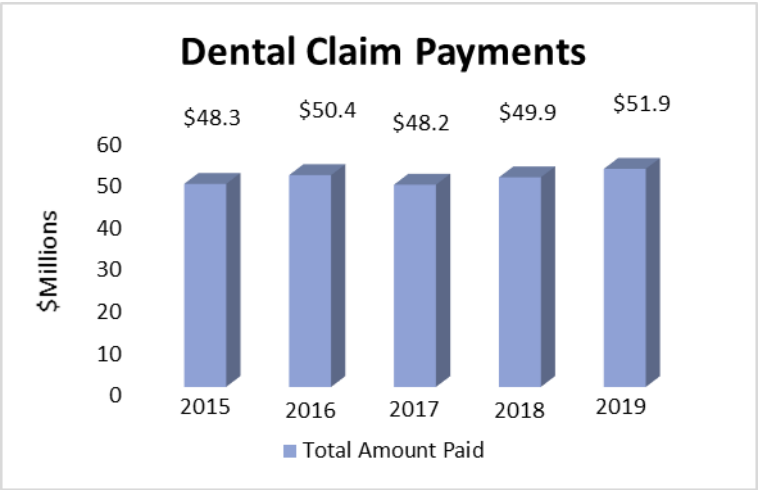
The City of Toronto (City) provides extended health and dental benefits coverage to its employees and retirees, their spouses and eligible dependents in accordance with City policies and collective agreements.

Providing extended health and dental benefits helps the City to attract talent and maintain a healthy and productive workforce. However, it is also important to monitor benefit claims and control costs.

In 2019, according to the benefits plan administrator’s annual report, the City spent \$152 million to provide employee health benefits, including coverage for chiropractors, registered massage therapists, hospital treatments, prescription drugs, vision and dental benefits. Dental coverage amounted to \$51.9 million or 34 per cent of total benefit costs in 2019.

In the past five years dental benefits increased from \$48.3 million in 2015 to \$51.9 million in 2019 – representing an overall increase of \$3.6 million or 7.4 per cent.

Figure 1: Dental Claim Payments, 2015 – 2019*



*These figures are from the administrator’s year-end report. For our analysis, we used raw data from actual paid claims. The total paid amounts for 2017 (\$47.3 M) to 2018 (\$49.2 M) varies with the figures provided in the above chart due to timing differences for adjustments and reversals.

**Auditor General
analyzed dental claims
data from 2017 - 2018**

Even though the City's benefits plan administrator uses tools to prevent and detect fraudulent activity, it is important for the City to strive for continuous improvement in plan design and monitor claims. The Auditor General analyzed dental claims data for the period from January 1, 2017 to December 31, 2018.

**In 2018, 80,059
individuals eligible for
City's benefit plan.
61,787 or 77% used
dental benefits**

From 2017 to 2018 the City spent \$98.1 million to provide employee dental benefits coverage. Approximately 1.2 million dental claims were submitted over two years. For 2018, there were 80,059 individuals eligible for the City's health benefit plans and 61,787 (77%) plan members used dental benefits.

**Cost containment is
especially important
when the City is facing
significant financial
constraints**

This is our first Continuous Controls Monitoring (CCM) report on dental benefit claims. It is a very complex area. The objective of the CCM program is to proactively monitor claim transactions to identify opportunities for reducing benefit costs and improve plan design. Cost containment is especially important when the City is facing significant financial constraints.

We used data analytics tools and techniques to assess key trends and anomalies. It is management's responsibility to validate the data and the results. While no detailed audit work was performed by our Office, the analysis and results were verified by management and the benefits plan administrator.

Management's response to our recommendations is attached as Appendix 1.

We recommended in our 2017 audit of employee health benefits that the City arrange an independent review of the new plan administrator's adjudication system to verify that claims were being processed as intended. The independent review by a third-party professional services Firm completed in January 2020 found that controls are good.

Overall Findings

What we found:

1. Overall, we found the benefits plan administrator has good controls in place to adjudicate claims.
2. We also found that there are plan design opportunities to consider going forward, including significant savings by modifying the plan design to include co-insurance and/or annual maximums in various dental service categories.
3. There is a need to develop an employee benefits information guide and online training material for dental billing practices to assist plan members to make informed decisions and verify whether the fees being charged by dentists are reasonable.

Our report includes recommendations for the City to evaluate the current plan design for cost saving opportunities, further review some outlier claims, enhance monitoring controls, and to provide training for plan members to understand their plan coverage and related service fees.

The work contained in this report is not an audit. We used extensive data analytics techniques combined with selective testing. We followed-up all observations with the plan administrator. We believe that we have performed sufficient work to form the conclusions we have made in this report.

Opportunities to Reduce Dental Benefit Costs

Dental services fall under 4 major categories

There are four categories of dental services covered by the City's benefit plan. These are basic services, comprehensive basic services, major services and orthodontics. Details of these services are described in Section A.1.

Figure 2: Cost Saving Strategies



Financial challenges due to COVID-19

During these uncertain times the economic impact of the coronavirus (COVID-19) pandemic on the City is significant. There is a need to explore all opportunities to reduce costs. This report identifies opportunities where cost savings are possible.

Cost saving opportunities exist

We have provided examples where some changes to the plan's design could result in a significant reduction of employee benefit costs. These include employees sharing a portion of the cost of the benefit plan with the City.

Plan Design Changes: Establishing Co-insurance Payments by Plan Members

City pays 100% basic and comprehensive dental services

Currently, the City pays 100 per cent of dental procedures for basic services and comprehensive basic services.

Province of Ontario and Government of Canada pay 85% and 90%

Co-insurance is the percentage of the cost a plan member pays for a dental procedure. It is common for organizations to require plan members to pay for a certain amount of a claim. For example, the Province of Ontario and Government of Canada pay 85 and 90 per cent of the cost of basic and comprehensive basic services. The remainder is paid by plan members.

Co-insurance payments by plan members will reduce costs

Table 1 provides the potential cost reductions from using a range of co-insurance payments by plan members. The savings for dental are in the range of \$1.7 million to \$4.9 million annually, or \$8.5 million to \$24.5 million over five years.

Combined savings over 5 years may range from \$27.5 - \$80.5 M

If co-insurance payments are extended across drug and other health benefits plans the potential combined savings over five years may range from \$27.5 - \$80.5 million. These changes could result in more additional savings due to the potential reduction in use of some benefit services.

