

Finding the Way Forward: Equitable Access to Pharmacare in Ontario

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Copies:

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The mission of Toronto Public Health is to reduce health inequities and improve the health of Toronto residents through provision of programs and services, advocacy, and research and policy development. Wellesley Institute is a non-profit research and policy institute with a mission to improve health and health equity, through action on the social determinants of health for communities across the Greater Toronto Area (GTA).

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Statement on Acknowledgement of Traditional Land

We would like to acknowledge this sacred land on which the Wellesley Institute operates. It has been a site of human activity for 15,000 years. This land is the territory of the Huron-Wendat and Petun First Nations, the Seneca, and most recently, the Mississaugas of the Credit River. The territory was the subject of the Dish With One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes.

Today, the meeting place of Toronto is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work in the community, on this territory.

Revised by the Elders Circle (Council of Aboriginal Initiatives) on November 6, 2014

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Executive Summary

There are significant gaps in drug coverage in Ontario. In 2014, one quarter of Ontarians aged 12-64 lacked prescription medication insurance. This lack of insurance results in some people not taking their medications as prescribed which contributes to poor health outcomes and increased use of health services. This burden falls disproportionately on lower income groups who have poorer health outcomes than higher income groups.

In December 2015, the Toronto Board of Health and Toronto City Council endorsed the creation of a universal, national pharmacare program. While there have been policy discussions nationally about expanding drug coverage, and recent changes provincially to extend drug coverage to youth and children without private insurance, gaps remain that create disproportionate health risks for certain social groups. An effective drug coverage policy ensures equitable access to prescription medications.

There exists a complex arrangement of publicly funded drug coverage programs, which creates uneven access to prescription drugs. The three main drug coverage models in Canada include targeted drug coverage for specific populations (e.g., based on income or age), catastrophic coverage which extends prescription drug coverage to people who have high out-of-pocket costs for prescriptions relative to income, and insurance-based coverage, which requires that people buy into a health insurance plan to access drug coverage. In addition, some employers provide health benefit plans that cover drug costs for their employees. Many precarious low-wage workers in Ontario and across Canada do not receive drug benefits through their employer.

Each of these models have limitations, particularly for low income earners who do not meet the income thresholds of targeted coverage plans. The universal pharmacare model does not exist in Canada, however, it is widely recognized as providing greater access to prescription medications and has the potential to reduce health inequities for the growing number of Toronto residents living in poverty and experiencing poor health. It also reduces the cost of medications through increased bulk buying.

This report explores how the drug coverage programs in Canada create barriers to accessing prescription drugs for individuals and families who participate in Toronto Public Health programs. These case studies clearly illustrate that the most equitable model is the universal program which provides medications for little or no out-of-pocket cost. Other countries that provide universal drug coverage pay less for medications than Canada and have lower rates of non-adherence due to cost.

The government of Ontario has already taken a step toward extended coverage through OHIP+, which allows for coverage for children and youth who lack private insurance. At the federal level, an advisory council was recently established to provide direction on how best to implement a national pharmacare program. Findings from this report, jointly authored

by Wellesley Institute and Toronto Public Health, support the implementation of a universal single-payer pharmacare program at the federal level, and create a rationale to further extend drug coverage to all residents in the province as an interim measure. Such actions would help to reduce health inequities and improve the health of the whole population through ensuring universal and equitable access to prescription medications.

Introduction

There are significant gaps in drug coverage in Ontario.¹ In 2014, one quarter of Ontarians aged 12 to 64 lacked prescription medication insurance.² Women, people with low earnings and newcomers are less likely to have workplace medical benefits and access to prescription medication insurance.³ This leaves many low-income people paying out-of-pocket for their medications.

In 2015, 24 percent of Ontarians reported that they or a member of their household did not take their medications as prescribed, or missed medications, due to cost.⁴ Medication non-adherence leads to poor health outcomes and increased use of other health services.⁵ This is especially relevant for low-income people because they have poorer health outcomes than those in higher income groups.⁶ The current gaps in drug coverage resulting in differential access to prescription medications in Ontario, and in other provinces, are inconsistent with the principles of universal access, upon which the national health care system is based, and which is valued by many Canadians as one of the top priorities for prescription drug coverage programs.⁷

There is a complex arrangement of prescription drug coverage in Ontario and across Canada. It is widely acknowledged that the existing systems of coverage are inadequate, because they result in gaps in access and affordability, as well as high costs for prescription medications paid by public and private insurers.^{8,9} These shortcomings have been identified as important areas for public policy research and analysis by Toronto Public Health and Wellesley Institute, and both organizations have produced papers on the issue.^{10,11,12} The Toronto Board of Health and Toronto City Council endorsed the creation of a universal, national pharmacare program in December 2015. Policy discussions taking place nationally about expanding drug coverage, and actions taken within the province of Ontario to extend drug coverage to children and youth without existing private insurance plans are promising steps towards greater prescription drug coverage regionally and at a national level. Nonetheless, significant gaps remain.

A health equity lens can help to assess the drug coverage needs of diverse populations. For low income earners who are at greater risk of poor health, financial and other barriers that prevent access to prescription drugs can worsen health and social inequities. Effective drug coverage policy ensures that every person has coverage and can access necessary medications.¹³ Thus, the policy focus of this paper is to make a case for equitable access to prescription medications.

This report describes Ontario's publicly funded prescription drug program models, identifies gaps in coverage and explores other options to expand access to drug coverage. A series of case studies of individuals who participate in Toronto Public Health programs demonstrate how different approaches to prescription drug coverage lower or raise barriers to accessing

medically necessary drugs. Within the complex policy environment of public drug coverage, these scenarios provide a unique public health lens through which to consider how different policy models facilitate or impede health and social equity.

The Broader Policy Context for Prescription Drug Coverage in Ontario

The Changing Labour Market and Growing Inequality

Concerns about the lack of consistent, affordable access to prescription drugs for Ontarians relates to other significant public policy issues, including rising income inequality and the growth in precarious employment. Since the 1980s, and particularly in the last ten years, the proportion of precariously employed workers within the labour market has grown. This trend is marked by a decline in the number of people with job security, in favour of short-term, unstable, and “flexible” work arrangements for many.¹⁴

Certain social groups disproportionately shoulder the burdens of precarious work, including low-wages, declining autonomy in work, and a lack of benefits tied to employment.^{15,16} Research has found that racialized people living in marginalized neighbourhoods in Canada face numerous structural disadvantages within the labour market, which limits their ability to obtain stable employment. There is also evidence of declining social mobility for some immigrants and refugees in Canada, and racialized immigrants who face substantial barriers to finding secure jobs and liveable earnings.^{17,18,19}

