TORONTO

# STAFF REPORT
# INFORMATION ONLY

## Core Service Review Potential Health Impacts: Toronto Public Health

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| **Date:** | September 8, 2011 |
| **To:** | Executive Committee |
| **From:** | Medical Officer of Health |
| **Wards:** | All |
| **Reference Number:** | |

## SUMMARY

This report describes the potential health impacts of implementing two specific options and opportunities identified by KPMG for Toronto Public Health in its report to the City Manager, and as presented to Executive Committee on July 28, 2011.

### Financial Impact

There are no direct financial impacts flowing from this report.

## DECISION HISTORY

At the July 26, 2011 Board of Health meeting, the Board discussed the Core Service Review: Toronto Public Health report. The Medical Officer of Health was directed to report to the Executive Committee's September 19, 2011 meeting on the potential health impacts of implementing the KPMG opportunities (Decision Document: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.HL6.1)

At the same meeting, the Board of Health directed the Medical Officer of Health to explore alternate sources of funding for the AIDS Prevention and Drug Prevention Community Investment Programs as a way to retain these programs and report as part of the 2012 Operating Budget process.

The Board also recommended to Executive Committee that:

a. Current municipal funding to the Student Nutrition Program be maintained.
b. The City of Toronto continue to provide essential dental services to low income children and seniors who would not otherwise have access to such

services until such time as provincially funded programs are available to meet this need.

## COMMENTS

This report addresses the potential health impacts of implementing the Non-Core Service Review (NCSR) opportunities identified by KPMG. NCSR options are those which KPMG has indicated that there is an opportunity to consider a range of options that could include divesting, transferring, discontinuing, or significantly altering the service.

For TPH, KPMG classified two NCSR opportunities:

- Community Partnership and Investment Program (CPIP):
  - "Consider eliminating this program, reducing the service level, or identifying alternative funding offsets". This opportunity was identified as one with high potential savings, medium risks and implications, and high barriers.

- Municipally Mandated – Dental Health and Investing in Families:
  - "Consider eliminating this program or reducing the service level". This opportunity was identified as one with high potential savings, medium risks and implications, and high barriers.

An analysis of the potential health impacts of the KPMG opportunities is provided below.

**Community Partnership and Investment Program (CPIP)**

<u>AIDS Prevention and Community Investment Program (APCIP) and Drug Prevention Community Investment Program (DPCIP)</u>

The elimination or reduction of the APCIP or DPCIP funding will not only have health impacts, but will also have financial impacts. There will be an increased pressure on Toronto Public Health's budget to off-set the provision of the prevention initiatives supported and funded through these grants as these initiatives are key to meeting the Ontario Public Health Standards and the provision of comprehensive multi-pronged strategies to address HIV/AIDS and the health impacts of illicit drug use.

The grants provide essential funding to community agencies that provide HIV/AIDS and illicit drug misuse prevention programming to high risk populations and communities that may not access TPH programs or services offered by other mainstream organizations. The initiatives are designed to build capacity within communities to address HIV/AIDS and illicit drug misuse issues through their participation in the development, implementation and oversight of prevention efforts. Community agencies are uniquely positioned to reach the targeted populations most vulnerable to acquiring HIV as well as using illicit substances.

The intent of the initiatives funded through the grants is to provide culturally and linguistically appropriate program and services that will prevent HIV transmission, delay or eliminate the initiation of drug use, and or mitigate the harms of drug use. Theories of Health Behaviour Change establish that the ability to shape, modify or change behaviour must be addressed by multiple approaches and interventions; funding community agencies to deliver appropriate messages to influence behaviour change is consistent with this.

The initiatives funded through the grants also provide an opportunity to invest in Toronto communities through the recruitment and training of volunteers, peer educators and project co-coordinators. In 2009, both programs together leveraged 49,349 volunteer hours and 44,317 peer hours – this translates into the hours that about 55 FTEs would work in a year. Leveraging these types of resources is a cost-effective way of reaching vulnerable groups.

The potential health impacts of eliminating or reducing the service levels for the grants is significant as the initiatives funded are an integral component of the prevention efforts in HIV/AIDS and illicit drug use programming in the City. There is a wealth of evidence which supports the effectiveness and cost-effectiveness of prevention programs, particularly community-based prevention programs which are culturally appropriate, delivered at times and locations where high-risk behaviour takes place, trusted among the target populations, and delivered at low cost.