At a time when many organizations are struggling and the City is faced with unprecedented cost pressures to provide services, paying 5 to 15 cents on the dollar by plan members could go a long way to support the City and the provision of services to citizens.

Table 1: Potential Savings from Co-insurance Payments for Dental, Drug and Other Health Benefits

Description	Dental Basic & Comprehensive	Drug Benefits	Other Health Benefits	Total
2018 benefits payments (Active plan members*)	\$32.9 M	\$37.3 M	\$37.6 M	\$107.8 M
Potential Savings:				
City pays 95% and plan member pays 5%	\$1.7 M	\$1.9 M	\$1.9 M	\$5.5 M
City pays 90% and plan member pays 10%	\$3.3 M	\$3.7 M	\$3.8 M	\$10.8 M
City pays 85% and plan member pays 15%	\$4.9 M	\$5.6 M	\$5.6 M	\$16.1 M

*Excluding Retirees

Management should work with the benefits plan administrator on the potential applicability of co-insurance payments on various benefits coverage considering the examples of other government benefit plans mentioned above. This information should be used to evaluate a suitable level of benefits for plan members and costs for the City.

Further cost savings are available if co-insurance payments are implemented across other City Agencies and Corporations, such as the Toronto Transit Commission and Toronto Police Services.

Plan Design Changes: Harmonization of Dental Benefits

Benefit level covered for major dental services varies between the various employee group plans

We also compared the percentage of costs for major services covered under City plans with other public sector organizations. The Province of Ontario and the Government of Canada benefit plans provide coverage at 50 percent for these services. The City's coverage for major services is from 60 to 80 per cent.

Harmonizing plans will increase efficiency

There are opportunities to contain dental benefit costs if City plans are aligned with federal and provincial benefit levels and harmonized across the City. Harmonizing plans would also improve the management, monitoring and processing of claims.

Table 2: Potential Savings from Plan Harmonization (Active Plan Members)

Description	2018 Dental Benefit Costs	Potential Annual Savings
Major Services	\$5.5 M	
City Pays 60% and plan member pays 40%		\$0.3 M
City Pays 50% and plan member pays 50%		\$1.0 M

Plan Design Changes: Assessing the Need for Annual Maximum on Dental Services

Basic and comprehensive basic services account for 83% of the total cost

Currently, there is no annual maximum on basic and comprehensive basic services. These two service categories accounted for \$40.7 million or 83 percent of the total cost of dental benefits in 2018.

Given the current financial pressures faced by the City due to COVID-19, management should evaluate in consultation with the benefits plan administrator the optimum levels of annual maximum allowable amounts per dental category.

Top 50 claimants average claim - \$9,126 is 11.5 times the plan average of \$796

In 2018 the top 50 out of 61,787 claimants incurred \$456,303 in dental expenses. The average cumulative amount paid (\$9,126) for each claimant is 11.5 times the plan average (\$796).

The benefits plan administrator provides benchmarking and industry data by type of dental service including basic, major and orthodontics. The benefits plan administrator advised that it provided cost saving ideas in the past and will continue to do so to reduce dental costs.

Plan design changes throughout the City may not be immediate due to collective agreements

We understand that plan design changes throughout the City may not be immediately possible due to collective agreements. To be clear, we are not suggesting management going outside of these agreements. However, it may be possible for management to work with the unions and management to determine if there is something more that can be done given the City's financial pressures.

Sharing the benefit costs is consistent with other levels of government which would may help to avoid reductions to service levels across all City operations and programs.

Improving Controls through Ongoing Review of Atypical Benefit Claims

Auditor General highlighted claims and trends that appear outside of the norms

We performed a series of analysis that revealed some atypical claim patterns. The Auditor General highlighted some claims and trends that were outside of the norms. These include exceptions such as:

- claims that are significantly higher than the average billed for the same dental procedure, and
- billing of emergency/specific exam procedures during a hygiene visit.

Awareness among City Plan Members of Dental Services and Related Charges

Dental billing codes are complex and technical

Dental billing codes are complex and technical in nature. Plan members may not understand or find it difficult to verify the fees being charged for each visit.

An information guide and basic online training will assist plan members to understand if dental fees charged are correct and reasonable.

Ontario Dental Association provided referrals for subject matter experts

We also approached the Ontario Dental Association for assistance. The organization was supportive in providing names of dentists who could consult as an independent advisor on our project. The Auditor General obtained the assistance of a dental expert who operates a professional practice and has experience with adjudicating dental claims for the insurance industry.

The Auditor General also appreciates that the benefits plan administrator was very cooperative and helpful in providing claims data and responding to our queries. To the extent that we have conducted our analysis, we found the benefits plan administrator has good controls in place. The administrator also provides quarterly information reports that provide an overview of the various City benefit plans.

During this process, the benefits plan administrator advised that they will be revisiting their dental claim adjudication guidelines to further strengthen controls.

Conclusion

The City can manage growing dental expenses by evaluating and implementing plan design changes

The City can manage growing dental expenses by evaluating and implementing plan design changes in consultation with the benefits plan administrator, including considering a small co-insurance payment by employees.

Establishing co-insurance payments, harmonizing dental plans and having annual maximum allowable amounts on dental services would help reduce the dental costs.

We have noticed and reported outliers, many of which are being further reviewed by the plan administrator. This does not mean that there is fraud, but it does mean that the Auditor General and/or the benefits plan administrator will further review these claims to ensure they are appropriate.

Enhancing the continuous review of trends and expenses using advanced data analytics would help control costs. Implementation of the recommended changes from this report will potentially result in significant annual savings. These measures will continue to help ensure the long-term sustainability of the benefit plans.

Finally, we would like to acknowledge Pension, Payroll & Employee Benefits Division management and staff who assisted with coordinating our requests with the benefits plan administrator.

Background

Continuous Controls Monitoring program has expanded since 2011

Since its inception in 2011, the Continuous Controls Monitoring (CCM) program has expanded and included various City expenses and payments for ongoing monitoring, such as:

- Overtime and standby pay
- Absenteeism for short-term illness, ill-dependent leave and bereavement leave
- Mileage reimbursements
- Telecommunication expenses
- Accounts Payable

The objective of the CCM Program is to use data analysis techniques to provide periodic reports for management to proactively monitor financial transactions, detect unusual expenses and identify areas where internal controls could be strengthened.

CCM reports have led to significant annual savings

Previous CCM reports have led to significant annual savings. The Auditor General is now including dental claims in the CCM program. This program will be expanded to include other health benefits.

