

# Behavioural Insights in Ontario

Update Report 2020

Ontario 

## Table of Contents

<b>Foreword</b>	<b>5</b>
<b>Executive Summary</b>	<b>7</b>
<b>Most Notable Accomplishments</b>	<b>9</b>
<b>Introduction</b>	<b>10</b>
How Does Ontario Apply Behavioural Insights?	10
Methodology	10
<b>Accomplishments</b>	<b>12</b>
<b>1.0 Ensuring Compliance</b>	<b>12</b>
Increasing Timely and Online Municipal Fine Payments	12
Increasing Compliance Reporting with the <i>Accessibility for Ontarians with Disabilities Act (AODA)</i>	14
<b>2.0 Promoting the Use of Digital Services</b>	<b>16</b>
Increasing Uptake of the MyBenefits Online Service	16
Shifting Health Card Renewals Online	18
Increasing Vaccination Reporting for High School Students	19
<b>3.0 Improving Health and Safety</b>	<b>23</b>
Increasing Vaccination among High School Students	23
Increasing Uptake of the Human Papillomavirus (HPV) Vaccine	24
Increasing Organ Donor Registration by Motivating Customer Service Representatives	27
Decreasing Excessive Opioid Prescribing	29
<b>4.0 Increasing Uptake of Programs and Services</b>	<b>31</b>
Increasing Applications for the Ontario Electricity Support Program (OESP)	31
Increasing Retirement Planning Amongst Ontario Public Service Employees	34
Increasing Participation in the Ontario Public Service Employee Survey	36
Increasing Timely Updating of Talent Profiles	37

## Table of Contents

<b>Behavioural Insights Projects Underway</b>	<b>39</b>
Increasing Reinstatement of Suspended Drivers' Licences	39
Increasing Health and Safety Compliance Amongst Child Care Centres	39
Increasing Jury Pool Participation	40
Increasing Ontario Works Client Attendance at Local Tax Clinics	40
Increasing Uptake of the Special Authorization Digital Information Exchange (SADIE)	41
Increasing Uptake of MyDirectPlan Online Service	41
Increasing use of electronic payment options among Social Assistance recipients	42
<b>Select Advisory Work</b>	<b>43</b>
Increasing Cervical Cancer Screening Rates for Eligible Women	44
Improving Ontario's Demerit Point System for Driver Remediation	46
Increasing RESP Uptake Among New Parents	46
Helping Primary Care Physicians Improve Prescribing Behaviour	47
Increasing Uptake of Direct Bank Deposit Amongst Social Assistance Vendors	48
Increasing Compliance with Vital Statistics Reporting	49
Increasing Uptake of an Online Patient Portal	49
Supporting Ontario's COVID-19 Response	50
<b>Education and Outreach</b>	<b>52</b>
<b>Conclusion</b>	<b>53</b>
<b>Glossary</b>	<b>54</b>
<b>References</b>	<b>59</b>



It is equally impossible to create programs and policy that add value to humans without understanding humans. The Ontario BIU has shown that it is possible to do both within the existing structures of government.

-Dilip Soman and Melanie Kim

## Foreword

If we are building programs and public policy, it is perhaps uncontroversial to say that we should understand how the public behaves. Government for the people implies that government needs to design programs, policies, and services with a view to maximizing their value to people. As Richard Thaler and Cass Sunstein so eloquently wrote in the 2008 book *Nudge*, however, organizations often have erroneous assumptions about what drives human behaviour. We often think about citizens as rational, value-maximizing individuals who act in their own best interests and have infinite capacity to make cognitively complex choices. Instead, citizens are human – susceptible to human fallibilities like impulsivity, forgetting, cognitive laziness, confusion over complexity, and tendency to let emotions play a role in their decisions and actions.

While we often recognize that programs needed to be designed for humans and not rational actors, product and program design unfortunately happens in isolation with minimal engagement with end-users. The fix is usually simple - do extensive research to better understand what our citizens care about and how we can add value to them. However, decades of research in behavioural insights (BI) shows that context matters to people's choices and actions and that people cannot articulate their own preferences very well. Therefore, it is paramount to not just do research, but to do the right kind of research and use the right frameworks for implementing insights from the research.

The adoption of BI and experimentation by governments has been growing worldwide. In a recent update, the OECD showed that more than 200 units within governments, quasi-government agencies, academic units, and other supporting agencies have now been using the principles and methods of BI to help design better programs and policy. Canada has been a leader in this space. In particular, the Ontario BIU has now been in operation for more than five years and uses rigorous scientific thinking to develop, design, and test policies that are in our citizens' best interests.

After the success of the Ontario unit, other units in Canada emerged. In particular, the Impact and Innovation Unit in the Canadian federal system, the Behavioural Insights Group at the government of British Columbia, and several other regional and local units now use the science to create value for citizens. One important principle from BI that many of these units leverage is the notion of the intention-

action gap, the idea that many citizens do not want to intentionally evade taxes or to avoid taking vaccinations or donating organs. However, they simply fail to do so because life gets in the way. These are domains where BI can be of help.

In this latest report, the Ontario BIU has documented their work on a range of projects that cut across domains and departments. What is common to all is that they involve specific behaviour change challenges that run the spectrum from increasing uptake of HPV vaccinations, paying fines on time, reporting of vaccination, and increasing the uptake of MyBenefits. They are also common in that they all use a rigorous scientific approach to testing and implementing a behaviourally informed solution.

At the University of Toronto, our research centre (BEAR) has been working with several organizations in the government, industry, and not-for-profit space to help them embed BI into their operations. The Ontario BIU has been one of our very early partners, and we have been proud to be associated with the unit since its early days. As an academic partner, our ongoing emphasis is not only on conducting behavioural trials, but also scaling up the outcomes of trials and helping our partners find additional ways of incorporating BI. These might include policy and program design, conducting behavioural audits, the use of big data initiatives in conjunction with BI, and creating a platform for policy innovation more generally. It is impossible to create good evidence-based policy without evidence.

It is equally impossible to create programs and policy that add value to humans without understanding humans. The Ontario BIU has shown that it is possible to do both within the existing structures of government.

**Dilip Soman and Melanie Kim**

Behavioural Economics in Action at Rotman (BEAR), University of Toronto

## Executive Summary

What if there were simple, low-cost changes that governments could make to increase the effectiveness of policies, programs and services?

Behavioural insights solutions are one way that Ontario can put people first while achieving these goals. Behavioural insights can be applied to better understand and plan for how people interact with government to help improve their experiences and provide services more effectively. Ontario's Behavioural Insights Unit (BIU) uses behavioural science knowledge and methods to provide evidence-based and effective solutions across policy areas in the Ontario government and with partners across the public sector.

Putting people first means that collaboration is key. The BIU works closely with partners across government to design and implement practical solutions. With its partners, the BIU has saved the province millions in annual operating costs and helped Ontarians unlock significant, everyday benefits through modernizing – and humanizing – government programs and services. Since the accomplishments described in the 2018 Update Report, the BIU has worked collaboratively on projects with more than 10 ministries and provincial agencies. The BIU has also teamed up with partners working at other levels of government on front-line services that affect Ontarians, including with local and municipal service agencies in the Region of Durham and the City of Toronto.

Ontario's BIU, housed in the Treasury Board Secretariat, was the first unit of its kind in Canada. The impact of the BIU's successful collaborations has extended beyond the province's borders with Ontario recognized as a behavioural insights leader across Canada and around the world. In 2018, Ontario was profiled in the OECD/World Bank's report, Behavioral Science Around the World – Profiles of 10 Countries, with positive implications for the provincial unit's standing. Public-facing reports that highlight results and lessons learned from Ontario's behavioural insights interventions are a valued resource among international teams (e.g., Behavioural Insights Team UK, Canada's Impact and Innovation Unit, and public sector teams in Australia, New Zealand, the European Commission, the United States, the Netherlands) and have built legitimacy for the work of Ontario on a global stage.

To date, Ontario has delivered nearly 30 behavioural insights pilots, with 18 completed since 2018 and more underway. These projects have increased compliance in fine payment, accessibility and health and safety, have saved people

time and money by increasing the use of digital platforms, have improved public safety and public health as well as encouraged uptake of valuable programs and services for Ontario residents. The BIU has also provided evidence-based advice and capacity-building to Ontario Public Service colleagues and decision-makers through workshops, select advisory projects, and the development of a publicly-available digital Behavioural Insights Workbook (email [biu.tbs@ontario.ca](mailto:biu.tbs@ontario.ca) for a copy).

Although the majority of this report was written prior to the 2020 COVID-19 public health emergency, it cannot be published without acknowledging the role this pivotal event has had on the lives of people in Ontario. Some of the BIU's projects – including trials underway – were put on hold as public resources were quickly redirected to support emerging priorities across the government and physical distancing restrictions shut down “business as usual.” Likewise, the BIU worked with government ministries and agencies to provide extraordinary, rapid behavioural advisory services to help respond to the crisis. Some of the products that the BIU has supported with best-practices and emerging COVID-19 related advice are noted in the “Select Advisory Work” section of this report.

Moving into the next decade, the BIU looks forward to deepening existing partnerships and building new relationships across government and the broader public sector to provide high-quality behavioural insights advice to support people-centred programs and services.



## Most Notable Accomplishments

**2x**

increase in the likelihood of getting vaccinated

**1,120**

more students protected against preventable cancers during the trial alone



Increasing Uptake of the Human Papillomavirus (HPV) Vaccine.

Tested multiple redesigned versions of reminder/recall letters and made enhancements to the appointment booking system.

**30%**

increase in screening rates

**7,200**

more women screened for cervical cancer in 2018 and similar increases expected in subsequent years

Increasing cervical cancer screening rates for eligible women.

Redesigned letters sent to Ontario women eligible for Pap screening.

**\$9.3**

million dollar projected increase in collected fines per year

**\$4.85**

million projected yearly reduction in avoidable late fees and interest incurred by Ontarians



**33,900**

fewer drivers projected to be suspended annually

Increasing timely and online municipal fine payments.

Tested multiple versions of a redesigned notice of fine and due date.

**\$309,672**

saved annually by social assistance clients on electricity bills due to the trial alone

Increasing applications for the Ontario Electricity Support Program.

Tested multiple redesigned versions of letters sent to social assistance clients.

**3x**

increase in the likelihood of reporting via the online channel

**4x**

increase in registrations for the MyBenefits online service



Increasing online vaccination reporting for high school students.

Tested multiple versions of redesigned paper notices sent to students and their families.

Increasing uptake of MyBenefits online service.

Developed and tested behaviourally-informed emails and text messages.

## Introduction

### How Does Ontario Apply Behavioural Insights?

Ontario's Behavioural Insights Unit was officially created in 2015 with a mandate to enhance public services by leveraging behavioural science research. It is the first government unit dedicated to the practice of behavioural insights in Canada.

The BIU is part of the Centre of Excellence for Evidence-Based Decision Making within the Treasury Board Secretariat and works with partners to apply a behavioural science lens in policy development and program implementation. This means building capacity, providing advisory services and designing and evaluating solutions.

Behavioural insights are applicable to a wide variety of domains and the BIU works collaboratively with numerous ministries, agencies and other levels of government.

The BIU provides advisory services and attracts and inspires potential partners through innovative education and outreach. While we help build local behavioural insights capacity across government, the majority of the BIU's capacity building work comes from engaging with partners to apply insights from the behavioural sciences to design, evaluate and implement policies and programs that are more effective, efficient and human-centric.

Part of the BIU's mission is to inform the government, partners and prospective partners, as well as the public, about the progress it is making and the policies or programs that have been shaped and influenced by our scientific, people-centred approach. This is the BIU's second update report detailing notable accomplishments and ongoing work.

### Methodology

Ontario's BIU follows a methodology adapted from the Behavioural Insights Team and ideas42, two well-respected organizations that have been engaged in the application of behavioural science to public policy for more than a decade. This methodology, called TESTS, is so named because it has five steps: Target, Explore, Solutions, Trial and Scale.

In the Target stage, the BIU works with project partners to identify consequential behaviour that can be changed and how change will be measured. An ethical review conducted during this early stage ensures that the desired behavioural change has clear benefits for Ontarians as well as the government. Then, we Explore the behavioural context surrounding this specific action, which can involve a literature review, qualitative research, stakeholder interviews and a modified version of a user journey map known as a behavioural map. The Explore stage concludes by identifying the primary behavioural barriers that may prevent people from acting. Next, multiple different versions of a Solution are developed that incorporate different behavioural insights to address the behavioural barriers identified in the Explore stage. During the Trial stage, these solutions are tested against each other and against a “business-as-usual” or status quo version, usually via a randomized control trial. Trial results are communicated back to the BIU's partners and decision-makers, who then have an opportunity to Scale the best-performing solution or keep the status quo depending on their cost-benefit analysis.

#### **What is a randomized control trial (RCT)?**

Considered the gold standard for evaluations in behavioural science (and in the medical field), an RCT is a specific type of evaluation method that uses random assignment to create two or more groups that are likely to be statistically equivalent in terms of all possible variables (e.g., demographics, personality, education, geography). One of these groups is used as a control group and receives a “business-as-usual” or status quo treatment (e.g., a letter previously used by the partner), while the other groups receive different solutions (e.g., different behaviourally-informed letters). Since the different groups are designed to be statistically equivalent, comparing the behaviour of the different solution groups against the control group, the RCT allows for inferences to be made about what behaviour change was caused by each solution.

While presented linearly, TESTS is often an iterative process that requires moving back and forth between stages to incorporate learnings or refine project deliverables. The accomplishments that follow are presented using the TESTS structure to highlight the multi-step scientific method that the BIU and its partners apply to achieve behaviourally-informed public policy outcomes.

### Increasing Timely and Online Municipal Fine Payments

Regional Municipality of York and Ministry of the Attorney General

**Target:** Although the majority of fines issued under the Provincial Offences Act are collected on time, a substantial proportion are paid late or never. As of 2018, municipal courts in Ontario were owed over \$1 billion in defaulted fines, even though citizens face serious consequences for unpaid fines, such as additional penalty fees and interest and driver's licence suspensions. In fact, around 100,000 drivers have their licences suspended in Ontario every year due to unpaid fines. When these fines are paid, fewer than half are paid digitally, increasing the cost and labour necessary to process these payments.

**Explore:** Responding to drivers' complaints about licence suspensions for unpaid fines, Ontario's Ombudsman described notices related to these fines as "long, confusing, overcomplicated, and poorly formatted." The BIU worked with the Ministry of the Attorney General (MAG) to make changes to the Notice of Fine and Due Date (NFDD) sent to people convicted of a provincial offence notifying them of their fine payment deadline.

**Solution:** When possible, the BIU leverages the evidence generated by other behavioural science teams around the world to increase our likelihood of success. The Behavioural Insights Unit in New South Wales, Australia had previously developed and tested a fine notice that used salient formatting to clearly communicate concrete steps a recipient had to take to avoid negative consequences. Three versions of these notices were adapted for the Ontario context: one with just the new salient formatting, and two with added nudge statements that either highlighted the social norm that most recipients make on-time payments or used framing to evoke loss aversion by emphasizing the penalties a recipient would face for inaction.

