



Canada Emergency Response Benefit Formal Assessment

Best Practices and Lessons Learned

Final

Canada Revenue Agency

March 31, 2022

Table of Contents

Scope	4
Background	4
Defining a role for the CRA	5
Program design and launch.....	7
Attestation approach and risk management	8
Rapid execution and agile methodology	9
Pandemic workforce challenges	11
System capacity	11
Successful launch	12
Post Launch	13
Iterative changes.....	13
Program close-out	15
Best Practices	17
Streamlining governance for faster decision making	17
Integrating risk management into decision making	18
Solution-driven cross-functional teams	19
Starting with a minimal viable product.....	20
Putting clients first: User-centric design informed by iterative UX testing	21
Digital by default: Fostering efficiency and convenience	23
Capitalizing on partnerships to better serve Canadians.....	24
Investing in innovation: Pilot projects	25
Leveraging organizational culture and public service pride.....	26
Lessons Learned	28
Combatting fraud is an ongoing effort	28
Additional up-front compliance efforts were required	29
Program eligibility should have been communicated more clearly	31
Clearly map downstream impacts for clients and provide more decision support tools	32
Investments in telephone support continue to be important.....	33

Conclusion35

Scope

The Office of the Auditor General (OAG) of Canada conducted a performance audit on the Canada Emergency Response Benefit (CERB) and issued the corresponding audit report¹ on March 11, 2021. The report recommended that the CRA should:

- finalize and implement its plans for CERB post-payment verification work
- conduct a formal assessment of its delivery of the CERB so the CRA can apply the findings to the design and delivery of future government emergency response and recovery benefits

The objective of this report is to identify the lessons learned and best practices about the design and delivery of the CERB from March 15 to December 31, 2020. These lessons will enable the Government to apply the findings to future emergency responses.

This report focuses on the administration of the CERB, in line with the Agency's role, and as such policy decisions are out of scope. Similarly, the recommendation to finalize and implement plans for the CERB post-payment verification work is outside the scope of this formal assessment.²

Background

COVID-19 was declared a pandemic by the World Health Organization on March 11, 2020,³ and it has had an unprecedented impact on the lives of Canadians. The disruption and uncertainty the pandemic caused in March 2020 created many challenges in society and the economy. Canadians were suddenly forced to adapt to many new public health measures like social distancing and queueing for service at businesses deemed essential.

As the gravity of the pandemic set in, the impact on the public was evident. Panic-buying in stores was one indication of the fear people were feeling.⁴ Families and their routines were thrown into turmoil due to the sudden closure of public schools, daycares, and community centres. Large gatherings were cancelled in communities across the country. As well, many people experienced disruption to their social and community support networks.

¹ Office of the Auditor General of Canada (2021). Reports of the Auditor General of Canada to the Parliament of Canada. Independent Auditor's Report. COVID -19 Pandemic, Report 6, Canada Emergency Benefit. (11 March 2021), online: <https://www.oag-bvg.gc.ca/internet/English/parl_oag_202103_01_e_43783.html>

² Office of the Auditor General of Canada (2021). Reports of the Auditor General of Canada to the Parliament of Canada. Independent Auditor's Report. COVID-19 Pandemic, Report 6, Canada Emergency Benefit. (11 March 2021), online: <https://www.oag-bvg.gc.ca/internet/English/parl_oag_202103_01_e_43783.html#hd2e>

³ World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19. (March 11, 2020), online: <<https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19--11-march-2020>>>

⁴ Legassic, Ashley and Katherine DeClerq. "Empty shelves and long lines: What was with all the panic buying during the pandemic?" CTV News Toronto. (July 29, 2021), online: <www.toronto.ctvnews.ca/empty-shelves-and-long-lines-what-was-with-all-the-panic-buying-during-the-pandemic-1.5526364>

On March 13, 2020, the Government of Canada asked Canadians to cancel all non-essential international travel. More than 1 million Canadians and permanent residents returned to Canada between March 14 and 20, 2020 before the Government imposed travel restrictions.

Public health officials tracked the steady rise in COVID-19 infections and issued daily reports. As cases began to rise in the country, every province and territory declared states of emergency. To protect the most vulnerable and limit the spread of the virus, all Canadians, except for essential workers were asked to stay home. This meant that large numbers of people were laid off and self-employed individuals saw their incomes collapse.

In response to the social and economic crisis and in light of significant disruptions created by a highly uncertain outlook, the Government announced an Economic Response Plan⁵ on March 18, 2020. A basic goal at that time was to keep people fed and housed during the lockdown. This plan would implement several federal relief measures aimed at individuals, businesses, economic sectors, and communities. As part of these federal relief measures, the Government announced the emergency response benefits. These benefits would provide Canadians who suddenly had little or no income with essential financial support “to make sure that Canadians can keep food in the fridge, that they can keep a roof over their heads, that they can afford the medicine that they need.”⁶

As the pandemic continued, Canadians were asked to follow further public health measures, such as wearing masks in public spaces and reducing social gatherings to decrease virus transmission. Regular community pandemic status updates became the norm, and as the year continued, initial public health measures evolved based on local conditions. Many families continued to cope with school and daycare closures and the introduction of online learning while adapting to extended periods of working from home. With the deployment of COVID-19 vaccines and as 2020 came to a close, Canadians were anticipating a return to normal.

Defining a role for the CRA

On March 15, 2020, the Canada Revenue Agency (CRA) became aware that Employment and Social Development Canada’s (ESDC) employment insurance (EI) system was being overwhelmed by applications from Canadians who could no longer work due to COVID 19 restrictions. ESDC’s EI system was designed to process a predictable number of applications at relatively lower volumes (compared to the unprecedented volume of CERB applications that were anticipated), that allowed it to use processes requiring significant manual processing. Moreover, EI was not designed to provide support to self-employed individuals, including gig workers, who would also be impacted by COVID-19.

⁵ Department of Finance Canada. Canada’s COVID-10 Economic Response Plan: Support for Canadians and Business. (March 18, 2020), online: <<https://www.canada.ca/en/department-finance/news/2020/03/canadas-covid-19-economic-response-plan-support-for-canadians-and-businesses.html>>

⁶ Harris, Kathleen. “Trudeau unveils \$82B COVID-19 emergency response package for Canadians, businesses”. CBC News. (March 18, 2020), online: <<https://www.cbc.ca/news/politics/economic-aid-package-coronavirus-1.5501037>>

The Government approached the CRA to design and deliver time-bound emergency benefits based on the CRA's proven track record administering benefit programs and managing high volume transactions. This emergency aid would help support affected workers financially and allow them to stay home to avoid overwhelming the country's health care system. The CRA would deliver this benefit at the same time that Service Canada delivered the EI Emergency Response Benefit.

Acknowledging the prevailing socio-economic environment at the time, the CRA accepted the challenge of delivering the benefit with unprecedented speed with the expectations that the respective agencies and departments would return to delivering on their respective mandates post-crisis. The required initial infrastructure and processes needed to get emergency support payments into the hands of Canadians was put in place within three weeks. This stands in contrast with traditional program implementation which typically follows a 12- to 18-month design and development cycle once legislative parameters are known. During this period, ESDC simultaneously developed the program policy and legislation, with input from the CRA.

The CRA had an established digital presence. It had made previous investments in infrastructure, including IT capacity, and had demonstrated success with system changes in response to legislative and policy changes for tax filing purposes. Moreover, the CRA had a longstanding history of collaborating with ESDC on other initiatives.

In defining roles, it was recognized that most public servants, including CRA employees, were among those who were asked to stay home. Over 90% of the CRA's more than 46,000 employees moved to remote work when a work-from-home order was announced on March 15, 2020 to ensure employees' health and well-being.

For the most part, the CRA's programs are designed to operate in an environment where the vast majority of employees would work in one of the many CRA buildings across the country. However, COVID required the CRA to quickly migrate employees to a remote work arrangement and as well, to mobilize employees to different workloads in support of the emergency benefits.

The CRA's National Business Continuity Plan was invoked and identified jobs that were considered non-critical to the delivery of CRA services during the first phase of the pandemic. During the initial days and weeks of the pandemic, the CRA also temporarily paused a number of workloads it considered to be non-critical in order for resources to be reassigned to deliver the CERB. As the pandemic period lengthened, steps were taken to digitize more workloads or establish other creative solutions to reduce the requirement for onsite work.

To address the anticipated high volume of emergency benefit applications, the CRA and ESDC/Service Canada would deliver two streams of a new emergency benefit. All Canadians who had ceased working due to COVID-19 would be able to receive the CERB to ensure they had timely access to the income support they needed if they were not eligible for EI. The entire program of parallel emergency benefits was referred to as the Canada Emergency Response Benefit (CERB); however, there were technically two benefits with slightly different eligibility criteria and governed by separate legislation. Applicants could apply for either benefit:

- Applicants eligible for EI benefits were encouraged to apply for the CERB through Service Canada (EI Emergency Response Benefit). This benefit fell under the Employment Insurance Act, and was to provide \$500 a week for eligible individuals.
- Applicants not eligible for EI benefits were encouraged to apply for CERB through the CRA. This benefit fell under the Canada Emergency Response Benefit (CERB) Act, and also provided \$500 a week.