City is self-insured which means the City pays for benefit claim costs

The City is self-insured which means the City pays for plan members' benefit claims costs. The City has an administrative service contract with a benefits plan administrator to adjudicate claims, issue claim payments, and monitor and detect fraud or abuse. Under the contract, the City pays an administrative fee to the benefits administrator.

Overview of dental benefit claims

In 2017 and 2018 the City spent \$98.1 million to provide employee dental benefits in accordance with employee collective agreements, and City policies.

61,000 individuals submitted claims under the City's dental plan

On average, 61,000 individuals submitted claims under the City's dental plan in 2017 and 2018. The average amount claimed per individual in 2018 was \$796. Table 3 shows the breakdown of dental claimants under the active employees' dental health plans and retirees' dental plans.

Table 3: Total Number of Dental Claimants for 2017 and 2018

	2018		2017	
	Number of Claimants	% of Total Claimants	Number of Claimants	% of Total Claimants
Employees	22,273	36.0%	21,775	36.0%
Spouses	12,298	19.9%	12,039	19.9%
Dependents	16,857	27.3%	16,790	27.7%
Active Sub-total	51,428	83.2%	50,604	83.6%
Retirees	10,359	16.8%	9,935	16.4%
Total	61,787	100.0%	60,539	100.0%
Average per Claimant (\$)	\$796		\$781	

8,100 general practitioners provided dental services to plan members

In 2018, 8,100 general practitioners provided dental services to plan members. The average annual billings per general practitioner was \$5,200. In addition, there were 1,900 specialists with average annual billings of \$3,600.

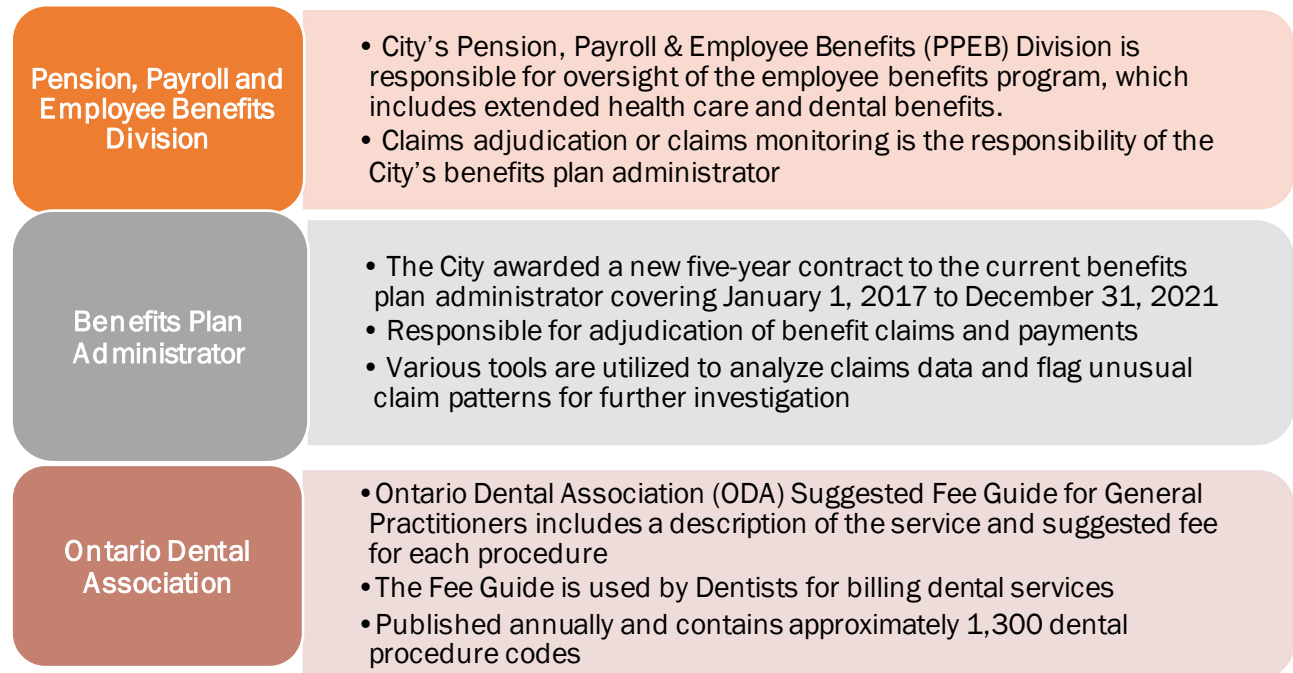
Dental Benefit Claims Process

Benefits plan administrator adjudicates benefit claims based on the City's Plan and Collective Agreements

Dental claims can be submitted to the City's benefits plan administrator by an online services portal or by mail if using a paper claim. The City's benefits plan administrator adjudicates dental benefits based on the City's plan and collective agreements.

On a quarterly basis, the benefits administrator prepares a claims report by benefit type for the City. This report provides information on dental claim trends and statistics on claims paid.

Figure 3: Overview of Dental Claims Process



Results of Dental Claims Analysis

2017-2018 paid dental claims totaled \$96.5 million	For our analysis of dental claims, we used raw data from actual paid claims provided by the benefits plan administrator. These figures differ from the administrator’s year-end report (\$98.1million) because of timing differences of reversals and adjustments. The total paid claims that we calculated from the source data for 2017 to 2018 is \$96.5 million (2017: \$47.3 million, 2018:49.2 million).
Auditor General analyzed over 1.2 million anonymized records	We analyzed over 1.2 million anonymized records. Our work was limited to data analysis and results were provided to the management and the benefits plan administrator for their review and validation.

A. Opportunities to Reduce Dental Benefit Costs

	Under the City’s administrative service contract, the benefits plan administrator must be capable of <i>“offering proactive advice and information specific to trends (i.e., costs, Claims experience and so on) for each Participant as well as industry-wide trend information”</i> . The City should leverage the benefit administrator’s expertise to control costs including changes to plan design.
Cost containment strategies would help control the growth of employee benefits expenditures	<p>Cost containment strategies could help control the growth of benefit expenditures by evaluating possible changes to the current plan design. The following sections explain strategies that could be used to reduce benefit costs.</p> <p>We understand that the benefits plan administrator has been helpful to the City in recommending plan design improvement including implementing fee guides, lab fee caps, requiring pre-authorization of major expenses and limiting specific procedures but there are other strategies to consider. We have discussed these in the following sections.</p>

A.1. Plan Design Changes: Co-insurance Payments

Four major categories of dental benefits

The four major categories of dental benefits covered under the City's dental plan are:

- **Basic Services** - include recall visits once every 9 months (once every 6 months for retirees and dependent children under age 18), fillings and simple extractions.
- **Comprehensive Basic Services** - include root canal therapy, periodontal scaling/root planing, complicated extractions (and anaesthesia required for oral surgery).
- **Major Services** - include crowns, dentures and/or bridgework, denture repairs, relining/rebasing or adjustments.
- **Orthodontics** - include treatment to straighten teeth or correct the bite.