In the GTA, almost 45 percent of workers between the age of 25 and 65 years were precariously employed in 2015. Fewer than 10 percent of these low-wage workers receive supplemental benefits, such as a drug plan.^{20,21} Income-related findings from the 2016 Census show that 20 percent of Toronto residents live on a low income, a higher rate than the rest of the country (14 percent). Of Toronto’s employed residents, 35 percent earned an annual income of under \$20,000, and 56 percent earned under \$40,000.²² At the same time, Toronto has the lowest housing affordability when compared to all other regions in the province,²³ 46.7 percent of all renter households experience problems with affordability, and one-in-ten households are food insecure.²⁴

These social and economic conditions have consequences for health and health equity. In addition to exclusion from health-related benefits, precarious employment negatively impacts health more broadly.²⁵ Income is a key determinant of health, and there are documented health inequities between high and low-income groups in Ontario. People living in the poorest neighbourhoods have hospitalization rates more than twice that of people living in the richest neighbourhoods for conditions that could be managed outside of hospital settings.²⁶ Similarly, a 2015 Toronto Public Health report found that men in the

lowest income group are 50 percent more likely to die before age 75, and women in the lowest income group are 85 percent more likely to have diabetes, when compared to the highest income groups.²⁷ The report concluded that health inequities are worsening over time based on a number of important health status indicators.

There is a need to rethink existing drug coverage programs in Canada, which assume that poor health is equitably distributed among the population, and that residents have drug coverage through employment or are able to purchase their prescription medications. The data described above suggests that this is not true; people with the worst health are often in the lowest income groups, have less access to employer provided benefits and less capacity to pay for their medications. Existing drug coverage programs perpetuate health and social inequities, and deepen disparities such as those based on income, race, immigration status, and gender.

In the following sections, we outline publicly funded drug programs in Ontario, and then discuss the different models of coverage in place throughout Canada. Through case studies of Toronto Public Health program participants, we demonstrate that these models are inadequate for providing comprehensive coverage across different income groups.

Access to Prescription Drugs in Ontario

The **Ontario Drug Benefit (ODB)**²⁸ is the main entry point into public drug benefits and provides coverage for over 4,400 prescription drug products. Residents of Ontario who hold a valid OHIP card may be eligible for ODB coverage if they are aged 65 or over, live in a long-term care home or home for special care, are enrolled in a home care program or receive social assistance through Ontario Works or the Ontario Disability Support Program. Seniors pay a deductible of \$100 and are responsible for co-payments of up to \$6.11 per prescription if they exceed an income threshold; after tax, \$19,300 for individuals and \$32,300 combined income for couples. All other recipients of ODB are exempt from deductibles but may be charged a pharmacist co-payment of \$2.00. The **Exceptional Access Program (EAP)** facilitates access to drugs that are not included in the ODB, or where no listed alternative is available. The coverage for EAP medications is determined on a case-by-case basis.

The **Trillium Drug Program** provides catastrophic coverage for Ontarians with high drug costs relative to their income. The program provides coverage for residents who are eligible for provincial health care coverage, do not have private health insurance, and whose prescription drug costs exceed 3-4 percent of their after-tax household income. Recipients must pay a deductible based on their household income. There is also a suite of specialized programs providing coverage for drugs that treat specific conditions.

In January 2018, the provincial government introduced the **OHIP+ Children and Youth Pharmacare** plan for expanded drug coverage to those under the age of 25 years. The plan

covered prescription medications available through the ODB, with no upfront user fees or deductibles.²⁹ All adults 25 years of age and older maintain coverage through existing public (e.g., Ontario Drug Benefit) and private individual or group insurance plans (e.g., employer sponsored or post-secondary student plans).

In June 2018, the new provincial government announced plans to modify the OHIP+ program to increase efficiencies. The new model will provide free prescriptions to children and youth not already covered by private benefits. Those who are already covered will first charge their private insurers, and the remainder of the costs will be paid by the government. This change means that the province is no longer the first or single payer provider for prescription medications for this group.³⁰

Prescription Drug Coverage Models

Canada is the only country with a universal health care system that does not include coverage of prescription drugs. Nationally, a variety of approaches have been developed to address gaps in access that result from the current approach to drug coverage. There are three main models of public drug coverage offered through provincial programs: targeted, insurance-based, and catastrophic drug coverage. This section briefly outlines each model with examples from across Canada, and also discusses a fourth model – universal pharmacare.

Targeted Drug Coverage

Providing specific populations with drug coverage is the model most commonly used by provinces and territories in Canada and ensures access to prescription medications for groups such as seniors, people on social assistance, or people with low income. The Ontario Drug Benefit (ODB) is an example of targeted coverage.

Other provinces in Canada have different targeted coverage than Ontario. The Alberta Adult Health Benefit and the Child Health Benefit provide coverage to households with low income, and other groups may be eligible for public drug coverage, such as people with high drug costs. Saskatchewan provides drug coverage to low-income families with children, while Nova Scotia covers only children living in low-income households. Saskatchewan also provides drug benefits to all children aged 14 and under living in the province. Most targeted drug programs have co-payments and/or deductible costs that vary according to groups receiving coverage. Low-income seniors in Ontario pay no deductible and a copayment of \$2 per prescription. By comparison, low-income seniors pay a maximum of \$25 per prescription in Saskatchewan. Direct costs through deductibles and co-payments are among the lowest in Ontario compared to other provinces and vary across populations.

Targeted drug coverage can be an effective way to provide prescription medications for eligible groups.³¹ All seniors in Ontario are enrolled in the ODB once they turn 65. People

receiving social assistance are also automatically enrolled, which provides relatively quick and simple access to medications. Maintaining low co-payments can ensure the affordability of plans for recipients, and some have suggested that co-payments can act as a modest disincentive to over-prescribing by physicians or overuse of drug benefits in general.^{32,33,34}

A major limitation of targeted drug coverage is determining who is eligible and who is excluded. While the ODB provides coverage for people on social assistance, other low-income individuals are required to pay out-of-pocket for prescription medications unless they are covered by employer benefits.³⁵ There is no guarantee that prescription medications will be covered for social assistance recipients who leave the program after obtaining employment. Thus, targeted coverage can act as a barrier to social and economic mobility for people who are enrolled in social assistance programs.³⁶

A second challenge is determining who is required to pay deductibles and co-payments, and the appropriate amount for these charges. Establishing these costs to discourage overuse of the program may create unintended affordability barriers. Most research finds that prescription drug charges lower the use of both essential and non-essential medicines, which can have a negative impact on health.³⁷ Policy makers must also consider that some populations, such as seniors, are likely to have substantial (and recurring) prescription drug needs, and even modest co-payments can create a financial burden if people have to fill multiple prescriptions.

Insurance-Based Coverage

Optional or mandatory insurance-based coverage provides prescription drug coverage to people who buy into a public insurance program.³⁸ Insurance-based coverage is used exclusively in Quebec and to a lesser degree in Alberta, New Brunswick and Nova Scotia.