For this report, we refer to the CERB as the part administered by the CRA.

An important design consideration was influenced by the roles the two entities had in delivering benefits, and the fact that ESDC/Service Canada had an existing EI system based on weekly payments. This system would need to be modified to deliver the flat amount of \$500 a week. It was expected that most individuals familiar with the EI system would turn to Service Canada to receive the emergency benefits. As a result, Service Canada would continue to deliver a weekly benefit as it meant fewer system changes, and would mean applicants would generally continue to make an initial eligibility application followed by weekly non-employment confirmations.

In contrast, the CRA would need to build a completely new system within three weeks, including the supporting infrastructure system (e.g. online application system, phone support) to administer the program. It was expected that self-employed workers, and many employees who had never used EI, would turn to the CRA for emergency benefits. As a result, it was determined that the benefit issued by the CRA could consist of a \$2,000 payment every four weeks to every eligible applicant. Applicants would apply every four weeks, and would need to meet the requirements for the entire four-week period to qualify for the payment. The advantage of this approach for the CRA was that rather than dealing with a wave of millions of applicants every week, many of whom would be calling the CRA, applications would be spread over a four-week period. Moreover, this approach would reduce the stress on the printing and postal services during the pandemic.

On April 6, 2020, at 6 a.m. eastern time, CERB was open to Canadians. During the first week alone, the CRA would process 2.77 million applications and issue \$5.56 billion in emergency benefit payments to Canadians.

By the time the program closed in December 2020, the CRA had processed 22.6 million applications and issued \$45.31 billion in CERB payments to over 5.4 million Canadians.

Program design and launch

ESDC led and coordinated the legislative framework and policies associated with the CERB with the goal of providing financial support to those who had lost their income because of COVID-19. The priority and direction for the CRA in this time of crisis was to design and develop a simple system (a minimal viable product) that would get money to Canadians in need as quickly as possible. The CRA would be authorized to provide these benefits through a delegation of authority from the Minister of Employment, Workforce Development and Disability Inclusion.

Attestation approach and risk management

The Agency applied industry-accepted project management principles, including close risk monitoring and mitigation, to track the continuously changing requirements of the CERB program. At the same time, it was guided by the best practices promoted by the International Public Sector Fraud Forum and its principles of fraud control in emergency management. This approach resulted in a focus on delivery of benefits to where they were needed as quickly as possible. This included providing support and services to those in need.

In recognition that the money would need to be delivered extremely quickly to millions of Canadians, the Government decided to use a simplified attestation-based application process supported by certain authentication and verification controls (application blocks). The attestation approach meant that no documentation was required at the time of application and that instead, eligibility would be verified at a later date. Certain files, however, would be selected for a review of their eligibility based on a risk model.

The decision by the Government of Canada to use an attestation approach reflected a number of important factors.

First, in March 2020, most 2019 tax returns had not yet been filed or assessed, meaning there was no current, validated income information available on the earnings of most employed and self-employed individuals. Information was available for the 2018 tax filing year, but this did not reflect recent earnings. To withhold payments until individuals could provide more recent information, particularly during the pandemic, would have meant that CERB payments would have been delayed by months.

Second, even if more recent data was available for the millions of expected applicants, building an IT system that would allow extensive up-front verification could have delayed the launch of the emergency benefit by months.

Third, the attestation-based approach reflected both the self-assessment principle that is part of Canada's tax system, as well as the high compliance rate of clients when reporting their income and paying their required amount of tax. Reconciliation of accounts would be done after payments were issued.

The Government ultimately determined individuals would need to attest that they earned \$5,000 of eligible income in 2019 or \$5,000 of eligible income in the 12 months prior to the CERB eligibility period. This approach would recognize both longer-term earnings as well as more recent earning patterns. The decision to use a dynamic 12-month period to calculate income, however, added a layer of complexity for the CRA and further affected the ability to introduce automated integrity measures at the time of application.

In its assessment, the Government weighed the benefits of providing needed funds immediately using an attestation approach (with the specified parameters) against the risk that using an attestation approach would mean some non-eligible applicants would receive the benefit, and determined that the timely delivery of emergency support was more important. Accepting this risk and recognizing

that strategies and means would be implemented from a post-assessment perspective are consistent with the best practices promoted by the International Public Sector Fraud Forum and its principles of fraud control in emergency management.⁷

It should be noted that at that time, the initial scope was to provide Canadians with up to four emergency benefit payments for a maximum entitlement of \$8,000 (\$2,000 x 4 eligibility periods).

Rapid execution and agile methodology

The CRA moved swiftly to design and deliver the system, processes, and infrastructure to ensure emergency benefits payments could be issued within three weeks, with ESDC developing the program policy and legislation simultaneously.

A group of CRA employees was tasked to lead the delivery of this unprecedented emergency benefit. This group became a team of individuals from various levels (flattened for efficiency) with expertise and experience in program delivery, client services, project management, communications, system infrastructure, policy, and legislation.

The CRA quickly reshaped and simplified its governance structures to expedite decision making. It suspended regular governance and replaced it with an Incident Management Committee. Regular touchpoints between the CRA and ESDC were held at the highest levels (Assistant Commissioner and Assistant Deputy Minister, Director General, and Director) to ensure alignment and to quickly address emerging issues, and there were joint ESDC and CRA implementation calls with Privy Council Office. Additionally, several task forces for the CRA and the ESDC were set up during CERB's delivery to discuss particular areas of joint responsibility, such as external communications. Internally, the CRA followed the formal establishment of a Director General Steering Committee which continued to report to the Commissioner level. By swiftly adapting to the situation, the CRA's organizational governance enabled senior management to quickly become aware of emerging issues and address them, with regular updates on the CRA's pandemic response, risk exposure, and strategic business resumption activities.

In addition, it stopped most compliance and recovery programs early in the pandemic to sustain the economy and to recognize the challenges posed by COVID-19. With a three-week design and development window before launch, CRA focused on delivering the minimal viable product required for the CERB's launch on April 6, 2020. Many other system and process components that would ordinarily accompany a program of this nature would need to wait until after launch.

Draft legislation changed rapidly as policy decisions were taken at unprecedented speeds. The CRA often sought and received clarifications regarding legislation and policy interpretation from ESDC to ensure the CRA was applying the legislative and program requirements appropriately as system

⁷ International Public Sector Fraud Forum. Fraud in Emergency Management and Recovery: Principles for Effective Fraud Control. International Public Sector Fraud Forum (2020), online: < https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/864310/Fraud_in_Emergency_Management_and_Recovery_10Feb.pdf > page 15

development progressed. In other cases, and where warranted, policy decisions were reviewed throughout the life cycle of the program as more information became available.

One such situation relates to the guaranteed income supplement (GIS) reduction or ineligibility due to emergency benefits received in the year. As indicated previously, the CRA delivered the CERB program under the CERB Act and Service Canada delivered a parallel program under the EI Act. The delivery of benefits under two separate pieces of legislation resulted in a potentially asymmetrical treatment of CERB payments for the calculation of the GIS. More specifically, if an individual applied for the CERB through the CRA, the CRA lacked the regulatory or legislative authority to take steps or interim measures to adjust the GIS, unlike their counterparts at ESDC who possess the legislative authority to consider the redetermination of the GIS payment based on current year income. The issue was continuously monitored and a policy review was undertaken by the Government to mitigate this imbalance.

The CRA minimized risks of an evolving landscape by applying an agile methodology approach to system development, reusing existing systems as much as possible, and adhering to existing project management control practices.

In applying an agile methodology to build the systems (instead of the traditional waterfall method), the CRA was able to speed up the development cycle. Traditional waterfall methodologies are usually a 12- to 18-month cycle once legislative parameters are known.⁸ Agile methodology builds IT solutions in a way that is broken down into rapid, incremental, and successive steps. Given the risks and the rapidly changing legislation and program requirements, the agile methodology proved to be the right approach because of its flexibility and iterative deployment methodology, allowing the CRA to focus on a minimal viable product that would be launched to quickly provide benefits to millions of Canadians who had lost their incomes.

The CRA was able to take advantage of its pre-existing My Account online service and integrate the CERB applications into the web portal's user-friendly design. To ensure all populations, including vulnerable ones, had access to emergency benefits and services, the CRA provided alternative mechanisms. It set up an automated telephone line (Interactive Voice Response (IVR)) and expanded activities at its client service contact centres. This ensured that those without access to My Account had other options. It should be noted that system limitations meant that the IVR could only respond to a set number of individuals each day without generating busy signals, and that this would later be factored into the launch of the CERB.

The CRA successfully applied incremental, iterative development to design the expanded My Account web portal in the short time window before launch. A group of CRA employees completed initial user experience (UX) testing to provide feedback on usability improvements to the application. Within days of discussing the portal concept, the CRA had draft mock ups of the new

⁸ Waterfall is a linear system of working that requires the team to complete each project phase before moving on to the next one, while Agile encourages the team to work simultaneously on different phases of the project. Forbes. (Accessed March 23, 2022); online: <<https://www.forbes.com/advisor/business/agile-vs-waterfall-methodology/>>

My Account screens for the CERB applications ready for testing and further refining. The mock ups evolved daily during development and were used as a way of ensuring a common understanding among the development teams as well as between the CRA and ESDC. Incorporating iterative UX testing in the web portal design process was a delivery success factor that supported rapid deployment.

