

## UBC-DIBS Working Paper 2022-CBI-04

# Using Reminders to Expedite Claim Form Submission Among Injured Workers

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**Knowledge Summary:** This project aimed to improve form submission rates and timeliness for injured workers going through a claims process. New “Behavioural Insights informed” reminders were designed to simplify language and reduce friction by providing a link to the required form; they were sent at the right time and included a deadline to reduce procrastination. A control condition was compared against three intervention conditions (simple SMS reminder, simple email reminder, and simple SMS reminder plus detailed email) in a randomized controlled trial. All three reminders significantly increased both form submission rates and the timeliness of submission. Based on the results and implementation costs, the simple email reminder is recommended as the best solution. The project team also includes several recommendations for scaling and further research.

**Keywords:** *behavioural insights, nudge, reminders, simplification, friction, prompts, deadlines, return to work*

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## Executive Summary

For many workers who suffer an injury while on the job, submitting their workers' compensation claim (while also managing their recovery and return to work) is a difficult process to navigate (MacEachen et al., 2010). From the moment they report their injury until the time they receive a decision confirming their claim approval, weeks can go by in which no benefit or treatment are received. A key step and responsibility to help workers' claims move forward early on is the workers' timely submission of key documentation. However, due to barriers early in the process such as unclear communication, this requirement is often forgotten by many workers, which can delay a compensation decision, and in turn, prolong time off work. The current research tested a behavioural insights approach, in the form of simple reminders to motivate workers' timely submission of their release form. We employed a 4-arm randomized controlled trial comparing a control condition, a simple text message (SMS), a simple email, and an SMS followed by an email. The results revealed that all types of reminders were effective in improving timely submission of the release form. Moreover, injured workers were significantly more likely to submit the form within 7 days when receiving the simple email reminder than when receiving the simple SMS. Going forward, we recommend that other workers' compensation boards explore the usage of simple reminders in this and other areas of the claim process to improve worker empowerment, and in the long term, return-to-work outcomes.

## Part A. Problem Background

### *Overall Problem and Importance*

In 2019, an estimated 271,806 time-loss injuries (injuries requiring an injured worker to take time off work while they receive compensation) were accepted by provincial and territorial Worker Compensation boards across Canada (Tucker & Keefe, 2021). The effect of a work injury is not only costly to the employer and the provincial government, it also places an unnecessary burden and long-term consequences on the victim. For injured workers, a traumatic injury may leave them unable to work for extended periods of time, not only impacting their mental and physical well-being, but also their financial stability (MacEachen et al., 2010; Billias et al., 2022). Through internal data gathered by a Canadian workers' compensation board (WorkSafeBC), it is reported that nearly 1-in-2 claims reported require the worker to take time off work. While many of these claims are straightforward to navigate, a small portion may be prolonged, which directly impacts return to work outcomes as workers are less likely to feel motivated to return (MacEachen et al., 2010).

As a result, while rest and recovery are key to the injured workers' physical wellbeing, it is important for them to plan for a gradual return to normal life as soon as it is safe to do so (Shaw et al., 2018). Through past research evaluating the source of prolonged claims, effective claim management and communication between all parties (e.g., physicians, employers, and case managers) are two contributing factors to a positive claim experience and timely return to normal life (Roberts-Yates, 2003).

To understand how claim management could be improved early in the claim, we conducted 12 in-depth interviews with injured workers who had a registered claim within British Columbia's WCB (see Appendix I for the interview discussion guide for injured workers). Here, it was revealed that many recalled looking for more communication and instructions early in their claim journey, particularly when initial paperwork was required. The findings from these initial interviews were further supported by literature pointing to information requests and unclear communications as key bottlenecks during the first 30 days of the claim, impacting overall experience (NSW Behavioural Insights Unit, 2016). As a result, many felt they would have benefited from different communication strategies and materials to help them navigate the process.

These conclusions were also strengthened by feedback from the organisation's frontline claims staff who often take queries or provide information to injured workers who call (see Appendix II for the interview discussion guide for frontline claims staff). From their perspective, initial collection of key documents early in the claim is often misunderstood or missed altogether by claimants, which negatively affects the claim processing and requires more effort on their end as they then need to follow up with the worker through mail or phone calls. One document in particular, a release form enabling the insurer to gather key records related to the claim to support the adjudication, was reported to be difficult to gather from injured workers (Form 69W1; see Appendix III for a visual of the form).

Feedback from frontline staff in this organisation suggests that workers often fail to submit the form in a timely manner, either because they are uncertain of their responsibilities at this stage, they lack motivation, or they have simply forgotten. One worker's description of their experience during the early stages was echoed by many others who were interviewed for this research:

*"At the beginning [I do not remember] so much, it was just a lot of information being received."*

The overall impact of information being ineffectively communicated is felt by both frontline staff and injured workers and can be summarized as a negative feedback loop. The lack of effective claim management creates inefficiencies that burden staff and damage worker experience. As a result, this leads to many feeling a general lack of control over their own wellbeing, as they find the system rules are difficult to understand yet they need

to depend on the system for their financial support (MacEachen, 2007). This is articulated by an injured worker who described their dissatisfaction with management of their claim:

*“I needed more open communication and thoroughly going through the procedures on what to expect. I asked [the call centre agent] if I'm forgetting anything and to let me know and then a month later, she told me I was missing this and that's why the claim didn't go through. [The organization] needs to take care of the workers too, to help them be less stressed and well taken care of as well. When they are overworked, I can tell by her email, it reflects onto the customers.”*

Altogether, while claim management may encompass a variety of touchpoints with each party involved (i.e., employer, insurer, service providers, etc.), findings from the literature suggest effective communication with the injured worker, and ensuring they are aware of their responsibilities, can significantly impact their claim experience and potentially their return-to-work outcomes. By looking at the claim as a series of touchpoints, submission of claim documentation on time is one inefficiency, that if improved, would help instill trust between worker and the insurer, and in the long term, have a positive impact on their claim experience. In addition, for the insurer, reduced resources incurred from prolonged claims will help in redirecting current efforts to other areas of service delivery.

### *Justifications for a BI Approach*

This problem was suitable for a behavioural insights (BI) approach as there is an intention-action gap present, wherein the worker is aware of the benefits of submitting their documentation in time but has trouble performing the action. Based on the in-depth interviews conducted with injured workers, their failure to submit the release form can be understood in the context of bounded rationality (Simon, 1990); the workers may want to submit the form in a timely manner, but a combination of poor communication from the organisation's staff, along with a complicated form which is difficult to locate and submit, as well as the worker's cognitive load impeding their ability to understand or remember the form request prevents them from performing the desired behaviour.

The ability to address this problem using behavioural science was further supported by the fact that, on average, only 25% of injured workers with a registered claim in this organization submit the form within 7 days, suggesting a moveable middle and thereby little concern for floor or ceiling effects, and altogether, an opportunity to intervene with a BI intervention.

In terms of feasibility, this project was a good fit for a Randomized Control Trial (RCT) due to the fact there is a large number of injured workers each month registering claims that require submission of the release form, with a population size of approximately 5,000 per month in British Columbia as of 2021. In addition to the sufficient sample size, there is little room for contamination across control and intervention groups, since injured worker clients generally do not have the opportunity to interact with one another. Further, the insurer has a robust internal data warehouse, recording a large number of parameters and touchpoints related to every claim registered. This database management system allows for the target outcome to be adequately tracked and measured.

This project strived to nudge for good by placing injured workers' wellbeing at the forefront. By targeting delayed submission of their documentation (the problem behaviour), injured workers would be able to prevent delays in claim processing, ultimately allowing them to access the support and benefits they need sooner. Injured workers were afforded freedom of choice, as they were able to choose to ignore requests for proactive form submission. If injured workers chose to ignore the intervention, they did not face any additional costs, up until the point where they require a claim decision from the regulatory agency. Workers would still be eligible

to receive a decision on their claim even if they decide to submit their form outside of the suggested timeframe. However, failure to submit the form entirely would potentially make them subject to costs that exist regardless of the introduction of an intervention.

## Part B. Behaviour & Context

### *Target Behaviour*

To improve claim experience, and in turn, safe return to work, research suggests that encouragement of injured workers to take an active role in their claim (when possible) and play an advocate for themselves is important (MacEachen, 2007). In the same vein, insurers must ensure that they provide support and guidance to injured workers at every touchpoint, starting from the beginning when they need to submit key documentation to support a timely claim decision.

Gathering key documentation (which includes release forms) is pivotal in helping adjudicate the claim which, if delayed, may not only impact the worker's financial stability as they wait to receive wage loss benefits from the insurer, but may also negatively impact their mental and physical wellbeing as they withhold from receiving treatment they may need to pay out of pocket. Overall, this impacts the timeliness of a decision which in turn extends the workers' time off work which has been cited as reducing motivation to return in the future (Collie, Sheehan, Lane, et al., 2019).

As such, while there are many opportunities to improve interactions between the insurer and injured worker, a release form's indirect yet influential role in determining recovery timeline demonstrates its importance in developing a seamless claim experience. This research focuses on the submission of the release form as a key behaviour as it is a single, targeted action that must be performed by injured workers but is often forgotten or not done correctly.

### *Measurable Outcomes*

The target behaviour of this research was measurable for several reasons. The performance of this action was observed once received by the insurer through their claims management system (CMS), which records the receipt of the form, along with the date of receipt. The date of the form's receipt is then compared against the date of the associated claim's registration with the organisation's call centre, which is also recorded within CMS, and can be used to measure the timeliness of the submission.

Consequently, the target behaviour could also be quantified using the target measure of the proportion of forms submitted (in general), in a timely manner, and over the course of a certain period. The amount of days taken to submit the form was determined by counting the number of days from the date the claim was registered and the date the form was received in the system, inclusive. The form could be submitted and received using any of the available methods (mail, fax or on the website), with all channels of submission being recorded into the system automatically upon receipt.

The data from the target measure was made accessible and reliable through the insurer's database. The availability of this pre-existing data management system reduced research costs and improved reliability of the data, supporting the use of the selected target measure.

### Population of Interest

The population of interest consisted of the injured workers registered with the insurer. For this population, claim-based variables were specified to target only those who would benefit from an intervention motivating timely submission of a release form. The following eligibility criteria summarize these specifications:

- The worker had not yet submitted the release form as indicated by online records.
- The claim must have involved time loss; we excluded health care only claims. Time loss claims are the only claims requiring release form submission on a regular basis for this specific organisation.
- Claims must be of the following eligibility status: allowed, disallowed, pending, rejected, or suspended. These eligibility types are used for claims requiring release form submission on a consistent basis.
- We excluded injured workers with prior claims over the course of the past 6 months. Having prior claims may create bias, based on their existing knowledge about the claim registration process.
- The worker must have had both an email and telephone number on file to restrict the potential for confounding variables. For instance, if a worker only has a phone number on file, they will be excluded from the study entirely as opposed to put into a condition that does not include email.
- The claim must have been initiated by the worker through the organisation’s call centre, excluding cases where the employers, providers, or relatives start the claim through separate documentation. Having had a discussion with a call centre representative guarantees the workers’ awareness that the claim exists. In addition, this provided us with their full contact information.

The population demographics are summarized in Table 1, sourced through the internal CMS database.

**Table 1.** Demographics of the population of interest, newly-registered injured workers. Source: Internal Claims Registered dashboard.

Characteristics	Categories	Percent of target population
Age	Young worker (age 15-24)	15%
	Adult worker (age 25-54)	64%
	Mature worker (age 55 and over)	22%
Gender	Female workers	38%
	Male workers	60%
English speaking proficiency (interpreter required?)	Yes	96%
	No	4%
Claim experience (claim in the past five years?)	Yes	51%
	No	49%



Working with the above population was feasible due to the accessibility of their contact information, which they shared during their claim registration. The information shared by this group was stored internally (in CMS), making it possible to reach this target population by a variety of channels, such as mail, phone, or email.