Overall the greatest impacts of eliminating or reducing the grants will be the adverse consequences on the health and social outcomes of at-risk populations. While short and medium-term impacts on disease and illicit substance use rates is extremely complex to project, research and evidence clearly indicate that prevention initiatives are essential and effective program components. It is reasonable to assume that HIV transmission rates and the burden of illness due to illicit drug use would be higher in the long run if these grants were reduced or eliminated.

AIDS Prevention and Community Investment Program (APCIP)

The current budget of $1.679 million for APCIP resulted in the allocation of funding for 41 projects for 2011/2012. Data from the 2009 funding cycle indicate that APCIP funded interventions made 233,220 contacts through outreach initiatives and 30,422 contacts through workshops.

HIV is a chronic infection impairing the immune system and can lead to infections, cancers, dementia, other major physical impairments, and AIDS.

Although the number of HIV/AIDS reports declined by 3% from 2008 to 2009, gay and bisexual men, and men who have sex with men (MSM) continue to be disproportionally affected by HIV/AIDS (TPH, 2011). In 2009, Toronto had 527 new reports of HIV (TPH, 2011). Of those with a known exposure, MSM accounted for 69% of reports of HIV (TPH, 2011), 5% of which reported also being illicit drug users (Ontario Ministry of

Health and Long-Term Care). People who were born in a country where HIV is endemic account for 15% of new infections in Toronto, of whom 61% are female. Illicit drug use (non MSM) accounted for 3% of the infections (Ministry of Health and Long-Term Care). Of people testing positive for infectious syphilis in 2009, 48% presented with HIV co-infection (TPH, 2011).

A preliminary report of HIV/AIDS in Ontario (Remis et al, June 2011) puts Toronto statistics in perspective with the rest of the province. Of interest,

- In Ontario, 30,800 persons were diagnosed with HIV infection from November 1985 to December 2009. Overall, 65.1% of HIV infections in Ontario were diagnosed in Toronto.
- HIV diagnosis for injection drug users was highest in Toronto at 36.6%.
- Toronto comprises the majority of HIV diagnoses in Ontario, with 67.5% of cases for males and 52.4% for females.
- The majority of reported AIDS cases in Ontario between 1981 and 2009 were from Toronto (59.6%).
- The AIDS incidence rate for Toronto between 1981 and 2009 was 219.4 (the highest in the province).

Lack of HIV prevention programming will have adverse consequences on the health and social outcomes of the at-risk populations served by the organizations receiving funding through the grants. Prevention interventions influence participants to modify the behaviour that puts them at risk of acquiring and transmitting HIV (such as promoting increased condom use, decreased unsafe needle use, enhancing negotiation in relationships and accessing culturally and linguistically appropriate HIV testing). APCIP reaches populations that cannot be as easily accessed by TPH and uses strategies that have been proven to be effective at a financial cost that is far less than that of HIV infections.

Researchers in the field of HIV prevention acknowledge that without the prevention activities of community-based organizations, the HIV/AIDS epidemic could well be greater (Ramirez-Valles, 2002). According to a federal analysis of the costs associated with HIV/AIDS, reducing the number of new infections each year by 50% would save the Canadian health care system and society $1.5 billion over a five-year period (Martin Spigelman Research Associates, 2003). As the report *The Cost of HIV/AIDS in Canada* (2001) affirms, "because of the enormous economic burden of HIV/AIDS, prevention and management strategies are highly cost effective and will produce significant long term direct and indirect cost savings to the Canadian economy" (GPI Atlantic, 2001). Two meta-analyses document evidence of the cost-effectiveness of interventions, particularly small-group, community-level and outreach-based activities with moderate- to high-risk populations (McKay, 2000 and Pinkerton et al, 2002).

Research shows that the use of peers in HIV prevention interventions has found to be either cost saving or cost-effective relative to other interventions in public health and medicine (Holtgrave and Curran, 2006).

Drug Prevention Community Investment Program (DPCIP)

The current budget of $844,280 for DPCIP resulted in the allocation of funding for 30 projects for 2011/2012. Data from the 2009 funding cycle indicate that DCIP funded interventions resulted in 1,350 workshops, 1,132 outreach activities, 267 events and 2,227 drop-in activities reaching about 71,530 participants; the development of 40 culturally and linguistically appropriate resources; and 130,961 web contacts.
The prevalence of illicit drug use in the City is of concern. Specifically of note,