Pandemic workforce challenges

To ensure a successful launch of the CERB, the CRA needed to distribute equipment and provide training to thousands of employees who volunteered to be reassigned to its contact centres. This effort was supported by the unions and it was evident that prior investments in a strong union-management relationship were essential to effectively mobilize a virtual workforce and to reassign employees from across the country – first as temporary contact centre agents and later, to assume varying roles in the compliance domain.

Initial limitations in bandwidth, equipment, and remote collaboration tools were some of the first challenges the CRA faced and resolved, for example, with better bandwidth and the use of virtual collaboration tools.

The CRA followed security provisions for protected information by introducing security waivers for the CERB delivery. The move to virtual work for contact centres highlighted several policy restrictions that presented difficulties in communicating with taxpayers from a remote working environment. In many cases, these restrictions prevented employees from providing service virtually. Using temporary security waivers allowed the CRA to continue providing critical services by mobile phone and email while respecting the health and safety of employees and protecting taxpayer information.

System capacity

In preparation for the CERB, the CRA identified concerns about its systems' capacity to handle the expected high volume of applications. It did this in two ways. First, the CRA mitigated the risk of an overloaded system by disabling mobile applications and low-priority features in the My Account web portal. Second, it mitigated risks to infrastructure by working with Shared Services Canada (SSC) to invest in enhancements to better handle the increased demand. SSC increased the capacity of the platform infrastructure supporting the CRA's systems, from the network to its mainframes, ensuring a successful launch of the CERB through My Account. It subsequently monitored these mitigation strategies to enable the reintroduction of full functionality in My Account once it confirmed the systems' stability.

Another major concern was the capacity to respond to Canadians who had questions about the CERB. A solution however, was found. Due to the pandemic, some jobs in the CRA were initially deemed to be non-critical, thereby freeing up the required resources to allow client-facing operations to continue with minimal disruption. To mobilize these resources and ensure that Canadians had access to services and supports, the CRA sent out a call to action to all employees asking them to work as contact centre agents. Over 7,500 employees responded to the call and they were from all

ranks of the CRA, from junior employees to executives. As a result, the CRA's contact centre capacity dramatically increased. These mobilized employees answered nearly half of the almost 1 million COVID-19 calls received between March 28 and April 24, 2020. A similar trend occurred in other areas administering integrity aspects of the CERB program where employees from within the organization were deployed to assist with these priority workloads.

All CERB applications were processed in real time, leaving the next area of focus for the CRA to be how to get payments into the hands of eligible recipients in the shortest possible time. There were significant capacity concerns regarding government cheque printing and the ability of Canada Post to deliver a large volume of cheques in quick order during the pandemic. Fortunately, before the pandemic, the CRA had piloted an automated direct-deposit solution between the CRA and two financial institutions, whereby individuals could sign up for CRA direct deposit through a banking portal without requiring the CRA's My Account. The CRA leveraged this pilot and expanded it within eight days to over 200 financial institutions. The result was that the CRA successfully processed over 1.4 million new direct-deposit enrolments as of April 14, 2020, significantly reducing the pressure on Canada Post and the government's cheque printing sites. Since the CRA maintained CERB payment service standards of 3 to 5 business days by direct deposit and 10 business days by mail, direct deposit registration had a significant impact on the swift delivery of CERB payments to eligible Canadians. Over 84% of payments were made using direct deposit and many Canadians received payments within 24 hours by direct deposit.

Finally, while concerns about the ongoing capacity limitations had been mitigated, capacity concerns remained about the initial launch of the CERB. There was not enough time to build a system that would stagger the influx of applications for the first week of the launch of the CERB. Instead, people born from January to March would be encouraged through a communication "nudge" to apply on the Monday of the launch, while those born in the next three month period would be encouraged to wait until Tuesday, and so on. This concept recognized that applications would need to be staggered – if millions of people applied on the same day it could have overwhelmed the system (particularly the IVR and phone systems). Canadians overwhelmingly cooperated with this guidance. By the end of the first application day, three-quarters of applicants had adhered to the suggested guidelines.

Successful launch

On March 25, 2020, Bill C-13, the act that encompasses the Canada Emergency Response Benefit Act (CERBA), received royal assent and became law. The Government of Canada announced the CERB on April 1, 2020.

On April 6, 2020, the CRA officially launched the CERB program, and in the first week alone, the CRA processed 2.77 million CERB applications and issued \$5.56 billion in emergency benefit payments to Canadians.

Post Launch

At the launch of the CERB, the initial scope was to provide Canadians with up to four emergency benefit payments. To deliver under urgent timelines, it was necessary for the CRA to increase its tolerance to certain risks but still incorporate best practices related to internationally accepted risk control.⁹

The Principles of Fraud Control in Emergency Management

1. Accept that there is an inherently high risk of fraud, and it is very likely to happen.
2. Integrate fraud control resources into the policy and process design to build awareness of fraud risks
3. The business and fraud control should work together to implement low friction counter-measures to prevent fraud risk where possible
4. Carry out targeted post-event assurance to look for fraud, ensuring access to fraud investigation resource
5. Be mindful of the shift from emergency payments into longer term services and revisit the control framework

Iterative changes

Post launch, the CRA made iterative improvements to the CERB infrastructure and added controls that were not initially possible due to time constraints. In addition, there were a series of program extensions and modification, numerous manual processes to enhance integrity and service were added, and there were 10 major subsequent system releases that took place over the lifespan of the CERB. Some of these changes are set out below.

Within one week after the launch of the program, CRA and ESDC established a system to counter attempts at “double dipping,” where individuals would apply for both the CERB and EI-ERB in respect of the same period.

Shortly after, the CRA introduced further anti-fraud measures, such as age restrictions and the flagging of high risk accounts identified through the use of business intelligence. (Referred to as “bad actor” lists.) These additional measures further strengthened the application process and helped to prevent many ineligible applications from being processed.

As a result of the ongoing pandemic, the Government continued to respond to changing and dynamic circumstances, requiring the CRA to continually adjust the CERB’s program parameters. On April 15, 2020, the eligibility criteria for CERB was expanded to include some seasonal and

⁹ International Public Sector Fraud Forum. Fraud in Emergency Management and Recovery: Principles for Effective Fraud Control. International Public Sector Fraud Forum (2020), online: <
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/864310/Fraud_in_Emergency_Management_and_Recovery_10Feb.pdf > page 8

other workers and as the pandemic continued to lengthen, the Government responded by extending the program twice (first in June 2020, and again in August 2020).

Questions surfaced regarding the legitimacy of those accessing the benefit. In response, the CRA identified an opportunity to expand its national Leads Program, which gives the public and law enforcement agencies, the opportunity to come forward and anonymously report suspected cases of non-compliance with the laws administered by the CRA. The Leads Program was expanded to include the CERB on May 12, 2020 when it began accepting reports of misuse of the CERB program. The leads were triaged with valid leads being forwarded for further assessment and potential compliance actions where warranted.

There were also increasing reports from individuals concerned that their social insurance number had been compromised and used by fraudsters to access CERB. The CRA quickly mobilized, and on May 28, 2020, established a service where taxpayers were able to contact the CRA to report their concerns. As the number of reported cases continued to rise the CRA introduced the Canada Emergency Benefits Validation and Identity Protection Service (CEBVIPS) to help identify suspicious activities, add integrity to the application process, and guard individuals against fraud. At the beginning of June 2020, the CEBVIPS began identifying high-risk and suspicious applicants. These applicants underwent additional scrutiny and were required to provide CRA officials with additional information before the CRA would process their CERB application. As time passed, the CRA uncovered more issues of potential fraud, which included a rise in account takeover, and identity theft.

On June 16, 2020, the Government extended the maximum number of weeks of eligibility from 16 to 24 weeks.

At this time, the CRA drafted a formal CERB Compliance Strategy that encompassed the control measures already in place (such as rigorous front-end validation measures and a secondary review of applications), those to be introduced before the end of 2020, and longer-term initiatives for 2021 and onward. Included in this strategy was the identification of those clients still considered to be “double dippers” – meaning they received the CERB from CRA and other ESDC benefits (such as EI sickness) in respect of the same period.

As a result of cyber incidents that became known to the CRA in August 2020, the CRA temporarily shut down access to all authentication services for its portals on August 15, 2020 and gradually returned authentication services until August 19, 2020 when they were fully restored. As a result, the CRA introduced a number of additional fraud management measures throughout the application process, regardless of the channel used (i.e. online through My Account, IVR or via contact centre agent).

On August 20, 2020, the Government announced another four-week extension to the CERB, making the CERB available to Canadians for a total of 28 weeks (from the original 16 weeks).

On August 26, 2020, the CRA announced additional reporting requirements for employers issuing T4 slips to employees for the 2020 tax year, as a means to help determine the income eligibility criterion for the CERB. The CRA required T4 reporting for the first periods of the CERB from all

Canadian employers. This additional information will enable the CRA to detect errors and fraud from recipients.

The CRA also provided repayment information and mechanisms to individuals who made a mistake when applying for the CERB, received multiple payments for the same period, or received payments they were not entitled to. To provide Canadians with recourse for the eligibility decisions made by the CRA, it also established a review process for those who didn't agree with its decisions.