The population of interest described above was also large enough to conduct a rigorous experiment. In 2021 alone, this insurer saw an average of approximately 10,000 claims being registered every month, of these 50% were reported through the organisation’s call centre. Subsequently, 35% of the claims reported through their call centre were initiated by workers without prior claims in the past 6 months and whose claim details satisfy the additional parameters of the target population outlined above. Taking into consideration the exclusion criteria, we were left with an average monthly population size of 1,225 injured workers. This is a sufficient sample size for a rigorous evaluation as there can be a minimum of 100 participants within each sample, if conducting a study with three treatment groups and one control group, all of which was confirmed by a power analysis.

### Key Barriers

Several barriers prevented timely form submission. These barriers lent themselves to the motivation-related factors associated with reflective and automatic cognitive processes within the COM-B model (Hallsworth, 2020) (see Table 2).

**Table 2.** Barriers to target behaviour. Sources: BC WCB Voice of the Customer Survey (2021), interviews with frontline staff and interviews with injured workers.

<b>Cognitive barriers</b>	Information overload when receiving initial claim information (during call centre interaction and upon receipt of multiple long and complex introductory claim letters)
	Lack of attention when faced with text-heavy letters filled with legal jargon, distracted by their injury and stress due to recent life-changing event
	Forgetfulness when it comes to submitting the release form
	Bounded rationality (cognitive limitations prevent them from understanding claim correspondence)
<b>Motivational barriers</b>	Lack of motivation to proactively manage their claim
	Habituated to automated customer service experiences
	Perceived effort required to retrieve the form, complete it, and send it back

In alignment with the EAST framework (Hallsworth et al., 2012), behavioural insights can be used to reduce cognitive and motivational barriers through a variety of ways:

- Interventions aimed at making outcomes to a behaviour **timelier** can reduce procrastination.
- Interventions aimed at making the desired behaviour **more attractive** can overcome lack of attention.
- Interventions geared towards simplification can make it **easier** to complete complex actions.

These three principles from the EAST frameworks directly address the barriers to timely form submission as indicated by workers and frontline staff during interviews.

### Touchpoints

Throughout the course of a claim, there are many opportunities for an intervention in which the injured worker may benefit from clearer communication on when and how to submit key documentation. However, for the

purposes of this study, we chose to focus on the beginning of the claim as this is often when the worker awaits a decision from the insurer, in which case additional support is needed for them to feel at ease.

During the first month of the claim there are several existing low-cost ways of reaching this specific group of injured workers, such as phone, mail, or email, depending on the contact information provided. Looking at the beginning of the claim, touchpoints range from the initial claim registration call with the organisation's call centre, to providing the insurer with updates on their injury and/or receiving written documentation and letters regarding the claim.

Throughout these interactions, the beginning of the claim is marked by an overload of information from different channels in which little detail is captured by the injured worker. As seen in the literature (NSW Behavioural Insights Unit, 2016), lengthy communications given to injured workers often use legal language describing the insurance provider, which is not only difficult to understand, but reduces the salience of key responsibilities or roles from the worker. In addition, injured workers are naturally found to have a passive role during the claim process, which may be due to a variety of factors, including a lack of a clear understanding of their role in claim processing. Specifically, Osbaldiston and Sheldon (2003) outlined that people who believed that an authority figure gave them more autonomy demonstrated greater internalized motivation.

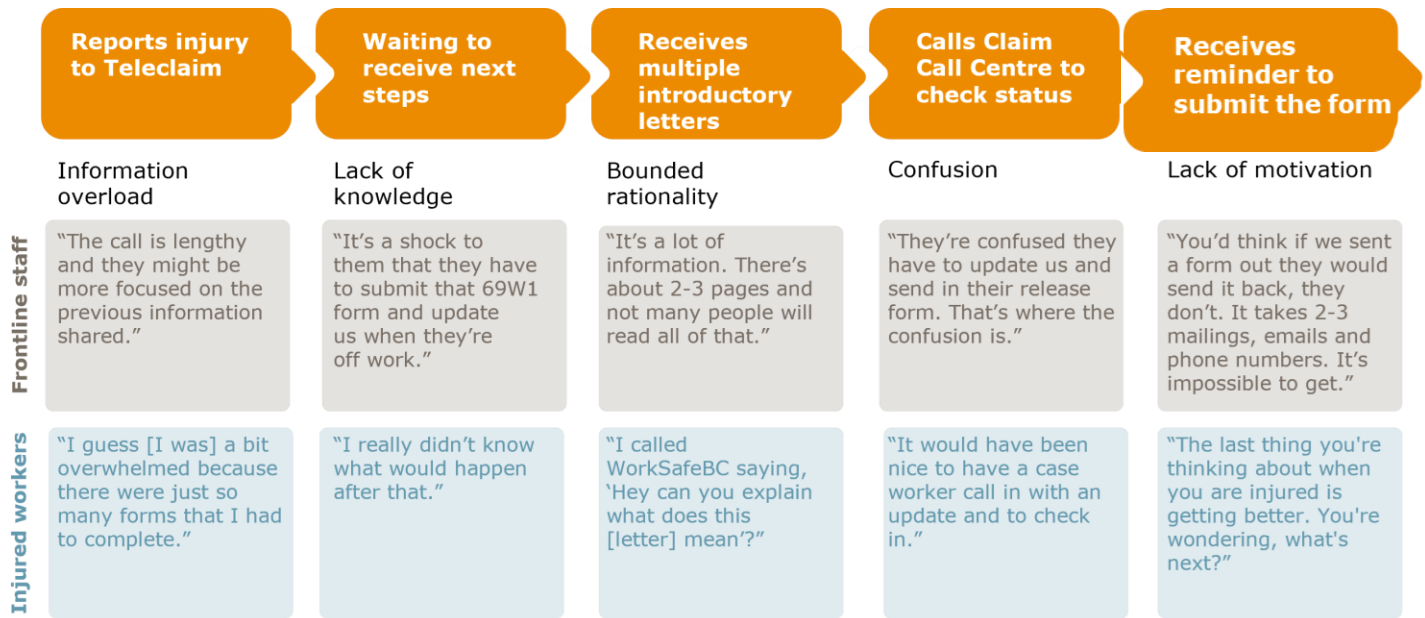
In addition, these communications often don't include mention of why key documentation is needed and why submission in a timely manner is important, specifically the release form. In many cases, the worker is only told to submit the form within a certain period and provided a copy of the form in the mail for them to send back. As demonstrated by literature in behavioural science, this has a negative impact on compliance, as people are more likely to complete an action of medium effort if they're provided with an adequate reason why (Langer et al., 1978).

Lastly, the two main channels often used to engage with the injured worker are telephone and letters. While these may be perceived to be effective by insurers, they are perceived to limit communication. As outlined by (MacEachen et al., 2010), letters don't allow for the client to easily ask questions or clarify any doubts on the content, in addition, for those who don't understand the complexities of the compensation system, they are left at a disadvantage if they fill out a form incorrectly, leading to prolonged claim processing. Telephone calls are often short and don't allow for proper development of rapport.

The above literature is further supported by the in-depth interviews conducted with frontline staff and injured workers as seen through the process map below which illustrates the connection between touchpoints and barriers (see Figure 1). For this insurer, the worker is often informed about the requirement of a release form at the end of an hour-long phone call at which point they are often no longer listening actively. What follows is a period of limbo, in which the worker is unaware of the next steps, and their claim can sit for weeks as the organization awaits the form. During subsequent touchpoints, such as the multiple letters they receive requesting the form, workers remain unaware of the need to submit the form as they are victims of their bounded rationality.

Frontline staff cite that when attempts are made to request the form over the course of this period, workers are either unmotivated to respond or are extremely confused by the staff's request—they "are in shock" that they have to do anything after calling the call centre.

**Figure 1.** Summary of injured workers’ form submission process and associated barriers. Source: Interviews with injured workers and frontline staff.



## Part C. BI Solution

Based on the impact of delayed submission of key forms, and specifically a medical release form, our objective was to introduce an intervention aimed at not only expediting submission, but also increasing compliance overall. In doing so, to address both the cognitive and motivational barriers currently impacting submission we employed the EAST framework (Hallsworth et al., 2012).

More precisely, an intervention of this kind needed to **reduce the amount of effort** typically taken by injured workers to locate the form, complete it, and locate its channel of submission. In doing so, the following behavioural insights were employed:

1. **Simplification** – communicating the purpose of the form and why it is necessary in a way that is simple and easy to understand was ideal. In this case, ensuring plain language was used, clearly describing that submission of the form will ensure the insurer is able to gather additional information about the claim to help move the process along.
2. **Friction costs** – While injured workers may be able to submit their document by mailing or faxing it directly to their insurer, providing them with easy access to the new upload tool may not only reduce the clicks it may typically take them to locate it on our online site, but also potentially reduce the number of steps it may take others to print the form, complete it, and scan it in order for it to be faxed. This reduction in effort may, in turn, help injured workers overcome the barrier of motivation that typically prevents them from completing this action.
3. **Cognitive load** – Considering the amount of information provided to injured workers regarding their claim, providing instructions and guidance regarding submission in a way that it is easy for them to disseminate is key.

In addition, encouraging submission needed to be done during the **right point in time**. Given that the beginning of the claim is filled with a variety of touch points, an intervention needed to be salient. To do this, the following insights were employed:

1. **Prompts** – Reminding workers to submit the form is essential in encouraging the targeted behaviour. In this case, the best time to remind workers of submission would ideally be as soon as they have reported their injury, as they will then typically be looking for a confirmation of their conversation and more information on next steps to proceed.
2. **Deadlines** – At the moment, injured workers aren't provided with a typical timeframe for submission which may affect the urgency with which they view the form. With that in mind, providing them a recommended timeframe for when they should submit the form will increase the likelihood that they will submit it.

To implement an intervention that captured the insights outlined above, and that aligned with the needs of injured workers, we **designed and implemented an SMS reminder to be sent to workers 1 day after reporting their injury to the insurer**. That is, by providing injured workers with a timely reminding them to submit their form shortly after their conversation with one of the organisations client service representatives, our aim was to ensure this stood out from all other communications and provided them with easier access to the tools available to complete the desired behaviour in a more timely manner. We also tested a comparable email reminder with a separate group of workers, to see which medium of communication was most effective.

### *The Value of SMS Reminders*

Past literature employing behavioural insights in a variety of contexts have demonstrated the efficacy of reminders in bridging the intention-behaviour gap, as well as enhancing our prospective memory (Cadena & Schoar, 2011; Kast et al., 2012; Schwebel & Larimer, 2018). Specifically, reminders have been widely used in health care to help increase engagement and compliance with key tasks, and this method has often seen great increase in task completion, or a decrease in task abandonment (D'Arcey, et al., 2020).

Given the integration of mobile technology in modern culture within the past 20 years (with 88% of British Columbians owning a phone in 2019; Statistics Canada, *Canadian Internet Use Survey, 2020*) along with the low cost of implementing SMS communications, this new channel of engagement is a promising way to interact with a potential audience. In addition, recent work in the health care field has continued to make strides in analyzing the effect of reminders through this new medium, highlighting the positive effect text reminders have in improving compliance with specific tasks and praising its accessibility, ease of use, and overall low cost to implement (Sly et al., 2014).