# Sample/exemple

Ontario Court of Justice  
 Provincial Offices Office  
 The Regional Municipality of York,  
 465 Davis Drive, Suite 200  
 Newmarket ON L3Y 7T9  
 Phone No./N° de tél: (905) 739-4291

To: John Doe  
 123 Any Street,  
 Anywhere, Ontario,  
 A1B 2C3

## Notice of Fine and Due Date Avis d'amende et d'échéance

You have been convicted of an offence, and you owe the amount noted below.  
 Vous avez été déclaré(e) coupable d'une infraction et vous devez payer l'amende indiquée ci-dessous.

Place of Offence Lieu de l'infraction		Offence Code Code de l'infraction	Offence Infraction
Highway 400 Barrie, Ontario		D412003	Speeding
Due Date Échéance	Fine No. N° de dossier	Plate No./No de plaque immatriculation	Conviction Date Date de condamnation
DDMMYY - JJMM/AA 0000/00	38609990012345678		DDMMYY - JJMM/AA 07/03/05
		Amount Due/Montant exigible \$45.00 Includes fine, court and Victim Fine Surcharge Comprend l'amende, les cotés et la surcharge pour victime	

For most Provincial and Municipal offences, an additional administrative fine of \$20.00 will be charged if the fine is not paid within fifteen days of the due date.  
 Pour la plupart des infractions provinciales et municipales, des frais administratifs supplémentaires de 20,00 \$ seront ajoutés si l'amende n'est pas payée dans les 15 jours qui suivent la date d'échéance.

- FAILURE TO PAY THIS FINE BY THE DUE DATE MAY RESULT IN:
- Suspension of your driver's licence and the imposition of a licence reinstatement fee.
  - Informing the Credit Bureau of the debt, which may affect your credit rating.
  - Referral to a Private Collection Agency for formal collection proceedings.

COMPLÉTE AND DETACH THIS PORTION AND SEND WITH PAYMENT.  
 SEE BACK FOR MAILING AND PAYMENT INSTRUCTIONS.

NAME AND ADDRESS: John Doe  
 123 Any Street,  
 Anywhere, Ontario, A1B 2C3

CHECKS MONEY ORDER ENCLOSED  
 VISA  
 MASTERCARD

CONVICTION DATE / DATE DE CONdamnATION: 07/03/05

AUTHORIZED AMOUNT / MONTANT AUTORISÉ: \$45.00

CARD NUMBER / NUMÉRO DE LA CARTE: \_\_\_\_\_

CARD EXPIRY DATE / DATE D'EXPIRATION: (MONTH) / (MOIS) \_\_\_\_\_ (YEAR) / (ANNÉE) \_\_\_\_\_

Ontario Court of Justice  
 Provincial Offices Office  
 The Regional Municipality of York,  
 465 Davis Drive, Suite 200  
 Newmarket ON L3Y 7T9  
 Phone No. (905) 898-0425

Notice of Fine and Due Date  
 Form 10.3, Provincial Offences Act, Ontario Court of Justice, O. Reg. 108/11

**Unpaid Fine**

File No.: 00000000000000000000  
 You owe: \$000.00  
 You must pay by: XXXXXXXXXXXX 00, 2018

To pay now, go to [www.paytickets.ca](http://www.paytickets.ca)

Fine payable to: XXXXXXXXXXXXXXXXXXXXXXXX  
 Ticket type: Notice of Fine and Due Date

Re: Notice of Fine and Due Date - If you have already paid the amount due, please disregard this notice.

**PAY NOW**

Pay your fine now or you may lose your driver's licence, your possessions may be seized, or your employer may be ordered to garnish your wages.

Offence	Offence Date	Conviction Date	Place of Offence	License Plate No.
XXXXXXXXXXXXXXXXXXXXXXXXXXXX	00/00/00	00/00/00	XXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX

- SERIOUS LEGAL CONSEQUENCES MAY RESULT IF YOU DO NOT PAY YOUR FINE ON TIME:**
- Loss of your driver's licence, and a licence reinstatement fee.
  - Dealing with your credit score by Credit Bureau.
  - Property seizure by enforcement officials.
  - Registration of a lien (possession of your property until the debt is paid).
  - Additional fees, costs and surcharges.
  - An order for your bank to remove the owed funds from your account.

**HOW TO PAY:**

Mail: Send in the bottom portion of this letter (reverse side) to the address above.

Online: [www.paytickets.ca](http://www.paytickets.ca) Fast and convenient!

In Person: Go to any Provincial Offences Court Office.

- ADDITIONAL INFORMATION:**
- Remember to keep a record of your payment.
  - You have the right to apply to the court for an extension of time for payment of this fine.
  - If you have any questions, please contact the Court office at the address shown on the upper left-hand corner.
  - For information on access to Ontario Courts for Persons with Disabilities please contact via the address and telephone number in the upper left-hand corner.

**Pay Online  
 at  
 PayTickets.ca**

**FRANÇAIS AU VERSO.**

Guide for Defendants available at [www.ontariocourts.ca/CC/JC/Guide](http://www.ontariocourts.ca/CC/JC/Guide) or contact the court office.  
 Le Guide pour les défendeurs est consultable à [www.ontariocourts.ca/CC/JC/Guide](http://www.ontariocourts.ca/CC/JC/Guide) ou contactez le greffe du tribunal.

When you mail your payment and this notice, you assume the consequences if, for any reason, the payment is not received in our Court office by the due date.  
 Lorsque vous envoyez par la poste votre paiement et le présent avis, vous êtes responsable des conséquences si, pour une raison quelconque, le greffe ne reçoit pas votre paiement au plus tard à la date d'échéance.

**REMEMBER TO KEEP A RECORD OF THIS PAYMENT**  
**N'oubliez pas de conserver une preuve du paiement**

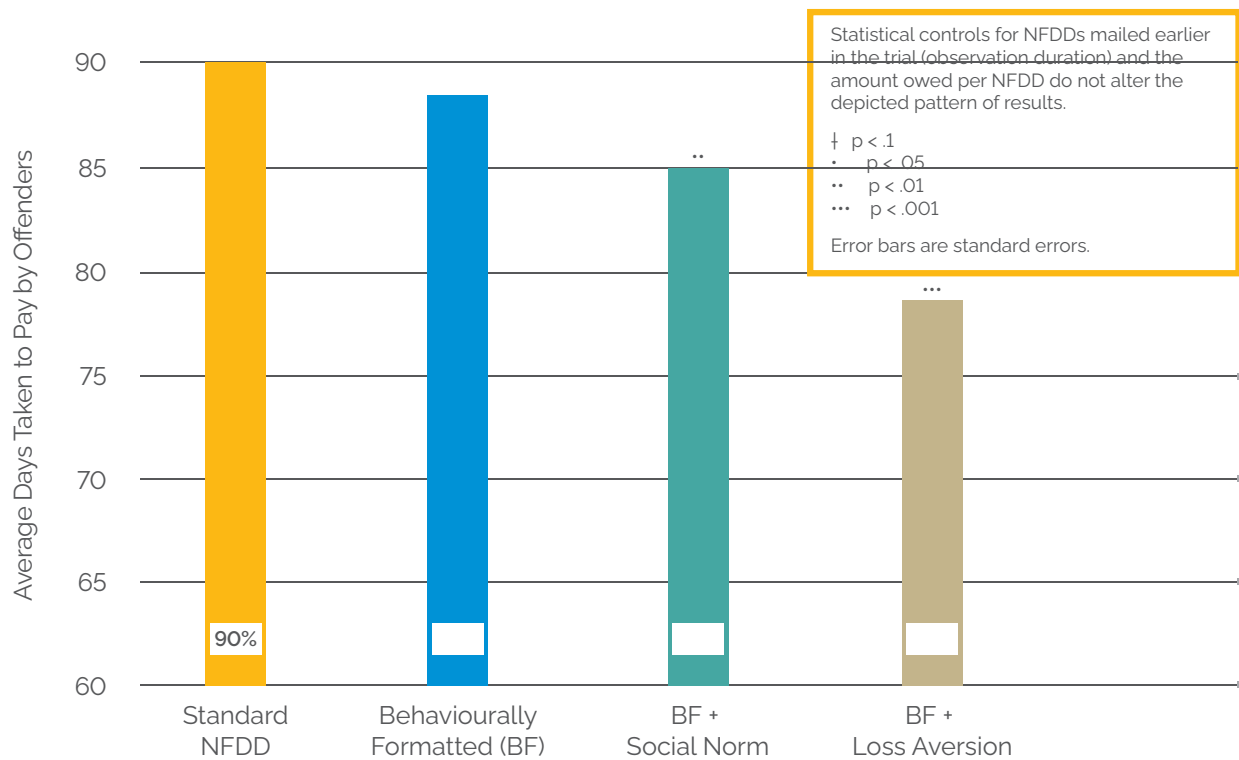
Ontario Court of Justice  
 Provincial Offices Office  
 The Regional Municipality of York,  
 465 Davis Drive, Suite 200  
 Newmarket ON L3Y 7T9  
 Phone No. (905) 898-0425

Cour de Justice de l'Ontario  
 Bureaux des infractions provinciales  
 Municipalité régionale de York  
 465 Davis Drive, Suite 200  
 Newmarket (Ontario) L3Y 7T9  
 Téléphone: 905 898-0425

FOR INFORMATION ON ACCESS TO ONTARIO COURTS FOR PERSONS WITH DISABILITIES: Call (905) 898-0425  
 POUR OBTENIR DES RENSEIGNEMENTS SUR L'ACCÈS DE PERSONNES HANDICAPÉES AUX TRIBUNAUX DE L'ONTARIO: Téléphone (905) 898-0425

**Figure 1:** Status quo version of the notice of fine and due date, along with one of the behaviourally formatted notice designs. The only difference between the three behaviourally formatted versions was the nudge statement in red text, which was omitted from one version, written as a social norm statement in the second version, and written as a loss aversion statement in the third version.

**Trial:** Over the course of a four-month trial, the fine notices distributed by York Region were collected each day until 21,035 recipients had received one of the four notices. Assignment to notice version was clustered by day to avoid the same person receiving different notice versions if they had been convicted of multiple offences on the same day. Data analysis revealed that the behaviourally formatted notice with the loss aversion statement significantly accelerated fine payment by twelve days, increasing fine collection amounts by 11% compared to the standard notice. As the Ministry scales this new notice province wide, Ontario anticipates a \$9.3 million dollar increase in collected fines a year. Just as importantly, more timely fine payments will save Ontarians over \$4.85 million in avoidable late fees and interest and decrease the number of suspended drivers by 33,900 annually. The new notices also increased uptake of the digital channel for fine payments by 16%, saving an estimated 1,739 staff hours and \$65,000 in costs per year across the province.



**Figure 2:** Comparing time taken to pay by different NFDD version recipients. The behaviourally formatted NFDDs with nudge statements significantly accelerated payments by as much as twelve days.

**Scale:** The Ministry of the Attorney General implemented the behaviourally formatted NFDD notices with loss aversion nudge statements starting in November 2019 with the roll-out completed province wide in February 2020.

### Increasing Compliance Reporting with the Accessibility for Ontarians with Disabilities Act (AODA)

Ministry for Seniors and Accessibility

**Target:** Over 15 per cent of Ontarians identify as having a disability. Businesses with 20+ employees in Ontario are required to regularly report their compliance with AODA regulations. Some organizations that submit a compliance report are selected to provide further documentation. Currently, approximately 89 per cent provide the

required documentation, and 11 per cent are escalated to the next phase of the audit. The BIU collaborated with the Ministry for Seniors and Accessibility (MSAA) to test whether a behaviourally-informed notice of audit email could increase the timely responses to audit requests.

**Explore:** The project team created a behavioural map of the compliance reporting process and identified that because organizations receive large volumes of correspondence and are often managing multiple tasks each day, limited attention and cognitive bandwidth could be a barrier to compliance. Even seemingly small hassle factors, such as having to read through multiple paragraphs to understand the steps to respond, could result in confusion or procrastination.

**Solution:** The project team designed two behaviourally-informed emails, both with clear deadlines for action and the contact information of the compliance analyst assigned to the audit. The first attempted to remove perceived hassle factors by simplifying and laying out the steps to respond to the audit request in an enumerated list. The second included a nudge statement that emphasized the commitment the organization already demonstrated by submitting their report and stressed the consequences of non-response.

**Trial:** A sample of 300 organizations was randomly assigned to receive one of the two notices. One hundred organizations were audited each quarter, and data on their response rates was collected at the end of each quarter. Data analysis of response rates revealed that both behaviourally-informed notices performed statistically identically, and that neither significantly surpassed the benchmark of 89 per cent compliance with the audits. This null result (not statistically significant) could be due to a ceiling effect. It is likely that the organizations who would be influenced by a behavioural insights intervention are already part of the 89 per cent that are taking the desired action, and the remaining 11 per cent of organizations face barriers to a timely response that are not affected by light-touch behavioural insights interventions.

**Scale:** The Ministry for Seniors and Accessibility is currently reviewing the results and considering how best to incorporate these findings to increase compliance with accessibility legislation in Ontario.