Co-insurance is the portion a plan member pays for an allowed benefit coverage

Co-insurance is the portion/percentage of the cost a plan member pays for a dental procedure. There are saving opportunities if co-insurance payments are established.

The table below compares dental benefit plans for basic and comprehensive basic services across the City's major employee groups and other public sector organizations.

Table 4: Comparison of City's Basic and Comprehensive Basic Dental Benefits with Provincial and Federal Benefit Plans

Description of Services	City of Toronto				Public Sector Organization	
	Non-union staff	Local 416	Local 79 full time/ part time LTC	Firefighters	Province of Ontario - OPSEU ¹	Government of Canada ²
Basic Services	100%	100%	100%	100%	85%	90%
	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	\$2,500*
Comprehensive Basic Services	100%	100%	100%	100%	85%	90%
	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	\$2,500*

*Annual Maximum Reimbursement for Basic and Major dental expenses per calendar year per person, effective January 1, 2021. Some services may not be equivalent to the City's dental plan. This is provided for information only to assist management in having a further detailed review of other benefit plans.

¹ https://opseu.org/wp-content/uploads/2017/02/ops_collective_agreement_january_1_2015-december_31_2017_1.pdf

² <https://www.canada.ca/en/treasury-board-secretariat/services/benefit-plans/dental-care-plan/public-service-dental-care-plan-glance.html>

Common for organizations to require plan members to pay a portion of benefits claim

It is not uncommon for organizations (in both the private and public sector) to require plan members to pay for a portion of a claim. For example, the Province of Ontario and Government of Canada pays 85 and 90 percent of the cost of basic services and comprehensive basic services and 50 percent of major services.

The table below shows potential cost savings under various co-insurance payment options by plan members. The savings range from \$1.7 million to \$4.9 million annually, and \$8.5 million to \$24.5 million over five years.

Table 5: Potential Savings from Co-insurance Payments (Active Plan Members)

Description of Services	2018		Savings on Co-insurance Payments - Active Plan Members		
	Paid Amount	% of Total Dental Benefits	City Pays: 95% Plan Member: 5%	City Pays: 90% Plan Member: 10%	City Pays: 85% Plan Member: 15%
Basic Services	\$21.4 M	44%	\$1.1 M	\$2.1 M	\$3.2 M
Comprehensive Basic Services	\$11.5 M	23%	\$0.6 M	\$1.2 M	\$1.7 M
Total	\$32.9 M	67%	\$1.7 M	\$3.3 M	\$4.9 M

Aggregated 5-year savings could range from \$27.5 M - \$80.5 M

As discussed in Table 1, if co-insurance payments are applied to all employee health benefits, we estimate the aggregated five-year savings (dependent on the percentage of co-insurance payments) would range from \$27.5 - \$80.5 million.

Applying co-insurance payments across all employee groups is simply a consideration at this point, because of current collective agreements in place. If it were possible, the largest realized savings (Basic and Comprehensive) will come from unionized employees and their plan members since they comprise the most plan members. In the table 6 below we are providing potential savings from non-union plan members which account for approximately 20 per cent of all members.

To be clear, we are not proposing management going outside of current union agreements. What we are suggesting is to consider implementing co-insurance payments for non-union employees and consider this in future negotiations with bargaining units.

We live in unprecedented time. The City is struggling with a large deficit. Where it makes sense City staff should consider cost containment strategies with a fresh perspective, in consultation, whenever and wherever it makes sense.

We have been informed that the unions and the City are establishing a Joint Benefits Committee to look at the Benefits Program holistically to consider developing a more consistent approach to benefits across the City. This approach takes into consideration the long-term financial sustainability of the programs and the health outcomes for all employee groups in the bargaining units. This is a step in the right direction.

Table 6: Potential Savings from Co-insurance Payments – Non-Union Employee Health Benefits (Dental, Drug and other Health Benefits)

Description	Dental Benefits - Basic and Comprehensive	Drug Benefits	Other Health Benefits	Total
Payments during 2018 - Active Non-union Staff	\$6.3M	\$6.7M	\$6.6M	\$19.6M
Potential Savings:				
City pays 95% and plan member pays 5%	\$0.3M	\$0.3M	\$0.3M	\$1.0M
City pays 90% and plan member pays 10%	\$0.6M	\$0.7M	\$0.7M	\$2.0M
City pays 85% and plan member pays 15%	\$0.9M	\$1.0M	\$1.0M	\$2.9M

A.2. Plan Design Changes: Harmonization of Dental Benefits

Benefit level covered for major dental services varies between employee groups

We found the benefit level or percentage covered for major dental services varies between the employee groups. Table 7 compares the benefit level among the City's major employee groups and other public sector organizations.

The Province of Ontario and Government of Canada provides 50 per cent coverage. The City's coverage for major services is from 60 to 80 per cent. Similar to our analysis in section A.1 above, there are opportunities to evaluate and compare City plans with plans offered by other levels of government to reduce dental benefit costs and improve management of these expenses.

In the table below, we compared the City's major dental benefits with other levels of government.

Table 7: Major Dental Services - Comparison of City's Major Employee Groups with Provincial and Federal Benefit Plans

City of Toronto					Other Public Sector Organizations	
Description of Services	Non-union staff	Local 416	Local 79 full time/ part time LTC	Firefighters	Province of Ontario - OPSEU	Government of Canada
Major Services	80%	60%	60%	80%	50%	50%
	\$5,000 per person each benefit year	\$4,000 per person each benefit year	\$4,000 per person each benefit year	\$2,500 per person each benefit year	\$2,000 per person each benefit year	\$2,500* per person each benefit year
Orthodontics	50%	50%	50%	50%	50%	50%
	lifetime \$5,000 per person	lifetime \$4,000 per person	lifetime \$5,000 per person	lifetime \$4,000 per person	lifetime \$3,000 per person	lifetime \$2,500 per person

* Annual Maximum Reimbursement for Basic and Major dental expenses per calendar year per person, effective January 1, 2021. Some services may not be equivalent to the City's dental plan. This is provided for information only to assist management in having a further detailed review of other benefit plans.