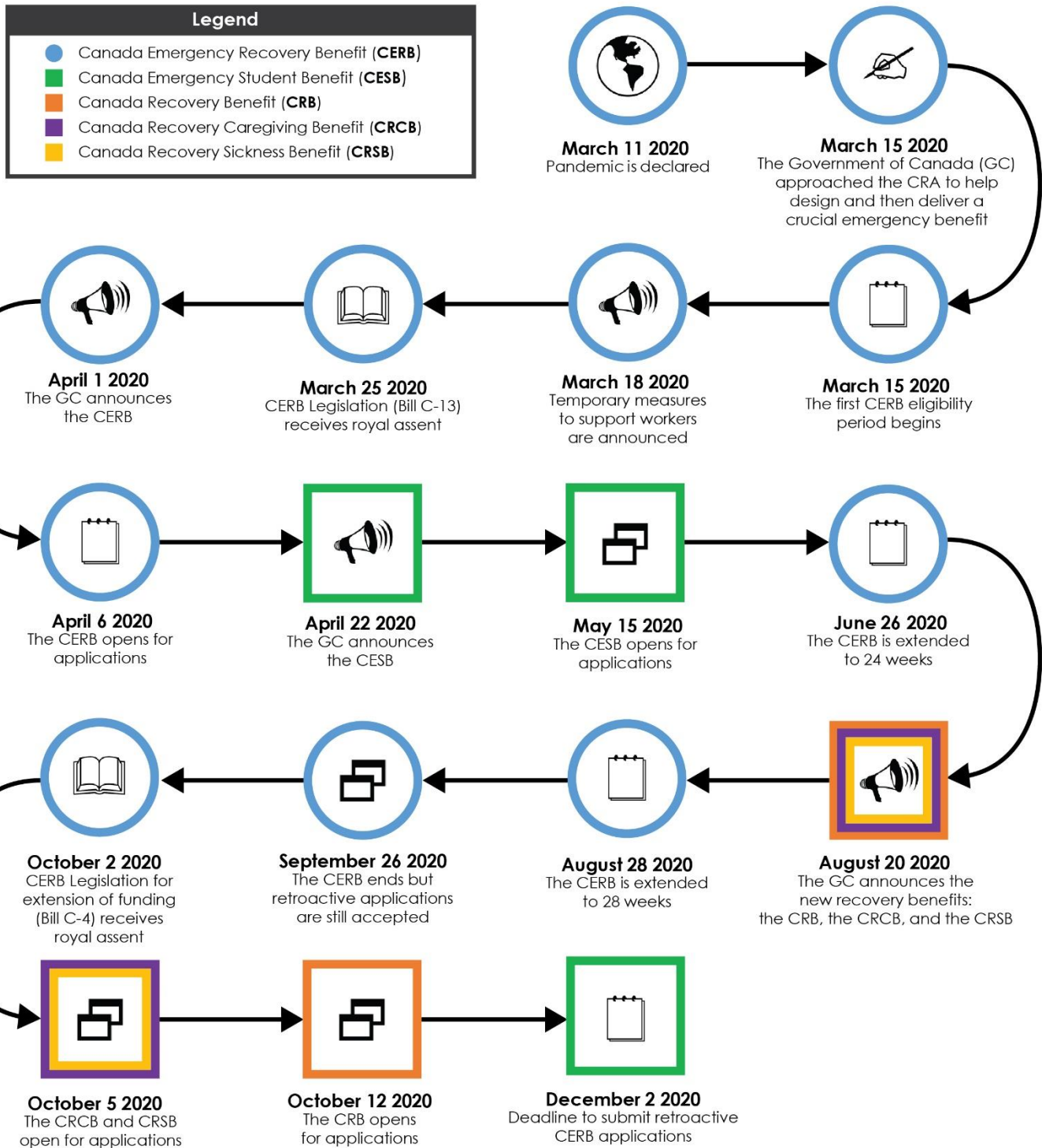
Program close-out

The CERB eligibility periods ended on September 26, 2020, but the CRA continued to accept and process retroactive applications until December 2, 2020. However, legislated authority to release CERB funds expired on September 30, 2020, which prevented the CRA from processing applications until funding was extended on October 2, 2020.

With the pandemic entering a second wave across Canada in the fall of 2020, the Government shifted from relief to recovery measures and announced three (3) new benefits to be delivered by the CRA – the Canada Recovery Benefit (CRB), the Canada Recovery Caregiving Benefit (CRCB), and the Canada Recovery Sickness Benefit (CRSB). The introduction of these benefits created additional pressure on the CRA's operations requiring it to shift significant attention and resources to the new suite of programs, and requiring it to expedite the completion of reviews and validations for applications for the CERB for which the CRA did not have the authority to process beyond December 2, 2020.

The following illustration shows a timeline of key events related to the emergency and recovery benefits between the period of March and December 2020.

Illustration 1: Emergency and Recovery Benefits Implementation Key Milestones



Best Practices

The CRA has identified the following best practices from the launch and post-launch of the CERB. These practices are based on areas of strength, innovation, and collaboration that the Government and the CRA can apply to the design and delivery of future emergency benefits.

Streamlining governance for faster decision making

The CRA has a well-developed and established governance structure in place to provide program and project management oversight and to manage risk. This includes a series of internal agency-wide committees at various levels throughout the organization, in addition to central agency oversight. Although this oversight provides important benefits, especially for an organization the size of the CRA, the hierarchical nature, which requires a cascading set of committees to lead to a final decision, results in a longer decision-making process.

The CRA recognized at the onset that for a rapid launch of the CERB, the traditional governance structures would not be nimble enough for timely decision making as hundreds of design and delivery decisions would need to be made within a very short timeframe. In order to ensure success, protocols were established for governance within the CRA and between the CRA and ESDC.

As the CRA and ESDC were simultaneously working on the legislation, program design, and corresponding systems, the CRA quickly transitioned to an emergency management posture. It created a flattened governance framework consisting of a core group of individuals, who met daily, and several times throughout the day when needed. This allowed for immediate informed decision making and risk mitigation. Throughout this timeframe, the lead program Assistant Commissioner provided daily updates to the Commissioner.

Regular touchpoints between the CRA and ESDC were held at the assistant commissioner, director general, and director levels to ensure alignment and to quickly address emerging issues. The lead program Assistant Commissioner from the CRA also had regular touchpoints with the Associate Deputy Minister at ESDC. Additionally, the CRA and the ESDC set up several task forces during the CERB's delivery to discuss particular areas of joint responsibility, such as external communications.

The CRA also established a Project Management Office to co-ordinate, among other things, communications between the 300-plus internal stakeholders in the CRA. The Project Management Office hosted a daily scrum with all internal stakeholders, first via conference call and later, as technology permitted, through virtual meetings. Daily scrums were scheduled seven days a week ensuring timely communication of business needs, identification of emerging issues and possible solutions, mitigation of risks and the prioritization of deliverables. These scrums provided participants with a regular opportunity to review evolving requirements, resolve issues, assess risks, and provide system specifications to the relevant areas

The combination of the CRA's flattened organizational governance, in conjunction with a streamlined governance and communication (internally and with ESDC), meant that key decisions

could be taken quickly, followed by immediate implementation. Moreover, senior management could be quickly made aware of issues, and respond. While the streamlined, flattened governance was more informal than standard governance processes, the CRA documented its response to the COVID-19 pandemic through a comprehensive and structured repository of evidence. This repository ensured the quality and consistency of records of decisions that were generated in a fast-changing environment and, in particular, documented how the CRA managed risk given the time constraints and uncertainty.

Best Practice

A streamlined, flattened governance structure that leveraged existing bodies and frameworks allowed for timely decision making, which was critical in an emergency environment.

Integrating risk management into decision making

The CRA has well-developed risk management practices integrated into its culture. Its strategic decisions are informed by objective information on the effectiveness and efficiency of its risk mitigation strategies. Throughout the delivery of emergency benefits, the CRA leveraged its professional expertise in the program, information technology, and audit and evaluation domains in order to manage risk. Experts from these areas were part of a multi-discipline project team that supported sound risk management practices throughout the program design and delivery phases. The CRA also adapted some of the best practices promoted by the International Public Sector Fraud Forum and its principles of fraud control in emergency management.¹⁰

The risk environment was assessed, documented via risk registries, monitored and communicated on a regular basis through the established governance structures. The effectiveness of control measures, risk exposure, and risk tolerance for pertinent risks were systematically assessed and additional validation controls were implemented into the program and its application process on an ongoing basis. A daily update forum for subject matter experts facilitated the CRA's ability to deliver on its objectives, anticipate emerging needs, and mitigate potential risks. Examples of key risk informed decisions that were made early on in the pandemic include activating the Incident Management Committee, establishing the National Business Continuity Plan, enabling employees to work from home, upgrading the technological infrastructure, and developing building re-entry protocols.

The risk landscape evolved for the CERB after the program was extended and the CRA experienced cyber incidents during the summer of 2020. In light of these incidents and given the continued risk of account takeover and identity theft, the CRA implemented controls to block changes in direct deposit or mailing address information and identify suspicious activity on client accounts.