### Increasing Uptake of the MyBenefits Online Service

Ministry of Children, Community and Social Services

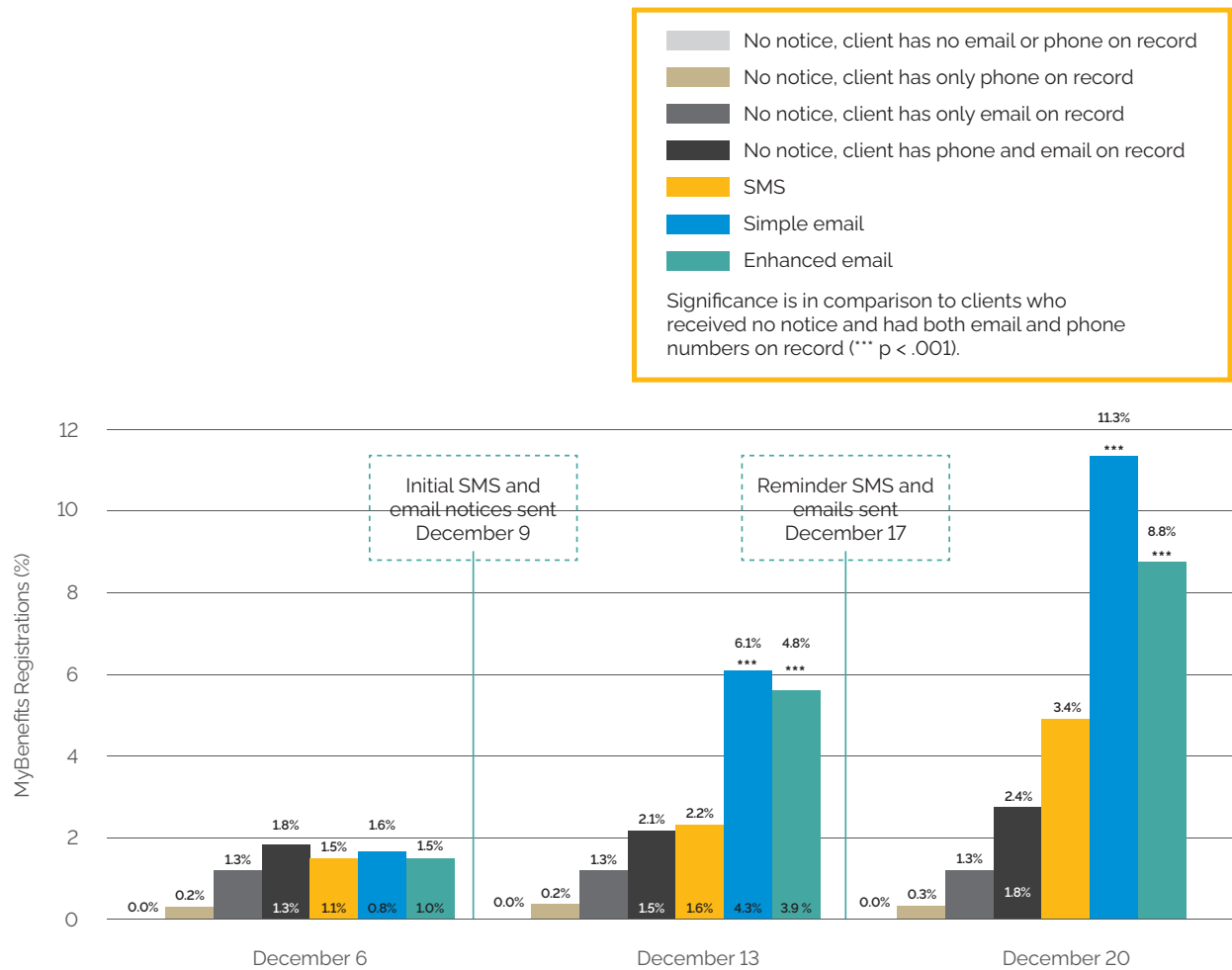
**Target:** Ontario has two social assistance programs to help eligible residents who are in financial need: Ontario Works and the Ontario Disability Support Program. Managed by the Ministry of Children, Community and Social Services (MCCSS), these programs offer financial support to Ontarians in need and help with finding employment. To improve service delivery, the Ministry launched MyBenefits, a secure and convenient online tool to help social assistance recipients report income and manage their case information. The Ministry approached the BIU to collaborate on a project that could increase client uptake (e.g., registration) of the MyBenefits tool.

**Explore:** The BIU worked closely with MCCSS to better understand its social assistance programs and how clients interact with them. Behavioural mapping explored the social assistance enrolment process and opportunities where clients may be exposed or introduced to the MyBenefits tool. Key barriers preventing clients from signing up for MyBenefits were identified. Information overload during social assistance enrolment made it difficult for clients to attend to non-mandatory tasks like MyBenefits registration. Once clients were onboarded to social assistance, they were likely influenced by status quo bias, a preference for their existing process for reporting and managing their information rather than a new service that would require additional effort to master. Clients on social assistance are also likely to be dealing with resource and time scarcity, which takes up significant mental bandwidth. Given this context, the project team took extra consideration to identify and remove barriers to completing MyBenefits registration.

**Solution:** Based on findings from the behavioural mapping exercise, the BIU and MCCSS sent net-new email messages (both a simple and enhanced email) and text messages (with the same content as the simple email) to social assistance clients at two pilot sites, informing them of the MyBenefits tool. These communications were intended to promote MyBenefits to recipients (in case they had not heard about it previously) and enabled easy sign-up through a direct link. These communications used behavioural insights techniques such as simplification, making key advantages of the service more salient and providing timely reminders. Email and text messages were specifically chosen due to the higher “read rates” and lower cost of these channels compared to paper-based communications. In order to manage potential risks associated with sending text messages to social assistance clients, a pre-pilot was conducted in November 2019 where 100 clients received text messages.



**Trial:** Email and text messages were sent in December 2019 to a sample of 4,000 clients who were eligible to register for MyBenefits. The clients were divided equally by random assignment into the three treatment conditions. Clients were selected from pilot sites in London (Ontario Disability Support Program) and Ottawa (Ontario Works) – both locations with large case volumes and low uptake of MyBenefits prior to the trial. Although all three treatments had a positive impact on MyBenefits uptake rates, the simple email was the most effective. Compared to clients who had both email addresses and phone numbers on file with the Ministry who received no notices, 1.8% of whom had registered for the service by December 20, more than four times as many (8.8%) who received the simple emails had registered, 7.4% of those who received the enhanced email registered, and 2.7% of those who received an SMS registered.



**Figure 3:** Comparing MyBenefits registrations across different trial conditions. (Accounts where registration is "in progress" (started but not yet completed) are shown in lighter colours at the top of the bars.)

**Scale:** Conversations are underway to apply lessons learned from this project to future MyBenefits outreach efforts. The feasibility and interest in sending out simple emails to outstanding social assistance clients is currently under review.

## Shifting Health Card Renewals Online

ServiceOntario, Ministry of Health and Ministry of Transportation

**Target:** In 2018, Ontario launched a new integrated online health card/driver's licence renewal service (OHCDLR). Health card holders screened for eligibility for online health card renewals were sent a renewal notice which directed them to the online option. The BIU partnered with ServiceOntario (which provides Ontarians with health card renewal and other services), the Ministry of Health (MOH) and the Ministry of Transportation (MTO) to test behaviourally-informed notices to increase timely health card renewals online.

**Explore:** ServiceOntario conducted usability testing in August 2017 that revealed several potential barriers to online renewals. The immediate actions required of recipients were not clear, increasing the perceived hassle of responding appropriately. Usability testers also reported that the notice language was confusing, and it was not clear which side of the form to attend to first.

**Solution:** The project team designed a set of four letters incorporating findings from usability testing. The language of the letters was simplified and immediate actions were made clearer. Headings on the notice indicated the "front" and the "back," and all letters included a nudge to turn over the notice and try online renewals. A control letter maintained the closest formatting to the existing health card renewal notice but prominently displayed messaging about the online service. The other three notices were redesigned to include colour gradients, call-out banners, graphical icons, and other formatting edits to increase the salience of key information. Two of these notices included a nudge statement either highlighting the exclusivity of online renewal eligibility, or the potential to easily bundle the renewal of two cards online at the same time (health card and driver's licence).

**Trial:** A sample of 48,000 ServiceOntario clients pre-screened for eligibility to renew their health cards online were randomly assigned to receive one of the three

behaviourally-informed notices or the control notices. The behaviourally-informed renewal notices increased uptake of the online service by 1 per cent, compared to the standard notice. If any of the behaviourally-informed renewal notices are implemented by ServiceOntario, it is estimated this would shift an additional 16,000 transactions online per year.

**Scale:** ServiceOntario used the findings from the trial to make an evidence-based decision whether to scale up the notices or revert to the control notices. Due to operational considerations, the control notices were reinstated.

## Increasing Online Vaccination Reporting for High School Students

Ministry of Health and Toronto Public Health

**Target:** Under Ontario law, students or their parents must report up-to-date vaccine records to their local public health unit in order to attend school. In 2017, the Ministry of Health (MOH) created a new user-friendly tool for reporting vaccines online, Immunization Connect Ontario (ICON). This digital tool promised substantial efficiencies for program administration, especially for very large public health units such as Toronto, which is responsible for assessing over 350,000 student records from some 850 schools. Toronto Public Health and the Ministry collaborated with the BIU to increase ICON uptake without restricting access to other reporting channels (i.e., phone, fax and mail). Keeping alternative channels accessible is important for parents who may need the support of healthcare professionals and translation services to report.

**Explore:** In mapping the behavioural context surrounding vaccine reporting and auditing existing communication materials, several potential barriers were identified. For example, the notice sent to students and parents informing them that their vaccine record is not up-to-date included a prominent form for listing vaccine information. This form acted as a behavioural affordance, suggesting vaccines should be reported via mail or fax. In contrast, the URL for ICON was not salient – it only appeared on the back of the notice and linked visitors to a generic immunization page requiring them to navigate to the ICON tool. Since vaccine information is complex and students and parents may not have interacted with Toronto Public Health recently, it was suggested that parents were unlikely to remember information from past communications. Clear instructions of concrete next steps were required.

# Sample/exemple

## Status Quo Letter

**TORONTO Public Health**

Toronto Public Health  
235 Danforth Avenue, 2nd Floor  
Toronto, Ontario M4K 1N2  
Phone: 416-392-1250  
Fax: 416-392-2487

**Immunization Notice**

To Parent/Guardian of, And where the student is 16 or 17 years old, to:  
Student: **Eazy Breezy**  
Address: **2428 Summer STREET TORONTO ONTARIO M6A 0A1**

Client ID: 1234567890  
Gender: Male (TPH 6)  
Date of Birth: 2009 February 03  
School: **ADAM BECK JUNIOR PUBLIC SCHOOL - 002151**

Public health units are required to collect and review immunization records for all students in Ontario schools. The Immunization of School Pupils Act, 1990 (ISPA) requires students to be vaccinated against the following diseases: diphtheria, tetanus, polio, measles, mumps, rubella, meningococcal disease, pertussis (whooping cough), and for students born in 2010 or later, varicella (chicken pox), or submit an exemption form.

The immunization information for Eazy Breezy is shown on the page p.2. This record is incomplete and shows this student needs vaccines to protect against:

**Measles, Meningococcal disease (Men-C-C), Mumps.**

The student may be suspended from school if we do not receive an up-to-date immunization record or a valid exemption by **2018 August 28**.

If this student has received vaccines that are not listed on p.2, please report them to us.

If this student requires a vaccine, visit your doctor to get vaccinated.

Ask the doctor to report the vaccines given in the chart below:

Date Given	Vaccine Brand Name	Vaccine Lot	Doctor's Name	Doctor's Phone Number

If you do not wish to vaccinate this student, please contact us about an exemption.

Page 1

Client ID: 1234567890  
Choose one option to report the student's immunization:  
call 416-392-1250  
fax 416-392-2487  
mail 235 Danforth Avenue, 2nd Floor Toronto Ontario M4K 1N2

We appreciate your cooperation in ensuring your child's immunization record is complete.

Date Given	Age	Diphtheria/Tetanus/Polio	Measles	Mumps	Rubella	Varicella	Meningococcal Disease	Vaccine
2009-02-11	10M 6D		X					OPV
2009-03-22	11M 19D	Y	Y	Y				DTaP-HB-IPV-Hib, OPV
2009-04-21	12M 18D	Y	Y	Y				DTaP-IPV-Hib
2009-05-23	13M 20D	X	Y	Y				DTaP-HB-IPV-Hib
2009-11-09	19M 6D				Y			M
2010-05-21	1Y 3M			Y	Y	Y		MMMR
2010-07-20	1Y 5M					Y		Var
2010-09-19	1Y 7M	Y	Y	Y				DTaP-IPV-Hib
2011-08-28	2Y 6M					Y		Var
2014-06-30	5Y 4M	Y	Y	Y	Y			DTaP, OPV

Y = a valid vaccination  
X = an invalid vaccination, according to Ontario's Publicly Funded Immunization Schedules (2015)

This student's name, date of birth, gender and contact information was provided by the school. If any of the information is wrong, please contact the school to have it corrected.

The information provided or attached to this form is being collected, and will be used by: Toronto Public Health, for the purpose of the medical officer of health assessing an immunization record as the above named student and to take appropriate action to prevent certain vaccine-preventable diseases in the health unit. This information may be disclosed to the Ministry or other health unit for the purpose of the prevention of vaccine-preventable diseases. For further details concerning this collection, contact us at 235 Danforth Avenue, 2nd Floor, Toronto, Ontario M4K 1N2.

Page 2

## Behaviourally informed "OnlineSalience" letter

**TORONTO Public Health**

Toronto Public Health  
235 Danforth Ave., 2nd Floor  
Toronto, Ontario M4K 1N2  
Phone: 416-392-1250  
Fax: 416-392-2487

January 18, 2018

To the parent/guardian of, and/or  
David Student  
1234 Home Rd.  
Toronto, Ontario M1N 1N1

**FINAL REMINDER** David Student can be suspended from school if David's vaccine record is not updated.

Did you know that all Toronto students must have up-to-date vaccine records with Toronto Public Health? The vaccines are free and prevent **serious diseases**. Students who are not up-to-date can be suspended from school per the Immunization of School Pupils Act.

David's record with Toronto Public Health is missing vaccine(s) for the following diseases:  
**Diphtheria, Pertussis, Tetanus**

Here's what you need to do by February 28, 2018:

**A.** Check David's yellow vaccine card. If the diseases listed above are checked off, then the vaccines are probably complete, but you still need to update the student's record with Toronto Public Health. Visit [www.toronto.ca/studentvaccines](http://www.toronto.ca/studentvaccines) to update the record.

**OR**

**B.** If David has not had these vaccines, see your doctor. Once the vaccine(s) are given, update the student's record with Toronto Public Health at [www.toronto.ca/studentvaccines](http://www.toronto.ca/studentvaccines).

If the vaccine record is not updated, David will be suspended from Toronto Collegiate Secondary School on April 6, 2018. Follow the steps on the back of this letter. When you're done, you will have an online vaccine record that you can access in the future.

Sincerely,  
*W. D. D.*  
Dr. Vinita Dabey, MD, MPH, CCFP, FRCPC  
Associate Medical Officer of Health  
Vaccine Preventable Diseases Program

81  
Client ID: 100076110

2

**What do I need to do now?**

**Step 1** Already get the required vaccine(s) listed on the previous page? **Yes**  
Report the vaccines to Toronto Public Health at [www.toronto.ca/studentvaccines](http://www.toronto.ca/studentvaccines).  
**Step 2** Go to your doctor and/or Toronto Public Health clinic\* to get the vaccine(s).  
**Submit Immunizations**  
**Wait for 3-5 days...**  
**Step 3** You'll get an email receipt!

**\*Need the meningococcal vaccine? (Check the list on front page!)**  
Ask your doctor if they can order the **meningococcal** vaccine. If they can't, get the vaccine for free at a Toronto Public Health clinic. Go to [www.toronto.ca/health](http://www.toronto.ca/health) to book an appointment (all other vaccines can be provided by your doctor).

**\*Don't have a Health Card or a Doctor?\***  
Students can receive free vaccines at Toronto Public Health clinics. Go to [www.toronto.ca/health](http://www.toronto.ca/health) to book your appointment.  
**Need a medical or non-medical as employee?**  
Call the Immunization Information Line at 416-392-1250.

**Where do I find my yellow vaccine card?**

In Ontario, the yellow vaccine card is usually given to you after getting vaccines at the doctor's office. If lost, contact the student's doctor.