- The majority of youth who experiment with alcohol or other drugs will not go on to develop a substance use problem. Street involved and homeless youth use drugs at a much higher rate than other youth and with more risks such as injection drug use and drug combinations. People who are homeless or otherwise street-involved have more health problems and higher rates of illness and substance use than people who are in stable living situations.
- Highlights of drug use among Toronto's youth include (TPH, 2010):
    - 32% of Toronto students reported that someone had tried to sell them drugs in the past year.
    - Cannabis is the most frequently used illicit drug among students, with 20% of grade 7-12 students reporting use, and between 73% and 83% of homeless/ street-involved youth (aged 16-24).
    - 17% of students reported the use of prescription opioids at least once in the past year, with 72% reporting that the drugs were obtained from home.
    - Heroin use by homeless/street-involved youth has been reported at 5%, and higher rates of 30% (young men) and 21% young women.
    - Cocaine use among homeless/street-involved youth has been reported at 24% (powder cocaine), 11% (crack cocaine) and as high as 68%-69% (young men) and 71%-74% (young women).
    - Amphetamine use by homeless/street-involved youth has been reported at 16%.
    - Hallucinogen use is more common among homeless/street involved youth with 46% of male youth and 50% of female youth using ketamine; 28% of males and 33% of females using LSD; and 12% of men and 8% of women using PCP.
    - Eight percent of students inhale solvents and 4% sniff glue (higher rates than the rest of the province). Students report higher rates than elsewhere in the province.

The goal of DPCIP is to reduce the initiation, frequency, severity and impact of substance use /misuse. Effective prevention strategies aimed to prevent the development of drug related harm is based on the evidence that interventions targeting risk and protective factors lead to attitude and behaviour change (Toumbourou et al, 2005). Successful drug prevention programming is not simply informing people about the dangers of drug use. Therefore DPCIP funds projects that build resiliency in order to address protective factors. Resiliency studies have shown that it is the development of competence that is essential to healthy outcomes. Competence is typically achieved through academic performance, participation in arts, sports and or community service (Bernard, 2000).

Drug prevention initiatives provide leadership and skill building opportunities for lower socio-economic and marginalized youth that impact their ability to develop competence.

Harms from drug use cost the Ontario health system $1.5 billion in 1992. Of these costs, 69% were attributable to tobacco, 28% to alcohol, 0.5% to marijuana and 2% to all other illicit drugs (Room, 2001). Cost benefit research of prevention programs shows that for each dollar invested in prevention, a savings of up to $10 in treatment for alcohol or other substance abuse can be seen (National Institute on Drug Abuse, 2003).

The overall social cost of substance abuse in Canada in 2002 was estimated to be $39.8 billion with alcohol accounting for about $14.6 billion (36.6%) and illegal drugs for $8.2 billion (20.7%). Health care costs associated with tobacco, alcohol and illegal drugs have risen since 1992. At the same time, costs linked to illegal drug use have increased at a greater rate than costs for either tobacco or alcohol (Rehm et al, 2006).

DPCIP funds peer outreach programs because marginalized drug users have limited access to even the most basic services. Many are reluctant to contact any form of health or social service agency for fear of public identification and/or stigmatization. Marginalized populations are often best reached through peers familiar with how and where to access the target population and who can build relationships of trust based on the credibility of personal experience (Beirness, 2008).

Student Nutrition Program

The CPIP grant provides essential core municipal funding to Student Nutrition Programs in high needs, low income schools/communities in each Toronto ward. The goal of Student Nutrition Programs is to ensure that children and youth at risk for poor nutritional intake have access to safe, adequate, and nutritious food at school. In 2010, municipal funding of $3,796,576 subsidized about 9.6% of total program costs or just under $29 per participating child and youth.

Eliminating core municipal funding will impact 685 Student Nutrition Programs serving 465 high needs, low income schools/communities (2010), involving 132,246 children/ youth in the City of Toronto. These programs depend on the municipal grant to help offset the cost of the nutritious food. The 2011 Nutritious Food Basket survey found that food costs in Toronto have increased by 4.63%, as compared to 2010. In the likelihood that programs will not be able to raise funds to make up the shortfall provided by the municipal grant, as well as to cover increased food costs, one or more of the following impacts are expected: reduced numbers of students served, reduced number of days/weeks the program operates, lower nutritional quality of food served (e.g., limited fruits and vegetables and other nutritious foods), reduced quantity of food served (e.g., reduced portion sizes, reduced number of food groups served) and finally, increased closures of programs. Any of these potential impacts will compromise the ability of programs to meet the nutritional needs of the participating children and youth.

Overall, the greatest impacts of a reduction in municipal funding will be adverse consequences on health, learning and social outcomes of the at-risk children and youth in Toronto who access these programs. Evidence supports that breakfast eating and breakfast programs are key strategies for preventing childhood obesity and other chronic health problems (Haines, J. et al, 2007). Student nutrition programs also help alleviate short-term hunger resulting from food insecurity among children living in low income families. Forty-one percent of students in secondary school come to school without breakfast and 21% do not eat lunch (Toronto District School Board, 2009).