### *How Much Content & How Often?*

Focusing on the content of the message, while some research suggests simplified messaging with minimal detail (e.g., timing, deadline, location) may be most effective in encouraging behaviour (Huf, 2017), other research highlights the value in messages incorporating additional information over and above what is necessary, referred to as a "reminder plus" (e.g., information regarding procedures, personalization, additional detail, etc.). Although there may be weak evidence supporting the positive effect of a reminder plus message on behaviour versus a more simplified kind (McLean et al., 2019), there is value in investigating the efficacy of including additional information to a user to help them perform a task.

While there is an absence of research outlining the efficacy of reminders with injured workers in other jurisdictions across Canada, a recent qualitative study conducted by Jetha et al. (2019) focusing on communication with workers around Return-to-Work highlighted the need for injured workers to receive

“carefully worded written communications” reinforcing the messaging provided during phone conversations with staff.

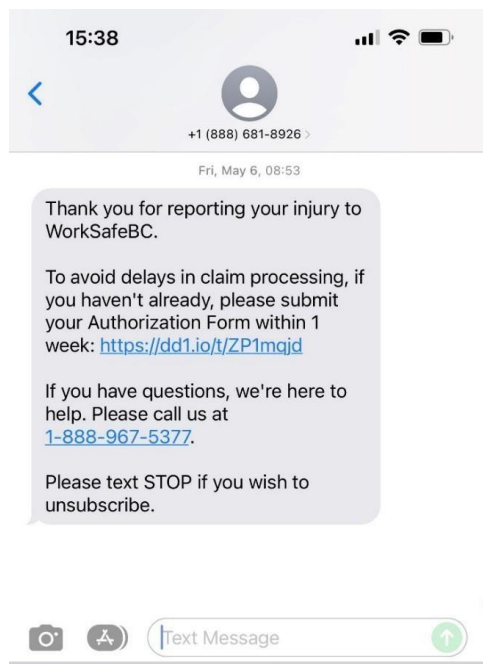
In conjunction with this, during our interviews with injured workers, most expressed preference for automated notifications to provide them with information and instructions for what they could do next to move their claim forward. Upon discussing the level of content they would like to see from these communications, some spontaneously noted wanting to receive an initial simple reminder with key information followed by a detailed notification including steps relevant to other parts of their claim. As seen by the comment below, some felt this would help them digest information in an easier way during the beginning of the claim.

*“I think this is good [detailed reminder]. I think the initial [simple reminder] one would be number one, give them [a] chance to absorb that, and then send them all this information [detailed reminder].”*

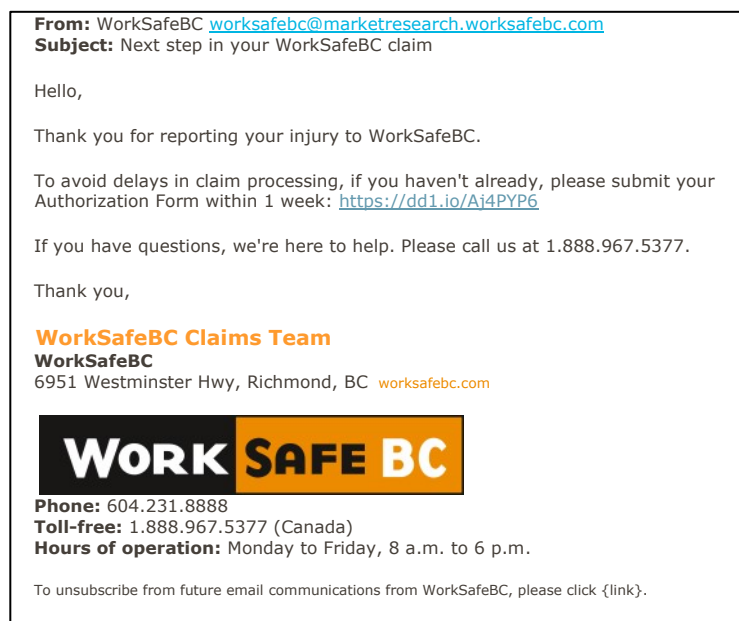
Although there is little research to support the usage of stepped reminders to encourage behaviour change, research evaluating the value of double or triple reminders supports the idea that multiple reminders are often helpful in increasing response rate to surveys (Christensen et al., 2014). While this environment is quite different, there is value in exploring the efficacy of reminding injured workers more than once to submit a form, while taking the opportunity to provide them with additional detail regarding their claim.

As a result, for our intervention, we looked to understand the effect of a simple reminder including a deadline versus a simple reminder with a deadline followed by another reminder with detailed information that reinforced the messaging they heard during the call with the call centre agent, provided more information regarding the purpose of the form, and listed additional steps required for them to move their claim forward (as shown in Figure 2). With the evidence provided by the research, we posited that injured workers who were provided with key pieces of information on their claim may feel more supported, and in turn, have a higher likelihood of being more engaged with their claim, leading them to submit important documentation on time.

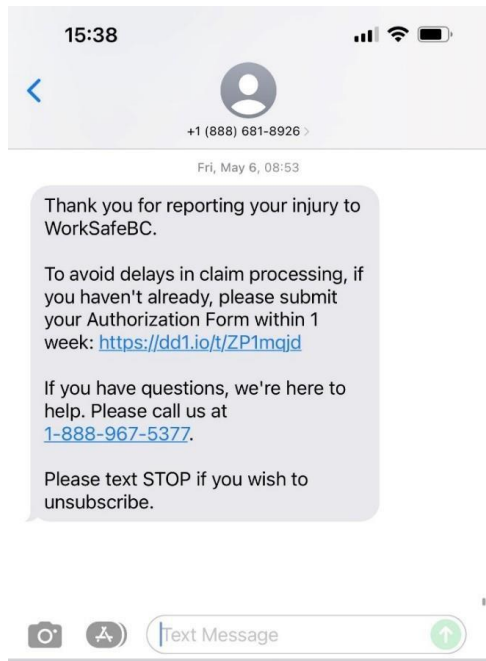
**Figure 2.** The three intervention conditions in the trial: (a) simple SMS reminder, (b) simple email reminder, and (c) simple SMS reminder plus detailed email.



(a) Simple SMS reminder



(b) Simple email reminder



**From:** WorkSafeBC [worksafebc@marketresearch.worksafebc.com](mailto:worksafebc@marketresearch.worksafebc.com)  
**Subject:** Next step in your WorkSafeBC claim

Hello,

Thank you for reporting your injury to WorkSafeBC.

Your claim number is {{ClaimNumber}}.

This message is a follow-up email to the text message you initially received from us.

We are now reviewing your claim and the incoming documentation. Once we have all the information we need, we'll send you a letter to advise you whether or not we're able to accept your claim.

**Submit Your Authorization**

As a reminder, if you haven't already, **please submit your Authorization Form within one week of this notification:** <https://dd1.io/Aj4PYP6>


Submitting this form gives us permission to gather information relevant to this claim only.

**Other next steps**

- Please contact us if you see your doctor, if your condition changes, or if you return to work in any capacity.
- Follow up with your doctor on a regular basis, approximately once every two weeks unless otherwise requested.
- Please keep in contact with your employer during your recovery. If you have questions, we're here to help. Please call us at 1.888.967.5377.

Thank you,

**WorkSafeBC Claims Team**  
**WorkSafeBC**  
 6951 Westminster Hwy, Richmond, BC [worksafebc.com](http://worksafebc.com)



**Phone:** 604.231.8888  
**Toll-Free:** 1.888.967.5377 (Canada)  
**Hours of operation:** Monday to Friday, 8 a.m. to 6 p.m.

To unsubscribe from future email communications from WorkSafeBC, please click {link}.

(c) Simple SMS reminder plus detailed email

### Rationale Behind Our Intervention

While automated reminders may be most cost-effective in the long term, the jurisdiction we collaborated with lacked immediate resources or tools available to implement automated texts upon receipt of a report of injury. As a result, our intervention shifted to a manual text sent a day following the injury report. In addition, based on how the injury is reported by the injured worker (whether it is reported through a mailed/faxed form, reported first by their employer, or reported through the insurer's call centre), it was essential to narrow down our focus to just those injured workers that reported through the insurer's call centre given that we would know with certainty that the injured worker first reported the claim.

### Ethical Concerns

While tailored messages including a worker's claim information may increase the likelihood of engagement with the content, the ethics surrounding the sharing of information via a non-encrypted channel to injured workers could be put into question. As a result, for this intervention, there was no personalization in the messaging (e.g., no usage of first name, claim number, or any other personally identifiable details in the text) to protect workers' private information.



## Part D. Research Design

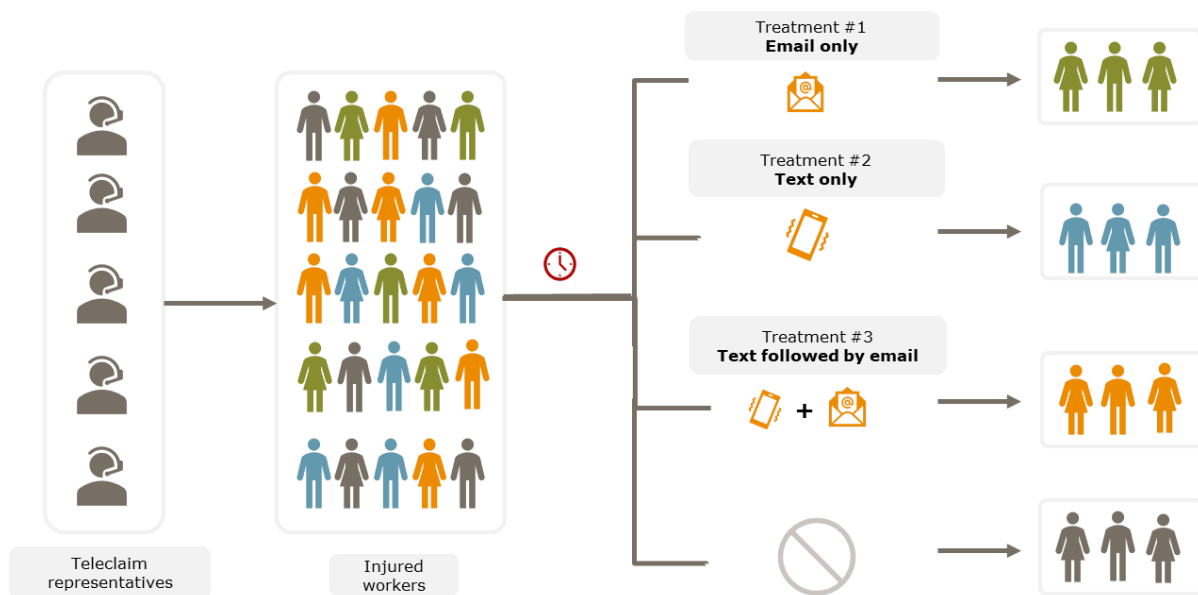
### Our Conceptual Hypothesis

We hypothesized that injured workers receiving an SMS reminder followed up with a detailed email would be most likely to submit the release form in a timely manner. We further hypothesized that workers receiving an SMS only reminder or email only reminder would be somewhat likely to submit the release form in a timely manner, and we hypothesized that workers in the control condition (receiving no reminder) would be least likely to submit in a timely manner.

### Our Research Plan

To evaluate the effect of our intervention on time taken to submit the form, we conducted a **4-arm randomized controlled trial**. Here, injured workers who recently called the call centre were placed into one of three treatment conditions or the control condition by randomly assigning each claim a number between one to four to determine their placement.