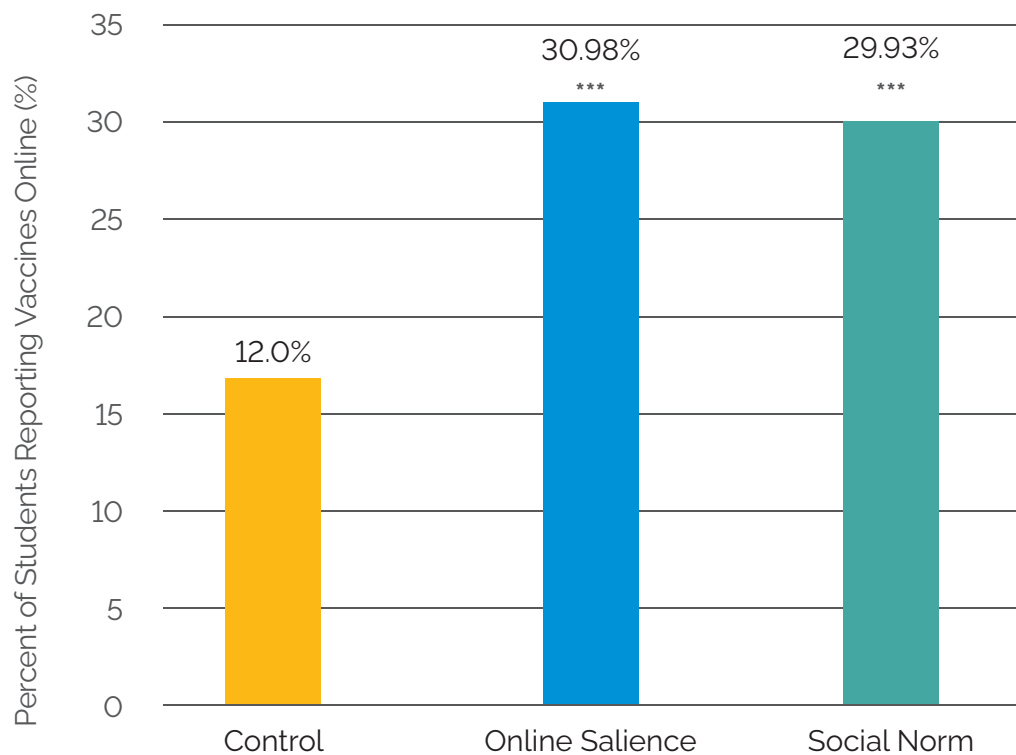
If you received vaccines in another province or country, it may look different, but that's OK! Please report the vaccines online at:

[www.toronto.ca/studentvaccines](http://www.toronto.ca/studentvaccines)

**Reporting your vaccine records online is fast and easy!**  
If you are unable to report online, see one of the options below:  
Call: 416-392-1250 — Use the Client ID: 100076110 when calling Toronto Public Health  
Fax: 416-392-2487

**Figure 4:** Status quo version of the notice, along with one of the behaviourally formatted notice designs. The other behaviourally formatted notice included a social norms nudge statement on top of the first paragraph.

**Solutions:** To address these barriers, two new notices were designed. Both new notices made the online reporting channel more salient with formatting and repetition. Accessing the online tool was made easier by creating a memorable URL that linked visitors directly to ICON. And when parents or students read the notice, they were provided clear step-by-step instructions as both text and a flow diagram. In addition to these changes, one of the new notices also contained a social norm question, asking the reader, “Each year, 9 out of 10 high school students get the vaccines needed to go to school – have you?”



Significance is in comparison to Control.

**Figure 5:** Graph comparing online reporting rates between recipients of the different letter versions (\*\* p < .001).

**Trial:** A randomized control trial was conducted to determine whether either of the two new notices affected online vaccine reporting rates. Analysis showed that students who received either behaviourally-informed notice were more than three times as likely to report their vaccines via ICON versus any other channel (increasing online reporting from 12 per cent to as high as 31 per cent). The new notices had little-to-no effect on overall vaccine reporting rates, which indicated that Toronto Public Health could scale the notices to increase online reporting without reducing vaccine reporting rates.

**Scale:** Toronto Public Health currently uses the best performing notices (without the social norm) as standard. Several other public health units across the province have replicated these findings and are currently using an adapted version of the new online salience notice.

### Increasing Vaccination among High School Students

Ministry of Health and Toronto Public Health

**Target:** Under Ontario law, students or their parents must report up-to-date vaccine records to their local public health unit in order to attend school. Building from the successful online vaccine reporting project outlined in the Promoting Use of Digital Services section, the Ministry of Health (MOH), Toronto Public Health and the BIU collaborated on a follow-up project to use behavioural insights with the specific goal of reducing student suspension.

**Explore:** Archival data analysis revealed that 30 per cent of all high school students in Toronto with incomplete vaccine records were missing the vaccine for meningococcal disease (specifically, the Men-ACYW-135 vaccine). Students missing this vaccine make up the majority of students suspended in Toronto for failing to obtain and report vaccinations. These students may struggle to comply with vaccination requirements because this meningococcal vaccine is difficult for students to obtain if they missed receiving it at a school-based clinic in Grade 7. Family doctors do not frequently stock the vaccine, as it must be ordered through a special process and it takes two-weeks for vaccine delivery. The easiest way for a student to get this meningococcal vaccine for school is free of charge at a Toronto Public Health clinic, but many may not be aware that this option is available.

**Solutions:** Two solutions were tested as part of this trial. The first solution attempted to help students who needed the meningococcal vaccine to plan their appointment at a Toronto Public Health clinic by adding maps, clinic addresses, nearest subway stations, and clinic times to the notices students received. These notices also contained a planning prompt encouraging students to write the specific time and location of their appointment. The second solution leveraged a familiar messenger, who also had access to parental email addresses. Principals were sent an information package by email that contained a list of students with incomplete vaccination records and a template email to distribute to parents. The email to principals also contained a social benchmark, comparing the suspension rate last year at the principal's school to the average and best performing schools in Toronto to motivate the principal to take an interest in reducing the suspension rate.

**Trial:** To evaluate the planning prompt notice for students requiring the Men-ACYW-135 meningococcal vaccine 8,534 students were randomly assigned

to receive either the best performing notice from the previous year's trial or the planning prompt notice. To evaluate the email from principals, 142 schools were randomly assigned to either receive status quo or social benchmark email treatments. Statistical evaluation of both treatments revealed no statistically significant effect.

**Scale:** Behavioural science is an iterative process. In light of the null results (not statistically significant) from this trial, other barriers to vaccination are being explored, and addressing them is already starting to pay dividends. For instance, in examining Toronto Public Health clinic attendance, it was revealed that approximately 20 per cent of scheduled appointments are not attended. When clinics are at or near capacity, missed appointments can prevent two students from getting vaccinated: the one who scheduled the appointment but did not attend, and one who could have been vaccinated during that time instead. These missed appointments could have contributed to the null results for the planning prompt notices, and reducing missed appointments became an area of focus for subsequent projects. The BIU and Toronto Public Health are also now looking further upstream, to Grade 7 school-based clinics, to see whether improved attendance at those clinics can reduce the number of students who need Men-ACYW-135 and other vaccines by the time they reach high school.

## Increasing Uptake of the Human Papillomavirus (HPV) Vaccine

Ministry of Health and Toronto Public Health

**Target:** Human papillomavirus (HPV) infection causes seven types of cancer. Despite free access to the HPV vaccine through Ontario's publicly-funded immunization schedule, nearly one third of students have not received the vaccine. The BIU collaborated with the Ministry of Health (MOH) and Toronto Public Health to test behavioural insights solutions to encourage HPV vaccine uptake.

**Explore:** The BIU consulted with vaccine program nurses to map the behavioural context for students and decided to focus on summer "catch-up" clinics for students who missed the opportunity for in-school clinic vaccinations. This mapping process revealed that several barriers might make students unlikely to read and respond to

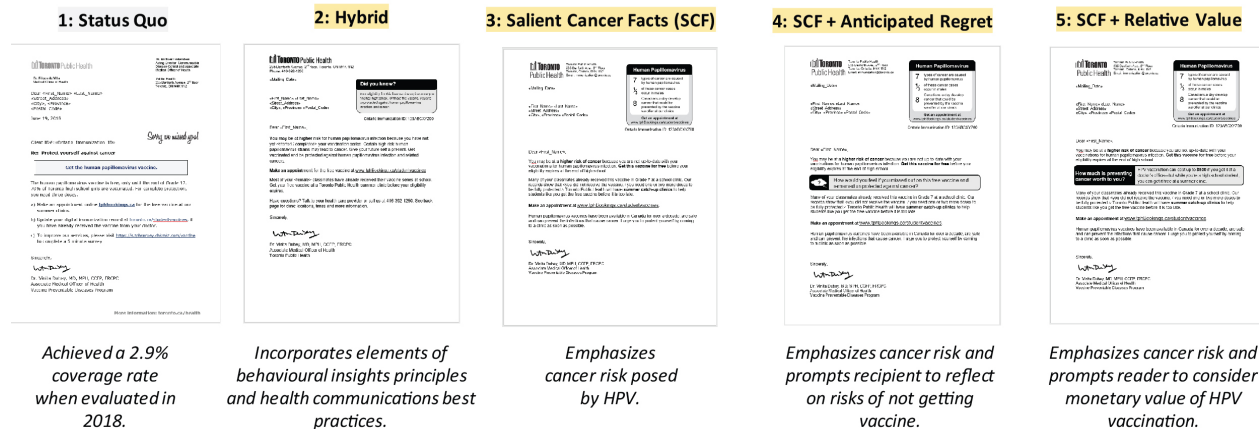


the letter inviting them to attend catch-up clinics. Students' attention is fragmented across many communication channels, and finite mental bandwidth could mean they fail to open or extract the key information from the letter. Students who do read the full letter might still not respond because they assume that bad outcomes (such as contracting HPV or its associated cancers) will happen to others, and not to them; this optimism bias could make vaccination seem unimportant. The time and effort required to show up to a vaccination clinic during the fleeting summer months may seem unappealing due to present bias, people's tendency to prefer actions that pay off in the short term, rather than in some distant, uncertain future.

**Solutions:** The project team designed a set of four letters, each with a different combination of behavioural insights. One letter drew heavily from health communications best practices and emphasized the time-limited nature of the student's eligibility for the free HPV vaccine, while the other three emphasized the cancer risk associated with HPV infection to correct risk misperceptions. Two of these three cancer-risk-focused letters included nudge statements. One nudge prompted students to anticipate the regret they might feel if they remain unprotected against cancer by foregoing the HPV vaccination. The second prompted students to consider the monetary value of the free HPV vaccine by anchoring them to the high cost of receiving the vaccine from their family physician. Enhancements were made to the appointment booking system so that students received multiple email reminders with planning prompts (including a day-of reminder and calendar invite) to help reduce appointment no-shows. Students were also able to book their follow-up appointment for their next dose of the HPV vaccine during the 15-minute observation period following their vaccination, rather than having to remember to book it six months after receiving the dose. This change was made to help students avoid prospective memory failure – when people commit to doing something in the future but fail to follow through because other intervening events crowd out that initial intention.

**Trial:** A sample of 25,000 eligible students were randomly assigned to receive one of the four behaviourally-informed (BI) letters or a status quo letter that had been circulated in Summer 2018. Enhancements to the appointment booking system were put in place for all clients. Data analysis revealed that the BI letters doubled the likelihood that students would receive an HPV vaccination relative to the status quo letter (vaccination rates were 6.2 per cent for the status quo letter and 12 per cent for the BI letters). All four BI letters performed statistically identically, likely because the demand generated by the letters far exceeded the capacity of the summer clinics. Double the number of individuals accessed the immunization clinic

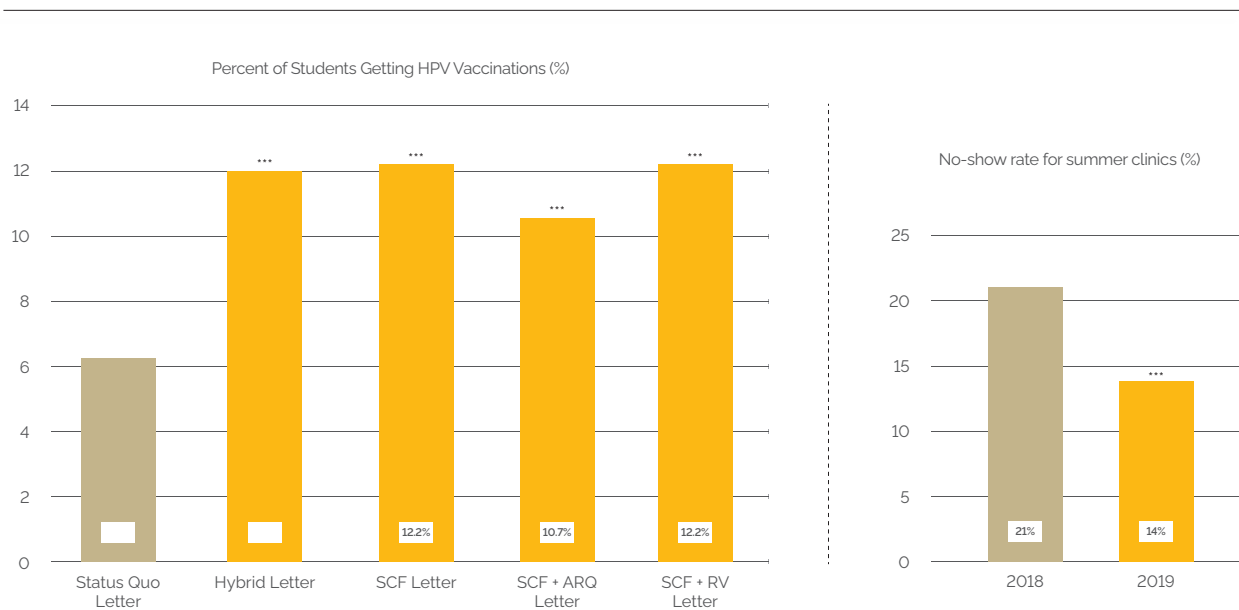
# Sample/exemple



**Figure 6:** Pictures of the first page of each of the five reminder/recall letters that were tested during the trial. 1) Status Quo: achieved a 2.9% coverage rate when evaluated in 2018; 2) Hybrid: incorporates elements of behavioural insights principles and health communications best practices; 3) Salient Cancer Facts (SCF): emphasizes cancer risk posed by HPV; 4) SCF + Anticipated Regret: emphasizes cancer risk and prompts recipient to reflect on risks of not getting vaccine; 5) SCF + Relative Value: emphasizes cancer risk and prompts reader to consider monetary value of HPV vaccination.

appointment booking page than could be accommodated in the summer clinics. The enhancements to the appointment booking system appear to have reduced appointment non-attendance rates. With no-show rates 7 percentage points lower in Summer 2019 compared to the previous year, Toronto Public Health served the equivalent of an additional full clinic of students.