¹⁰ International Public Sector Fraud Forum. Fraud in Emergency Management and Recovery: Principles for Effective Fraud Control. International Public Sector Fraud Forum (2020), online: < https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/864310/Fraud_in_Emergency_Management_and_Recovery_10Feb.pdf >

Risk management processes and mitigation strategies at the Agency continue to evolve to be more responsive in an unpredictable environment.

Best Practice

The CRA prioritizes prudent risk management in its decision making.

Solution-driven cross-functional teams

Like most large organizations, the CRA is structured in a manner where key functions are grouped together for the purpose of program administration and where each functional group is responsible for the design and delivery of their respective programs. Typically, programs are designed with a clear delineation of responsibility by function and follow a traditional linear design and development approach that occurs sequentially. For example, legislation is passed and informs program design, program design then informs system and process requirements, resulting in a product or service for a citizen. From there, the communications team is engaged to determine how best to announce or communicate to citizens or stakeholders.

In the case of the CERB, this traditional approach was not possible. Given the timelines and urgency of the situation, the CRA established a cross-functional team at the outset, each with expertise from their respective areas of responsibility, such as policy and legislation, program delivery, project management, financial management, system infrastructure, compliance, risk management, and so on. This approach was designed to break down silos and accelerate the development of a solution that was workable from all angles. Although all of the various disciplines represented on the team were important, two stood out as being absolutely instrumental: information technology (IT) and communications.

Having IT and program design experts in the same virtual room meant that both parties could come to a quick understanding as to what could be built, and how. It also allowed the parties to identify the portion of the solution required to deliver a minimal viable product while identifying and prioritizing future iterations of the solution that would be required as time permitted. In fact, this iterative process is what led to 10 system releases over the lifespan of the CERB, with each iteration further strengthening the integrity of the application and payment issuance process.

The other key component was having strategic communications with digital content design and program design teams working collaboratively from the outset. This was intended to ensure that clear and effective messaging was developed for the CERB in real time, as the design was being refined, and that website messaging and other communications products would be consistent, cohesive and launched in a timely fashion. It also allowed feedback from the communications team to be incorporated into the solution and led to the use of innovative, creative, and agile approaches in the program design, resulting in a simple and user-friendly CERB application process.

A specific example of how the cross-functional organization reaped benefits is the work that led to using an applicant's birth month to determine the date that Canadians would be encouraged to apply for the CERB. IT flagged that there was not enough time to build a system that would stagger the

influx of applications for the first week of the launch of the CERB, and without staggering, there would be a risk that the IT systems, and particularly the IVR phone system, would not be able to withstand the volumes. The solution the cross-functional team found was that people born from January to March would be encouraged, through a communication “nudge” to apply on the Monday of the launch, while those born in the next three month period would be encouraged to wait until Tuesday, and so on. This concept, and execution of the initiative, was successful because a multi-disciplinary team of IT, program and communication experts were in the same room, working together, to find a solution. This initiative was critical to the successful launch of the CERB, and was designed just days before its launch. The exceedingly quick process, from problem identification, to solution determination and communication execution, was only possible because of cross-functional teams working together concurrently over the two weeks prior to the CERB launch had built the trust and the knowledge to take this bold communication approach.

Canadians overwhelmingly cooperated with this guidance. By the end of the first application day, three-quarters of applicants had adhered to the suggested guidelines. Despite the fact that some Canadians were asked to delay their application and therefore defer receipt of the CERB payment, Canadians commented on the ease of use and the ability to receive payments within the standard of three to five days, and often within 24 hours.¹¹

Best Practice

Cross-functional teams were established at the outset to enable rapid, cohesive, and effective outcomes.

Starting with a minimal viable product

Standard development cycles in government typically run between 12 to 18 months, beginning with the development of policy and the enactment of legislation followed by the design, build and testing of all program components prior to launch. In the case of the CERB however, the Government’s direction was to prioritize issuing emergency financial relief to Canadians in an extremely short period of time – three weeks. As a result, the CRA used an aggressive approach to build what it referred to as a minimal viable product that would achieve that very objective, deferring important but non-essential functionality so as to ensure that emergency support benefits could get into the hands of citizens without delay.

Once the solution was launched, the CRA made iterative improvements, adding important and necessary functionality to the CERB infrastructure (such as validation, accounting and verification), including the ongoing monitoring of program integrity. In applying an agile methodology to build the systems instead of the waterfall method (a linear, sequential methodology with stages to plan,

¹¹ Subramaniam, Vanmala. “‘So easy I thought it was fake’: CRA’s CERB system gets stellar reviews in first days of operation.” National Post. (April 8, 2020), online: <<https://nationalpost.com/news/economy/so-easy-i-thought-it-was-fake-cras-cerb-system-gets-stellar-reviews-in-first-days-of-operation/>>

design, build, test, and deliver), the CRA was able to speed up the development cycle. Agile methodology was chosen because it builds IT solutions in a way that is broken down into rapid, incremental, and successive steps. The separation and staggering of various components of the solution was an essential factor in allowing for a timely launch.

The CRA's previous IT investments for the existing secure web portal, My Account, put the foundational structures in place for the minimal viable product.

As policy and processing details continued to evolve throughout 2020, the CRA continually adjusted the type of data required (such as for accepting applications, processing them, verifying them, issuing payments, and reconciling accounts) and the manner in which it would store and access that data. An example of this evolution was the requirement for the CRA to produce millions of new T4A slips¹² with the CERB payment amounts in time for the 2020 tax-filing season. In order to be able to do so, not only was new system functionality required to create and issue the slips, but a new accounting system – the Canada Emergency Benefits Eligibility and Entitlement system – was required to account for payments and reconcile them. Having the ability to create T4A slips was not essential for the launch of the CERB and therefore not considered part of the minimal viable product, but it was absolutely necessary to create this functionality for tax filing purposes.

The CRA understood at launch that quickly deploying a minimal viable product would pose certain risks and it increased its tolerance to these risks; but, it still adhered to internationally accepted risk control best practices and proactively assessed privacy considerations in consultation with the Office of the Privacy Commissioner. A minimal viable product worked because it was allowed to evolve as required and sustain engagement for the duration of the program and beyond. This was true even after the CERB was replaced with a different benefit, and systems and processes continued to evolve. The result was that the CRA was able to launch a program that served millions of Canadians more quickly than previously thought.

Best Practice

The identification of a minimal viable product at launch allows for a faster launch of the core product (in this case, emergency financial assistance to millions of Canadians) with a recognition that the solution must progressively evolve with new functionality over time.

Putting clients first: User-centric design informed by iterative UX testing

From the beginning, it was critical to the CRA that Canadians clearly understood all aspects of the CERB program, such as eligibility, how to apply, and how to receive payments. The large number of applicants for an entirely new program, at a time when millions of Canadians were under stress due to the pandemic, as well as the possibility that they may not be able to access traditional service

¹² Form T4A, Statement of Pension, Retirement, Annuity, and Other Income

supports (such as contact centres), meant that the web and application design for the CERB needed to be as simple and clear as possible. The alternative of an unclear, complex and cluttered CERB application process through My Account and the IVR would have meant millions of people calling the contact centres for guidance in that first week following the CERB launch.

Traditional program design and development often incorporates user testing at the end of the development cycle, whereby the feedback from user-experience testing (UX) informs the program to develop new business requirements, which in turn allows IT to make the necessary changes. This flexibility, to make changes to the user interface late in the development process, or even after the program launch, was for practical purposes, not available in the three week pre-launch development cycle. An alternative approach, of a pilot project launch, to get UX feedback to incorporate changes into the eventual full launch of the program, was also not feasible when millions of Canadians needed immediate financial support.

As a result, the CRA successfully applied incremental, iterative development to design the expanded My Account web portal in the short time window before launch. A group of CRA employees completed initial user experience (UX) testing to provide feedback on usability improvements to the application. Within days of discussing the portal concept, the CRA had draft mock ups of the new My Account screens for the CERB applications ready for testing and further refining. The mock ups evolved during development and were used as a way of ensuring a common understanding among the development teams as well as between the CRA and ESDC. UX testing occurred daily, and was relentless. This approach allowed the CRA to launch an easy-to-use service that received glowing reviews from Canadians regarding the user experience.¹³

Similarly, relentless UX testing was utilized for the development of web content. Web content on Canada.ca was the primary resource for Canadians seeking information about the CERB and to avoid confusion, a single landing page was established, providing general information about the emergency benefit. From there, EI applicants were routed to ESDC and non-EI applicants were routed to the CRA. The CRA's landing page for the CERB quickly grew to include critical information related to eligibility and payment details and links to the My Account web portal to submit an application.¹⁴ The CERB-related web content on the CRA's web pages was written by the CRA and then vetted by the ESDC's policy experts before publishing to ensure that the content accurately communicated the legislation and policy. The CERB pages were mocked up and UX tested frequently before launch. The CRA's landing page, in both official languages, had a combined total of nearly 16 million visits during April 2020.¹⁵ The improvements the CRA made as a result of insights from testing with Canadians greatly contributed to the launch of an easy-to-use service that

¹³ Subramaniam, Vanmala. "So easy I thought it was fake": CRA's CERB system gets stellar reviews in first days of operation." National Post. (April 8, 2020), online: <<https://nationalpost.com/news/economy/so-easy-i-thought-it-was-fake-cras-cerb-system-gets-stellar-reviews-in-first-days-of-operation/>>

¹⁴ Canada Revenue Agency. "Canada Emergency Response Benefit (CERB) with CRA" (March 23, 2021), online: <<https://www.canada.ca/en/revenue-agency/services/benefits/apply-for-cerb-with-cra.html>>

¹⁵ Canada Revenue Agency. "CERB '2.0' Pages – Summary April 2, 2020 to August 29, 2021." This is a CRA internal report.

received many positive reviews from Canadians regarding their user experience.