**Figure 3.** Diagram detailing the 4-arm randomized controlled trial.



As shown in Figure 3, the four conditions were:

1. **Treatment no. 1 (simple SMS reminder):** In this condition, injured workers received a short text message letting them know to submit the required release form through our upload tool within the next 7 days.
2. **Treatment no. 2 (simple email reminder):** In this condition, injured workers received a short email letting them know to submit their form through our upload tool within the next 7 days. The content was the same as the SMS reminder except for additional branding elements (e.g., logo, call centre number, address of organization).
3. **Treatment no. 2 (simple SMS reminder plus detailed email):** In this condition, injured workers received a simple SMS reminder (same content as treatment no. 1) and a detailed email the following day detailing information about their claim (e.g., their claim number), additional next steps they needed to complete, and a link to submit their form online.
4. **Control condition:** In this condition, injured workers did not receive any reminder.

### *Data Collection*

To enable daily distribution of reminders promptly from the time the injury was reported; contact information (name, phone number, and email) and claim data (e.g., claim number, injury type, sensitivities, claim type, etc.) was gathered from injured workers through two channels:

1. **Manual data entry from client service representatives.** To accommodate a same-day distribution for injured workers who reported their injury in the morning, client service representatives used a shared spreadsheet in which they entered the claim number, name, and phone number of those injured workers they spoke to during that day. This sheet was maintained daily, and the data was used to randomize workers between conditions and provide them with a reminder.
2. **Automated daily report.** To gather the remaining claims, we utilized a daily report of claim data which automatically updated every morning with the data from the previous day. This report included all information from every worker that spoke to a client representative (both contact information and claim information) allowing us to randomly assign them to condition and distribute a reminder accordingly.

As all the details of every claim we interacted with were gathered through the injury reporting process, and as implied consent is provided for the insurer to communicate with a worker about their claim, the data collection was respectful of injured workers' right to privacy of information. Furthermore, the research project operated under an ethics protocol approved by the university ethics board.

### *Measuring Behaviour*

From this research we were looking to evaluate the effect of our independent variable (the type of message sent to injured workers at the beginning of their claim) on form submission. To measure this behaviour, we relied on a final extract of data from the organisation's analytics team providing the details of every claim reported during our data collection period.

Here, we had the following parameters to ensure that we were able to clean our data, exclude irrelevant claims, and accurately analyze the effect of the intervention:

1. Claim number
2. Phone number
3. Claim type
4. Injury type
5. Injured date
6. Claim report channel (e.g., Call centre? Mailed letter? Fax?)
7. Date claim was registered
8. Is release form on file? (Yes/no)
9. Date release form submitted
10. Channel used to submit the release form

We measured the effectiveness of our interventions through the following metrics:

1. The proportion of injured workers who engaged with each communication. For those who received an email, we were looking to gather the proportion of those who opened each email and those that clicked on the link to submit a form. For those who received a text, we looked to gather click through rates.

**Prediction:** Given our concern for credibility of the SMS reminder, we predicted that through rates for the sole SMS content would be significantly lower than those for the email reminder.



However, we expected that either an email or the detailed email would have similar engagement rates as users may be more comfortable using their desktop to submit the form or would simply feel the content was more credible.

2. The proportion of workers who submitted a release form within the two-month data collection period.  
**Prediction:** As a reminder of any sort has seen to be successful in increasing compliance of a certain action, we expected to see a higher likelihood to submit the form regardless of the type of reminder received. In terms of which of the reminders we expected to be more effective, we expected SMS followed by an email to be most effective as it would provide injured workers with key information they needed beyond the requirement of the form, helping them feel more empowered, and as a result, be more likely to submit their claim documentation.
3. The proportion that submitted the form within a specific period (within 7 days or less).  
**Prediction:** As all reminders included mention of a 7-day deadline, we expected injured workers to be equally likely to submit the form within that time period regardless of reminder.
4. Average number of days it took for injured workers in each condition from the moment the injury was reported via the call centre to the moment the release form was received by the insurer.  
**Prediction:** Given the success of SMS reminders in a health care context (e.g., appointment compliance, or survey submission), we predicted that those who received either a simple SMS or an SMS followed by a detailed email were significantly more likely to submit the form within a shorter time period. However, a key barrier we were wary of was the usage of a 1-800 outgo number for the message which may impact the credibility of the content; as a result, we expected that those who received the stepped reminder (SMS+email) would be the most likely to submit the form quickly.

### *Rationale Behind Our Research Design*

Due to the lack of infrastructure available to implement the SMS distribution in time, we needed to adjust our research design to allow for our team to gather the data from injured workers and send this to a third-party provider who would then distribute this on the insurer's behalf. While our initial aim was to ensure that reminders were sent within a 24-hour period of reporting an injury, to allow time for sufficient cleaning and data sharing, many workers may have received the reminder after our expected timeframe.

### *Ethical Concerns*

A key ethical concern in this research design was the effect this intervention may have had on those suffering from a sensitive or catastrophic injury. Our aim was to ensure that our experiment did not interfere with these vulnerable populations. Because this message is only related to the claim process and outlines a step that may improve their experience in the long-term, there was likely little to no negative impact of this intervention on their claim process.

## **Part E. Research Results**

### *Data Cleaning*

A total of 2,417 injured workers were part of the trial. Upon ending the data collection, the total sample of claims was cleaned to ensure that the analysis on the impact of the intervention pertained to injured workers with time-loss claims, without recent claim experience with the insurer. The following exclusions were made to ensure our records were consistent with claims that likely needed a release form to move forward with processing, and that there was no bias in sampling.

- Removed duplicate claims (one worker appeared twice on the list)
- Removed claims that didn't require adjudication
- Removed injured workers with a prior claim in the past 6 months
- Removed injured workers that submitted their form prior to calling the call centre
- Removed injured workers who didn't report their injury by calling the call centre

As a result of our sample cleaning, there were 1,543 eligible injured workers in total who aligned with our criteria and were included in the analysis.

### Descriptive Statistics

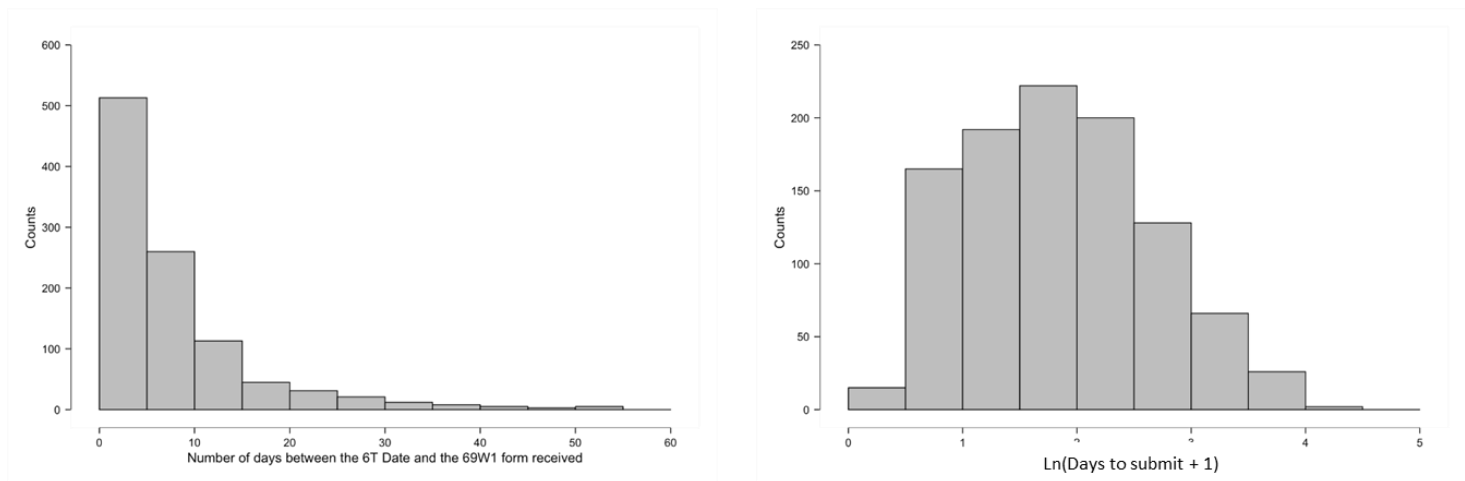
Overall, when looking at age, gender, English proficiency, and past claim experience on Table 3, injured workers who were part of the trial were representative of the injured worker population.

**Table 3.** Breakdown of injured workers who were part of the research study by age, gender, English speaking proficiency and number of claims in the past 5 years.

Demographics of injured workers who were part of trial (Newly registered injured workers at WorkSafeBC, subject to parameters)						
Characteristics	Categories	Percent of target population	Control condition (N = 371)	Received SMS only (N = 443)	Received email only (N = 372)	Received SMS followed by email (N = 357)
Age	Young worker (age 15-24)	15%	10%	8%	8%	11%
	Adult worker (age 25-54)	64%	60%	71%	67%	69%
	Mature worker (age 55 and over)	22%	30%	21%	25%	20%
Gender	Female workers	38%	55%	45%	48%	47%
	Male workers	60%	45%	55%	52%	53%
English speaking proficiency (interpreter required?)	Yes	4%	5%	5%	3%	4%
	No	96%	95%	95%	97%	96%
Claim experience (claim in the past five years?)	Yes	51%	56%	55%	53%	52%
	No	49%	44%	45%	47%	48%

Throughout data collection a total of 1,016 release forms were submitted by injured workers who were part of the trial. On average, across all conditions, an average of **8 days** spanned from the moment that injured workers spoke to our call centre representative to the moment the document was received and recorded in the WorkSafeBC database. This is significantly lower than the baseline average calculated from 2021, which was 1,821 days. As seen in Figure 4, the distribution of frequency of forms submitted within a certain span of days demonstrates an asymmetrical distribution, skewed to the right. Upon using a log transformation, we observe a relatively normal distribution of forms submitted per day, thus we use the logged days for our statistical analysis.

**Figure 4.** Histograms depicting number of forms submitted during different timeframes during data collection period: (a) The distribution of form submission timeframe, and (b) The distribution of log-transformed  $\ln(\text{days} + 1)$  submission timeframe. Note that this includes forms submitted across all conditions.



Across all three different treatment types, there was a variance in engagement. As seen in Table 4, injured workers were more likely to open and interact with the link in the simple email invitation than those who only received an SMS. Among those who received an email with additional information following the initial SMS reminder, these injured workers were equally likely to open the communication as those who only received the simple email; however, they were significantly less likely to click on the link taking them to submit the form online.

**Table 4.** Engagement with notifications by channel: (a) Open rates for emails, and (b) clickthrough rates for emails and SMS messages.

Engagement rates			
	Simple email	Follow up email	SMS
Open rate	78.5%	78%	N/A
Click-through rate	56.5%	42%	39%

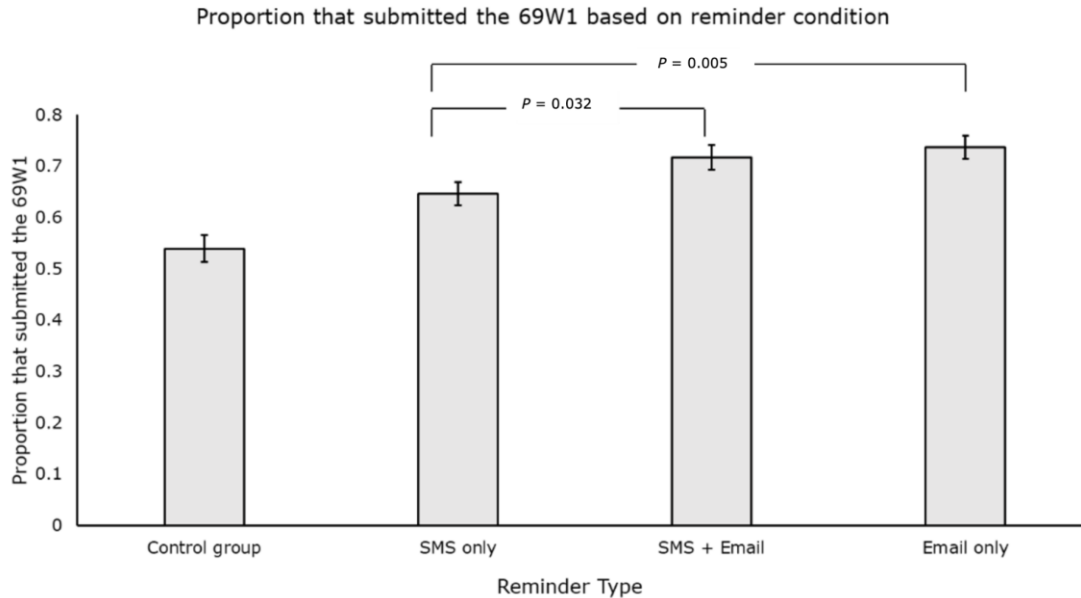
### Effect of Reminder on Form Submission Rates

To evaluate the effect of the intervention, we compared the mean proportion of injured workers who submitted the release form within the study period by condition, as seen in Figure 5. We conducted a one-way ANOVA with the percent of release forms submitted as the dependent variable. Overall, the test demonstrated a statistically significant difference between conditions,  $F(3, 1539) = 13.436, p < .001, \eta_p^2 = .026$ . Injured workers within any of the treatment conditions were significantly more likely to submit the form compared to those in the control condition.