The Quebec program represents a private-public hybrid, in which an employer that offers health benefits must also provide a prescription drug plan. Insurers are required to meet minimum standards that ensure that private insurance does not provide less coverage than that of the public drug insurance plan, and the province sets limits on the cost of deductibles and coinsurance. Some employees pay for coverage through payroll deductions.

Individuals not eligible for insurance through an employer, such as seniors without retirement benefits or people whose employer does not offer health benefits, must register for the provincial Public Prescription Drug Insurance Plan (PPDIP). PPDIP requires that plan members pay premiums, deductibles and co-payments. The annual premium is calculated based on net family income to a maximum of \$667. Plan members pay a monthly deductible of \$19 and a co-payment of 35 percent of a prescription's cost, minus the deductible, and there is a maximum monthly contribution. The Quebec plan has several exemptions to these

requirements, for example, people receiving social assistance and children are not required to pay these costs.³⁹

Alberta offers optional insurance-based coverage through the Non-Group Coverage Benefit. Plan premiums may be reduced for recipients with low income, which is assessed on gross adjusted family income. Plan members must pay co-payments up to a maximum cost of \$25, and these cannot be waived. New Brunswick and Nova Scotia also provide insurance-based coverage similar to the Alberta model.

A major challenge of the publicly funded insurance-based coverage is that it can create barriers to access for people with a low income and/or high drug costs, due to premium, co-payment and deductible payments. Everyone in Quebec has coverage, yet the system remains inequitable.⁴⁰ Drug prices vary according to public and private plans, and employers and employees pay steep premiums to insurance companies in order to offset the costs of public plans.⁴¹ As well, earnings do not determine premiums for private plans and therefore people with disparate incomes could shoulder the same costs.⁴² While Quebec has lower rates of cost-related non-adherence than Canada as a whole (7.2 percent versus 10 percent in 2007; see Table 2), the province has higher rates than comparator countries with universal drug coverage and the other provinces, and limited user fees.⁴³

A related challenge is that publicly funded insurance-based plans are intended to serve populations who do not have access to private insurance, and often disproportionately cover populations with high health care and prescription drug needs. Private insurance-based plans can be expensive; ultimately insuring people who are more affluent and who are in relatively better health. By comparison, equitable insurance arrangements pool risk across broad populations, and distribute costs through progressive taxation.^a

Catastrophic Coverage

The catastrophic coverage model extends prescription drug coverage to eligible individuals and families who shoulder high out-of-pocket costs for prescriptions, often due to chronic illnesses or rare diseases.⁴⁴ The premise is that households pay out-of-pocket for their prescription drug costs until they reach a certain percentage of their household income, after which the public system steps in to cover some, or all, of the remaining drug costs for the year. Manitoba, Saskatchewan, Ontario, Prince Edward Island, Newfoundland and Labrador all provide versions of catastrophic coverage alongside other public drug plans.

British Columbia (BC) is the only province that relies exclusively on catastrophic coverage for its public drug plan. All residents who are eligible for provincial health care coverage

a In a progressive tax system groups with lower income pay a lower percentage of their income in tax than do high-income groups. This system is based on the concept of ability to pay.

and who filed a tax return for the relevant tax year are also eligible for the Fair PharmaCare Plan. Deductibles are calculated as a share of family income, and families with a net income of \$15,000 or less do not pay a deductible. The plan requires that households pay a family deductible of roughly 2-3 percent of income, after which the public plan covers 70 percent of drug costs. Once the total out-of-pocket expenditure reaches a certain threshold, drugs become fully covered. Each family has a maximum amount paid for prescription drug costs that ranges from \$25 to \$10,000 depending on income, at which point Fair PharmaCare covers all costs for the rest of the year.^b

The major benefit of catastrophic coverage is that it is a simple model to administer; everyone is eligible if their drug costs exceed a set percentage of their household income. Governments avoid the challenge of determining eligibility based on more complex factors like population or income, and do not have to establish systems to collect (and exempt people from) premiums, co-payments and deductibles. Catastrophic coverage can provide adequate coverage for middle and upper income households that can afford to pay a portion of their prescription drug costs.

The challenge with catastrophic coverage is that for low-income households even relatively modest prescription drug costs can be unaffordable. This can have substantial effects on non-adherence to prescriptions or can force people to forego essential items to be able to afford medications. Out-of-pocket expenses, paid upfront by people waiting for their benefit enrolment to be processed, can be a financial burden and prevent timely access to necessary medicines. These trade-offs can be unacceptable when household budgets are fixed, and this is particularly the case for people living with chronic disease who are required to pay quarterly annual deductibles.

Among the provinces, BC has the lowest level of public expenditures on prescription drugs in Canada. The province also has the highest number of uninsured and under-insured households at 30 percent (compared to Ontario at 20 percent),⁴⁵ and a much higher prevalence of cost-related non-adherence to prescription drug regimens (see Table 2). Ontario avoids this problem to some extent through the Ontario Drug Benefit program, but people not eligible face the same barriers to access as in BC.

Universal Pharmacare

Another model of prescription drug coverage, which has been widely recognized for its health equity benefits, is universal pharmacare. Universal programs provide coverage to all groups

^b In February 2018, the BC provincial government announced its plan to invest \$105 million in Fair PharmaCare over three years, to reduce or eliminate deductibles for families with incomes between \$15,000 and \$30,000. The changes are set to begin in January 2019.

within society regardless of employment status, income or other criteria. The ability of a single-payer to purchase drugs centrally by eliminating a patchwork of drug plans, means that governments can maximize their purchasing power and negotiate significantly lower drug prices for bulk purchases.⁴⁶

This model does not currently exist in Canada, but many international jurisdictions provide universal public drug coverage. In England, all citizens have prescription drug coverage within the National Health System (NHS).^c Citizens face little or no costs for covered medicines, and those who do pay carry low cost co-payments.⁴⁷ According to the UK Department of Health, as of 2013, approximately 90 percent of prescription items in England were provided free of charge.⁴⁸

The NHS provides medications at no cost to numerous groups, including people under 16 or over 60 years of age, full-time students aged 16-18, and people receiving social assistance. Some additional groups receive free medications if they have a medical exemption certificate. All other people pay £8.60 per prescription (around CAD\$14.25), and there are payment options in place to minimize the burden of these costs.⁴⁹