**Scale:** Results from this trial were shared with vaccine program managers of public health units across Ontario to help inform their HPV vaccination programs. The booking system enhancements have since been scaled up to other public sector clients.



**Figure 7:** Comparing vaccination rates between the status quo letter and the behaviourally-informed letters for the 2019 trial, as well as no-show rates for Summer 2018 compared to Summer 2019. (\*\*\*)  $p < .001$ .

## Increasing Organ Donor Registration by Motivating Customer Service Representatives

ServiceOntario and Dr. Nicola Lacetera, Dr. Nina Mazar and Dr. Mario Macis

**Target:** Every three days, an Ontarian dies waiting for an organ transplant. The number of registered organ donors in the province has increased in recent years from 24 per cent of Ontarians in 2014 to 32 per cent in 2017. This increase was in part due to the successful 2015 collaboration between ServiceOntario, behavioural scientists at the Behavioural Economics in Action at Rotman (BEAR) institute and the BIU: using behavioural insights enhanced organ donor registration (outlined in the BIU's 2018 Update Report). Still, there are many more people who could register; surveys consistently show that more than 90 per cent of Canadians are in favour of organ and tissue donation. Building from their success in 2015, the project team reconvened to identify behavioural insights that could further increase organ donor registrations.

**Explore:** Although people in Ontario can register as an organ donor online at BeaDonor.ca, the vast majority of registrations continue to take place in person at ServiceOntario centres. Therefore, customer service representatives play a critical role in promoting organ donor registration. Yet little is known about customer service representatives' impact and whether they can encourage even more people to register. In our previous project, anecdotal observations suggested that some customer service representatives might forget to ask whether a customer wished to register from time to time (e.g., due to finite mental bandwidth, time scarcity because of competing priorities and the low salience of organ donor registration), whereas others were particularly effective at registering many customers each day. At the start of this project, the team applied statistical methods confirming that there are significant differences in registration rates between customer service representatives (even those who work at the same office), suggesting that some CSRs may be able to increase the number of in-person registrations by changing their customer interactions.

**Solutions:** While official policy directs customer service representatives to ask every customer about organ donor registration, representatives may forget, or they may ask in ways that are less effective than others. This may especially be the case when a centre is busy, or because this is often not a specifically requested service. To help keep organ donor registration top of mind, during this project customer service representatives were sent periodic emails reminding them of the vital role they play in this life-saving service and providing them with tips on how to discuss this potentially sensitive topic with customers. Given that the messenger of a communication can affect how it is perceived by its recipients, local managers were attributed as the sender for all emails. In some offices, emails also included audit-and-feedback information, letting customer service representatives know how many customers they registered overall and on average per 100 transactions. In other offices, the audit-and-feedback information was augmented with social benchmarking information that compared customer service representatives to the average registration rate and top 20 per cent of customer service representatives in their region.

**Trial:** ServiceOntario centres were randomly assigned into one of the three email conditions, and a series of three emails were sent from managers to their customer service representatives between June 2016 and December 2018. The rate of organ donor registrations was tracked for all recipients. Data analysis is currently underway; preliminary results indicate that compared to emails which just provided a reminder and tips, the audit-and-feedback and social benchmarking emails significantly increase daily donor registrations by as much as 25% of the baseline levels.

## Decreasing Excessive Opioid Prescribing

Health Quality Ontario and Women's College Hospital

**Target:** Although there are many causes to the opioid epidemic affecting communities across the world, one pathway to addiction is excessive opioid prescribing. When patients are prescribed opioids from more than one prescriber, it can be especially difficult for primary care physicians to supervise or remediate a potentially dangerous situation. To address this problem, in 2017, Health Quality Ontario, now a part of Ontario Health, developed an audit-and-feedback report for primary care physicians. This report showed doctors how many of their patients were prescribed opioids, from any prescribers, that totalled more than the watchful dose of 90mg morphine equivalents. It also compared that doctor's proportion of patients with high-risk opioid prescriptions to a social benchmark of the Ontario average. As a first step to establishing the impact of this report, Health Quality Ontario partnered with researchers at Women's College Hospital and the BIU to try to increase the proportion of primary care physicians who signed up to receive the report.

**Explore:** Busy physicians often operate under conditions of time scarcity. This means that they may be narrowly focused on solving the task at hand and acutely present biased against tasks that require investing time in the present for uncertain future benefits. Physicians are also confronted with countless decisions and pieces of information each day, which may reduce mental bandwidth to attend to new information and requests. Like all decision-makers, physicians may also wish to avoid information that challenges their self-efficacy by highlighting areas in which their performance could be improved.

**Solutions:** To address these behavioural barriers, four personalized faxes were developed inviting physicians to sign up for the new MyPractice report with information about opioid prescribing. To attract attention to the faxes, salient shaded boxes were added to titles and key information. One feature that was varied across the faxes was specifying a fellow physician who worked with Health Quality Ontario as the sender of the fax, as opposed to an unidentified employee of the organization, with the hope that a specific messenger could build source credibility. This trial also employed the concept of framing the information contained in the report as focused on the prescribing behaviour of other physicians instead of the prescribing behaviour of the recipient doctor.

**Trial:** A total of 3,494 doctors were randomly assigned to receive one of five different faxes: a control fax based on standard Health Quality Ontario faxes advertising the MyPractice report, or one of the four behaviourally-informed faxes described above. Statistical analysis revealed that the standard Health Quality Ontario fax significantly outperformed the four behaviourally-informed faxes in terms of the number of physicians signing up for the report. Although it is difficult to know why this backfire effect was observed, anecdotal reports from some physicians indicate that the shaded boxes on the behaviourally-informed faxes may have been illegible with some fax machines.

**Scale:** While Health Quality Ontario reverted to promoting its MyPractice reports with the standard faxes, the organization sees value in applying behavioural insights to its work. For example, the BIU consulted on the design of the MyPractice report digital dashboard to make it easier for physicians to navigate the information contained in the report.

### Increasing Applications for the Ontario Electricity Support Program (OESP)

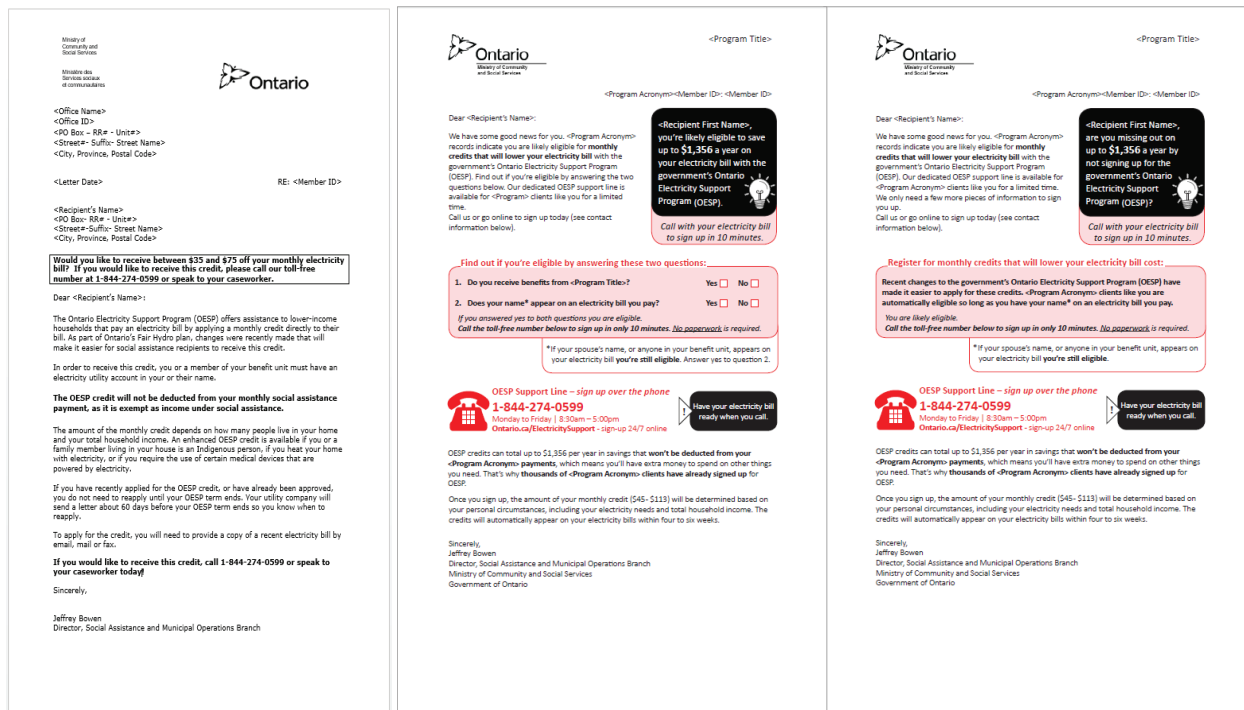
Ministry of Children, Community and Social Services

**Target:** The Ontario Electricity Support Program (OESP) is an Ontario Energy program that lowers electricity bills for low income households by providing a monthly credit to eligible customers based on household income and size. Social assistance recipients who have an electricity account are automatically eligible for an OESP credit. Yet, in August 2017 approximately 90,000 eligible social assistance recipients had yet to sign up for the OESP. The BIU partnered with the Ministry of Children, Community and Social Services (MCCSS) to test behavioural insights solutions to increase eligible applications for the OESP.

**Explore:** The BIU and the Ministry of Children, Community and Social Services collaborated to map the behavioural context for social assistance recipients and decided to focus on a pool of 90,000 social assistance recipients eligible for OESP but who had not yet applied. The behavioural map revealed that these clients were included in a targeted mail campaign to notify them of the OESP and the opportunity to call a social assistance team that could provide support with the application. The map also identified several barriers that may have prevented people from responding. The letter may not have been salient enough to stand out against other communications given people's finite mental bandwidth, and the perceived hassle factors of signing up for the OESP credit may outweigh its perceived future benefits due to people's present bias (preference for actions that pay off in the short term).

**Solution:** The project team designed a set of five letters, each with a different combination of behavioural insights. One letter provided an annual rather than monthly aggregate of the expected savings from the OESP so that recipients could understand the full value of the program. The other four included one of two framings for the annual aggregate as either a potential missed opportunity (loss framing), or a potential benefit acquired by applying (gain framing). These potential losses or gains were combined with either: a letter emphasizing how easy the OESP application process is, including a social norms statement indicating that other social assistance recipients had already applied; or a short two question survey intended to provide both a self-validation for eligibility and an escalation of commitment to the application process. Further simplifications to the language and design of the letter were also made.

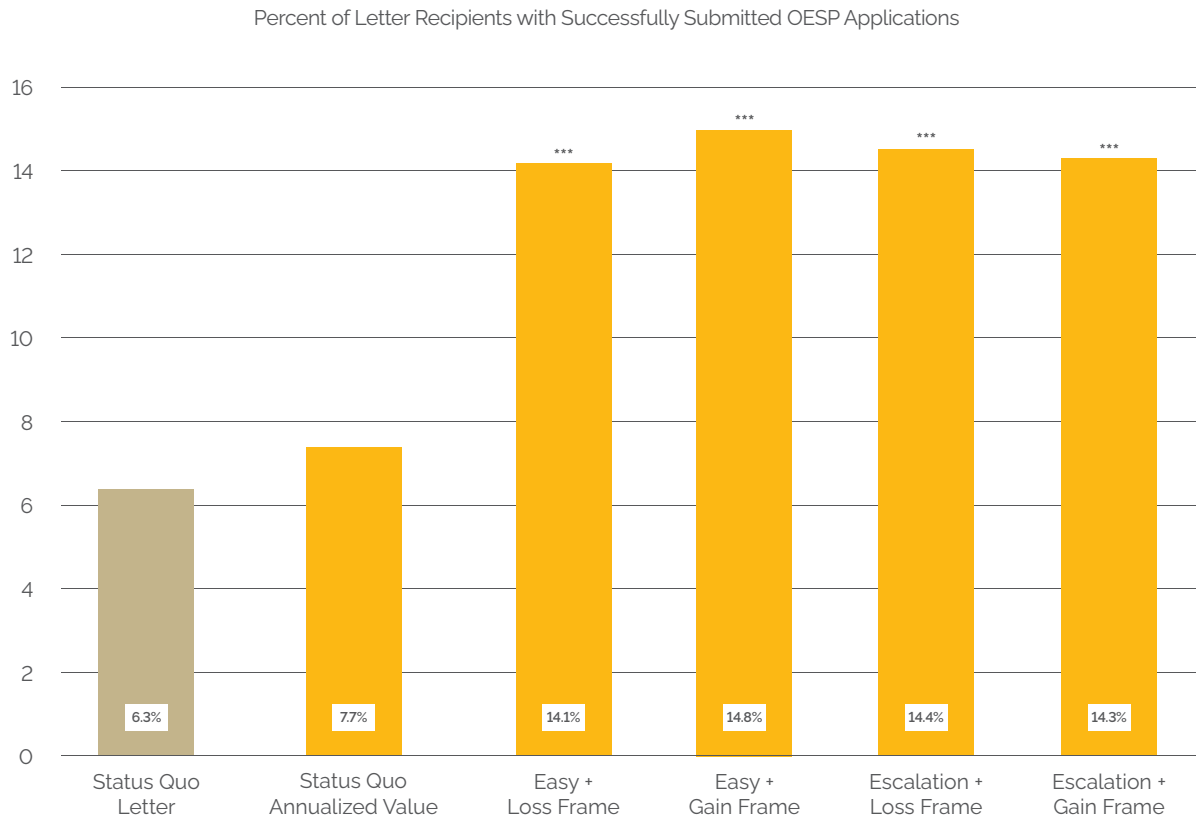
## Sample/exemple



**Figure 8:** The status quo OESP letter compared to two behaviourally formatted versions. Four behaviourally formatted letters were tested, employing loss and gain framings as variations on the two enhanced letters pictured here. A fifth letter version was also tested which only changed the monthly savings amount quoted in the status quo letter to an annual savings amount.

**Trial:** A sample of 10,500 OESP eligible social assistance recipients were randomly assigned to receive one of the four behaviourally-informed letters, or a status quo letter that had been previously circulated. Compared to the existing letter promoting OESP, the BI letters developed for this trial increased OESP applications by as much as 135 per cent (from 6.3 per cent to 14.8 per cent). During the trial, 506 additional social assistance recipients applied for OESP as a direct result of the revised letters. Collectively, these 506 recipients are estimated to save \$309,672 annually on their electricity bills, which is money they can now put towards other needs. Had the best performing letter been sent to all 90,000 existing social assistance recipients identified as OESP eligible, an estimated 7,633 recipients would have applied for OESP, collectively saving \$4.7 million annually on their electricity bills.





**Figure 9:** Comparing OESP application rates between people who received different letter versions (\*\*\*)  $p < .001$ .

**Scale:** OESP enrollment is now integrated into the social assistance intake process, removing the need for social assistance recipients to opt-in themselves. This development means that the letters are no longer required. Importantly, findings from this trial about best practice communications with social assistance clients to help them access benefits can be applied to other programs.