Upon conducting a number of independent samples t-tests with several paired groups (see Appendix IV), it was found that injured workers who received a simple email notification ( $M=0.74, SD = 0.441$ ) were significantly more likely to submit the form than those who received only an SMS ( $M = 0.65, SD = 0.479$ ),  $t(813) = 2.8, p = .005$ . In addition, those who received an SMS followed by an email ( $M = 0.72, SD = 0.451$ ) were significantly more likely to have submitted the form than those who only received an SMS,  $t(798) = 2.154, p = 0.032$ . However, there is no significant difference between those who received an email only or an

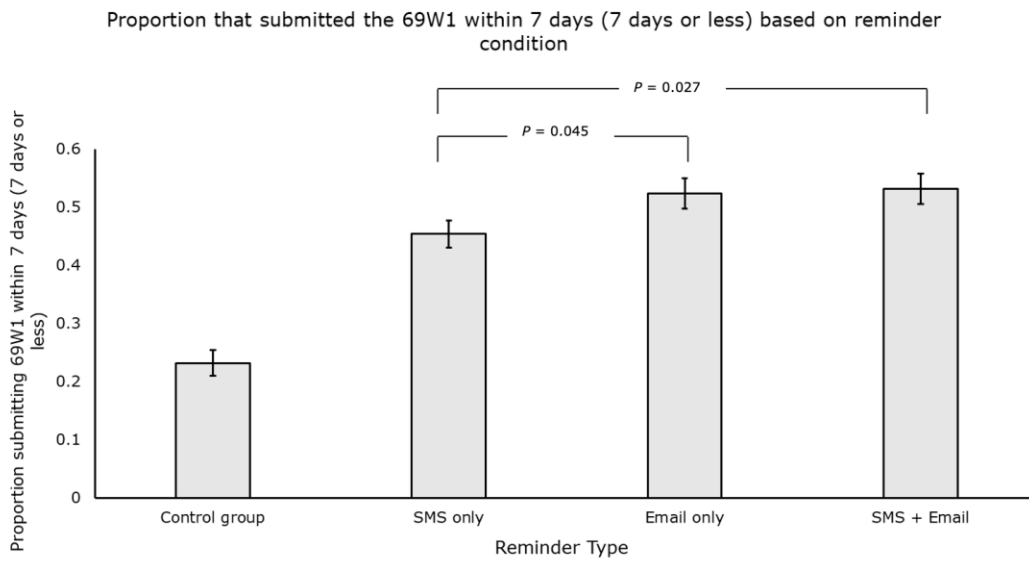
SMS followed by an email,  $t(727) = 0.589$ ,  $p = 0.556$ . Taking these results together, this demonstrates that email reminders increased compliance and had a positive effect on timely submission.

**Figure 5.** Mean proportion of workers who submitted the form within the two-month study period, across the four different conditions: control ( $n = 371$ ), SMS only ( $n = 443$ ), email only ( $n = 372$ ), SMS plus follow-up email ( $n = 357$ ). Error bars indicate +/- one standard error.



In alignment with this, injured workers within any of the treatment conditions were significantly more likely to submit the form within 7 days compared to those in the control condition,  $F(3, 1539) = 31.288$ ,  $p < .001$ ,  $\eta_p^2 = .057$  (as seen in Figure 6). Further, injured workers who received either a simple email reminder ( $M=0.53$ ,  $SD = 0.479$ ) or an SMS followed by a more detailed email ( $M = 0.53$ ,  $SD = 0.5$ ) were significantly more likely to submit their form within 7 days of reporting their injury than those who received an SMS only,  $t(813) = 2.007$ ,  $p = .045$  and  $t(798) = 2.212$ ,  $p = .027$ , respectively. There is no significant difference between those who only received an email vs. an SMS followed by an email,  $t(727) = -0.217$ ,  $p = 0.829$ .

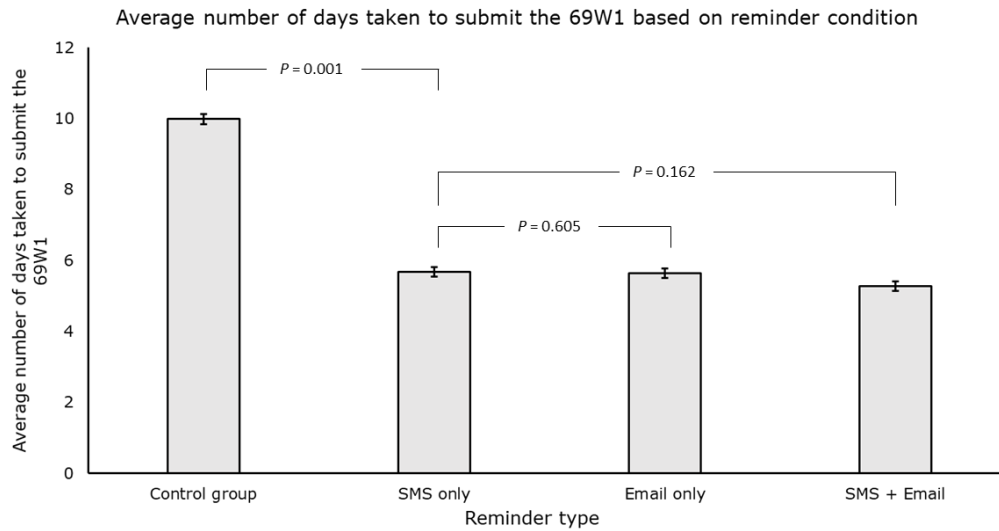
**Figure 6.** Mean proportion of workers who submitted the form within 7 days of reporting their injury across the four different conditions: control (n = 371), SMS only (n = 443), email only (n = 372), SMS plus follow-up email (n = 357). Error bars indicate +/- one standard error.



*Effect of Reminder on Number of Days Taken to Submit the Form*

Looking at those who chose to submit the release form during the data collection period and the number of days it took for the insurer to receive the form, there is a clear distinction between workers assigned to each condition, as seen in Figure 7,  $F(3, 997) = 30.682, p < .001, \eta_p^2 = .079$ . Injured workers who received an SMS (M = 12.15, SD = 2.257), an email (M = 12.00, SD = 2.69), or an SMS followed by an email (M = 10.65, SD = 2.69) submitted the form significantly earlier than those in the control group (M = 24.119, SD = 2.26). Looking at the relationship between the intervention conditions, however, there were no significant differences in the amount of time it took to receive the form. There was no significant difference in the average number of days it took those who received only an SMS vs. only an email,  $t(558) = -0.517, p = 0.605$ , or between those who received an SMS vs. an SMS followed by an email,  $t(540) = -1.399, p = 0.162$ , or between those who received only an email vs. an SMS followed by an email,  $t(528) = 0.891, p = 0.373$ . In other words, there isn't a relationship between message channel or number and the likelihood of submitting the form faster. Note that for this analysis, we are only comparing the number of days to submit for those workers who did submit during the study period. Therefore, in this analysis we are excluding those who did not submit the form, or who submitted the form after the study period.

**Figure 7.** Mean days taken to submit the form across the four different conditions: control (n = 200), SMS only (n = 286), email only (n = 274), and SMS plus follow-up email (n = 256). Error bars indicate +/- one standard error.



### Understanding the Impact of Reminders

Upon close analysis of each of the dependent variables across all four groups, an interpretation of the data is that injured workers may be equally likely to submit the form within a certain time period regardless of how many times a reminder is received, which is likely why there isn't a significant difference between those who received two reminders and those who only received one reminder, when looking at the average number of days taken to submit the form.

However, when looking at each condition in detail, injured workers who received SMS reminders were significantly less likely to submit the form in general and less likely to submit the form in a timelier manner (in accordance with the 7-day deadline), but were still more likely to submit in general and in a timelier manner than if they did not receive a reminder at all. The effectiveness of the deadline is consistent with the findings from the proportion of those who submitted in general, suggesting that SMS is less effective than the other treatment conditions in terms of encouraging submission on time.

While we had expected to observe a higher likelihood for those who received an SMS followed by a detailed email to submit the form in a timelier manner, or submit it generally during the time period, we observed equally positive results for those who only received a simple email and those who received both an SMS and an email. However, as depicted by the engagement data in Table 4, receivers of the follow up email were less likely to click on the link than those who received the simple email. One key reason for this is the likelihood that those who struggled to use the application on their phone or were concerned about the credibility of the message upon receiving the SMS were less likely to engage with the follow up email once opening it. As a result, this demonstrates that, while SMS is a novel channel, not all users may be accustomed to engaging with it in this form, and this warrants further research to understand how it may best be implemented in different parts of the worker's claim journey.

## Part F. Recommendations

### *Trial Results*

Based on the behaviour change achieved by the results, we observed that reminders, of any channel type, were successful in driving target behaviour. In specific, every reminder type was similarly effective in encouraging workers to submit the form in a timelier manner. However, given that email only and SMS plus the detailed email are similarly effective in increasing submission, both in general and within a specific timeframe, we recommend implementing a simple email reminder.

Logistically speaking, the reminder plus (SMS plus detailed email) has more associated costs than sending emails only and is equally effective at best. Sending only one reminder in the form of an email may also result in less annoyance and disturbance costs to workers (Gravert, 2021).

### *It's Time to Remind*

The results from this research outline the value of a simple intervention early in the claim in not only increasing form submission, but as a whole, helping injured workers feel more supported and confident. Feedback from an injured worker on what they expect at the beginning of their claim outlines the needs of many.

“Just [send] a quick summary, we received your claim, we will follow up with a detailed email. This is just to let you know. The text message is just a quick update about what’s going on. Any pertinent information that comes in letter form should be sent in email. So, these people are aware, like, I’m expecting something.”

Injured workers’ engagement with the reminders suggest they were effective in providing them with clear information that they required in that moment. Further, the findings support the argument that the current introductory claims letters can be ineffective. Those submitting at a later time may have been waiting to receive the form in the mail, supporting worker perceptions that receiving this information in the mail is untimely and ineffective. With the reduction of time taken to submit the form, digital reminders present themselves as a more timely and effective solution, at least in the majority of cases.

The findings also corroborate previous research that argues sending reminders will help bridge the intention-behaviour gap (Cadena & Schoar, 2011; Kast et al., 2012; Schwebel & Larimer, 2018). Akin to previous studies, applying reminders to the context of this specific jurisdiction aids with engagement and compliance with key tasks (D’Arcey, et al., 2020). It becomes evident, based on the literature, that the return-to-work context benefits from concise communications (Jetha et al., 2019).