In 2010/11, there were 908,954 client visits to Toronto food banks, a 4% increase since 2009. Furthermore, 36% of food bank clients were children under 18 years of age in the GTA (up from 34% in 2010), with 19% of children going hungry at least once a week in the GTA (up from 15% in 2010) (Daily Bread Food Bank, 2010 and 2011 *forthcoming*). The key nutrients that at-risk children and youth receive from student nutrition programs help them become ready to concentrate and learn at school.

In fact, when offered as part of the school day, student nutrition programs can result in improved learning outcomes, reduced absenteeism, less aggressive behaviour, and fewer violent incidents (Maryland State Department of Education, 2001 and Muthuswamy, 2011). These community-based programs are a catalyst for community capacity building, community development, parent engagement, and job skills training. As a whole, student nutrition programs help strengthen Toronto's local communities and better prepare Toronto's children to succeed and lead healthier, productive lives. Without core municipal funding contributing to program stability and instilling confidence in other donors to offer support, student nutrition programs will struggle and many could close.

**Municipally Mandated**

Dental Health

The municipal dental service is a last resort program for eligible children, youth, perinatal mothers, and seniors who do not have access to dental care for financial reasons and have urgent and other conditions requiring treatment.

Currently the municipally-funded dental program treats approximately 21,000 low income seniors, children, adolescents and perinatal clients. In addition, approximately 5,000 low income institutionalized seniors receive preventive care, including labelling and cleaning of dentures. The cleaning and labelling of dentures is important as often these seniors' dentures are misplaced and cannot be returned to the owner because the dentures are not identifiable. For institutionalized, low income seniors who require dentures, it is a financial hardship to replace a lost denture as dentures are costly. Often the lost dentures are not replaced. This affects the seniors' ability to eat and their quality of life.

Good oral health is necessary for good overall health and contributes to healthy eating and being employable, sociable and productive citizens. Dental disease can result in time lost from work and time lost from school.

Dental disease is one of the most prevalent chronic diseases. The Canadian Health Measures Survey shows that 96% of Canadians are affected by some form of dental disease (Health Canada, 2010). In addition, dental disease has been shown to increase the severity and complications of other chronic diseases such as diabetes, heart and lung diseases, as well as contributing to premature births.

The municipal dental service provides one course of basic treatment to restore the client to health. Clients are then encouraged to seek maintenance dental care in the mainstream system.

If this program were eliminated or the services were reduced, people who do not have third party insurance and/or the financial means to pay for dental care in the private system would continue to suffer from untreated dental diseases, e.g. cavities and periodontal disease, until the pain becomes unbearable. People without access to care may resort to taking care of the symptoms themselves or to obtaining care from unsafe, unlicensed, and unregulated dental providers.

The current delivery model of providing dental services directly to the population allows for better control of eligibility and cost containment since the costs are predictable and controllable. It would be more difficult to contain costs in a fee for service delivery system as has been observed with other provincially funded dental programs.

Investing in Families

Investing in Families is a partnership program between Toronto Employment and Social Services (TESS), TPH and Parks, Forestry and Recreation (PF&R). Funding for this program comes from the National Child Benefit Supplement and flows to TPH through TESS. This City-wide program offers "wrap-around" support to families who have children under the age of 17 years and are receiving Social Assistance. TPH provides assessment, counselling support, referral and service co-ordinator for approximately 1,000 families per year. Many of these families are experiencing mental health problems and unhealthy family dynamics. The primary goal of the program is to improve the health and parenting capacity of these families with a view to increased job readiness and employability.

Investing in Families is an evidence-based program that has demonstrated significant benefits for both parent and child participants. Similar programs have demonstrated a 15% reduction in reliance on social services. Parents in the program benefit from timely and effective linkages to community mental health services and the community connections established though the group intervention component of the program which leads to more effective use of available community resources (e.g., settlement services, job training programs, parent support programs) and reduced social isolation. Health

education provided through the program supports healthy eating, healthy weights and increased physical activity among program participants (both parents and children), thereby reducing the risks related to chronic disease. The program has demonstrated that as a parent's physical and mental health improves their capacity to more effectively parent and provide a healthy environment for their children does too. Without this evidence-based partnership program, approximately 1,000 families who are currently receiving social services will fail to realize these benefits.

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## SIGNATURE

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