Recent work on expanded drug coverage in Canada has introduced the possibility of a transitional drug formulary that provides “essential medicines” to all residents, by adapting a World Health Organization list to the Canadian context.^{50,51} Cost benefit analysis of this type of program estimates that incremental costs to government would be \$1.2 billion per year to provide coverage for approximately 125 essential medicines, and would save individuals and private providers \$4.3 billion annually. The list is comprised of roughly 90 percent of prescription drugs, or therapeutically comparable medications, prescribed in primary care in Ontario. The effectiveness of full coverage of essential medicines for improved health and other outcomes (adherence, appropriate prescribing, and costs) is currently being tested in a randomized control trial in Ontario.⁵²

In 2014, Canada had one of the highest drug expenditures of all Organisation for Economic Co-operation and Development (OECD) nations.⁵³ In 2015, generic essential medicines in Sweden and New Zealand were 60 percent and 84 percent less in cost, respectively, than in Canada. Under the various coverage models described here, the drug purchasing system in Canada is highly fragmented, and this is one of the reasons that costs are high relative to other countries.^d Table 2 provides per capita prescription drug expenditures for provinces

c The National Health System covers other jurisdictions in the United Kingdom, including Scotland, Wales and Northern Ireland, each of which have different charging structures for prescription medications. For example, Wales abolished prescription drug charges via copayments or deductibles in 2007.

d In January 2016, the federal government joined the provinces in the pan-Canadian Pharmaceutical Alliance (pCPA) to promote bulk purchasing. The annual savings due to this partnership is estimated to be more than \$490 million. The consolidation of drug purchasing through a universal single payer would further facilitate equitable prices for prescription drugs relative to other countries with similar economic profiles.

in Canada and several countries with universal drug coverage models. It demonstrates very low non-adherence rates for the United Kingdom, at 2 percent, versus 10 percent in Canada. As these figures demonstrate, the NHS model is the least expensive while also providing the most equitable coverage.

The main arguments against universal pharmacare focus on increased costs to governments and individuals once the responsibility for private and employer drug plan costs are transitioned to the government. There are, however, reasonable methods to generate revenue for a universal pharmacare system. This could be achieved through a progressive taxation system in which contribution through taxes is based on percentage of income, or through increases to corporate tax contributions to account for the considerable savings to the private sector. It has been identified that there would be negative economic consequences for private insurance companies and the pharmaceutical industry if universal pharmacare were introduced.⁵⁴

Critics also argue that under a universal system access to new and innovative medicines would be limited, and that some Canadians who currently receive private insurance would be forced to accept narrower coverage due to a restrictive public drug formulary. Other countries with universal systems have implemented rigorous, evidence-based processes to determine which medicines are included for coverage. Examples of cost-effective, context-driven, evidence-based formularies include Sweden's list of approximately 200 medications, as well as the United Kingdom's regional short lists.⁵⁵

Applying Models of Coverage to Public Health Program Participants

The models of prescription drug coverage described vary considerably, and this can mean differences in the level of coverage that individuals receive. To demonstrate, this section applies drug coverage models to five individuals and families participating in public health programs in Toronto.

All health units in the province are mandated, through the Ministry of Health and Long-Term Care's Standards for Ontario Public Health Programs and Services, to improve population health and reduce health inequities. Toronto Public Health fulfills this function in a number of different ways, including through the provision of culturally competent and accessible services to meet the needs of diverse groups. While Toronto Public Health's focus is on the entire population, its services and programs prioritize people with the least access to resources, and often the greatest health needs. Many of these groups lack access to prescription drug coverage.

The following case studies include:^{e,f}

Alia, a 27-year-old lone parent with post-partum depression, who participated in the Healthy Babies Healthy Children (HBHC) program;

Zane, a 51-year-old custodian with Type 2 diabetes who participated in a Smoking Cessation/ Nicotine Replacement Therapy Program;

Tyrone and Talisha, aged 5 and 6, who were both diagnosed with asthma after their parents completed a Peer Nutrition workshop;

Elaine, a 27-year-old barista and line chef with rheumatoid arthritis who visited the Sexual Health Clinic;

Leila and Nadia, aged 38, a high-income couple who accessed a Breastfeeding Clinic after having a baby.

After calculating monthly drug costs as a proportion of income and essential living expenses (rent and food), costs are compared across the different models of coverage described above. These estimates are in the high range for Ontario as a whole, given Toronto's relatively expensive rental rates.

1) New Mother accessing the Healthy Babies Healthy Children (HBHC) program:

Alia is 27-years-old and just gave birth to her first child, who is 4 weeks old. Alia is single and receives a total take home monthly income of \$1,790. Alia finds it hard to make ends meet and her food budget is particularly tight. Alia was eligible for the HBHC program, which is a home-visiting program that supports individuals, and families to maintain healthy pregnancies, develop positive relationships with their child, and promote healthy child development. At a home visit, the Public Health Nurse noticed that Alia appeared to be feeling down, and she admitted to having low energy, decreased appetite, and feelings of inadequacy as a mother. The Public Health Nurse provided support and information about coping strategies and referred her to her family doctor for follow-up.

Alia's family physician diagnosed her with postpartum depression and recommended that she start on Sertraline, an antidepressant. A monthly supply of the medicine costs \$26.48 along with a dispensing fee of \$11.49. These costs would account for 12.5 percent of her discretionary income after rent and food. Alia has coverage via the Ontario Drug Benefit because she is on Ontario Works and pays a monthly \$2 dispensing fee for her medicine.

e These case studies are hypothetical and do not represent specific people. While they are written to reflect the characteristics of people who access Toronto Public Health programs, they do not claim to be representative of this highly diverse population.

f See **Appendix (Case Study Methodology)** for details about specific calculations in the case studies.

Take home monthly income: \$1,790

- \$986 from Ontario Works
- \$115 from Ontario Child Benefit
- \$59 in GST/HST credits
- \$97 from the Ontario Trillium Benefit
- \$533 from the Canada Child Benefit

Monthly income after rent and food: \$303

Expected monthly household drug expenditure without drug coverage: \$38

Expected drug expenditure as a proportion of discretionary (after rent & food) income: 12.5%

Actual monthly household drug expenditure: \$2

Actual drug expenditure as a proportion of discretionary (after rent & food) income: 0.66%

2) Adult Male accessing the Smoking Cessation/Nicotine Replacement Therapy program:

Zane is a 51-year-old custodian at a large law firm in downtown Toronto. He currently works part time for 25 hours each week, where he earns minimum wage. In order to make ends meet, he works another part-time job as a security guard a few evenings a week, working 10 hours per week. After income taxes, CPP, and EI deductions Zane takes home \$1,880.76 per month. As he is a part-time worker, neither job offers health insurance.

Zane has been trying to quit smoking for many years, but despite his efforts, he continues to have difficulty stopping for more than a few days at a time. One of his co-workers mentioned a smoking cessation and Nicotine Replacement Therapy (NRT) program. Stop on the Road is a three-hour workshop, delivered in partnership with the Centre for Addiction and Mental Health, which provides a group psychoeducation presentation and free NRT. During the workshop, Zane was encouraged by a Public Health Nurse to see a physician for the first time in many years.