### *Follow-Up Research*

Follow-up research would help us better understand the impacts of these BI solutions. In terms of content, it would be useful to explore the impacts of incorporating deadlines into other communications. While all the reminder types significantly increased the number of workers that submitted the form within a 7-day period, the differences between groups are estimated to be based on the different responses to the channel types rather than the content itself. Further testing comparing content, rather than or in addition to channels, would provide insight into the impacts of deadlines on this and other jurisdictions adopting this solution.

In addition, while this intervention was helpful in increasing submission of one form early in the claim, further research is needed to understand other points of the claim journey that an injured worker may benefit from this type of intervention. For example, while this specific reminder tasked users with clicking on a link and submitting a form, perhaps a reminder for them to attend a visit with their physiotherapist or to follow a return-to-work plan may also be of value. In these scenarios, further research would be needed to understand which



channel is most effective and when; perhaps an SMS reminder was not as successful in this research due to a lack of credibility and a convoluted task required, but a simple notification to refresh their memory may be more successful.

It also remains challenging to determine whether the outgo number on SMS messages would have impacted how they were received by the target population, warranting a potential follow-up study comparing responses to SMS reminders, one with a credible short code as the outgo number, and the other with the 1-800, nondescript number.

In terms of methodology, follow-up qualitative research or a feedback survey would be helpful in clarifying workers' perspectives towards claim-based reminders. In specific, there is value in gaining a more well-rounded understanding of how workers engage with messages in different combinations and from different channels. SMS is an especially novel area explored through this project, this being the first internal usage of SMS messaging among any worker compensation board in Canada.

### *Managerial Significance*

Each month, 50% of the 10,000-time loss claims are registered through the insurer's call centre, allowing a large population, approximately 5,000 injured workers, to experience the benefits of this intervention. That results in approximately 60,000 workers per year benefiting from this solution. The administrative burden associated with ensuring a form is submitted would also be reduced and staff will have more time available to support injured workers. From an internal employee perspective, there would be benefits in terms of a reduction in workload, and potentially, an improvement in the quality of work.

From an innovation perspective, this solution enables not only this but other jurisdictions to evaluate and implement automated post-reporting reminders backed by behavioural science, which has not been achieved previously. Altogether, the official usage of this solution would result in several new milestones for an organisation, while also allowing them to anticipate injured worker needs by delivering forward-thinking worker-centric solutions.

### *Cost-Benefit Analysis (CBA)*

The CBA shown below identifies the costs and benefits of implementing the BI solution, both of which are indirect and direct in nature. The below analysis argues that the BI solution is low-cost to implement and scale.

#### Benefits

- The solution allows for the fulfillment of organizational priorities for other jurisdictions, such as increased responsiveness and clarity of content, altogether making communication more understandable and making claim experiences more positive.
- The administrative burden on staff managing claims would be reduced, and in effect, they would be able to be more productive in how they serve injured workers—beyond the scope of chasing down forms.
- There would be a potential increase in operational efficiencies due to a reduction in mailed reminders to submit the form. In turn, these would allow for the operationalization of more sustainable customer service practices.
- By encouraging timely decision-making on the claim, workers can receive a decision sooner, providing them with the support they need earlier, such as financial aid and health care.



- There might be an improvement in workers' return-to-work outcomes; the longer they stay off work (waiting for a decision), the less likely they are to return to work in a timely manner (Collie, Sheehan, Lane, et al., 2019).
- The solution may encourage injured workers to take an active role at the start of their claim, rather than instinctively forming a paternalistic relationship with their insurer.

#### Costs

- Setting up the infrastructure that would help enable automated SMS reminders would be costly and require a large change management effort internally due to outdated systems in place.
- Anticipating the workers' needs early in the claim with an innovative reminder solution may create false expectations for the rest of the claim experience, creating conflict and lack of trust when inefficiencies or confusion arises later in the claim journey.
- There may be cases in which reminders are not well received; if injured workers see the reminder but do not act on the reminder, because either they cannot at that time or choose not to act on the reminder, then they will feel "the distraction and the annoyance costs that come with the reminder" (Gravert, 2021).

Altogether, the above comparison reveals that the overall benefits of implementing targeted reminders outweigh the overall costs, endorsing the full-scale implementation of targeted reminders at any compensation board.

#### *Unintended Impacts*

If the trial is permanently implemented on a full-time basis, there might be differences in the response to reminders from workers that received the same reminder already. In terms of longevity and habituation, it is possible the reminders become less effective overtime; a worker may be less engaged or less likely to take action when receiving the same reminder they already received on a previous claim, or if additional reminders were added to subsequent claim stages. Ultimately, increased reminders may decrease their effectiveness. Yet, the opposite is also possible: timely reminders may build effective habits and familiarity with the expected process, thus improving future form submissions.

Technology wise, it is also important that online experiences for injured workers are sufficient across devices, to ensure the intended impacts. Should there be glitches or shortfalls occurring when sending workers to the organisation's services, this could result in more frustration and confusion amongst workers. Overall, clunky online experiences could impact the worker's ability to perform the desired behaviour.

From an operational perspective, it would also be worthwhile to evaluate the long-term impacts of this solution when implemented on a larger scale. The entire sample only consists of 1,543 claims, which is only 15% of the target population (should the scaled intervention target time loss claims only). Should that number of reminder recipients grow it may result in operational burdens down the line. It may increase incoming call volume. Also, a significant increase in timely form submission may put pressure on internal systems, which may not yet have the capacity to process a large number of claims efficiently.

In addition, sending a reminder with a call to action may create false expectations going forward that could have unintended consequences. Injured workers might begin to expect to receive notifications from their insurer whenever action is needed from them, preventing them from taking initiative without digital prompts. Also, incorporating this type of technology at the beginning of the claim, but not elsewhere in the claim journey, may lead to disappointment, as workers may view other parts of the claim process to be less straightforward.

Scaling within this space extends to other injured worker contexts, such as other points in their claim journey (e.g., reminders to attend an appointment with a specialist). These BI solutions could also extend to other stakeholder groups, such as employers or providers. From an ethical standpoint, it would be important to test the use of the reminders in other contexts and projects, and when used with other stakeholder populations, to confirm whether the solution sustains the intended effects. Scaling decisions should consider the impact of over-messaging stakeholders, should many different reminders be introduced simultaneously in a variety of contexts.

### *Recommended Next Steps*

The next steps regarding the client's implementation of the above recommendations are simplified and summarized below:

1. Conduct qualitative interviews, either during an extension of the RCT or during a proof of concept, to better understand how the different reminder types were perceived and used.
2. Based on the feedback, build the internal technological infrastructure required to deliver automated reminders to the entire injured worker population of interest, full-time.
3. Monitor the implementation of the intervention (collect data during rollout) to evaluate the solution's impacts on internal operations and injured worker claim experiences.
4. Conduct additional RCTs if altering the population, context or project tackled by the solution.
5. Continue to monitor the impacts of the solution through surveys to ensure responsiveness, inclusivity, and clarity during ongoing claim communications with injured workers.
6. Continue improving online experiences for both desktop and mobile for a user-friendly experience.

## **Part G. Discussion of BI & Research Ethics**

In our work, we have carefully ensured that throughout every touchpoint with our participants, we are working to understand how worker compensation boards may support injured workers through fair compensation and effective rehabilitation. In addition, in planning for every research component of this project, we can confirm that our research plans not only comply with UBC Behavioural Research Ethics Board ethics protocol, but they were reviewed and approved by the BI certificate instructors.

### *Our Qualitative Research*

Throughout all qualitative interviews, we followed a strict set of protocols to protect the privacy of each participant to ensure that only those who are comfortable to share their opinions and feedback were able to take part in an engagement. In doing so, prior to each session, each participant was asked to provide written consent to participate in the session. Within each session, we also asked for verbal consent from each participant to begin a video recording to aid our team with report drafting. During the beginning of each recording, participants were asked to confirm their understanding of the usage of their personal information and opinions under the Freedom of Information and Protection of Privacy Act. From this, each recording was only kept in storage for a maximum of 6 months.

### *Interviews with Internal Staff*

Recognizing our responsibility as researchers in this regard, and the potential issues raised when discussing the challenges and pain points staff experience when managing an injured worker's claim, we ensured to have relevant members from the organisation be present to address any key concerns staff had with business

processes and the impact these have had on their day-to-day-work. Given that the subject matter wasn't emotional in nature, we didn't incorporate any protocols to deal with potential distress from participants.

Secondly, as interviews were recorded to aid our team with report drafting, all participants were asked for their verbal consent prior to begin the recording and were asked to confirm their understanding of the usage of personal information and opinion under the Freedom of Information and Protection of Privacy Act.

Lastly to ensure that the knowledge and insight provided by participants was truthful and aligned with their experience, we ensured that managers and supervisors were not included in the interviews.

### *Interviews with Injured Workers*

As these interviews aimed to thoroughly understand the injured worker's experience shortly after their injury, we also looked to understand the challenges in receiving information from their insurer, their perception of SMS communications, as well as their perception of the organisation's current online services. While these topics of discussion may not be emotionally triggering for most, we prepared for injured workers with sensitive claims who experienced a traumatic or catastrophic injury to have a negative reaction to some of the content as they are a vulnerable population. Although we recognize this excluded a valuable perspective from our research, protecting the injured worker's mental wellbeing was our key priority.

Secondly, through every discussion, we aimed to exhibit responsiveness and accountability when listening to an injured worker's experience. With that in mind, it was of importance to ensure that injured workers who took part in our research were also able to express their concerns and their feedback regarding their experience outside of the realm of topics we aimed to address. As a result, we were sure to relay specific concerns regarding their claim process to relevant parties within the organisation to provide the participant with timely resolution.

### *Our Planned BI Solution*

When designing our BI solution, we aimed to address key relevant ethical concerns in behavioural science research:

**Nudge for good:** As our target behaviour was submission of a required form in a timely manner, we aimed to reduce the potential delays in adjudication of the claim, which often leaves a worker in doubt while they wait to hear back from the insurer. As a by-product from this intervention, this could potentially reduce the administrative burden taken on by staff who need to follow up with workers on this requirement.

**Feasibility:** The findings from this research support not only the impact of reminders within a claim journey, but their cost-effective implementation. As simple email reminders were effective in driving behaviour, it is clear that other insurers or similar agencies would benefit from a similar infrastructure, that in many cases is already embedded in their systems.

**Accessibility:** Injured workers may continue to receive mailed letters, emails, or phone calls from our staff about their claim which will help ensure that they're able to receive key messages and information. However, this leads us to highlight that while this solution may solve part of the problem surrounding the timeliness of submission, considering those from diverse populations (e.g., non-English speakers, those who live in rural communities) will need to be of the utmost importance when implementing this type of solution in the future.

## Part H. Project Reflections

Throughout the course of this project, we celebrated successes and overcame challenges which helped us understand how to improve as team members and colleagues, but most importantly as BI practitioners. Overall, the research conducted allowed us to understand the ways in which behavioural insights may be applied within the public sector while navigating a variety of challenges ranging from key players with diverse opinions to a variety of internal processes.