## Increasing Retirement Planning Amongst Ontario Public Service Employees

Ontario Securities Commission, Behavioural Insights Team and Ontario Public Service Internal Newsroom

**Target:** An important component of being financially prepared for retirement is making a plan. A retirement plan can help determine appropriate saving levels in the present to achieve an adequate income at a predetermined age of retirement. Despite the importance of planning, in its research the Ontario Securities Commission found that a majority (54 per cent) of Ontarians over the age of 45 have no retirement plan, and only 14 per cent have a formal written plan.

**Explore:** Preparing for retirement involves many behavioural barriers. Due to present bias, the future benefits of retirement planning may be insufficient to motivate people to incur immediate costs in terms of time and reduced disposable income now. Retirement planning can also involve many complex decisions that can lead to information and choice overload and thus a greater likelihood of sticking with the status quo of doing nothing to prepare. This is especially the case when optimism bias can lead people to expect that negative outcomes (such as reduced standards of living during retirement) are less likely to happen to themselves than to others.

**Solutions:** Employment and Social Development Canada (ESDC) had previously developed a Canadian Retirement Income Calculator . This tool enables Canadians to estimate their retirement income from all sources to determine whether they are on track to meet their retirement income goal. To promote this calculator as a first step towards retirement planning, five different messages were added to a weekly newsletter emailed to all Ontario Public Service employees. One version of the newsletter simply provided information about the value of planning for retirement and the existence of the calculator. The other four versions incorporated behavioural insights, such as emphasizing short term emotional benefits of retirement planning (increased confidence, reduced anxiety), increasing the salience of the future self (either individually or in a social context), and describing the retirement calculator as a simple step people could take in just 30 minutes to better prepare themselves.

**Trial:** In May of 2018, 76,565 Ontario Public Service Employees were randomly assigned to receive one of five different messages about the retirement calculator as part of a government-wide employee email newsletter. Overall, 6.8 per cent of recipients clicked through to the retirement calculator. The best performing message (“Picture who you’ll be spending time with in retirement”) resulted in 20.5 per cent more recipients clicking through to the calculator page and 24.2 per cent more recipients clicking to begin the calculator. Interestingly, the simple message describing the retirement calculator as easy to use significantly increased the number of people taking the additional step of going beyond the ESDC landing page and starting the calculator. Although the social framing attracted the most attention, both the social and simple frames lead to increased numbers of people accessing the calculator.

## Sample/exemple

### Newsletter Message Variants

#### Information

##### [Prepare for your retirement](#)

A retirement plan can help you understand how much you will need to save for retirement based on your anticipated expenses, your pensions and your current savings. The Government of Canada provides a free calculator to help you through the process.

#### Short Term

##### [Gain confidence today, prepare for your retirement](#)

Planning for your retirement can help build your financial confidence and security. Start preparing for your retirement today with the Government of Canada’s free retirement calculator.

#### Social

##### [Picture who you’ll spend time with in retirement](#)

Think about yourself the day after you retire. Will you be spending more time with friends and family? Start preparing for your retirement with the Government of Canada’s free retirement calculator.

#### Individual

##### [Picture what you’ll spend time doing in retirement](#)

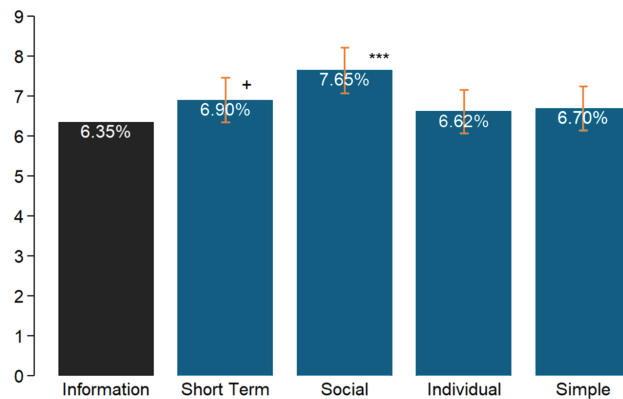
Think about yourself the day after you retire. Will you be travelling, volunteering in your community, or mastering a new hobby? Start preparing for your retirement with the Government of Canada’s free retirement calculator.

#### Simple

##### [Prepare for your retirement, it’s easier than you think](#)

Use the Government of Canada’s free retirement calculator. In less than 30 minutes, the calculator will help you understand how much you will need to save for retirement based on your anticipated expenses, your pensions and your current savings.

### Proportion of people clicking from the newsletter to the calculator



n=76,565

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.1

**Figure 10:** Comparing click-through rates for people who received the different newsletter message variants, taken from The Behavioural Insights Team. (July 27, 2018). Encouraging Retirement Planning through Behavioural Insights. Ontario Securities Commission Investors Office.

**Scale:** Although accessing the retirement calculator is not enough to prepare for retirement in and of itself, it is a good first step towards making a plan. Generating this evidence from a large-scale trial enabled the Ontario Securities Commission to learn more about how to most effectively communicate about retirement. Knowing that a social framing of people's future selves, and describing easy first steps, can motivate more people to plan for their retirement is a valuable insight that can help the OSC and other financial institutions help Ontarians.

## Increasing Participation in the Ontario Public Service Employee Survey

Ministry of the Solicitor General

**Target:** The data gathered in the Ontario Public Service's (OPS) annual Employee Experience survey is a valuable resource for ministry human capital planning. The greater the participation in the survey, the more reliable is the data. The Ministry of the Solicitor General (SOLGEN) employs the largest staff in the OPS and has historically had below average participation rates in the survey.

**Explore:** A structural barrier which may explain the Ministry of the Solicitor General's low rate of survey participation is that relatively few employees have access to an individual computer at work. To check email or complete the survey, some staff have to use a shared computer in a common area. In addition to this structural barrier, many common behavioural barriers could also reduce the likelihood of participating, such as present bias (preferring actions with short term benefits to actions with short term costs and greater benefits in the long term), inattention blindness (if people are focused on a specific task, they may fail to notice other requests) or a perceived social norm that participation is low because the survey is not viewed as important by colleagues and management.

**Solution:** While addressing the structural barrier was out of scope for this project, two emails were designed to address the identified behavioural barriers. The first email was a modification of the status-quo invitation, notifying employees of the survey and providing them a unique URL link to complete it. The behaviourally informed invitation employed salient formatting and simplified text – reducing the word count by 30 per cent from the status quo – with an emphasis on the confidential nature of the survey as its unique value proposition. Employees' names

also appeared in the subject line of the behaviourally informed invitation to leverage the cocktail-party effect, where people subconsciously scan for their name in communications and conversations and pay greater attention when they find it. The second email was a net-new 'heads-up' email sent on behalf of employees' senior manager. Sent the morning of the invitation emails, these just-in-time heads-up communications were intended to leverage well-known messengers as a way of garnering attention and conveying the value management saw in receiving employee feedback through the survey.

**Trial:** To evaluate the new invitation email, 9,642 employees were randomly assigned to receive either the new or standard invitation and a nearly identical reminder email several days later. To evaluate the 'heads-up' email, 36 division and correctional facilities were randomly assigned to either receive no email at this stage, or a 'heads-up' email from their directors or superintendents early in the morning after the invitation emails were distributed over the previous night. Statistical analyses revealed that the behaviourally-informed invitation emails increased survey participation by 2.6 per cent, a small but significant gain, and that the 'heads-up' emails increased participation even more (by 7.8 per cent).

**Scale:** The Ministry of the Solicitor General now sends behaviourally-informed invitation emails to all employees to boost participation in the annual survey. In addition, the 'heads-up' email approach continues to be used by encouraging senior managers to send reminder emails to staff underscoring the importance of participation. These insights have also been leveraged to enhance communication strategies for other ministry surveys.

## Increasing Timely Updating of Talent Profiles

Treasury Board Secretariat

**Target:** The Talent Profile, akin to an internal resume for staff in the Ontario Public Service who are part of the Talent Management program (e.g., managers, executives), is used to support hiring and succession planning. Many employees do not keep their Talent Profiles up to date, limiting their use for talent management purposes. The BIU partnered with the Talent Management Unit to test whether behaviourally-informed emails could encourage employees to update their profiles.

**Explore:** The BIU participated in a user research session focused on the Talent Profile, conducted semi-structured interviews with internal recruiters and staff and completed a behavioural map of the Talent Profile update process to identify behavioural barriers. These activities revealed that a lack of feedback about how Talent Profiles supported career mobility was likely interacting with present bias and finite mental bandwidth, causing staff to de-prioritize the task. Staff who did attempt to update their profiles also faced several hassle factors, such as difficulty locating the correct web address.

**Solution:** The project team designed two behaviourally-informed emails to address the behavioural barriers. The first email condition presented recipients with an active choice between updating their Talent Profiles to indicate they were interested in new job opportunities or doing nothing (sending the message that they are satisfied with their current role). The second email condition used the messenger of a former internal recruiter to convey the importance of the Talent Profile for career mobility and featured a downloadable calendar reminder to update the profile, in an effort to activate a sense of reciprocity. These emails were tested against a status quo email about the Talent Profile that had been previously distributed by the Talent Management Unit.

**Trial:** A sample of 6,300 staff were randomly assigned to receive one of the two treatment emails or the control messaging. Open and click rates were tracked for two weeks after the emails were sent. Both behaviourally-informed emails had significantly higher open and click rates compared to the control email. The active choice email performed the best, driving nine times as many staff to access the Talent Profile web page compared to the control email. Due to unforeseen technical limitations, update rates on the Talent Profile system could not be measured as part of the trial, but some of the increased traffic to the profile update page likely translated into the behaviour of interest.

**Scale:** The Talent Management Unit intends to incorporate findings from the project into the redesigned Talent Profile application, including exploring how enhanced data collection capabilities could make future rapid evaluations possible.

## Behavioural Insights Projects Underway

### Increasing Reinstatement of Suspended Drivers' Licences

Ministry of Transportation

Approximately 180,000 Ontarians have drivers' licences that are suspended indefinitely for non-medical reasons. Drivers that continue to use their vehicles while suspended pose a significant financial risk to themselves and other road users as they are not covered by insurance. The BIU collaborated with the Ministry of Transportation (MTO) to help increase the reinstatement rate for suspended licences among drivers in Ontario.

Through a behavioural mapping exercise, the BIU and Ministry of Transportation policy and program staff audited the existing reinstatement to identify potential behavioural barriers in the reinstatement process. A trial evaluating different BI-informed reminders for suspended drivers will determine whether a light touch intervention can prompt the required steps to reinstate a driver's licence. Due to the COVID-19 pandemic, this project is temporarily on hold.

### Increasing Health and Safety Compliance Amongst Child Care Centres

Ministry of Education

Licensed child care programs in Ontario must meet and maintain specific provincial standards. These standards are in place to help ensure the health, safety and quality experiences of children. The BIU partnered with the Ministry of Education (EDU) to try to increase compliance within child care centres, working under the assumption that increased compliance with Ontario regulations improves standards of child care in Ontario.

The BIU and EDU assessed existing data, developed a behavioural map of the child care centre registration and inspection process and conducted semi-structured interviews with representatives from seven different child care organizations to help identify key barriers that may lead to non-compliance among child care centres. The project team conducted a randomized control trial (RCT) to test three different emails among 3,235 child care centres (6,470 emails were sent to the licensees and operators of the child care centres) from late 2018 to September 2019. The RCT sought to evaluate whether behavioural insights could be applied to prompt child care centres to engage in behaviours that would increase their compliance. Data are currently being collected on changes in compliance scores; analysis of this data is pending.

## Increasing Jury Pool Participation

Ministry of the Attorney General

Serving as a juror is a civic duty and important to ensuring fair trials under Ontario's justice system. In recent years, the Ministry of the Attorney General (MAG) has faced operational challenges in meeting the demand for jurors.

To identify eligible jurors, the Ministry mails out a juror eligibility survey each year to randomly selected individuals. Individuals are legally required to complete and return this form. While the Ministry has increased the number of surveys distributed to Ontarians, survey return rates and eligibility rates have declined by 15 per cent and 10 per cent respectively, over four years.

The BIU is working with the Ministry to assess whether behaviourally-informed updates to the survey can increase the rates of eligibility survey completion in Ontario and thus the overall numbers of jurors on the roll.

## Increasing Ontario Works Client Attendance at Local Tax Clinics

Toronto Employment & Social Services

For individuals and families with modest and low incomes, like Ontario Works clients, tax filing can unlock federal and provincial tax benefits and other income-tested benefits delivered outside of the tax system. To support Toronto residents in accessing these key benefits, Toronto Employment & Social Services (TESS) runs free annual tax clinics at TESS offices and City shelters. For participants in TESS's clinics between March and May 2019 (2018 tax year), average returns of \$413 and average benefits of \$4,328 provided a valuable economic boost.

Working with TESS, the BIU identified several behavioural barriers that might keep clients from participating in their local tax clinic. These included fear or stress about filing taxes (e.g., due to having low financial literacy, or a misconception that filing taxes might result in owing money) and present bias where the transaction costs associated with filing now (i.e., inconvenience, time) are given more weight relative to financial benefits received in the future.



Based on these findings the BIU and TESS plan to test the success of behaviourally-informed emails to increase interest in TESS's free tax clinics. A trial was planned during the March to May 2020 tax filing season (2019 tax year), but was postponed due to the closure of tax clinics during the COVID-19 pandemic. A trial is planned for launch when tax clinics are safe to re-open to the public.

### **Increasing Uptake of the Special Authorization Digital Information Exchange (SADIE)**

Ministry of Health

In 2019 Ontario launched a new online portal, the Special Authorization Digital Information Exchange (SADIE), for physicians and nurse practitioners. SADIE enables prescribers to submit Exceptional Access Program (EAP) requests for Ontario Drug Benefit (ODB) recipients that are not currently covered under ODB programs. Previously, prescribers were required to submit EAP requests by fax or phone, which could mean long wait times as applications were processed by staff. SADIE is operationally efficient and reduces processing times by as much as 50% depending on the drug requested. Through dynamic smart-forms and the ability to research drug renewal requirements in the portal, SADIE streamlines the administrative process for prescribers and their staff, and helps patients access their medications faster. Despite SADIE's many benefits, EAP requests continue to be submitted by fax.

In partnership with the Ministry of Health (MOH), the BIU is working to increase the number of prescribers and their staff who submit EAP requests online using SADIE.

### **Increasing Uptake of MyDirectPlan Online Service**

Ministry of Children, Community and Social Services

Passport is a developmental services program provided by the Ministry of Children, Community and Social Services (MCCSS). It provides direct funding for adults with developmental disabilities and their families to purchase supports that enable community participation and provide respite to caregivers. Currently, manual

submission of claims and invoices for reimbursement create processing backlogs and strain the capacity of local offices, preventing them from spending their time helping clients in other ways.