At a doctor's visit, he was found to have Type 2 diabetes. In addition to recommending lifestyle modifications, Zane's physician also suggested that he start on Metformin, Gliclazide and Sitagliptin for the treatment of his diabetes. When he went to the pharmacy, he was told that per month the medicine would cost \$18.61 for the Metformin, \$20.50 for the Gliclazide and \$119.30 for the Sitagliptin, in addition to the dispensing fee for all three medications. Without insurance, the cost of this medication accounts for one-third of his discretionary income after rent and food. Zane is worried about the complications from diabetes, but simply cannot afford these medications.

Take home monthly income: \$1,880.76

- \$1,776.76 in earnings after deductions
- \$36 in GST/HST credits
- \$68 from the Ontario Trillium Benefit

Monthly income after rent and food: \$583.17

Monthly household drug expenditure: \$192.88

Drug expenditure as a proportion of discretionary (after rent & food) income: 33%

3) Family of five accessing the Peer Nutrition program:^g

Tyrone and Talisha, aged five and six, live with their parents and their infant sibling. The children's father works full-time (37.5 hours per week) at a food store where he earns \$14 per hour but does not receive any private health insurance. Their mother stays home to care for them. The family's total monthly take home income is \$4,019.

The parents were interested in learning how to make nutritious baby food at home. Friends who had attended the Peer Nutrition program recommended the educational program, which is provided in collaboration with community partners. The program provides culturally specific workshops that focus on improving food selection and food skills for parents and caregivers. During the program, the parents told public health staff that two of their children were wheezing and that they were planning to take them to see their doctor.

Both Tyrone and Talisha were diagnosed with asthma, a condition that runs in their family. The doctor recommended that both children have a rescue inhaler – Salbutamol – as well as a controller inhaler – Fluticasone. Salbutamol costs \$19 per inhaler while Fluticasone costs \$110 per inhaler, in addition to dispensing fees. Paying for the Fluticasone, in particular, would put a financial strain on the family. By purchasing these medications for both children, the family spends close to 20 percent of their discretionary income after rent and food. The physician emphasized the importance of taking the Fluticasone every day to control the asthma but given its cost the parents wonder if using only the Salbutamol is sufficient, as they would like to spend some money on extracurricular activities for the children.

Take home monthly income: \$4,019

- \$1,890.05 in earnings after deductions
- \$334 from the Ontario Child Benefit
- \$83 in GST/HST credits
- \$179 from the Ontario Trillium Benefit
- \$1,517 from the Canada Child Benefit

^g The Peer Nutrition program was integrated into Toronto Public Health's Early Years services in early 2018 and no longer exists as a stand-alone program.

- \$16 in Working Income Tax Benefit payments

Monthly income after rent and food: \$1,618

Monthly household drug expenditure (for both children): \$304

Drug expenditure as a proportion of discretionary (after rent & food) income: 19%

4) Young Adult accessing a Sexual Health Clinic:

Elaine is a 27-year-old who works as a line chef at a Toronto restaurant and a barista at a coffee shop. She is unable to find full-time employment and so works part time at both. At the restaurant, she works 15 hours a week and is paid \$15 per hour. At the coffee shop, she works 25 hours a week and is paid \$14 per hour. After incomes taxes, CPP, and EI deductions Elaine takes home \$2,147 per month. She receives no health benefits from either job.

Elaine recently visited a Sexual Health Clinic which provides a range of sexual health services (e.g., birth control counselling and STI testing and treatment). At the visit, she complained of joint swelling and pain. After being referred to a specialist, she was diagnosed with rheumatoid arthritis. The specialist recommended triple therapy with methotrexate (\$278.20), plaquenil (\$14.70), and sulfasalazine (\$38.60). The combined cost of these drugs is \$331.50 per month plus dispensing fees, which accounts for over 40 percent of her discretionary income. Elaine is very worried about these drug costs but knows that if she does not take them she may not be able to work.

Take home monthly income: \$2,147

- \$2,051.83 in earnings after deductions
- \$36 in GST/HST credits
- \$59 from the Ontario Trillium Benefit.

Monthly income after rent and food: \$880

Monthly household drug expenditure: \$366

Drug expenditure as a proportion of discretionary (after rent & food) income: 42%

5) New mother accessing a Breastfeeding Clinic:

Leila and Nadia are a professional couple with a combined annual income of \$300,000. As a lawyer and university professor, they both have employee health care benefits, which includes a drug coverage plan. Recently, the couple decided to expand their family by having a child. While pregnant, Leila developed gestational diabetes mellitus (GDM) and was required to take insulin for most of her pregnancy.

After researching the topic, Leila discovered that there is growing evidence that there are short- and long-term health benefits associated with breastfeeding for mothers with GDM. After giving birth, she experienced a lot of difficulty breastfeeding, and visited a Toronto Public Health breastfeeding clinic to seek support around effective techniques. Leila discussed her experience with GDM with the Public Health Nurse and was encouraged to follow-up with her family physician to screen for diabetes.

About a year after her pregnancy, Leila developed diabetes. Eventually, she was placed on the same regime that Zane's physician prescribed; Metformin, Gliclazide and Sitagliptin. The combined total monthly cost for these drugs is \$192.88. With private employer medical plans and an annual combined income of \$300,000, the monthly costs for these prescriptions are negligible.

Take home monthly income: \$15,663 (earnings after deductions)

Monthly income after food and housing costs (mortgage, property taxes, utilities, and home maintenance): \$8,411

Monthly household drug expenditure: \$192.88

Drug expenditure as a proportion of discretionary (after food and housing) income: 2.3%

Table 1. Applying Prescription Drug Coverage Models to Toronto Public Health Program Participants^h

The following table summarizes the differential impacts of five public and one employer provided drug programs on the five individuals described above.