Savings are available with harmonization of benefits

The following savings are available, if:

- Dental Benefit Plans for major services are harmonized at 60 per cent for all employee groups, the potential cost savings would be \$300,000 annually.
- Dental Benefit Plans for major services are harmonized at 50 per cent for all employee groups, the potential cost savings would be \$1,000,000 annually.

Harmonizing plans would also improve the management, monitoring and processing of claims.

A.3. Plan Design Changes: Assessing the Need for Annual Maximum on Dental Services

No annual maximum for Basic and Comprehensive Basic Services

Currently, there is no annual maximum on Basic and Comprehensive Basic Services (Table 4). Though, Major Services and Orthodontics have annual maximums or lifetime limits ranging from \$2,500 to \$5,000 (Table 7). The table below summarizes dental benefits paid throughout 2018 and 2017.

Table 8: Summary of Dental Benefits Paid During 2018 and 2017

Category Level	2018		2017	
	Paid Amount * (\$M)	% of Total Benefits	Paid Amount * (\$M)	% of Total Benefits
Basic Services	\$26.2	53.2%	\$25.6	54.4%
Comprehensive Basic Services	\$14.5	29.5%	\$13.9	29.4%
Major Services	\$5.5	11.2%	\$5.2	10.9%
Orthodontics	\$3.0	6.1%	\$2.5	5.3%
Other	–	–	\$0.1	–
Total	\$49.2	100%	\$47.3	100%

*All plan members including retirees

Most dental claims fall under Basic and Comprehensive Basic Services

Most dental claims fall under Basic and Comprehensive Basic Services and accounted for 83 per cent of total dental benefit costs. By establishing an annual maximum, the City has an opportunity to control expenses.

The table below lists the top 10 claimants for Basic and Comprehensive Basic Services. While these claims may be legitimate, they should be validated with the benefits plan administrator and compared with the industry norm in terms of level of coverage. Most claims were for high cost procedures. The benefits plan administrator is requesting dental charts to confirm services performed and will review specific billing practices on a few cases with high dollar claims.

Table 9: Top 10 Claimants Basic and Comprehensive Basic Services

Claimant	2018 Total Paid Amount
1	\$20,752
2	\$18,115
3	\$11,819
4	\$11,620
5	\$10,417
6	\$10,058
7	\$9,407
8	\$9,034
9	\$8,950
10	\$8,647

Average amount paid for top 50 patients was \$9,126 - 11.5 times the plan average

We also analyzed the overall dental expenses and noted that the average dental benefits per patient in 2018 was \$796. In 2018 the top 50 out of 61,787 claimants incurred \$456,303 in dental expenses. The average cumulative amount paid was \$9,126 per claimant which is 11.5 times the plan average of \$796.

An initial review for those plan members provided in Table 9 showed that several of these claimants were employees leaving the organization. Those employees appeared to have legitimate, but extensive dental procedures completed before departing from the City. Due to the large dollar amounts claimed for a few files, the administrator will be requesting dental charts to conduct a further review. Any concerns raised will be shared with the City.

Going forward, management should evaluate, in consultation with the benefits plan administrator the optimum annual maximum per dental category to control expenses.

In addition, management should use the quarterly reporting provided by the benefits plan administrator to compare the dental claims type for the City of Toronto plan to industry comparators. Management should then investigate large discrepancies.

Recommendation:

1. City Council request the Controller in consultation with the Benefits Plan Administrator, Chief People Officer and the City Solicitor to undertake a review of dental benefit plan coverages and industry standards and best practices to consider opportunities for changes to the City's coverage to provide cost effective dental benefits. A process should be established for:

- a) Consultation, on a periodic basis, with industry experts and the benefits plan administrator to identify industry standards and acceptable practices for dental benefits coverage limits, particularly in areas where use by the City's plan members is significantly higher than industry standards or benchmarks; and**
- b) Recommending reasonable maximum plan coverages for the appropriate services, such as the benchmark averages provided by the benefits plan administrator and examples provided by the Auditor General. Consideration for special circumstances, should be provided, where necessary.**

The identified cost saving opportunities should also be considered for other benefit plans and implemented across the City and its Agencies and Corporations.

B. Dental Claims Trends in 2018 and 2017

B.1. Analysis of Dental Claims by Plan Members/Dental Practitioners

Average Dental Claims Trends by Plan Members

The average dental claim reimbursement per claimant increased by nearly two percent from \$781 to \$796 for all plan members. The table below summarizes the average annual increase for major employee groups.

Table 10: Average Annual Cost per Claimant by Major Employee Groups

Employee Group	2018			2017			% Increase/ (decrease)
	Number of Total Plan Members	# of Claimants*	Average Cost /Claimant	Number of Total Plan Members	# of Claimants*	Average Cost / Claimant	
Non-union staff	13,817	10,693	\$726.60	13,209	10,309	\$709.03	2.48%
Local 416	11,559	8,836	\$802.42	11,341	8,931	798.48	0.49%
Local 79	29,881	23,070	\$773.02	29,519	22,773	\$759.80	1.74%
Local 79 Part-Time Long-Term Care	2,721	1,988	\$961.27	2,688	1,913	\$885.84	8.52%
Firefighters	9,298	7,156	\$669.53	9,515	7,176	\$681.13	(1.70%)

*Claimants with at least one claim

Distribution of Dental Benefits by Amounts Claimed

Approximately 61,000 plan members submitted claims each year. Table 11 shows the distribution of claimants by annual paid amount.

Table 11: Distribution of Patients by Annual Amount Claimed for Dental Services

Annual Paid Amount	2018		2017	
	% and (Number) of claimants	Total Paid Amount (\$)	% and (Number) of claimants	Total Paid Amount (\$)
Below \$1,000	74.27% (45,888)	19,079,298	75.01% (45,410)	18,817,478
\$1,000 to \$2,000	17.53% (10,832)	15,138,515	17.04% (10,318)	14,341,392
Over \$2,000- to \$5,000	7.82% (4,831)	13,435,056	7.56% (4,574)	12,620,230
Over \$5,000 to \$10,000	0.37% (228)	1,422,415	0.38% (230)	1,416,211
Over \$10,000	0.01% (8)	111,349	0.01% (7)	84,672
Total	61,787	\$49,186,633	60,539	\$47,279,983

In 2018, 236 individuals accounted for \$1.53 M in dental costs

Most claimants (74.27%) had annual dental expenses less than \$1,000. Over 230 patients had dental expenses totalling over \$5,000 each year during 2017 and 2018. In 2018 this small number of claimants accounted for 3 per cent or \$1.53 million of total dental costs paid that year. If annual dental benefits were capped at \$5,000 per year this would result in savings of \$354,000.