Best Practice

Incorporate earlier, more, and iterative UX testing and web optimization techniques into client-facing (web and digital application design) solutions to ensure a positive and frictionless outcome for clients.

Digital by default: Fostering efficiency and convenience

Once tasked with the challenge of delivering a new benefit within three weeks to millions of Canadians, a decision was taken that a paper-based application process could not be used.

A paper-based application system would mean Canadians would have to wait weeks and possibly months to receive their emergency benefits. A paper-based application would need to be developed, printed, and distributed, after which Canadians would need to mail in applications, and the millions of paper-based applications would need to be processed manually, after which payments would be issued (often by cheque). This would have meant Canadians might have had to wait 4-6 weeks to receive payments, even if the CRA would not have had to deal with other pandemic-related complications. For example, both a disruption in postal service as well as an inability for employees to report in person would mean that paper-based applications for the CERB would take even longer. As well, the CRA had to take into account the risk of publishing inaccurate paper products, and evolving program requirements, given the dynamic nature of the situation.

The CRA therefore made the decision early to not use a paper-based process. The web-based My Account CERB application, and the accompanying digitally-based IVR automated telephone application, were user-centric with an attestation-based service model. This meant no documentation was required to be mailed in for the initial application. Processing timelines were compressed to near real-time and resulted in clients often receiving emergency payments by direct deposit the next business day. Most people were able to self-serve for the CERB without needing to contact the CRA. This bolstered the CRA's ability to handle complex calls from both a surge and volume perspective. For the small share of clients that were unable to navigate the My Account or automated IVR application, a telephone service was made available on an exceptional basis where individuals could apply by speaking to an agent.

Feedback from Canadians was overwhelmingly positive with Canadians stating that they found their digital experience refreshingly easy and quick,¹⁶ and that they were able to receive payments within the standard of three to five days – often within 24 hours.

The ability, and the confidence, to not use a paper-based application, and rely almost exclusively on digital services (through the My Account portal and the automated IVR system) was due to the

¹⁶ Subramaniam, Vanmala. ““So easy I thought it was fake”: CRA’s CERB system gets stellar reviews in first days of operation.” National Post. (April 8, 2020), online: <<https://nationalpost.com/news/economy/so-easy-i-thought-it-was-fake-cras-cerb-system-gets-stellar-reviews-in-first-days-of-operation/>>

significant transformation of digital service delivery that had been under way in the CRA for several years. The transformation focuses on modernizing the CRA's approaches, practices, and tools for building IT solutions for the digital era. This transformation not only included significant and ongoing investments in IT, but also a digital mindset adopted across the agency.

Best Practice

Digital technology solutions should be considered as the default service option. Alternative non-digital services, such as a call-agent assisted application process should be used on an exception basis only for those not able to use automated services.

Capitalizing on partnerships to better serve Canadians

The financial ecosystem in Canada is both electronic and paper-based with financial institutions processing direct deposits and cheques issued by government on behalf of Canadians. The CRA anticipated that millions of Canadians would be seeking emergency financial support. Given the limited uptake of direct deposit and the anticipated disruptions in the postal service, this could result in a strain on the financial ecosystem. Moreover, the capacity for government cheque printing and the ability for Canada Post to deliver a large volume of cheques in quick order during the pandemic caused significant concern. This raised the need to increase direct deposit use and required a change in client behaviour.

Fortunately, before the pandemic, the CRA had piloted an automated direct-deposit solution between the CRA and two financial institutions, whereby individuals could sign up for CRA direct deposit through a banking portal without requiring the CRA's My Account. The CRA leveraged this pilot and its strong history of partnering with financial institutions by expanding the pilot within eight days to over 200 financial institutions. In this 8 day period, the CRA worked collaboratively with financial institutions to put in place the legal and technical framework to simplify the process by which people could sign up for direct deposit through their financial institutions. The result was that the CRA successfully processed over 1.4 million new direct-deposit enrolments as of April 14, 2020, significantly reducing the pressure on Canada Post and the government's cheque printing sites.

In addition to promoting an easy way to sign up for direct deposit through the banks, they also promoted – as part of the direct deposit negotiations – the availability of the emergency benefits in the lead up to, and shortly after the launch of, the CERB. As individuals went on the website of their financial institution, or opened their banking portal, they saw a significant volume of advertisement about the availability of CERB. This amplified and aligned the CRA's strategic messaging to the public.

Financial institutions are also part of the fraud identification ecosystem and worked collaboratively with the CRA to identify suspicious activity. For example, the CERB's direct-deposit solution leveraged the capacity of financial institutions, which have a consent form and audit capability. Financial institutions are also able to efficiently return the funds quickly. Emergency benefit payments could be paid through direct deposit, which would reduce payment production time, get

money to clients more quickly, and help lessen the risk of bad actors misusing or misrepresenting client information.

Best Practice

In situations where government and industry interests align and are interconnected, early engagement is encouraged to identify potential partnering opportunities.

Investing in innovation: Pilot projects

Pilot project investments made before the start of the pandemic helped the CRA's ability to have launch-ready solutions for business problems. The CRA leveraged several pre-existing frameworks and investments, which lead to the success of mobilizing its workforce during the pandemic.

Pathfinder initiatives regarding cloud technology enabled the CRA to engage with the private sector to increase capacity by establishing a new contact centre in 24 hours. A pre-existing procurement contract with the Government for external-vendor web services (cloud technology) was essential to create new contact centres. These centres assisted the CRA in managing over 50 million total calls received between May 9, 2020, and July 9, 2021 (a 28.42% increase over the same time frame in the previous year).¹⁷

A previous experiment with a chatbot helped serve clients while reducing pressures on the phone network. To ease some of the demand on contact centres, the CRA leveraged its chatbot to respond to simple questions from clients. Within a few weeks, it expanded the breadth of Charlie the chatbot's knowledge to include CRA COVID-19 topics, top call-driver topics from individual tax filers, and top tax-related tasks on the Canada.ca web pages. Pre-pandemic testing and experimentation with Charlie the chatbot enabled it to supplement the use of live contact centre agents by responding to 3,043,314 questions between its launch on March 27, 2020, and July 19, 2020.¹⁸

Experiments with remote workers gave the CRA a foundation for a remote work model and enabled contact centres to transition rapidly to a telework environment. Before the pandemic, the CRA had another pilot project in various contact centres with 50 to 60 agents working remotely. This gave the CRA a foundation for expanding remote work using procedures and protocols it had already developed. The CRA used these to rapidly establish its agents in a telework environment. As well, pre-pandemic testing and experimentation of virtual contact centres provided the CRA with a model for operating virtually.

Staffing Redesign within the CRA did previous pathfinder work on video interviews (using MS Teams) and introduced unsupervised internet tests (UITs) developed by an external vendor, enabling the contact centres to staff during the pandemic. By conducting virtual interviews, the CRA was able to use resources, such as interviewers, from across the country. Staffing Redesign also led

¹⁷ Canada Revenue Agency. Lessons from the Pandemic – ADM Clusters: Reporting. This is a CRA internal report. Page 5

¹⁸ Canada Revenue Agency. Lessons from the Pandemic – ADM Clusters: Reporting. This is a CRA internal report. Page 5

the horizontal efforts to address all the physical touchpoints in staffing. All CRA contact centres across Canada used these tools. UIT tests were so successful that they are looking at making the test results portable. Moreover, the Agency is adopting unsupervised internet tests (UITs) as a new and innovative way of developing and assessing abilities, and behaviours.

Finally, a pilot project on an automated direct-deposit solution (as set out in the previous Best Practice) enabled the CRA to increase enrolment in direct deposit.

Best Practice

Continued investment in pilot projects, experimentation, and new technologies allows for self-ready solutions for business problems that may emerge suddenly and require immediate solutions.

Leveraging organizational culture and public service pride

Public servants work for governments and for citizens, but they are also clients and had to live through the pandemic and adjust to very different working and home conditions.

Due to the pandemic, some jobs in the CRA were initially deemed to be non-critical, thereby freeing up the required bandwidth to allow client facing operations to continue with minimal disruption. To mobilize these resources and ensure that Canadians had access to services and supports, the CRA sent out a call to action to all employees asking them to work as contact centre agents. Over 7,500 employees responded to the call and were from all ranks of the CRA, from junior employees to executives.

As a result, the CRA's contact centre capacity dramatically increased. These mobilized employees answered nearly half of the almost 1 million COVID-19 calls received between March 28 and April 24, 2020. A similar trend occurred in other areas administering integrity aspects of the CERB program.