	Targeted (Ontario Drug Benefit)	Insurance-Based (Quebec PPDIP)	Catastrophic (BC Fair PharmaCare)	OHIP+, Ontario and Youth Pharmacare (coverage for <25)	Employer Provided Drug Benefits	Universal (NHS England)
Alia, 27, lone parent	Eligible for ODB coverage as a social assistance recipient. Alia must pay a co-payment of \$2 per prescription. Total monthly expenditure: \$2.	Eligible for PPDIP as social assistance recipient. Premiums, deductibles and co-payments waived. Total monthly expenditure: \$0.	Eligible for Fair PharmaCare coverage. Alia pays 30% of her drug costs up to \$250, her annual family maximum.	Not eligible due to age.	Not eligible due to employment status.	Eligible for NHS coverage with no co-payments as Alia has given birth within the last 12 months. Total monthly expenditure: \$0.
Monthly cost of drugs: \$38.			Total monthly expenditure: \$11,39.			
Zane, 51, custodian	Not eligible for ODB coverage.	Eligible for PPDIP coverage. Zane's annual premium is \$399 and he must pay a monthly deductible of \$19.45 plus a co-payment of \$60.35 (calculated as 34.8% of his drug costs minus the deductible). Annual premium: \$395 (paid regardless of whether Zane fills any prescriptions). Total monthly expenditure: \$79.8 (deductible = \$19.45, co-payment = \$60.35).	Eligible for Fair PharmaCare coverage. Zane pays 100% of his drug costs up to \$450, which is his deductible. After this has been reached he pays 30% of drug costs up to his annual maximum of \$225. (Total: \$675) Total monthly expenditure varies by month. Zane pays the full \$192.88 for his drugs in month 1-3 until he reaches his \$450 deductible. He then pays approximately \$58 in months 3-7 until he reaches his annual maximum. In months 8-12 Zane pays \$0. Avg. monthly costs: \$56.25.	Not eligible due to age.	Not provided.	Eligible for NHS coverage with no co-payments as Zane qualifies for a medical exemption certificate due to his diabetes. Total monthly expenditure: \$0.
Monthly cost of drugs: \$192.88.						
Tyrone and Talisha, 5 & 6	Not eligible for ODB coverage.	Eligible for PPDIP coverage. The family's annual premium is \$0 due to their income. They do not pay any deductible or co-payment as Tyrone and Talisha are under 18 years old. Annual premium: \$0. Total monthly expenditure: \$0.	Eligible for Fair PharmaCare coverage. The family is required to pay \$450 family deductible. After this is reached the family pay a 30% co-payment. Once the family has spent \$675 out-of-pocket on drug expenses the Fair PharmaCare coverage increases to 100%. Total monthly expenditure varies by month. The family pays the full \$304 in month 1 and part of the cost in month 2 until their deductible is reached. They then pay 30% from months 2-4 until they reach their maximum annual out-of-pocket costs of \$675. Avg. monthly costs: \$56.25.	Both puffers that the children require are covered by the most recent version because the family does not have a private plan. Total monthly expenditure: \$0.	Not provided.	Eligible for NHS coverage with no co-payments as both of Tyrone and Talisha are aged under 16 years old. Total monthly expenditure: \$0.
Monthly cost of drugs: \$304.						
Elaine, 27-year old cook and barista	Not eligible for ODB coverage.	Eligible for PPDIP coverage. Elaine's annual premium is \$667 and she must pay the maximum monthly contribution (deductible and co-payment) of \$89. Annual premium: \$667 (paid regardless of whether Elaine fills any prescriptions). Total monthly expenditure: \$89 (maximum monthly limit).	Eligible for Fair PharmaCare coverage. Elaine must pay 100% of her drug costs up to \$500, which is her deductible. After this has been reached Elaine pays 30% of drug costs up to her annual maximum of \$750. Total monthly expenditure varies by month. Elaine pays the full \$366 in month 1 and varying amounts in months 2-4 after which she reaches her maximum annual out-of-pocket costs is \$750, all paid in the first few months of the year. Avg. monthly costs: \$62.50.	Not eligible due to age.	Not provided.	Elaine pays only £2 (around \$3.50 CAD) per prescription and can purchase a 12-month prescription pre-payment certificate for: £104 (\$182 CAD). Assuming she obtains 3 months of medications at a time, her monthly payment is £10.67 (\$18.68 CAD). Total monthly expenditure: \$19.
Monthly cost of drugs: \$366.						
Leila and Nadia, 38, lawyer and professor	Not eligible for ODB coverage.	Covered by private plan that pays 100% of drug costs. Total monthly expenditure: \$0.	Covered by private plan that pays 100% of drug costs. Total monthly expenditure: \$0.	Not eligible due to age.	Covered by private plan that pays 100% of drug costs. Total monthly expenditure: \$0.	Eligible for NHS coverage with no co-payments as Leila has given birth within the last 12 months. Total monthly expenditure: \$0.
Monthly cost of drugs: \$192.88.						

^h Specific drug programs for each model have been selected to demonstrate how coverage varies: targeted uses the Ontario Drug Benefit, insurance-based uses Quebec's PPDIP, catastrophic uses British Columbia's Fair PharmaCare plan and universal coverage uses NHS England.

How Models of Coverage Create or Mitigate Inequities in Access

These case studies demonstrate the variation in prescription drug coverage provided in Canada and how type of coverage impacts affordability, compared to universal pharmacare provided by NHS England.

Under the targeted model, most of the illustrative case studies do not receive coverage. As a social assistance recipient, Alia has the most complete and affordable coverage. For Zane and Elaine, prescription drug payments account for between 33 and 42 percent of their income, after paying for rent and food. Tyrone and Talisha's parents have to spend almost 20 percent of their discretionary income to pay for their children's medicines. This model is reflective of how most Canadian public drug plans operate; some vulnerable populations are eligible for coverage, while other populations, such as the working poor, are excluded.

Under the insurance-based model, Zane and Elaine are required to pay premiums as well as monthly deductibles and co-payments. Tyrone and Talisha's family would pay no annual premium under the insurance-based model, and there is no deductible or copayment because the children are under 18 years old. As a social assistance recipient, Alia would similarly have no costs associated with this coverage.

The catastrophic model of coverage requires variable out-of-pocket payment each month depending on where people are in their deductible, co-payment and annual maximum cycles. Monthly drug expenses that start very high and then slowly drop to \$0 over a year may make budgeting difficult for low wage workers. Both the catastrophic and insurance models can present substantial barriers to access as even relatively modest out-of-pocket costs can be financially overwhelming for people with low incomes.

The OHIP+ program in Ontario works better for Tyrone and Talisha's family who receive full coverage because the children are younger than 25. As low-wage workers over 25, Zane and Elaine continue to pay for their medications out-of-pocket. The province's Trillium Drug Program would provide some catastrophic coverage once they spent more than four percent of their income on prescription drugs, but this is still a significant financial expenditure for some people.

Leila and Nadia, a high-income family, pay nothing or very little due to their work health benefit plans, which provide coverage in place of, or in addition, to the public models. For the same diabetes medications, costs account for 2.3 percent of their household income compared with 33 percent for Zane. Regardless, Zane still pays out-of-pocket under each of the Canadian models, which could deter him from taking medicines needed to manage his diabetes.

The Canadian models of drug coverage offer a clear contrast to the universal system used by the NHS England, which covers all residents with modest co-payments, and ensures that populations that need it have access to prescription drugs at no cost. Each of the illustrative case studies qualify for either low or no cost prescriptions under the NHS England model. Elaine must pay \$19 out-of-pocket per month for her monthly drug costs, which accounts for only 2 percent of her household expenditures, compared to the 16-42 percent that she would pay under the other models. The universal model recognizes that while most people will need prescription drugs at some point in their lives, not everyone is able to pay out-of-pocket and some people's health needs are so great that the most equitable solution is to provide prescription drugs at no cost.