### *Key Project Limitations*

- **Implementation and credibility of the SMS reminder.** While most organizations typically employ a 5-digit short code which often increases the credibility of a message, the insurer at the time of this research didn't have one available. This led us to find alternative ways to distribute the SMS message which led to two key limitations which may have impacted the credibility of the message.
  - 1-800 outgo number was used to distribute messages.
  - External platform used for distributions used a randomly generated short link in the content of the message which, for some, may appear to be spam.
- **Variability of the time the reminder was distributed.** To accommodate service demands, our team ensured to distribute the reminder no later than a day following the report of injury. However, as we heavily relied on a central database which refreshed every morning at 10-11am, this led some injured workers who may have reported their injury the morning prior to receives a notification more than 24 hours from the report of injury. The variance in the timing of each notification may have had an effect on the likelihood for some to submit the form. While we attempted to look at this data in detail, we don't have exact time stamps on the time the injury was reported to have a clear idea of how much time had transpired from the moment the injury was reported to the time the reminder was sent.

### *Lessons Learned*

- **While SMS may not have been effective in this trial, there is still an opportunity to explore its usage in other contexts.** Although we had originally expected to see great success with the usage of text reminders in motivating injured workers to complete and submit a key form in time, we quickly saw the email condition was significantly more successful. While this could have been due to the issue of credibility, we also realized that this specific use case may not have been appropriate for a short SMS. That is, previous literature supports the usage of SMS reminders to help refresh the memory of the recipient or complete an easy task (e.g., attend an appointment at x date, take medication, etc.), but there is little support for the usage of SMS reminders for users to print, sign, complete, and then submit a form online. As a result, while this specific may scenario may not have been successful, there is value in investigating the usage of these reminders throughout the course of the claim for other instances like attending a physiotherapy session or staying connected with their employer.
- **Investing time and effort in understanding how to best serve the needs of injured workers to help them feel confident and supported, especially early in the claim, should be at the forefront of service delivery.** Through this research and the engagements held with injured workers, it was illuminating to hear the experiences of those who suffered an injury while in the workplace, and the frustration they feel because of a poor service experience. In many cases, poor communication, and lack of transparency from their claim led to frustration that spilled over other areas of their lives. For some injured workers, not knowing when they would pay their next bill or if they would be homeless in coming months was at the forefront, and not having an appropriate support system was discouraging. Through listening to injured workers and designing and testing innovative solutions, we can support injured workers as they go through this challenging period.

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- WorkSafeBC Voice of the Customer (VOC) Survey (2021)



## Appendices

### Appendix I. Discussion Guide – Injured Workers

#### Research Objectives

- Understand what information injured workers are looking for **immediately** after reporting their injury and in the days **immediately** following claim initiation, and how does it **change** while waiting for decision, and after the claim is allowed
- Understand exactly what information injured workers are referring to when they are curious about claim status or “what’s happening on the claim” (did they go online, why/why not, what did they find, where did they get the information they needed, interaction with Call Centre or others) ... used the intro letter?
- Explore status and what’s happening
- For those who called our call centre, understand whether the list of things to remember was easy to recall or overwhelming ... did they make notes? Would it be helpful to have an SMS or email summarizing key points?
- **Understand perceptions of email and SMS notifications**
- Why people are or are not interested receiving them
- What features, content, or elements notifications need to be effective
- Gather feedback on sample copy for three emails (next steps, 69W1, email consent)
- **Explore information needs for online services**
- Information needs and priorities
- Get feedback on a concept for my worker services landing page

#### Timeline

**January 27 to February 4, 2022** – Interviews conducted

**February 11, 2022** – Report of findings sent to team

#### Methodology

10-11 90-minute-long sessions will be conducted with injured workers to understand their experience during their claim, providing them with early concepts of material as well as communications to understand how we can better support them.

- **During the beginning of the session (~30 minutes)**, participants will discuss their overall information needs.
- **Midway through the session (~20 minutes)**, they will evaluate the value of notifications/reminders (SMS and email).
- Feedback on sample emails:
  - 1) Simple:
  - Focus on the 69W1 · Deadline, gain framing ▪ 2) Short:
  - Dual focus – 69W1 and email consent
  - Three or so more reminder statements
  - Checklist ▪ 3) Online
  - Do your 69W1 and email consent now and go online when you get your PAN

Section, timing & objectives	Questions
<p><b>Introduction</b></p> <p><b>~5 mins</b></p> <p>Orient participant, set expectations, warm up</p>	<ul style="list-style-type: none"> <li>• Participant thanked for participation; all members of the call introduced.</li> </ul> <p><b>Objectives of this session summarized</b></p> <ul style="list-style-type: none"> <li>• The goal of this session is to discuss your claim experience focusing on the information you have needed at different parts of the process. Your feedback will help us understand how we can improve your experience and that of other injured workers</li> </ul> <p><b>Statements for housekeeping/reassurance</b></p> <ul style="list-style-type: none"> <li>• Anonymity, honesty – All of the feedback you share with us today will be reported in aggregate.</li> <li>• There are no right or wrong answers to any of the questions today. ‘I don’t know’ is also a valid answer.</li> <li>• Please be candid with your feedback.</li> <li>• Permission to record (<b>check that their name is not on camera</b>)</li> <li>• Official FIPPA statement: The personal information you provide will be collected, used, and disclosed only in accordance with s. 26(c) and s. 26(e) of BC’s Freedom of Information and Protection of Privacy Act. Do you have any questions about the collection use or disclosure of your personal info? (If so, provide contact information for FIPP office).</li> </ul>



## Understanding their information needs

~20-30 minutes

The goal for this section is to gather an understanding from participants on their information needs at different parts of the process

For this first portion of our discussion, I'd like us to spend some time chatting about your claim generally, and the type of information you were looking for in different parts of the process.

## Reporting their injury

Let's begin by thinking back to the moment you reported your injury...

- **How did you know you needed to report your injury to WorkSafeBC?**
- Why did you choose to report it through \_\_\_\_\_? [If didn't report, ask if received requests to do so...]
- How long after the injury occurred did you report it to WorkSafeBC?
- **As you reported your injury, what information were you given that you found helpful?**
- Were you given information about what you could expect next?
- Were you given any information about what you needed to do?
- How were you able to remember this information?
- E.g., claim number, did they write it down?
- **What else did you want to know that that point?**
- **What happened next after you reported your injury?**
- Did this align with your expectations? What did you expect would happen?

## Following report of injury

- **In the days that followed your injury, what did you want to know about your claim?**
- **[If mention status]** What do you mean by status?
- Where did you turn for that information?
- Did you get what you needed?
- **You mentioned that you were asked to \_\_\_\_\_; did you do that right away? Why/why not?**
- **Do you recall receiving letters about your claim in the mail?**
- **[If yes]** Did you read these letters?
- What type of information stood out to you from these letters?
- **[Time permitting]** I have a sample of a letter you may have received. Please take a look. What type of information did you find most helpful on this letter?
- **Thinking back to the first few days of your claim, to what extent did you find the process and information we provided understandable and easy to follow?**
- Why is that?
- Did you feel like you knew what to expect?
- Did you feel supported by WorkSafeBC?

- To feel more supported, what other information would you have hoped to receive?
- Was the information you received timely, was it available when you needed it?

**As their claim progressed (claim accepted)**

- **As your claim progressed, what did you need to know?**
- Where did you turn for that information?
- Did you get what you needed?
- What information do you look for today?
- **[If don't mention online]** Have you used our online services to look up information about your claim? Why/Why not?
- **[If used online] How did you hear of our online services?**
- What information have you found most helpful there? Why?
- What else would you have wanted to see online? Why?

**Other actions throughout the course of their claim**

Now thinking about how your claim has progressed so far, we'd like some additional feedback on other pieces of information you may have shared or received from us.

- **Did you provide an update to us after every visit with your doctor?**
- How did you know you needed to do this?
- **Have you submitted an authorization for release of personal information?**
- How did you know to do this?
- How soon after you learned about this form did you submit it? Why/why not?
- **Have you submitted a consent for us to communicate with you about your claim through email?**
- When did you know you could do this?
- How soon after you learned about it did you submit it?
- **[if applicable] Have you set up direct deposit payments?**
- When did you know you could do this?

Section, timing & objectives	Questions
<p><b>SMS and email communications</b></p> <p><b>20 minutes</b></p> <p>Participants will discuss their thoughts about potential reminders and notifications about their claim. Participants will provide their thoughts on three versions of messaging, order of each will be rotated per participant.</p>	<ul style="list-style-type: none"> <li>• <b>Shifting our discussion slightly, what are your thoughts about receiving automated messages or notifications about your claim status?</b></li> <li>• [If yes] What type of updates would you like to be notified of?</li> <li>• How about notifications related to actions you need to complete? (e.g., submit a document, set up direct deposit, etc.)</li> <li>• How would you like to receive these notifications?</li> <li>• Have you received this kind of message from other services? What have you found helpful from those types of communications?</li> <li>• <b>Would you have been interested in receiving an email after you reported your injury, summarizing important next steps?</b></li> <li>• Why/Why not?</li> <li>• What information would that email need to contain to be helpful?</li> <li>• Would it be helpful to have: <ul style="list-style-type: none"> <li>• A confirmation that we received your report of injury?</li> <li>• A reminder of your claim number?</li> <li>• A summary of important next steps?</li> </ul> </li> <li>• What about a text message? Why/why not?</li> <li>• What would you hope that text message would contain?</li> <li>• <b>We have some drafted versions of this email that we would love to get your thoughts on. These are just some initial concepts for discussion. [moderator to show three messages]</b></li> <li>• Would receiving this after you reported your injury be helpful? How does this make you feel? What stands out to you here?</li> <li>• If you had a magic wand, what would you edit/omit/add to this message?</li> <li>• Of the three, which do you feel would be most helpful to receive right after reporting your injury? Why?</li> </ul>
<p><b>Wrap up</b></p> <p>~2-3 mins</p> <p>Thanks, closure &amp; next steps</p>	<ul style="list-style-type: none"> <li>• Thank you very much for taking the time to speak with us and sharing your thoughts today. We appreciate your feedback; it will help us continue improving our products.</li> <li>• Anything else?</li> <li>• Interested in taking part in future research related to this or other projects?</li> </ul>

## Appendix II. Discussion Guide – Frontline Claims Staff

### Research Objectives

The primary objectives of these one-one-one interviews is to:

- Evaluate the experience of front-line staff (i.e., CCAs, CSRs, SCs, OAIIs) as they interact with injured workers when discussing initial claim protocols such as the Authorization for Release of Personal Information (69W1) as well as informed email consent, with the following in mind:
- How long, approximately, does it take for workers to submit their 69W1?
- Determine the barriers and motivators associated with 69W1 submission.
  - Are the steps involved with claim management clear and understandable?
- What type of feedback do front-line staff receive from injured workers/their representatives when asked/advising about the information needed at the start of the claim?
- What type of feedback do front-line staff receive from injured workers/their representatives when asked about/advising next steps related to 69W1 submission?
- How do staff typically communicate to workers about their informed email consent?
- How do staff gather informed email consent from workers?
  - How do staff perceive the current process of gather consent?
  - What are some key challenges and concerns that staff have at the moment with the current processes?
- When shown an early mock-up of the email consent tool, what are staff overall perceptions?
  - What are some benefits and/or drawbacks?
    - Does this meet their needs?
    - Does this alleviate concerns?
- Gather CSR's perceptions of how workers will perceive and react to the proposed BI solution (SMS text message/email nudge).
- This is aimed to assess whether a 69W1 reminder would help achieve the following:
- Improve internal and external stakeholder experience (workers, providers and claims staff)
- Reduce delays in decision-making
- Improve understanding of channel preferences when it comes to communications regarding claim information, to be used to inform future claims initiatives

### Timeline

**Dec 23:** Finalize DG

**Jan 4 – 7:** Notify relevant managers, confirm participants, schedule interviews

**Jan 10 – 14:** Conduct interviews

**Jan 24:** Finalize report and present findings

### Methodology

Three to four 30- to 40-minute-long sessions will be conducted with one front-line staff member at a time. In each session, front-line staff will be asked about their experiences discussing the information needed from injured workers at the beginning of their claim, along with worker perceptions of current claims registration processes—particularly as they relate to the 69W1.