Plan Members with High Dollar Amount of Dental Claims

Top 5 patients claimed \$11,000 to over \$25,000

Table 12 shows the total annual amount spent by the top five plan members. The total amounts claimed in 2017 and 2018, per individual ranged from \$11,000 to over \$25,000. The annual spend of \$25,000 is approximately 31 times the plan member average.

Table 12: Top 5 Claimants by Annual Total Paid Amount

Claimant	2018 Total Amount	Claimant	2017 Total Amount
A	\$25,041	F	\$15,819
B	\$18,115	G	\$13,440
C	\$13,031	H	\$11,386
D	\$12,242	I	\$11,382
E	\$11,260	J	\$11,205

Overall, the fees billed for the costs described in Tables 9 and 12 appears reasonable given the fees associated with the procedures performed. However, we noted there are high amounts being billed by these plan members.

We did not conduct detailed audit work to verify the claims. Our work was limited to the analysis of data and inquiries into why the claims were so high.

Many reasons why certain plan members have extensive dental expenses

Based on our inquiries the benefits administrator explained that, in general, when plans do not have a maximum amount (for basic services), there is an opportunity for claimants to have large dollar claiming patterns. Further, there are many reasons why certain plan members have extensive dental expenses. These include but are not limited to:

- New hires without previous dental benefits
- Plan members close to retirement or recently retired
- Medical condition that can impact oral health
- Poor dental hygiene

B.2. Analysis of Dental Claims by Practitioners

General practitioners provide a range of services including preventive services and restorative services

Most dental services are provided by general practitioners who provide a range of services including preventive services and restorative services. There are 8,000 dentists who are general practitioners and provided services to at least one patient. Table 13 below shows the average amount general practitioners billed per patient each year.

Table 13: General Practitioner Average Annual Billings per Patient

2018		2017	
Total # of General Practitioners	Average Billings (\$) per Patient	Total # of General Practitioners	Average Billings (\$) per Patient
8,130	\$535.36	7,725	\$536.68
General Practitioners' Annual Total Billings – All Patients *			
\$42,412,668		\$40,872,209	

*A General practitioner may have more than one patient

Some General Practitioners had billings per patient at least five times the average

General practitioners on average billed each patient \$536 each year. However, we found several practitioners with average or individual (one patient) billings per patient at least five times higher than the overall average (44 practitioners in 2018 and 38 in 2017).

Table 14 shows the top five general practitioners with the highest average annual billings per patient. Where the dentist has only one patient, we included annual cost billed by the dentist on that one patient.

Table 14: Top 5 General Practitioner - Highest Average/Individual Patient Billing

General Practitioner	2018 Average Total Billings (\$) per Patient	Total Patients	General Practitioner	2017 Average Total Billings (\$) per Patient	Total Patients
A	\$10,259	4	F	\$5,888	1
B	\$5,847	1	G	\$5,554	1
C	\$5,698	1	H	\$5,197	1
D	\$4,825	1	I	\$4,289	2
E	\$4,792	1	J	\$4,204	6

The average amounts billed per patient ranged from \$4,200 to over \$10,000. These results are provided to management to review with the benefits plan administrator and identify potential red flags for future monitoring.

B.3. Analysis of Common Preventive Services – Scaling and Root Planing

Most common dental procedures are teeth scaling and root planing

Some of the most common dental procedures are teeth scaling and root planing. These procedures are often performed during a patient dental hygiene visit to prevent or treat gum disease. Scaling involves scraping the plaque from teeth and root planing is deep cleaning below the gum line. Table 15 shows the top 5 dental procedures performed in 2018 and 2017.

Table 15: Top 5 Dental Procedure Codes by Dollar Amount in 2018 and 2017

Rank	2018			2017		
	Dental Procedure	Paid Amount (\$M)	Percentage of Total	Dental Procedure	Paid Amount (\$M)	Percentage of Total
1	Scaling - 15 Minutes	\$6.4	13.0%	Scaling - 15 Minutes	\$6.4	13.5%
2	Scaling - 30 Minutes	\$5.4	11.0%	Scaling - 30 Minutes	\$5.1	10.8%
3	Orthodontic Treatment	\$2.1	4.3%	White Filling, 2 Surfaces	\$1.9	4.0%
4	White Filling, 2 Surfaces	\$2.0	4.1%	Orthodontic Treatment	\$1.7	3.6%
5	White Filling, 1 Surface	\$1.4	2.8%	Recall Exams	\$1.4	3.0%
Sub-total		\$17.3	35.2%		\$16.5	34.9%
	Other Procedures	\$31.9	64.8%	Other Procedures	\$30.8	65.1%
Total		\$49.2	100%		\$47.3	100%

Top 5 dental procedures accounted for 35% or \$17 M/year

The top five dental procedures accounted for 35 per cent or approximately \$17 million each year. Two scaling procedures are at the top of this list at over \$11 million per year.

Scaling and root planing are billed in time units

The Ontario Dental Association (ODA) Suggested Fee Guide for General Practitioners includes several procedure codes for scaling and root planing. Scaling and root planing are billed in time units. One unit is equal to 15 minutes. These time units can be billed using a combination of one-half unit (7.5 minutes) and full units (15 minutes).

Total expenditures for all scaling and root planing procedures combined are approximately \$14 million a year. Table 16 shows the average number of scaling/root planing units billed per patient visit in four different age groups.

Table 16: Average Scaling/Root Planing Units Billed by Age Group

Age Category	2018			2017		
	Average Units Billed per Patient Visit	Total Visits	Total Paid (\$)	Average Units Billed per Patient Visit	Total Visits	Total Paid (\$)
0-7	0.71	4,566	\$179,430	0.70	4,348	\$166,993
8-12	0.86	7,623	\$362,527	0.86	7,702	\$362,527
13-18	1.24	12,616	\$859,450	1.24	12,722	\$867,226
19 and above	1.37	168,315	\$12,661,699	1.37	167,294	\$12,561,692
Total		193,120	\$14,063,106		192,066	\$13,958,438

We noted instances that significantly deviate from the average trend

The purpose of our analysis was to identify instances that significantly deviate from the average trend.