Ensuring Equity in Prescription Drug Coverage

An examination of alternative models provides useful lessons about who benefits, and who is excluded, in different approaches to public drug coverage. It is important that all Ontarians have equitable access to medically necessary medications. The targeted, insurance-based and catastrophic models currently in use across Canada all provide adequate coverage to some populations but exclude others who must pay a disproportionately large share of their income for out-of-pocket prescription drug expenses. Under such conditions, people are forced to choose between paying for prescription medications versus food. There are implications for health equity when high income earners pay small amounts relative to income, compared with low income earners who are often without benefits.

Ontario currently provides among the most comprehensive prescription drug coverage in Canada, with its mix of the Ontario Drug Benefit and Trillium Drug Plan. Despite this, one in nine Ontarians do not use a prescription medication as directed each year because of cost.⁵⁶ This indicates that the current model of coverage does not adequately protect Ontarians from facing high out-of-pocket drug costs. Achieving access to pharmaceuticals to treat health problems and maintain health should not be dependent on employment status or income.

The step towards universal drug coverage for all Ontarians under 25 years of age was a critical first move toward achieving an equitable pharmacare program. The expansion of ODB-level coverage to a wider population marked an incremental approach to drug reform and opened a policy window to introduce a more universal program at the provincial and federal levels.¹ While this move expanded drug coverage to many younger people whose families experience barriers to access, there remains a significant number of low-income Canadians who are under- or uninsured.

i The recent changes to OHIP+ in June 2018 represent a narrowing of this window to some degree at the provincial level and indicate that there will be a continued gap in coverage for those groups that currently receive targeted drug coverage (e.g., seniors) but would benefit from a universal model without copayments or deductibles.

This report describes the economic impacts of public drug coverage plans for Toronto Public Health program participants. Toronto has the highest poverty rate across large municipalities in Canada, and income inequality in the city is rising twice as fast as the rest of the country.^{57,58} Health outcomes vary according to income level, and people who are living in poverty or with low-incomes tend to have the worst health. Research also documents growing evidence that precarious work is detrimental to both physical and mental health.⁵⁹

The lack of drug coverage for many Torontonians will further perpetuate inequities between those who are struggling to make ends meet and high-income earners. Under existing coverage systems, those in the top and lowest (i.e., those enrolled in social assistance programs) income groups maintain coverage through public and private drug programs. For those who are precariously employed and having difficulty covering the costs of essential items, the lack of drug coverage can increase economic vulnerability and further compromise health status. From a population health perspective, cost-related non-adherence or opting to pay for medications at the expense of other necessities, exacerbates inequities. The universal provision of drug benefits can help to prevent and mitigate these effects.

The impact of labour market conditions on the provision of social and health benefits attached to employment could have been addressed through a number of recent policy developments in Ontario. The *Changing Workplaces Review* sought recommendations to tackle broad workplace issues and assess how existing labour and employment law addresses current trends, such as “changes in the prevalence and characteristics of standard employment relationships.”⁶⁰ The final report acknowledged the detrimental health impacts of a lack of access to drug benefit plans, and that an employer-provided benefit system creates disparity in coverage amongst Ontarians. Despite these admissions, the review did not recommend that the provincial government require employers to provide equal benefits to part-time, temporary, casual or seasonal employees, for practical and other reasons (e.g., financial burden to small businesses).⁶¹ Ensuing legislation also neglected the needs of the many low wage employees who lack health and drug coverage.⁶²

The *Commission for the Review of Social Assistance in Ontario* (CRSAO) (2012)⁶³ similarly recommended extended health benefits for all low-income Ontarians not receiving social assistance. The review recognized that prescription drug coverage is often unavailable through low wage employment, and people who exit social assistance may lose benefits to take up work in non-standard or low-wage jobs, which acts as a disincentive for workforce integration.⁶⁴ The CRSAO identified several potential pathways towards extended health benefits for people with low incomes through employer, government or private sector provided insurance plans.

The Ontario *Income Security Reform Working Group*⁶⁵ also recommended extending essential health benefits to all low-income adults, as more than half of people living in poverty in 2015 (1.94 million people) did not receive social assistance and were, thus, unable to access drug

benefits. While these policy initiatives to improve income security in Ontario have been promising, they have fallen short of extending universal drug coverage across the population.

There is an important caution in establishing an income-based program. As seen in BC, abandoning targeted coverage for a purely income-based catastrophic coverage model can leave many people with poor access to the public program, as high deductibles and co-payments create a significant barrier for people with low income.^j BC has the highest rate of cost-related non-adherence to prescription medication in Canada,⁶⁶ and research has found that policies that establish costs to users have lasting effects in terms of limiting access to medicine.⁶⁷

The most equitable drug coverage model, and least expensive from a societal perspective, is universal pharmacare. There has long been widespread support for universal drug coverage in Canada, including from provincial governments, health policy researchers, health care organizations, organized labour, professional associations, and municipalities.^k In April 2018, the Standing Committee on Health released a report, *Pharmacare Now: Prescription Medicine Coverage for all Canadians*, which recommends that the federal government establish a universal single payer public prescription drug coverage program. The report cites findings from the Parliamentary Budget Officer that estimates that a universal pharmacare program would lead to savings of roughly \$4.2 billion on total drug spending for Canadians.⁶⁸ An Advisory Council on the Implementation of National Pharmacare has also been established to provide independent advice to the Health and Finance Ministers on how to best implement an affordable national program.

In the meantime, Wellesley Institute and Toronto Public Health encourage Ontario to consider developing an interim made-in-Ontario model by expanding drug coverage to people in all age groups, income groups and employment situations. This action would represent a crucial step towards promoting health and social equity. Finally, we urge the federal government to establish a national universal single-payer pharmacare program to ensure a minimum standard of access for prescription medications.

j These problems have recently been acknowledged by the BC government when they announced they would eliminate or reduce out-of-pocket payments for many low-income earners as of January 2019. The province is now urging the federal government to invest in a national pharmacare program to ensure that all people who need prescription drugs can access them.

k In addition to numerous endorsements by academic experts and community, professional and labour organizations, a 2015 Angus Reid Institute survey found that 91% of Canadians support the idea of a national pharmacare program that would provide free universal access to prescription drugs.