It was never far from the mind of employees that millions of citizens were counting on the CRA to deliver emergency funds for groceries and rent. The public service focused on the desired outcome to help Canadians as quickly as possible. To do so, many employees experienced increasing responsibilities and working hours, up to 12 to 18 hours a day for months at a time. As well, many teams had multiple priorities during the delivery of the CERB (such as regular operations and the development of new benefits due to the pandemic). As a result, resources and employee responsibilities often overlapped. These teams had no precedent to fall back on, no system in place, many unknowns, and the highest of expectations from clients.

In addition to maintaining the CERB from launch to December 2020, the CRA was asked to deliver the following benefits and supports during this period:

- Canada Emergency Student Benefit
- Canada Emergency Rent Subsidy
- Canada Emergency Wage Subsidy
- Canada Recovery Hiring Program

- Canada Recovery Sickness Benefit
- Canada Recovery Caregiving Benefit
- Canada Recovery Benefit

The extensive work required to launch these additional benefits coincided with the planning and delivery of tax season, with the delivery of both being non-negotiable, placing enormous pressure on the CRA's resources.

It is clear that public servants have a service mindset that focuses on the needs of clients. The enthusiasm and dedication with which CRA employees mobilized was an eloquent illustration of the Agency's service-oriented organizational culture, centered around a vision to be fair, trusted, and helpful by putting people first.

Best Practice

The public service's pride and commitment can be leveraged through a clarity of purpose. The public service will focus on the desired outcome by breaking down organizational barriers, adapting to a new or evolving work environment, and creatively overcoming obstacles to launch and support emergency response initiatives.

Lessons Learned

The CRA's review of the implementation and management of the CERB has allowed for the identification of lessons learned under a number of key themes, identified below. Where possible, these lessons were later leveraged throughout the lifespan of the CERB and as the CRA assumed responsibility for the program design and delivery of new emergency benefit programs (such as the Canada Recovery Benefit, Canada Recovery Caregiver Benefit and the Canada Recovery Sickness Benefit).

For the purposes of this report, the lessons learned that are identified are in relation to the CRA's administration of the CERB. The CRA will share its observations with respect to policy and legislative considerations with ESDC.

Combatting fraud is an ongoing effort

The emergency benefits were unprecedented, both in terms of their reach and in the amount of financial support provided to citizens, providing bad actors the impetus to test the CRA's program integrity and security controls. The CRA saw an increase in the volume of fraudulent and suspicious activities (both conventional and cyber), including some very complex attempts to defraud the government. In order to help mitigate against fraud, the CRA worked closely with financial institutions, the Royal Canadian Mounted Police and the Canadian Centre for Cyber Security, acting on early information and collaborating on cases where possible.

The introduction of emergency benefits programs (delivered primarily through digital channels) significantly changed the cyber risk profile for the Agency: it became much more lucrative for the bad actors to target the CRA's secure portals with the ultimate objective of targeting the emergency benefits. The Agency trusted that its existing security controls would still be sufficient despite this sudden increase in the risk profile until some of the controls were tested and exploited by the bad actors.

In early August 2020 "credential stuffing"¹⁹ incidents were detected on Government of Canada's GCKey service and CRA accounts. GCKey is used by approximately 30 federal departments and it allows Canadians to access services such as Employment and Social Development Canada's My Service Canada Account, and their Immigration, Refugees and Citizenship Canada account. These attacks, which used passwords and usernames collected from previous hacks of accounts worldwide, took advantage of the fact that many people reuse passwords and usernames across multiple accounts.²⁰

¹⁹ Treasury Board of Canada Secretariat (August 15, 2020); online: <<https://www.canada.ca/en/treasury-board-secretariat/news/2020/08/statement-from-the-office-of-the-chief-information-officer-of-the-government-canada-on-recent-credential-stuffing-attacks.html>>

²⁰ Treasury Board of Canada Secretariat (September 17, 2020); online: <<https://www.canada.ca/en/treasury-board-secretariat/news/2020/09/update-from-the-office-of-the-chief-information-officer-of-the-government-canada-on-recent-cyber-attacks.html>>

The CRA took immediate steps as soon as the threat was discovered and implemented further counter-fraud measures to prevent questionable activity.²¹

Due to the emerging health and socio-economic situation, both globally and across Canada, policies, systems and processes had to be put in place rapidly. The CERB was unlike any other program the CRA had ever delivered: the time-critical nature of the benefit meant that the CRA relied on pre-existing risk profiles for system authentication infrastructures (ex. portal and cyber defenses).

The CRA took a proactive stance on trying to detect fraud, adopting a holistic approach and adjusting its approach and incorporating new layers of protection as potential or real vulnerabilities were identified. The CRA did not fully envisage the relentless need to continually monitor and assess the risks associated with the delivery of CERB benefits using pre-existing system authentication infrastructure. As the CERB program was extended beyond the original 12 week timeframe, the risk landscape for the program changed dramatically.

This meant that the CRA had to continually monitor and reassess the risks associated with the delivery of CERB and react to the ever-changing schemes of bad actors and threats to the integrity of the program. Subsequent to the April 6, 2020 launch of the CERB, the CRA implemented additional controls during 10 bi-weekly IT releases to further strengthen application validation and to help ensure that only those applicants eligible for the benefits were processed.

Some examples of controls included a further strengthening of the attestation process, new restrictions on the application process to require certain groups of individuals (such as non-residents, international students, and temporary social insurance number holders) to go through a secondary review process, and the establishment of monitoring teams to detect suspicious activity in real-time and intercept payments before they are issued to bad actors.

Lesson Learned

New programs that provide significant financial support to Canadians need to be monitored closely for fraud, and program administrators must be able to act nimbly to address new and emerging threats.

Additional up-front compliance efforts were required

In order to provide immediate financial support to Canadians, the Government designed the CERB using an attestation-based approach with the expectation that most Canadians were honest, and that the CERB would be a short-lived program and as a result, the risks associated with this method of delivery would be manageable. It was believed that the combination of post-payment verification and collections activities would, to a significant extent, compensate for the reduced level of up-front

²¹ Canada Revenue Agency. (Accessed: February 22, 2022); online: <<https://www.canada.ca/en/revenue-agency/news/2020/09/cyber-incidents.html>>

verification. That said, the Government understood that a quick deployment would result in increased risks, but that this was necessary given the massive loss of income Canadians were experiencing as a result of the pandemic.

This perspective was further reinforced by the fact that voluntary participation in the tax system in Canada is extremely high. Moreover, the attestation-based approach reflected both the self-assessment principle that is part of Canada's tax system, as well as the high compliance rate of Canadians when reporting their income and paying the required amount of tax.

Despite the speedy launch of the CERB, the CRA continued to take the usual steps to ensure that Canadians had the information they needed to determine if they were eligible for the CERB. The CRA ensured that information regarding program eligibility and entitlements was clearly laid out on the Canada.ca web site, co-ordinating and aligning with information provided by ESDC. The CRA also expanded its contact centre capacity to assist callers with questions to help them comply and expanded its chatbot service to respond to general questions regarding eligibility and compliance.

From an application process, a number of controls were incorporated into the design such as confirming the applicant's social insurance number and ensuring that the applicant met the age criteria. Many of the traditional controls available to the CRA that are leveraged when assessing an income tax return were not available to the CRA however, to ensure eligibility and program integrity for the CERB.

In fact, one of the most critical and fundamental requirements to determine eligibility for the CERB was that an applicant had earned \$5,000 of eligible income in 2019 or \$5,000 of eligible income over a rolling 12 month period, prior to the CERB eligibility period. It would have been relatively straightforward for the CRA to automatically validate income information associated with a tax filing. It was not however, possible for the CRA to determine whether or not an applicant had earned the required \$5,000 over a rolling 12 month period, prior to the CERB eligibility period, without first requiring an applicant to provide proof at the time of application. Although the risk of using a 12-month rolling income period was flagged, the Government decided that this continued to be the best course of action in order to allow Canadians to receive the CERB in circumstances of more recent earnings than would be reflected in their tax return.

Moreover, throughout the first week of the program, despite the many warnings on the Canada.ca web site and in the application processes advising applicants that they were not to apply for emergency benefits from both CRA and ESDC, many Canadians did just that. Early indications revealed that Canadians did so for a variety of reasons (for example, confusion, financial concerns, as well as the chance to get more money).

Controls to safeguard against double dipping (where individuals received support payments for the same period from both departments), such as the exchange of information between the CRA and ESDC, were introduced and were important components of program integrity, but the exchange only allowed for the validation of an applicant's situation at a point in time. It was unable to fully factor in situations whereby applicants would apply for benefits from either department on a retroactive basis, as well as a number of specific situations pertaining to data lags.

There were a number of other similar risks, all relatively minor in nature but combined, and drawn out over a longer period of time than originally anticipated, increased the overall risk exposure of the program for the Government.

Many other controls were adopted over the lifespan of the CERB, including “pre-payment” validations on the web portal, the identification of bad actors and suspicious addresses, and the creation of a centre of expertise and new processes to authenticate and verify applications, investigate reported cases of suspected identify theft, and provide assistance to victims.