For patients aged 19 and above, we noted there were over 800 patient visits each year billed at an average of 3.5 or more units. This is more than double the average units that were normally billed in this category. The total amount paid was approximately \$190,000 in each of the two years.

The benefits plan administrator notes that an adult with good oral hygiene and good health could manage with one unit of scaling however, there are many factors to consider, such as, pre-existing teeth condition and oral hygiene routines of patients.

The benefits plan administrator also stated that it is important that a patient is treated according to its needs and not the number of units available in the plan. The high number of allowed units and/or dollars have the potential for high usage.

Management should consult with the benefits administrator to determine if additional monitoring of claims should be implemented for scaling/root planning procedures.

B.3.1 Practitioners Consistently Appear to be Rounding up Half Units of Scaling/Root Planing to Full Units

Practitioners rounding-up 1/2 units of time

Scaling and root planing procedures are normally billed using a combination of half and full units. Table 17 below shows the number of practitioners who did not submit any half units for scaling/root planing procedures in 2018 and 2017. While these billings were not audited in detail, the absence of half units from any of the practitioner's billings may indicate rounding up to full units.

Table 17: Practitioners with No Billings for One-half (partial) Units

Description	Summary
Total Number of Patients with Scaling/Root Planing	5,625
Total Number of Practitioners with No Billings for any one-half unit (7.5. minutes) in 2 years	1,180
Total amount billed	\$1,524,330
Number of Practitioners (with 20 or more patients) with No Billings for any one-half unit in 2 years	36
Total Number of Patients	987
Total Amount Billed	\$ 292,310

Our analysis of practitioners' billing behavior shows that 1,180 practitioners did not submit any claims for half units in 2018 and 2017 and always billed full units. Of these, there were 36 practitioners with 20 or more patients with total billings of \$292,310.

Our expert found the non-billing of half units to be somewhat unexpected

We found one practitioner with 56 patients performed \$18,754 in scaling/root planing procedures. All billings were one or more full units. Our expert found the non-billing of half units to be somewhat unexpected.

Management should consult the benefits plan administrator to determine if additional monitoring of practitioners billing behavior should be implemented for scaling/root planning procedures. Where concerns have been raised, dentists should be contacted and asked to provide supporting documentation.

B.4 Emergency or Specific Exams Combined with Routine Hygiene Visits

Sometimes a patient requires immediate attention from their dentist such as for uncontrolled bleeding, dislodged tooth or severe pain. In these circumstances the dentist may conduct an emergency exam or specific exam as described in the ODA Suggested Fee Guide for General Practitioners:

- *Emergency and Diagnosis for the investigation of discomfort and/or infection in a localized area*
- *Specific Examination and evaluation of a specific situation*

Emergency exams are not regularly scheduled visits or part of a routine hygiene treatment

The prescribed fee for each emergency or specific exam ranges from \$35 to \$135 for each visit. Since these are not regularly scheduled visits, our subject matter expert said that an emergency or specific exam should not be part of a routine hygiene treatment.

A hygiene visit would normally include scaling and/or root planing procedures. However, we found number of instances where emergency/specific exams were combined with routine hygiene visits. Table 18 below shows the total number of emergency or specific exams completed along with a hygiene visit.

Table 18: Number of Emergency/Specific Exams Completed During a Hygiene Visit

Description	Emergency/Specific Exams and Hygiene Visit
Total number of emergency/specific exam performed with hygiene visits	4,468
Number of Practitioners	1,877
Number of Patients	3,854
Total amount paid for Emergency/Specific Exam	\$274,689

Our analysis of 2018 and 2017 claims found 4,468 emergency or specific exams were billed during a routine hygiene visit. The amount billed for emergency or specific exams was \$274,689.

Further, we found; one practitioner had 32 patients with 55 hygiene visits combined with an emergency/specific exam charges totaling \$1,782. We believe these matters would benefit from a further review.

When we checked with the benefits plan administrator, they advised that they have developed controls to reduce the amount allowed for emergency and/or specific exams when performed during the same appointment as hygiene visit. We were advised that the use of these codes is regularly reviewed for outliers, to ensure that the plan is not over charged.

B.5 General Practitioners Billing Emergency or Specific Exam Fee at Maximum Allowed Fee Range

General Practitioners may conduct an emergency or specific exam with patients. The prescribed fee for these exams ranges from \$35 to \$135 and relies on the professional judgment of the dentist. Usually, the fee is based on the amount of time involved to complete the examination and provide a diagnosis.

Practitioners consistently charging maximum fee on all exams need a further evaluation

The table below lists the top five practitioners (with 20 or more patients) in 2018 who consistently charged the maximum fee for emergency or specific exams. Dentists that consistently charge the maximum fee on all exams should be further evaluated. We have asked the benefits plan administrator to review these billing practices.

Table 19: Top 5 Practitioners Billing Emergency/Specific Exams at Maximum Fee Range

General Practitioner	Total Patients	Patients with Emergency Visit	Total Visits	Visits with Emergency Exam	Emergency Visits - charged at Maximum Fee	% of Exams Billed at Maximum
A	50	25	219	32	32	100%
B	110	31	341	35	34	97%
C	120	29	416	34	32	94%
D	72	22	190	28	21	75%
E	50	26	132	36	24	67%

It is our view that periodically, management may benefit by asking the benefits plan administrator to review submissions from practitioners who consistently bill the maximum chargeable fee.

The benefits plan administrator will explore adding a specific rule to its data analytics (artificial intelligence) tool to flag providers who consistently bill the maximum range of allowed amounts in the ODA fee guide.

Recommendation:

2. City Council request the Controller in consultation with the Benefits Plan Administrator to review the identified exceptions and select the instances (outliers) that require a detailed review including obtaining records from the service providers. Results of the review should be documented for corrective actions. These actions may include:

- a) recovery of cost where applicable,**
- b) communicating instances with practitioners/service providers and patients,**
- c) identifying potential new systematic controls and developing management information reports for ongoing monitoring.**

Any findings and realized savings should be documented to inform future Benefit Plan design.

C. Awareness among City Plan Members of Dental Services and Related Charges

Dental billing codes are complex and technical

Dental billing codes are complex and technical in nature. Dentists are paid according to the schedule of dental procedures and fees listed in the ODA Suggested Fee Guide. The Guide is organized by dental service categories and each section includes the associated dental procedures that general practitioners may perform. For example, under the preventive services category polishing, scaling and fluoride are some of the procedures listed.