Table 2. Comparison of Canadian provinces and countries with Universal, Public Drug Programs^{l,m,n,o,p}

Province/ Country	Number of Plans	Models Represented in Plans	Non-adherence – adults not taking medicines because of cost, 2007 and 2016 (share of population)	Per capita prescription drug expenditures (\$CAD) 2015 (or closest year)
Alberta	10	Targeted, Insurance-Based, Disease/ Condition-Specific	7.6%	728.10
British Columbia	10	Catastrophic, Targeted, Disease/ Condition-Specific	17%	590.68
Saskatchewan	11	Targeted, Catastrophic, Disease/ Condition-Specific	---	746.83
Manitoba	5	Catastrophic, Targeted, Disease/ Condition-Specific	---	702.08
Saskatchewan and Manitoba	---	---	8.9%	---
Ontario*	7	Targeted, Catastrophic Disease/ Condition-Specific,	9.1%	828.37
Quebec	1	Insurance-Based	7.2%	970.18
Atlantic Provinces	---	---	11.9%	---
Newfoundland and Labrador	5	Catastrophic, Targeted, Disease/ Condition-Specific	---	858.10
Nova Scotia	5	Targeted, Insurance-Based, Disease/ Condition-Specific	---	920.37
New Brunswick	10	Insurance-Based, Targeted, Disease/ Condition Specific	---	879.02
Prince Edward Island	27	Catastrophic, Targeted, Disease/ Condition-Specific	---	694.03
Canada	--	Patchwork of Different Plans	10%	952.1
United Kingdom	--	Universal, Public	2%	598.3
Norway	--	Universal, Public	3.5%	563.9
Sweden	--	Universal, Public	5.8%	602.5

l Source for provincial per capita expenditure figures and number of plans figures: Clement, F.M., Soril, L.J.J., Emery, H., Campbell, D.J.T., & Manns, B.J. (2016). Canadian Publicly Funded Prescription Drug Plans, Expenditures and an Overview of Patient Impacts. Calgary: Alberta Health. Retrieved from: <http://www.health.alberta.ca/documents/Health-Spending-PubliclyFundedDrugPlans-2016.pdf>

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n Source for provincial non-adherence prevalence rates (2007 CCHS): Law, M.R., Cheng, L., Dhalla, I.A., Heard, D., & Morgan, S.G. (2012). The effect of cost on adherence to prescription medications in Canada. *CMAJ*. 184(3): 297-302.

o Source for national non-adherence rates (2016): Morgan, E. (2017). A Prescription for Failure. Presentation at the *Canadian Health Coalition Policy Conference on “A Prescription for Equity.”* Retrieved from: <http://www.healthcoalition.ca/wp-content/uploads/2017/04/Morgan-E.pdf>

p *Ontario will also provide universal coverage with no premiums, co-payments or deductibles for everyone 24 years of age and under as of January 2018

Table Limitations:

The findings in this table are taken from a variety of references and data sources and may represent differences in terms of data source and dates, as well as design and methodological differences. The fact that we did not systematically assess potential differences across these sources should be acknowledged when comparing numbers within columns that come from different sources (e.g., national versus provincial non-adherence rates). We feel that there is value in being able to compare these compiled numbers despite these limitations.

Appendix – Case Study Methodology

The case studies are based on the socioeconomic characteristics of people participating in Toronto Public Health programs. The **financial figures** were calculated based on the following sources and assumptions outlined below. The income, deduction, and benefit figures are estimated for households in Ontario for the most recent data available.

- Benefits were estimated for 2017 levels using the Canada Revenue Agency’s “Child and Family Benefits Calculator” available at: <https://www.canada.ca/en/revenue-agency/services/child-family-benefits/child-family-benefits-calculator.html> and the most recent Ontario Works rates from the City of Toronto available at: <https://www.toronto.ca/wp-content/uploads/2017/11/99bb-ontario-works-rate-chart-oct2017-tess.pdf>.
- Ontario Works calculations combines the basic needs and the maximum shelter benefit amounts.
- GST/HST credits are paid quarterly but were averaged over the months of the year. WITB payment is annual but was also averaged over the months of the year.
- Payroll deductions including taxes, Canada Pension Plan, and Employment Insurance deductions were estimated for 2018 using the Canada Revenue Agency’s “Payroll Deductions Online Calculator” available at: <https://www.canada.ca/en/revenue-agency/services/e-services/e-services-businesses/payroll-deductions-online-calculator.html>
- Wages were estimated based on existing minimum wages in Ontario at the time of publication. The provincial government increased the minimum wage in 2018 to \$14. It plans to increase the minimum wage to \$15 in 2019.
- Gross employment income was estimated based on 4.33 weeks per month

For the ‘**discretionary income**’ figure, food and housing costs were subtracted from the take-home after tax and transfer income for each case.

- Food costs were estimated using Toronto Public Health’s 2018 “Nutritious Food Basket” calculator, which considers family size, age, and sex. It is available at: <https://www1.toronto.ca/wps/portal/contentonly?vnextoid=5bcoce7e2b322410VgnVCM1000071d60f89RCRD>
- Rent costs were estimated to be mean rents in the City of Toronto for October 2017 based on Canada Mortgage and Housing Corporation’s Housing Information Portal: CMHC Rental Market Survey zones 1-17 which align with the City of Toronto. This calculation takes into account family size and the appropriate number of required bedrooms according to the National Occupancy Standard requirements (i.e. not overcrowded). These are available at: <https://www03.cmhc-schl.gc.ca/hmiportal/en/#TableMapChart/3520005/4/Toronto%20>

Drug cost estimates include cost of medications and dispensing fees. These were provided by local pharmacies (Shoppers Drug Mart and Rexall) in Toronto. Dispensing fees vary somewhat by pharmacy. This report uses an average of \$11.49 for dispensing costs based on quotes from two pharmacies with relatively high (\$12.99) and low (\$9.99) rates. Case studies reflect the fact that dispensing fees are typically charged per prescription.

Drug plan coverage was estimated using the official government websites for each program.

- For Quebec’s Public Prescription Drug Insurance Plan (PPDIP) eligibility, annual premiums, deductibles, copays, and max contribution limits were estimated using Régie de l’assurance maladie du Québec’s questionnaire for 2017 available at: <http://www.ramq.gouv.qc.ca/en/citizens/prescription-drug-insurance/check-your-situation/Pages/introduction.aspx> and Schedule K from Revenue Quebec at: [http://www.revenuquebec.ca/documents/en/formulaires/tp/2017-12/TP-1.D.K-V\(2017-12\).pdf](http://www.revenuquebec.ca/documents/en/formulaires/tp/2017-12/TP-1.D.K-V(2017-12).pdf)
- British Columbia ‘Fair Pharmacare’ 2018 annual deductibles, client pay portions, and annual family maximums estimated using BC Health’s “Fair PharmaCare Calculator” available at: <https://www.health.gov.bc.ca/pharmacare/plani/calculator/calculator.html>

Details of case study calculations can be provided by Scott Leon at scott@wellesleyinstitute.com.

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