The Ministry provided support to Community Living Toronto to develop MyDirectPlan (MDP) as a way for clients to submit Passport invoices online. MDP is an online budgeting and reporting tool that tracks expenses and provides budget forecasting. However, the uptake of MDP is low. At the outset of this project, only 8 per cent of Passport clients were registered with MDP, and of those registered, only 23 per cent actively used the tool.

The Ministry has engaged the BIU to test whether net new letters walking clients through the MDP registration process, supported by behaviourally informed updates to the MDP website, will increase the registration of new users onto MDP and encourage consistent use of MDP for those registered.

### **Increasing use of electronic payment options among Social Assistance recipients**

Ministry of Children, Community and Social Services

Approximately 35,000 social assistance (SA) recipients still receive their benefits through paper cheques (about seven per cent of all SA clients), rather than electronic payment options such as direct deposit and reloadable payment cards. In general, cheques can entail a great deal of hassle for this vulnerable population. Those on paper cheques may experience delays in receiving their funds due to postal service disruptions, lost, stolen or damaged cheques. Unbanked individuals often pay high cheque-cashing fees and those without a permanent address need to pick up their cheques at Ontario Works offices. Processing and mailing paper cheques is also costly for the Ontario government. Driven by the added health risk during the COVID-19 pandemic when face-to-face contact should be minimized, the Ministry of Children, Community and Social Services (MCCSS) has partnered with the BIU to support moving SA clients from paper cheques to electronic payment options.

Working with MCCSS, the BIU identified several barriers that may prevent SA cheque recipients from switching to electronic payment options. For example, the team identified that the sign-up process may seem daunting for new users, especially for members of a vulnerable population already managing a range of barriers. The hassle of “channel-switching” from the default (cheques) to a new and unfamiliar payment option may encourage individuals to postpone sign-up. Potential skepticism of electronic payment options and their ‘unknown risks’ may also deter people from letting go of a tried and tested payment method.

## Select Advisory Work

In addition to running behavioural science randomized control trials (RCT), the BIU offers select advisory services to ministry partners and a wide range of public sector organizations. In this way, the BIU can provide a value-added perspective to our partners even in cases where a full pilot project may not be recommended.

The TESTS (Target, Explore, Solution, Trial, Scale) methodology that Ontario uses to develop behavioural insights is part of an iterative approach to rigorous social research. While deepening an understanding of the behavioural context from our partners' on-the-ground expertise, it may surface that some projects are not necessarily well suited to RCT pilots. For instance, during the target phase of research, the BIU may find that the project does not meet the MIST (Measurable, Impactful, Sizeable, accessible through Touchpoints) framework criteria – such as being a large enough sample on which to run meaningful statistical analysis during the trial phase. During the explore phase, it may come to light that systemic or structural barriers might be too strong or too many for behavioural interventions alone to achieve the desired outcome. These insights are also important outcomes that the BIU may use to develop behaviourally-informed recommendations and advice for partners.

In other cases, factors external to the project may shape the type of advice that the BIU offers partners, shifting a project that seemed promising for a trial pilot into a better candidate for select advisory work. This might be the case when partners experience internal changes (such as decreased capacity or a new mandate), or when the service area adopts a new people-centred innovation that effectively solves the issue that was targeted for behavioural intervention!

The exciting projects that follow are examples of work on which the BIU has provided behavioural insights advice. These projects also inform the province's behavioural insights portfolio and help to build knowledge on similar issues faced by government, the broader public sector and the behavioural insights community in Canada and internationally.

## Increasing Cervical Cancer Screening Rates for Eligible Women

Cancer Care Ontario and Ministry of Health

On average, 1,500 Canadian women get cervical cancer each year, and someone dies every day from the disease. Cervical cancer is almost 100 per cent preventable with regular Pap tests, follow-up of abnormal results and the human papillomavirus vaccine (HPV). Yet according to Ontario Health, more than a third of Ontario women are overdue for screening. Since 2013, Cancer Care Ontario has sent invitation and reminder letters to Ontario women to invite or remind them to have a Pap test. The BIU partnered with Ontario Health (Cancer Care Ontario, a business unit in Ontario Health) and the Ministry of Health (MOH) to investigate whether behaviourally-informed changes could be made to the cervical screening invitation letters to address behavioural barriers associated with having a Pap test.

The project team completed a literature review to better understand the factors that lead women to delay screening. This user research suggested that optimism bias (the belief that bad outcomes will only happen to others) may lead some women to misperceive the risks of cervical cancer and the utility of Pap screening, and that finite mental bandwidth or present bias may cause others to forget to book or attend their appointment. Discomfort with receiving a Pap test from a primary care provider was also a factor that motivated women to delay or forego screening.

The project team recommended changes to the letters to address these barriers. These recommendations included providing clear information about the prevalence of cervical cancer to correct risk misperceptions, adding a planning prompt to help structure the task of booking an appointment, and providing an active choice of two options for receiving a Pap test; the recipient's family physician or a walk-in clinic, to address the preference of some women to be screened by a doctor other than their family physician. Prototypes of these letters were tested with focus-groups and revised based on received feedback from eligible women.

Cancer Care Ontario implemented behaviourally-informed changes to the letters in May 2018, and completed a pre-post evaluation of their effectiveness at encouraging screening in October 2019. The evaluation found that compared to the months before the new letters were implemented, 4-month screening

# Sample/exemple

## Ontario Cervical Screening Program

«Correspondence Date»

«Letter Reference Number»

«FIRST\_NAME\_X» «LAST\_NAME\_X»  
 «CONTACT\_STREET\_ADDRESS\_X»  
 «CCC\_CONTACT\_STREET\_ADDRESS\_2\_X»  
 «CITY\_X» «CCC\_CONTACT\_PROVINCE\_X» «POSTAL\_CODE\_X»

Dear «FIRST\_NAME\_X» «LAST\_NAME\_X»:

Our records show that it is time for you to get a Pap test to protect you from cervical cancer. This year, about 1,000 women get cervical cancer in Ontario, and every day, at least 1 woman will die from this preventable disease.

A Pap test can help prevent cervical cancer. Cervical cancer is almost 100% preventable with regular Pap tests and following up with a doctor if you get an abnormal Pap result. That's why women in Ontario ages 21 to 69 are asked to have a Pap test every 3 years.

A Pap test only takes a few minutes and is covered every 3 years under the Ontario Health Insurance Plan (OHIP).

You can get a Pap test from your family doctor or at many medical clinics across Ontario.

It's your call to make. Book a Pap test today.

Yours sincerely,

*Linda Raboneck*  
 Linda Raboneck, MD MPH FRCP  
 Vice-President, Prevention and Cancer Control, Cancer Care Ontario

### My appointment

Date: \_\_\_\_\_  
 Time: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Clinic/doctor/nurse: \_\_\_\_\_  
 Location: \_\_\_\_\_

Screen for Life  
 Cancer screening sees what you can't

- Breast
- Cervical
- Colorectal

Take a minute and book your test today!

**Book an appointment with your family doctor**

What if you do not have a family doctor or nurse practitioner? The Health Care Connect program can help you find one for free! Call 1.800.445.1822 or visit [ontario.ca/HealthCareConnect](http://ontario.ca/HealthCareConnect)

**Visit a clinic that offers Pap tests if you prefer**

Search online for a clinic near you that offers Pap tests. Visit [ontario.ca/HealthCareOptions](http://ontario.ca/HealthCareOptions) and search for "Pap smear" in your area.

**Call Telehealth and ask for a clinic near you that offers Pap tests**  
 Call 1.866.797.0000  
 24 hours a day, 7 days a week



## Have questions?

Visit [cancercare.on.ca/paptest](http://cancercare.on.ca/paptest) for more information

Do I need a Pap test if...	Yes	No
I feel healthy and have no symptoms	✓	
I have never had intimate sexual contact		X
I used to be, but am no longer sexually active	✓	
I have only had 1 sexual partner	✓	
I am in a same-sex relationship	✓	
I have been through menopause	✓	
I have no family history of cervical cancer	✓	
My cervix was completely removed for a hysterectomy		X
I am under 21 or over 70 years old		X
I am over 70, but have not had 3 normal tests in the past 10 years	✓	
I have had the HPV vaccine	✓	

### What is a Pap test (also known as a Pap smear)?

A Pap test looks for early cell changes that could lead to cervical cancer. An instrument, called a speculum, is inserted in your vagina and samples of your cervical cells are taken with a soft brush so they can be looked at under a microscope. Pap tests are not perfect. A single test could miss some abnormal cells, so it is important to do the test every 3 years. If you have abnormal bleeding or discharge from your vagina, see your doctor even if your last Pap test was normal.

### What causes cervical cancer?

Cervical cancer is caused by infection with the human papillomavirus (HPV). Infection with HPV is very common. Most people will not know they have it because there are often no symptoms. The infection goes away without causing harm. HPV is sexually transmitted and causes cell changes in the cervix that are usually reversible. With a Pap test, HPV can cause cancer when the infection does not go away, although it usually takes many years or longer to develop.

### How often do I need a Pap test?

Every 3 years, ages 21 to 69. To help you and your healthcare provider remember when it is time for your Pap test, Cancer Care Ontario will send you a reminder letter directly to you. We will also send you a letter about your Pap test result a few weeks after your test.

### How long does a Pap test cost?

Pap test screening every 3 years is covered by the Ontario Health Insurance Plan (OHIP).

### What happens after I get my Pap test?

A few weeks after your Pap test, Cancer Care Ontario sends a letter to you with your result. If the result is abnormal, you will be asked to contact your healthcare provider.

### Who is Cancer Care Ontario?

Cancer Care Ontario is an Ontario government agency. For more information on our cancer screening programs, visit [ontario.ca/ScreenForLife](http://ontario.ca/ScreenForLife), or contact us at [screenforlife@cancercare.on.ca](mailto:screenforlife@cancercare.on.ca) or 1.866.662.9233.

To stop getting cancer screening letters, fill out the form at [cancercareontario.ca/screeningletters](http://cancercareontario.ca/screeningletters) or call 1.866.662.9233 to get a form. You may change your mind at any time. Your privacy matters: visit [cancercareontario.ca/screeningphi](http://cancercareontario.ca/screeningphi)

Need this information in an accessible format?  
 1.855.460.2647 / TTY 416.217.1815 | [publicaffairs@cancercare.on.ca](mailto:publicaffairs@cancercare.on.ca)

OCCSP/N50318

CR0201

**Figure 11:** The cervical screening invitation letter that was revised and implemented based on evidence from this project.

rates increased significantly by 30 per cent (from 10 to 13 per cent) once the new behaviourally-informed letters were implemented. Although this evidence is only suggestive because a randomized evaluation was not conducted, approximately 7,200 additional women were screened in 2018 once the new letter was implemented, and similar increases in screening rates are expected to continue.

## Improving Ontario's Demerit Point System for Driver Remediation

Ministry of Transportation

Ontario's demerit point system assigns points to driver's records as a form of conviction for traffic offences to reduce unsafe driving. Drivers begin with zero points and gain more as they incur violations, with more severe violations (e.g., failing to remain at the scene of a collision) resulting in more points. Depending on the number of points on their records, drivers may have their license suspended. The Ministry of Transportation (MTO) engaged the BIU to assess whether enhancements could be made to the existing demerit point system. After mapping the demerit point process from the driver's point of view and consulting the literature for examples from other jurisdictions, the BIU made several recommendations to support this process, such as providing personalized text message reminders about impending point accruals. In addition, the Ministry of Transportation has applied recommendations from the BIU, such as using a behaviourally informed, two-stage warning process, to enhance the effectiveness of demerit warning letters, used to communicate with high-risk drivers.

## Increasing RESP Uptake Among New Parents

ServiceOntario and Employment and Social Development Canada

Completing post-secondary education (PSE) is associated with many positive outcomes, including increased life satisfaction, health and income. Unfortunately, participation in PSE differs between income groups; students from low income backgrounds participate less than those with higher incomes. The cost of PSE deters many prospective students. To combat this barrier, Canadians can open Registered Education Savings Plans (RESPs) for their children. The federal government offers two savings incentives linked to RESPs, where families can receive government grants towards their child's education valued at up to \$9,200 per child. When surveyed, low income parents reported that they strongly value education and expect their children to attend PSE. However, lower income families are much less likely to have an RESP for their children than higher income families. The increased attentional demands of managing resource scarcity may make it more difficult for low income families to open an RESP and benefit from the associated government grants.

In March of 2018, the BIU advised ServiceOntario on the integration of an RESP referral service into the Ontario Birth Bundle, a collection of services that new parents complete while registering the birth of their child. Including the option to notify the financial institution of your choice that you would like to open an RESP account as part of the Birth Bundle is hypothesized to increase the number of parents who open an account and benefit from educational grants. While uptake of the RESP referral service has been high, a difference-in-difference analysis to confirm the effect on RESP enrollment rates is planned for the near future, pending the availability of Canada-wide RESP enrollment data.

### Helping Primary Care Physicians Improve Prescribing Behaviour

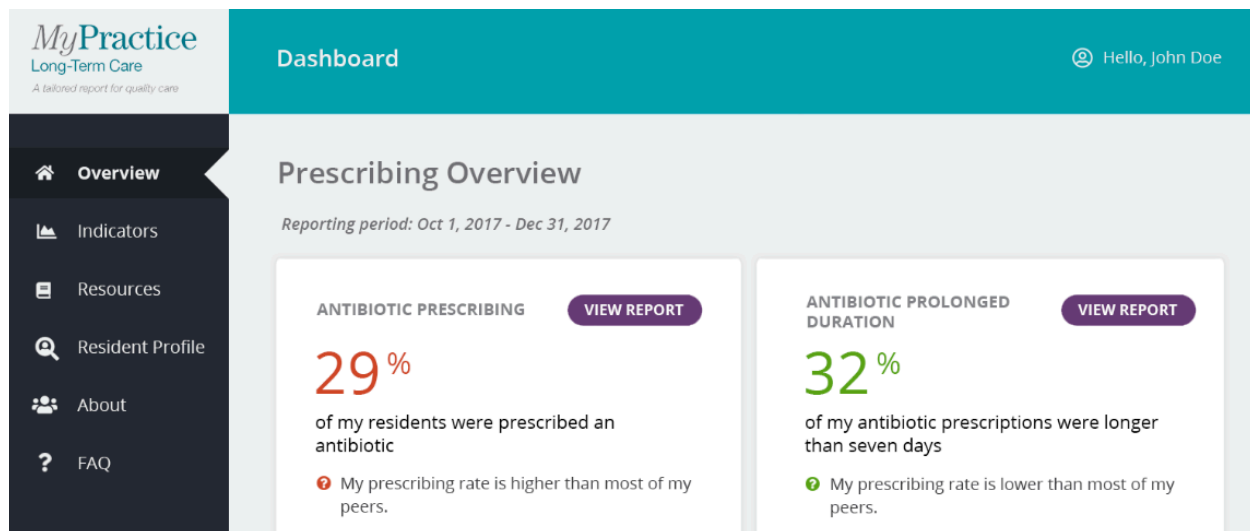
Ontario Health (Quality)

Ontario Health (Quality) provides physicians and surgeons with customized MyPractice reports. These reports include clinician practice-level data in relation to peers across the province and practical ideas to support improvements in patients care. Ontario Health (Quality) solicits input directly from end users of the reports (e.g., clinicians) and collaborates with researchers and other stakeholders, including the Behavioural Insights Unit, to maximize the impact of these reports.