Plan members may not understand the fees being charged

Each dental procedure is identified by a procedure code and description of the service. There are approximately 1,300 dental services. Due to the complexity and technical nature of dental billing, plan members may not understand the fees being charged for each visit.

Online videos or an information guide would assist in educating plan members

The City should encourage plan members to take ownership and responsibility of their plan to ensure benefits are used responsibly and billed appropriately. The benefits plan administrator can provide guidance on how the plan works so plan members can make informed decisions including review of the amounts charged for dental services obtained.

Online videos or an information guide would greatly assist with educating plan members.

In our discussion with PPEB, the Division acknowledged that there is a need for the City to develop an employee dental benefits information guide and online training material for dental billing practices. This would assist plan members to make informed decisions and to verify if dental fees being charged to the City's dental plan are reasonable.

The benefits plan administrator advised that they have recently developed an informational video for Providers and will review if this video can be used as a tool for plan members as well.

Recommendation:

3. City Council request the Controller in consultation with the Benefits Plan Administrator develop an information guide and online training for plan members to understand their dental plan coverage and common dental treatment services and related fees. Plan members should be advised to review and assess the fees charged for their services at the time of each visit.

D. Reported Results May Be Relevant to Other City Agencies and Corporations

**Recommendations
in this report have
relevance to other
City Agencies and
Corporations**

The issues and recommendations included in this report have relevance to other City Agencies and Corporations.

Management representatives in these organizations should review the issues and recommendations in this report relative to their respective organizations.

Recommendation:

4. City Council request the City Manager to forward this report on as needed basis to selected Agencies and Corporations and request that they review and consider implementing similar controls recommended in this report that are relevant to their respective organizations.

Conclusion

**Opportunities have
been identified to
reduce rising dental
benefit costs**

The City can manage growing dental expenses by evaluating and implementing plan design changes in consultation with the benefits plan administrator.

We have identified opportunities through benchmarking with other public sector organizations. Establishing co-insurance payments, harmonizing dental plans and having annual maximum allowable amounts on dental services would help reduce the dental costs.

Enhancing the review of unusual trends and expenses would also help control benefits costs. In addition, employee awareness of dental services would provide increased monitoring of the fees charged by dentists.

Implementation of the recommended changes from this report could result in significant annual savings. The savings will be reported after plan design changes are evaluated and implemented.

Appendix 1: Continuous Controls Monitoring Program: Opportunities to Reduce Costs of Dental Benefits

Recommendation 1: City Council request the Controller in consultation with the Benefits Plan Administrator, Chief People Officer and the City Solicitor to undertake a review of dental benefit plan coverages and industry standards and best practices to consider opportunities for changes to the City's coverage to provide cost effective dental benefits. A process should be established for:

- a) Consultation, on a periodic basis, with industry experts and the benefits plan administrator to identify industry standards and acceptable practices for dental benefits coverage limits, particularly in areas where use by the City's plan members is significantly higher than industry standards or benchmarks; and
- b) Recommending reasonable maximum plan coverages for the appropriate services, such as the benchmark averages provided by the benefits plan administrator and examples provided by the Auditor General. Consideration for special circumstances, should be provided, where necessary.

The identified cost saving opportunities should also be considered for other benefit plans and implemented across the City and its Agencies and Corporations.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

Pension, Payroll and Employee Benefits in partnership with the People and Equity, continues to conduct research and analysis and has strived to include a number of cost saving measures including co-pay for the Benefits Premiums and also co-pay for the claims in the Collective agreements through the last two rounds of collective bargaining. Although, this has not yielded any immediate results in terms of Claims co-payment, each of the Bargaining Units, through the current bargaining process, has agreed to establish a Joint Benefits Committee that will look at the Benefits Program holistically. The intention is to develop a more consistent approach to Benefits across the City, one that takes into consideration the long-term financial sustainability of the programs and the health outcomes for employees throughout all the bargaining units and non-union groups.

As part of its Benefits Program Review, the Director, Pension, Payroll and Employee Benefits will further identify opportunities where reasonable plan maximums could be put in place to ensure tighter plan controls.

Expected implementation date: End of Q1, 2023

Recommendation 2: City Council request the Controller in consultation with the Benefits Plan Administrator to review the identified exceptions and select the instances (outliers) that require a detailed review including obtaining records from the service providers. Results of the review should be documented for corrective actions. These actions may include:

- a. recovery of cost where applicable,
- b. communicating instances with practitioners/service providers and patients,
- c. identifying potential new systematic controls and developing management information reports for ongoing monitoring.

Any findings and realized savings should be documented to inform future Benefit Plan design.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

Some of the exceptions identified by the Audit were already under review by the Plan Administrator as part of their normal controls. The Plan Administrator has also begun reviewing the additional cases for additional management information reports.

The City has started implementing a number of administrative practices to bring about more controllership to the Benefits Program, such as notifying the unions of the cessation of past practices which do not align with the City's benefit plans parameters.

Expected implementation date: End of Q1, 2021

Recommendation 3: City Council request the Treasurer in consultation with the Benefits Plan Administrator develop an information guide and online training for plan members to understand their dental plan coverage and common dental treatment services and related fees. Plan members should be advised to review and assess the fees charged for their services at the time of each visit.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

During its functional review, PPEB has identified education related to the Benefits Program and other programs as a key gap. With its transformation, PPEB had addressed this gap by making education an important and strategic function to achieve compliance, reduce fraud and encourage consumerism and Benefits plan ownership by employees. To that effect, PPEB has created two Education Specialist positions within the newly created Policy and Program Management unit and will be developing and marketing a number of education vignettes regarding different aspects of the Benefits Program. Additionally, PPEB is currently exploring the merit of implementing mandatory education sessions as part of enrollment in the Benefits Program.

Expected implementation date: End of Q2, 2021

Recommendation 4: City Council request the City Manager to forward this report on as needed basis to selected Agencies and Corporations and request that they review and consider implementing similar controls recommended in this report that are relevant to their respective organizations.

Management Response: ☒ Agree ☐ Disagree

Comments/Action Plan/Time Frame:

PPEB will forward the current report, on behalf of the City Manager, to select City Agencies and Corporations. PPEB will also set up a meeting to discuss the recommended controls with the Agencies and Corporations. PPEB will report back to the City Manager by Q1-2021.

Target completion date: Q1, 2021.

**AUDITOR
GENERAL**

TORONTO