In doing so, the participants will help contextualize and clarify the behavioral barriers and motivators associated with this intervention. They will also extrapolate potential outcomes and solutions, based off their experiences.

At the beginning of each interview, the moderator will discuss the research objectives with participants, capturing their consent, feedback, and suggestions for improvement.

Section, timing & objectives	Questions
<p><b>Introduction</b></p> <p><b>3-5 mins</b></p> <p>Orient participant, set expectations, warm up.</p>	<ul style="list-style-type: none"> <li>• Thank you</li> <li>• Introductions</li> <li>• The goal of this project is to gather an understanding on how to communicate most effectively with workers during the beginning of their claim, with emphasis on the processes surrounding 69W1 submission as well as email consent. We will also check in with you about potential methods of communication and tools that may help you in this process.</li> <li>• At the end, we will also take you through an initial concept for a tool that we have in mind to gather email consent from workers, and we'd love to hear your thoughts on it.</li> <li>• Anonymity, honesty – All of the feedback you share with us today will be reported in aggregate.</li> <li>• <b>"Please be assured that all your answers today will be kept totally confidential, and your name will not be used when I share my findings."</b></li> <li>• 'I don't know' is an appropriate answer.</li> <li>• <b>"It is important for you to know that there are no right or wrong answers to the questions I will be asking. We just want to hear your honest opinions and learn from what you have to say. Additionally, if I ask you a question and you don't know the answer or it isn't something you haven't thought about, that is important for us to know too."</b></li> <li>• Please be candid with your feedback, you cannot offend me.</li> <li>• Consent/permission to record.</li> <li>• <b>"Before we start, I'd like to get your confirmation that it is okay for me to record this session? It will give me a record of our conversation which will help me collate your feedback, and it will be kept confidential."</b></li> <li>• Official FIPPA statement: The personal information you provide will be collected, used, and disclosed only in accordance with s. 26(c) and s. 26(e) of BC's Freedom of Information and Protection of Privacy Act. If you have questions about the collection or use of personal information, please contact WorkSafeBC's Freedom of Information Office at 604-279-8171 or fipp@worksafebc.com. If you'd like more information, you can view our Privacy Statement on worksafebc.com.</li> <li>• Any questions before we begin?</li> </ul> <p><b>Warm up question:</b></p> <ul style="list-style-type: none"> <li>• Tell us a bit about yourself, how long you've been with WorkSafeBC, and your role.</li> </ul>

Section, timing & objectives	Questions
<p><b>Background context</b> (Concerning population of interest and problem)</p> <p><b>5 minutes</b></p> <p>Understand how the interviewee perceives the problem and obtain general background information.</p>	<ul style="list-style-type: none"> <li>• How would you describe your experience collecting information from injured workers at the start of their claim? <ul style="list-style-type: none"> <li>○ <b>Probe:</b> In your experience, what are the key challenges in gathering information from workers on time early in their claim?</li> <li>○ <b>Probe:</b> Thinking about the claim registration phase (prior to a decision being made), in your perspective, what are the top three points of confusion for injured workers?</li> </ul> </li> <li>• In your opinion, how can we improve the way we communicate with workers at the start of their claim? <ul style="list-style-type: none"> <li>○ <b>Probe:</b> Why do you feel that way?</li> </ul> </li> </ul>
<p><b>Current communication tools and behaviors (69W1 only)</b> (Touchpoints; problem and target behaviors; barriers and motivators)</p> <p><b>5 minutes</b></p> <p>Identify problem and target behaviors, as well as barriers and motivators for target behavior, and touchpoints.</p>	<ul style="list-style-type: none"> <li>• Can you describe the process involved with obtaining the 69W1 from an injured worker? <ul style="list-style-type: none"> <li>○ <b>Probe:</b> How do you feel about this process?</li> <li>○ <b>Probe:</b> How do you think injured workers perceive this process?</li> <li>○ <b>Probe:</b> What do you think are some of the challenges associated with submitting the 69W1 on time?</li> <li>○ <b>Probe:</b> How do you typically position the need for the 69W1?</li> </ul> </li> <li>• <b>Probe:</b> Since the launch of the 69W1 uploader, how would you describe your experience gathering the form from workers? Have you noticed any impact on this experience since then? (probe on current mobile experience).</li> </ul>
<p><b>Potential communication tools and motivators (69W1 only)</b> (solutions)</p> <p><b>5 minutes</b></p> <p>Gather suggestions from participants; identify touchpoints and generate ideas for potential BI solutions.</p>	<ul style="list-style-type: none"> <li>• Based on your conversations with workers, how do you think a worker would perceive automated SMS reminders about their claim? <ul style="list-style-type: none"> <li>○ <b>Probe:</b> What about a reminder to submit their 69W1 on time? <ul style="list-style-type: none"> <li>▪ In your opinion, what type of information should that reminder contain to be effective?</li> <li>▪ What about including a deadline?</li> </ul> </li> <li>○ <b>Probe:</b> What are your thoughts on email reminders sent to workers about submission of documents in their claim?</li> <li>○ <b>Probe:</b> What channels do you suspect would be more effective? SMS or email?</li> <li>○ <b>Probe:</b> If we were to send an email or SMS as a reminder of 69W1 submission, when would be the best time to do this?</li> </ul> </li> <li>• Are there any other methods you would suggest that would help motivate workers to submit their 69W1 in a timely manner?</li> </ul>
Section, timing & objectives	Questions

<p><b>Wrap up</b></p> <p><b>~2-3 mins</b></p> <p>Thanks, closure &amp; next steps.</p>	<ul style="list-style-type: none"><li>• Thank you very much for taking the time to speak with us and sharing your thoughts on the changes we have made.</li><li>• Anything else?</li><li>• Next steps for us (analysing the findings internally to help drive future initiatives)</li></ul>
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Appendix III. Worker’s Authorization for Release of Personal Information from Third Parties to WorkSafeBC (Form 69W1)

				<b>Worker’s Authorization for Release of Personal Information from Third Parties to WorkSafeBC</b>	
<p>WorkSafeBC requires information related to your injury and employment to manage your claim under the <i>Workers Compensation Act</i> (the Act). Workers’ Compensation Appeal Tribunal (WCAT) may also require information if there is an appeal related to your claim. This form is your permission for health care providers and any employer to share your personal information with WorkSafeBC. If you choose not to provide your authorization or cancel it after it is given, we may be unable to manage your claim.</p> <p>WorkSafeBC will use this form to obtain information that is relevant or potentially relevant to the management of your claim. WorkSafeBC will not ask the health care providers and employers to disclose personal information that is clearly not related to the management of your claim.</p> <p>The Act and the <i>Freedom of Information and Protection of Privacy Act</i> (FIPPA) allow WorkSafeBC to collect your personal information for the management of your claim. WorkSafeBC will use and disclose your personal information in accordance with FIPPA, the Act, and other applicable laws. This includes disclosing information to your employer(s) if there is a review or an appeal to WCAT as this disclosure is required by law.</p> <p>Please contact your claims representative if you have a question about how the personal information will be used to manage your claim. If you have a question about WorkSafeBC’s authority under FIPPA to collect, use and disclose personal information, contact WorkSafeBC’s Access to Information and Privacy Manager at <a href="mailto:fipp@worksafebc.com">fipp@worksafebc.com</a>, or 604.279.8171, or PO Box 2310 Stn Terminal, Vancouver, BC V6B 2W5.</p>					
<b>Worker’s information</b>					
Worker’s last name		First name		Middle initial	WorkSafeBC claim number
Address line			City	Province	Postal code
Phone number		Alternate contact number (optional)		Date of birth (yyyy-mm-dd)	
<b>Authorization for disclosure</b>					
<ul style="list-style-type: none"> <li>To physicians, qualified practitioners, medical insurers, hospitals, and health care providers, I authorize disclosure of copies of records requested by WorkSafeBC containing my personal information related to my examination, treatment, diagnostic tests, and medical history to WorkSafeBC.</li> <li>To my employer(s), I authorize disclosure of copies of records requested by WorkSafeBC containing my personal information related to my employment, work history, and earnings to WorkSafeBC for the purpose of processing and managing my workers compensation claim.</li> </ul> <p>This consent for disclosure by third parties to WorkSafeBC is in effect from the date signed until cancelled in writing.</p>					
Worker’s signature		Date signed (yyyy-mm-dd)		Personal health number (BC Services Card/CareCard)	
<p><b>Note:</b> Authorization is not required for disclosure by health care providers who are under direct contracts for services with WorkSafeBC.</p> <p><b>How to submit your form</b></p> <p><b>Online is the quickest and easiest method:</b> Once you’ve completed this fillable form and added your electronic signature, visit <a href="http://worksafebc.com/69W1-upload">worksafebc.com/69W1-upload</a> to submit the form to your claim file.</p> <p>Alternatively, you can fax your form to 604.233.9777 (toll-free at 1.888.922.8807), or send by mail to: WorkSafeBC, PO Box 4700 Stn Terminal, Vancouver BC V6B 1J1</p> <p><b>For assistance in completing or submitting this form</b></p> <p>Claims Call Centre, 604.231.8888 or toll-free at 1.888.967.5377, M–F, 8 a.m. to 6 p.m.</p>					



## Appendix IV. Independent Samples T-Test Results

RCT Condition	% submitted						7 day submission					
	Student			Welch			Student			Welch		
	p-value	df	t-Statistic	p-value	df	t-Statistic	p-value	df	t-Statistic	p-value	df	t-Statistic
Control vs Treatment	0.001	1541	-5.616	0.001	1582.464	-5.384	0.001	1541	-9.327	0.001	1725.935	-10.175
SMS + Email vs Email	0.556	727	0.589	N/A	N/A	N/A	0.829	727	-0.217	N/A	N/A	N/A
SMS + Email vs SMS	0.032	798	2.154	0.037	778.875	2.168	0.027	798	2.212	N/A	N/A	N/A
SMS vs Email	0.005	813	2.8	0.005		2.82	0.045	813	2.007	N/A	N/A	N/A
Control vs SMS	0.002	812	-3.1	0.002	806.052		0.001	812	-6.776	0.001	811.874	-6.875
					774.856	-3.089						
Control vs Email	0.001	741	-5.715	0.001	729.476	-5.714	0.001	741	-8.607	0.001	721.54	-8.609
Control vs SMS + Email	0.001	726	-5.042	0.001	723.163	-5.052	0.001	726	-8.771	0.001	696.988	-8.743

RCT Condition	Avg days (Mean)						Avg days (LOG=LN)					
	Student			Welch			Student			Welch		
	p-value	df	t-Statistic	p-value	df	t-Statistic	p-value	df	t-Statistic	p-value	df	t-Statistic
Control vs Treatment	0.001	1014	7.421	0.001	266.729	6.545	0.001	1014	9.251	0.001	334.835	9.956
SMS + Email vs Email	0.373	528	0.891	N/A	N/A	N/A	0.337	528	0.961	N/A	N/A	N/A
SMS + Email vs SMS	0.162	540	-1.399	N/A	N/A	N/A	0.299	540	-1.039	N/A	N/A	N/A
SMS vs Email	0.605	558	-0.517	N/A	N/A	N/A	0.919	558	-0.101	N/A	N/A	N/A
Control vs SMS	0.001	484	5.378	0.001	385.615	5.236	0.001	484	7.514	0.001	467.409	7.743
Control vs Email	0.001	472	5.899	0.001	374.538	5.716	0.001	472	7.856	0.001	452.797	7.993
Control vs SMS + Email	0.001	454	6.746	0.001	358.718	6.519	0.001	454	8.863	0.001	440.613	8.943