The CRA continued to monitor the program’s integrity and take steps to ensure compliance. However, the CRA found itself caught in a protracted COVID-19 environment, where instead of delivering CERB benefits to Canadians for up to 16 weeks, and then proceeding with its original plans to turn its attention to its post payment verification and collections activities, its resources remained focussed on continuing to support Canadians with the delivery of CERB through until December 2, 2020. From there, the CRA’s attention turned to the delivery of a number of recovery-based benefits. This protracted benefit horizon, combined with a legislative framework prioritizing delivery over compliance (such as the rolling 12-month eligibility period and the absence of penalty mechanisms), has hampered the CRA’s efforts to identify and collect monies issued to applicants who may have otherwise been ineligible.

Lesson Learned

Time bound programs designed during a crisis should have a series of appropriate contingencies and off-ramps determined based on an anticipated date of expiry.

Program eligibility should have been communicated more clearly

As a result of the highly compressed timeframe for the delivery of CERB payments to Canadians, the CRA was unable to develop or consider every last aspect of program design before the launch. Often times, it had to validate and seek ESDC’s interpretation or direction on the legislation. The CRA, as a tax administrator generally operating under the Income Tax Act, has many definitions for income but this crossover did not exist as the CERB legislation was not part of the Income Tax Act.

Most prominently, there was confusion on whether net or gross self-employment income was to be used for determining program eligibility and there was a back and forth discussion between the CRA and ESDC on this matter. In the meantime, the CRA continued to process thousands of applications from applicants. It took several weeks for the CRA to clarify that net self-employment income was the proper parameter for the program. This led to situations in which individuals, in good faith, interpreted the income eligibility requirement to mean gross self-employment income and where they subsequently applied for the CERB. The CRA and ESDC could have worked faster to identify and rectify the incorrect and incomplete information, minimizing the impact on those Canadians who found themselves in this situation. Moreover, once the information available in the public domain was corrected, it should not have been assumed that those individuals who had

reached out seeking advice in this regard earlier in the program, would continue to be monitoring the website or phone for updates. Instead, the two organizations should have more aggressively pursued public announcements to ensure that citizens were alerted to this oversight.

In the end, the Government enacted a remission order to address those situations where recipients mistakenly used gross income from self-employment rather than net income, so as not to penalize those who applied for the CERB in good faith. Had the departments pre-emptively established a more comprehensive crosswalk between the CERBA and the Income Tax Act, the parties could have identified potential anomalies or gaps, and taken steps to address them in the program design.

Lesson Learned

When subsequent information or consideration reveals program uncertainty, it is critical to identify and immediately communicate these issues to policy makers and the public to minimize the impact of these mistakes or omissions.

Clearly map downstream impacts for clients and provide more decision support tools

In line with the earlier priorities, most of the attention was focused on ensuring that applicants understood the eligibility criteria, how to apply, and how to receive payments. The CRA expected that the information it provided on its web pages and shared via social media would be enough to alert CERB applicants of implications for their future tax and benefits. What later became evident, however, was that some CERB recipients were unaware of the impact the benefit would have on other seemingly independent benefits, such as the Canada child benefit (CCB), the On-Reserve Income Assistance Program administered by Indigenous Services Canada, and income and disability support payments administered by the provinces and territories.

All these programs are income tested programs, meaning that the value of the benefit is linked to the amount of income earned by the recipient in a given tax year. As the CERB and other COVID-19 benefits were considered to be “income,” it could negatively affect (i.e. reduce or in a worst case scenario, completely eliminate) the amount of support received through these other support programs. Five provinces and territories fully clawed back social assistance dollar-for-dollar, four partially exempted the CERB from social assistance calculations, while the remaining three fully exempted the CERB.

Social assistance clients who are found to be ineligible for the CERB or other COVID-19 income support benefits could face a situation where their federal or provincial/territorial benefits were reduced, and now they have a CERB overpayment as well.

Due to the complexity of the information about some aspects of the legislation and interaction with other programs, additional decision support tools, listing possible decision consequences, could have better equipped applicants to make more informed decisions.

Lesson Learned

Provide better decision support tools earlier in the process, listing possible decision consequences and explanations to demystify key concepts and processes.

Investments in telephone support continue to be important

The CRA has made significant progress over the last decade to provide citizens with opportunities to interact with CRA and conduct their affairs in a digital and electronic manner. This is witnessed, by among other things, the high rate of individual returns filed year after year (90%), the number of citizens who have signed up to access the CRA's digital portals (such as My Account or My Business Account) as well as the many opportunities for citizens to self-serve when ordering forms or obtaining account balances through automated phone lines. The Government's operating assumption was that, over time, a declining small share of Canadians would require telephone support, and funding and infrastructure investments generally reflected this assumption. The pandemic however, almost immediately revealed how citizens find comfort in speaking to a "real" person who can help them understand and navigate their individual issues and concerns.

At the time the pandemic hit, the CRA's contact centres were already under pressure due to persistent tension over the ongoing funding requirements to provide even a sufficient level of service to callers. Short-term bridge funding had been provided to see the CRA through filing season with the expectation that further investments would be required. The pandemic exacerbated the matter as the CRA experienced a massive increase in calls, placing an overwhelming burden on CRA's contact centres. Between March 28 and April 24, 2020, 267,000 (40%) of the calls to the CRA's individual tax enquiries line were related to COVID-19 – calls that the CRA had not anticipated as it headed into the filing season.

Moreover, inadequate phone support became problematic as the emergency situation went on as the CRA required additional telephone support in order to undertake pre-payment validation activities required as part of the delivery of CERB payments, as well as an increased call volume due to identity theft and the cyber incidents. By the fall of 2020 call handle times had increased from 8-10 minutes to over 15 minutes (over 70% increase) as phone agents adjusted to policy changes and the emotional complexity of the calls. The increase in call handle time meant call agents addressed fewer calls per day and this contributed to longer wait times for callers. The emotional complexity of calls remains significant as callers are concerned about both their regular financial affairs and the pandemic impacts to their finances.

Although the CRA leveraged other communication channels to provide information to citizens, such as via Canada.ca and its social media accounts, the desire for Canadians to speak with a "live agent" and, in particular, an employee of the CRA, appeared to have been viewed as a "lifeline" to callers who were desperate to be reassured and helped through the process.

The CRA mobilized to scale up its contact centre capacity both in terms of telephony infrastructure and the number of resources available to respond to callers.

In terms of telephony infrastructure, the CRA worked with other stakeholders to launch a separate, stand alone, “cloud-based” contact centre that could be used as a central point for citizens to speak to an agent and obtain general information about the CERB. The CRA worked with an external vendor to set up this system, with the teams working around the clock to get the system up and running over the course of a weekend. This allowed CERB applicants to get immediate information while alleviating some of the pressure on the CRA’s main phone lines, to address more complex, account-specific calls.

At the same time, the CRA’s telephony infrastructure was enhanced and expanded to allow for the use of a new interactive voice response (IVR) solution as a quick and easy means for hundreds of thousands of individuals who may not have had access to the My Account online portal, or who were uncomfortable interacting with the CRA in this manner to be able to apply for the CERB. The infrastructure was also expanded to allow for a significant increase in the number of agents signed into the telephony system in the CRA’s contact centres to accommodate the CRA’s significant bolstering of phone agents in the weeks and months that followed.

The CRA also introduced several initiatives to meet the demand for compliance activities, successfully leveraging its compliance-based contact centre systems to quickly establish an additional two new contact centres to help Canadians comply. This investment resulted in significant savings to the Government by reducing both fraud and blocking of ineligible CERB applicants.

The CRA’s phone channel, even when overwhelmed with callers, has been both a crucial support to Canadians and an integral part of CRA’s delivery of the CERB. As such, it should be viewed less as a service that is costly and be viewed more as an important solution that can be deployed to deliver key services to Canadians, year round, including during times of crisis.

Lesson Learned

Telephone support remains a key service channel that Canadians rely upon, especially during emergencies. Consideration should be given to investing in better, more robust phone systems and ensuring adequate phone agent surge capacity is available for emergencies.

Conclusion

This report is an assessment of the work the CRA undertook over the span of March 15 to December 31, 2020. It identifies the actions and risks the CRA took in delivering the CERB, as well as the challenges and hurdles the CRA encountered. This report aims to preserve the institutional memory so the CRA can apply the findings to the design and delivery of future government emergency response and recovery benefits.

The urgency of the public health crisis and the need to issue emergency financial support quickly challenged the CRA's innovative spirit and its capacity to deliver user-friendly, robust, and secure digital solutions. The CRA's client-centered service approach was demonstrated by the commitment and resilience of CRA employees to ensure the delivery of urgently needed emergency funds in three short weeks.

The best practices and lessons learned identified in this formal assessment will hopefully be useful in guiding the planning and implementation for future emergency benefits. That said, the impact and prevalence of the risks highlighted in this report may be fully understood only over a longer period of time as the CRA's post-payment strategy comes into play. As it stands, this report embodies the key known risks when the CRA implemented the CERB and captures the decisions the CRA made and the risks it took to aid Canadians as quickly as possible during a time of crisis. In implementing the CERB, the Government's direction to the CRA was to provide payments quickly to Canadians in urgent need. The CRA succeeded at this task – it processed 22.6 million CERB applications and issued \$45.31 billion in benefit payments to provide emergency financial assistance to 5.4 million Canadians.