With the MyPractice report for family physicians practising in long-term care, the BIU provided Ontario Health (Quality) with feedback on how to improve the visual clarity and the persuasiveness of the report dashboard. For example, the BIU's comments shaped how the dashboard describes a physician's prescribing rates in relation to their peers using simple language and a "traffic light" colour scheme to signal key areas physicians may want to focus improvement.

In a survey about the reports, 100 per cent of physicians (or 20 out of 20 respondents) reported the information presented on antibiotic prescribing rates was clear and easy to understand. For instance, one user commented that the report "provides a comparator for practice especially [helpful for] people who practice more in isolation. It helps new physicians judge their progress."

## Sample/exemple



**Figure 12:** MyPractice portal provides clear feedback to physicians on their antibiotic prescribing behaviour.

## Increasing Uptake of Direct Bank Deposit Amongst Social Assistance Vendors

Ministry of Children, Community and Social Services

Direct bank deposits with eStatements (DBD) are a secure digital channel for transfer payments to vendors, eliminating the hassle of cashing a paper cheque. Despite the advantages of DBD, more than a year after the service was made available to vendors who receive payments on behalf of social assistance recipients, only 5 per cent of vendors had made the switch to DBD.

The BIU collaborated with the Ministry of Children, Community and Social Services (MCCSS) to investigate whether behaviourally-informed solutions could increase DBD uptake. The BIU provided recommendations to the Ministry on enhancements that could be made to the DBD registration process, such as the creation of a short, memorable URL that linked directly to the form, as well as data infrastructure improvements that could make low-cost randomized evaluation possible in the future. The Ministry is currently reviewing these recommendations to determine which are feasible to implement.



## Increasing Compliance with Vital Statistics Reporting

Michael Garron Hospital

The Modified Early Warning Score (MEWS) is an algorithmic scoring system calculated from five vital sign measurements (heart rate, respiration rate, blood pressure, temperature and alertness). MEWS has the potential to standardize the early detection of deterioration of in-patients' health, enabling more responsive decisions for changes in care by healthcare teams. To be accurate, all five measurements must be recorded within the same 90 minutes, and to enable early detection MEWS should be calculated frequently. At the start of the project, Michael Garron Hospital assessed that MEWS recorded within the previous 24 hours were available for as few as 50 per cent of patients in some wards.

The BIU worked with Michael Garron Hospital to explore the behavioural context surrounding MEWS to better understand barriers to regular recording of vital signs and possible interventions which may promote it. This involved three separate sessions: one with hospital staff involved with Quality Improvement initiatives; a second with the Clinical Informatics Team; and a final one with nurses responsible for MEWS compliance. Learnings from these sessions were incorporated into a set of recommendations for improving the digital interface through which clinicians entered and reviewed MEWS, as well as advice on integrating MEWS into clinical decision-making. The BIU provided Michael Garron Hospital with a final report with recommendations to increase MEWS reporting.

## Increasing Uptake of an Online Patient Portal

South East Toronto Family Health Team

Online patient portals offer a secure, digital channel of communication between patients and their health care providers. In 2018, the South East Toronto Family Health Team (SETFHT) launched its patient portal, HealthMyself. After a year, 60 per cent of patients with email addresses on record had yet to register for the service.

The BIU worked with SETFHT to explore the behavioural context surrounding HealthMyself adoption to better understand barriers to uptake of the online portal and possible interventions which may promote it. This involved a session with SETFHT management, clinicians and administrative staff, as well as a

digital walkthrough of the HealthMyself registration process. The BIU provided recommendations on enhancements that could be made to the account activation process. Recommendations included having the patient's physician act as the messenger, and ideal times to prompt patients to register (i.e., while they are in the waiting room). The BIU has presented the South East Toronto Family Health Team with recommendations in the final report to support increase in uptake of the patient portal.

### Supporting Ontario's COVID-19 Response

Ministry of Health; Ministry of Government and Consumer Services; Ministry of Children, Community and Social Services; Toronto Public Health; Impact Canada

Governments have had to react swiftly to address the public health crisis brought on by the emergence of the novel coronavirus, COVID-19. Public service providers and decision-makers in Ontario suddenly faced new, urgent challenges to help slow the spread of this virus while serving residents in health, social and community services. To help support these demands with behaviourally-informed, human-centred guidance, several Ontario Ministries, Toronto Public Health and the federal Impact Canada behavioural science unit sought the advice of Ontario's Behavioural Insights Unit. As the pandemic response unfolded, the BIU also reached out to offer its expertise and services to program areas where behavioural insights could potentially add value and help improve outcomes for Ontarians.

Responding to COVID-19 presented challenges to the BIU as a completely new behavioural context with little existing research from behavioural scientists. As a well-established public-sector behavioural science team, Ontario's BIU was invited to join national and international working groups to support the application of BI in government responses to the pandemic. The BIU leveraged its relationships with Canadian and international BI organizations – such as Impact Canada, British Columbia's Behavioural Insights Group, the Behavioural Insights Team (UK, USA) and the UN Innovation Network's International COVID-19 Behavioural Insights Group – to stay apprised of emerging research on issues like hand-washing, mask-use, and contact-tracing. To support Ontario's COVID-19 response, the BIU developed extraordinary, rapid behavioural advisory services based on the team's knowledge of the local context in Ontario (especially where informed by previous research with partners), insights on related behaviours, and new literature reviews, jurisdictional and media scans of research from behavioural scientists and governments around the world.

In many cases, the BIU's advice have been applied to public-facing communications to help address potential barriers to action and to help improve compliance in a rapidly changing public-health environment. The BIU's COVID-19 related advisory services include the following interventions:

- The BIU has developed, administered and analyzed regular pulse surveys to gauge employee experience in the Treasury Board Secretariat's Planning and Performance Division's shift to remote work, and identify areas for management to improve communications and provide employee supports.
- Toronto Public Health has reached out to the BIU since the beginning of the crisis for ongoing advice regarding the city's COVID-19 tracking and lab-reporting.
- Similarly, the BIU has worked with the Ontario Ministry of Health (MOH) to respond to urgent demands such as improving the COVID-19 self-assessment tool and increasing online access to COVID-19 lab results.
- The Ministry of Children, Community and Social Services (MCCSS) sought the BIU's advice on how to set-up effective rapid direct communications using text messaging (SMS) with front-line workers.
- The BIU has provided behaviourally-informed advice to the Ontario Digital Service in the development of the province's COVID-19 Exposure Notification mobile phone app to support Ontario's plan to re-open the province.
- Impact Canada, a behavioural science unit in the federal government, invited the BIU to sit on a Canadian academic advisory committee with expertise in public health, behavioural science and epidemiology. This committee works in partnership with Impact Canada, the Privy Council Office Public Opinion Research and the World Health Organization (WHO) to support the COVID-19 Snapshot Monitoring (COSMO Canada) survey. The COSMO project addresses Canadians' experiences around COVID-19, including perceptions or risk, knowledge and misperceptions of the virus, trust in health authorities and adoption/ acceptance of public health recommendations, barriers/drivers to recommended behaviours, and stigma surrounding COVID-19.

## Education and Outreach

Building capacity to apply behavioural science to public policy across the public service is core to the BIU's mandate. The majority of the BIU's capacity-building activities occur through working in partnership with ministries and the broader public sector to deliver behavioural insights pilot projects. However, the BIU occasionally delivers workshops to provincial public servants. The BIU recently restructured its capacity-building workshop into full-day intensive workshop open to teams that want to address a behavioural change opportunity using the BIU's TESTS (Target, Explore, Solutions, Trial and Scale) methodology.

To support an increased demand for behavioural insights resources by public servants, the team also launched a standalone Behavioural Insights Workbook. The Workbook guides readers through the process of applying the TESTS methodology to deliver results with behavioural insights. Beginning in 2020, this interactive, digital Workbook is available to the broader public – interested parties may email [biu.tbs@ontario.ca](mailto:biu.tbs@ontario.ca) for a copy to help bring a behavioural lens to their projects.

The BIU is committed to supporting continuous learning and capacity building in behavioural insights across Canada. The BIU actively participates in the Behavioural Insights Network (BIN), a pan-Canadian community of practice for government bodies applying behavioural insights to public policy.

## Conclusion

It has been a decade since the idea of applying behavioural insights to achieve public policy outcomes first emerged. During these ten years, the field has grown remarkably, driven by successes in many jurisdictions, including Ontario. As the projects in this update report demonstrate, behavioural insights are delivering real value for Ontarians and helping the government build better public services. The Ontario Behavioural Insights Unit will continue to draw on work done in other jurisdictions around the world to inform its approach. With this report and others to follow, the BIU will continue to share examples of the positive impact that behavioural science methodology can generate with willing public sector partners keen to innovate to achieve better outcomes for people.

## Glossary

### **Active choice**

Presenting people with a choice between two options can help crystallize their decision, as it streamlines their decision-making and seemingly removes the option of doing nothing in response to the prompt.

### **Anchoring**

Initial exposure to a number serves as a reference point and influences subsequent judgments about value (e.g., full-price being shown before sales price).

### **Anticipated regret**

Prompting people to consider the regret they may feel if they fail to act and therefore experience a negative consequence can help them overcome inertia and make a decision.

### **Audit and feedback**

Collecting and then providing people with information about their own performance can help them focus on improving.

### **Behavioural affordance**

The options that are immediately obvious in the decision-making environment (e.g., a phone number prominently placed in a mailed notice may encourage more calls, even if an email address is present on the back of the notice).

### **Ceiling effect**

In situations where the encouraged behaviour is the uptake of a finite resource (such as booking an appointment at a fixed number of clinics), behaviour change can hit a "ceiling" once the resource is fully used (i.e., all appointments are booked).

### **Cocktail party effect**

Using a person's first name or other identifying factors can get their attention, as people subconsciously scan for mentions of their name in most situations.

### **Escalation of commitment**

People prefer to act in accordance with their past behaviour. If they take a small step toward a goal and then are reminded of this commitment, they may want to finish the task.

**Exclusivity**

Emphasizing how unique an opportunity is can cause people to value it more.

**Finite mental bandwidth**

People have a “mental bandwidth” made up of attention, cognition, and self-control. These abilities are all finite and easily depleted by the countless decisions people must make as they go about their daily lives.

**Forgetting**

People may miss important information because of inattention or distraction with other concerns.

**Framing effects and loss aversion**

People can assess the same option differently, depending on how it is framed (e.g., placing a coffee cup in between a smaller and larger cup can make it seem ‘just right’ even if it is an objectively large cup). People tend to avoid risk when they are prompted to think about what they might gain, but seek risk to avoid losing. People are loss averse and feel the effect of small losses more keenly than small gains.

**Hassle factors and friction**

The effort required to perform an action, even seemingly small requirements such as creating a new account, often puts people off. Reducing the required effort can increase uptake or response rates.

**Inattention blindness**

If people are not focused on a particular piece of information, they can miss it entirely.

**Information and choice overload**

The greater the number or complexity of choices or pieces of information offered, the more likely a person is to experience decision fatigue, go with the default option, defer the choice or avoid making a choice altogether.

**Messenger effect**

People add varying amounts of weight to a message depending on who delivers it.

**Moral self-image**

People are motivated to see themselves as morally upright and honest. Reminding someone that a particular behaviour relates to their moral self-image may increase the likelihood that they respond in a manner consistent with that desired image.

**Nudge statement**

A short phrase that incorporates one of the principles listed in this glossary, usually prominently featured in a communication. An example social norm nudge statement is "9 out of 10 people recommend this glossary to an acquaintance."

**Null result**

A null result occurs when there is no statistically significant difference in outcomes between groups in an evaluation. If the evaluation had enough people to provide sufficient statistical power, a null result means that the tested solution is likely unable to achieve the desired level of impact, and that other approaches should be pursued instead.

**Optimism bias and risk misperceptions**

People tend to think that bad outcomes will happen to other people, rather than themselves. This can cause them to deprioritize actions to protect their physical and financial health because they misperceive their risks as being lower than they are.

**Planning prompts**

Encouraging people to make plans about where and when they will complete an intended behaviour can make it more likely the behaviour will occur.

**Present bias**

People tend to give stronger weight to short-term payoffs (rather than longer-term benefits) when considering a trade-off.

**Procrastination**

People tend to put off making decisions or completing tasks partly due to inertia, the complexity of decision-making and present bias.



### **Prospective memory failure**

People are often convinced that they will remember to do something in the future (such as book a follow-up appointment in three months), but unless they take specific steps to remind themselves, they tend to forget about these tasks because present concerns dominate their attention.

### **Reciprocity**

People are more likely to want to take action to help someone who has helped them in some way.

### **Saliency**

Describes how much a piece of information “pops out” at first glance, and how memorable it is; colour, bolding and positioning, as well as removing non-important content, can all help increase the saliency of key information in a communication.

### **Scarcity**

When you realize that something in your life is missing (e.g., material resources, time), your brain can seem to only focus on that missing thing, which can distract you from daily tasks and can inhibit long-term planning.

### **Self-efficacy**

People’s belief in their ability to perform well at specific tasks.

### **Self-evaluation**

Giving people an opportunity to assess their own performance can encourage more reflection and motivate improvements.

### **Simplification**

People are deterred by small barriers, such as information-dense instructions or being shown too many options. Simplifying the wording and layout of a communication to make it easier to understand can encourage action.

### **Social benchmark**

Providing people with specific information about how they compare to their peers, or a high-performing subset of their peers, can help motivate people to act to bring their performance up to the benchmark.

**Social norm**

People are heavily influenced by what they perceive others as doing, and most people tend to act in accordance with the what they perceive to be the norm.

**Status quo bias**

People prefer things to stay the same by doing nothing or sticking with a previously made decision.

**Timely reminders**

People do not have great memories; reminding them of their intended actions at a critical point in time can make it more likely the action will occur.

**Timing**

The exact moment when someone is delivered a message, prompt or reminder about an action can have a significant effect on whether they take action (e.g., a request sent to a worker at 5:01PM on a Friday may elicit a different response than the same request at 9:15AM on Monday morning).

**Touchpoints**

Existing communication channels or materials already used to interact with the target group that can be used to deliver a behavioural insights intervention.

## References

Ontario Behavioural Insights Unit. 2018. Behavioural Insights in Ontario: Update Report 2018. Toronto

Ontario Health (Cancer Care Ontario). 2019. Prevention and Cancer Control. Quality Management Insider 2019. Queen's Printer: Toronto.



ISBN 978-1-4868-1442-8 (Print)

ISBN 978-1-4868-1443-5 (HTML)

ISBN 978-1-4868-1444-2 (PDF)

© Queen's Printer for Ontario, 2020

---