

# SELF-ISOLATION

PILOT

# Self-Isolation Pilot

Summary report

FEBRUARY 2022

ISBN (online) 978-1-99-102243-1

February 2022

Managed Isolation and Quarantine | Ministry of Business, Innovation and Employment  
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# Key Findings

- › 79 participants successfully completed self-isolation through the pilot programme from 30 October to 18 December 2021.

## Regarding the Application Process

- › A two-stage expression of interest and ballot successfully identified 81 participants to trial home isolation as an alternative to MIQ, for a closely monitored approach to self-isolation. 79 individuals participated in the pilot.
- › The strict criteria adopted for the pilot per Cabinet's agreement, including the requirement to isolate close to the port of arrival, meant that options for participation were severely limited for travellers living outside Auckland. There were few international flights scheduled into Christchurch (none from Australia and only from Singapore).

## Regarding the Arrival Process and Transfer to self-isolation

- › The processes to identify and separate self-isolating travellers from travellers going to managed isolation and quarantine (MIQ) worked effectively and smoothly.
- › Airports put in place systems that would cater for the number of people expected to participate in the pilot. The small size of the pilot limited the extent to which systems were fully tested, as the highest number of arrivals was four on any flight.
- › In Auckland, Rapid Antigen Testing was done for all pilot participants. The test extended the transfer time in the airport by 14-15 minutes for each individual.
- › It is the view of the airports that undertaking COVID-19 testing at the border at scale is not operationally viable because of space constraints to safely accommodate large numbers of people being tested on-site, and the risks and costs of delays to passenger disembarkation if arrival halls are not cleared quickly.
- › Overall, the use of commercial transport providers to drive participants to their place of self-isolation was highly successful with few incidents.

## Regarding the participant experience of self-isolation

- › The opportunity to travel internationally for business was valued by participants.
- › Most participants were satisfied or very satisfied with their self-isolation experience.
- › Most participants found the self-isolation experience easy. The key themes in the participant feedback were that the number of tests, the length of the required self-isolation was perceived as excessive, and that the challenges became harder after the first few days, including being bored and lonely and separated from loved ones.

## Regarding Health checks during self-isolation

- › During their stay in self-isolation, regular saliva-PCR tests were taken. In Christchurch where health workers supervised the collection of the tests there were no insufficient samples. In Auckland, where tests were unsupervised, there were a small number (six) of insufficient tests. The implications of these observations need to be considered alongside experience from other situations where saliva testing is used.
- › The pilot faced operational challenges from implementing a targeted programme at the same time as the nation-wide introduction of three days home isolation for travellers after seven

days of MIQ, and increased demand for health support to deliver health checks for self-isolating community cases. In a wider roll-out the priority and mechanism for health checks for returnees will need to be weighed against other demands due to cases in the community.

### Regarding Monitoring during self-isolation

- › Monitoring of pilot participation was effective, with no breaches identified. However, the participant views on monitoring were varied, with some welcoming the daily interactions with the monitoring staff and others finding the phone calls intrusive.
- › More advanced technological methods for tracking, using GPS tracking devices and other technologies were advocated for by some participants.
- › From the perspective of the monitoring company the approach was a high-trust model, which relied on establishing a good relationship between the participant and the monitoring staff. This view aligns with participant views that it would be possible to evade the monitoring if you wanted to.

### Regarding data collection and information sharing

- › Multiple agency involvement requires that information is speedily, efficiently, and securely shared to facilitate a clear self-isolation pathway for travellers. Given the small scale of the pilot, the processes used were mostly manual.
- › The model of self-isolation will determine the extent of information collection and sharing required, but to handle large volumes of travellers it will not be feasible to use manual processes. Manual processes are not only resource heavy but also introduce privacy and security risks as it is not possible to track and monitor all data access and use.
- › Overall, while manual in nature, the information sharing processes put in place for the pilot worked well to ensure that all partner agencies received the information required for their part in the process.

### Regarding Communications

- › Communications using multiple methods were necessary to engage with stakeholders such as the airports and health services, iwi, partner agencies and pilot participants. The communications were effective because they used multiple digital channels, and because they could be revised to take account of the changes to the pilot requirements and in response to feedback as the pilot progressed.

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# Overview

## Background

The Self-Isolation pilot was set up to test some of the processes for isolation in the community as an alternative to managed isolation and quarantine for low to medium risk international arrivals. This pilot is part of the Reconnecting New Zealanders work programme to allow for a phased border reopening around a risk-based system.

The pilot was approved by Cabinet on 27 September 2021 [CAB-21-MIN-0386]. It was agreed that the report back on the self-isolation pilot will cover:

- › The border system and processes,
- › The delivery of services in self-isolation,
- › Monitoring, compliance and enforcement,
- › The participant experience, and
- › The experience of other stakeholders

The evaluation is focussing primarily on aspects of scalability and participant experience of the components of the self-isolation pilot, which are:

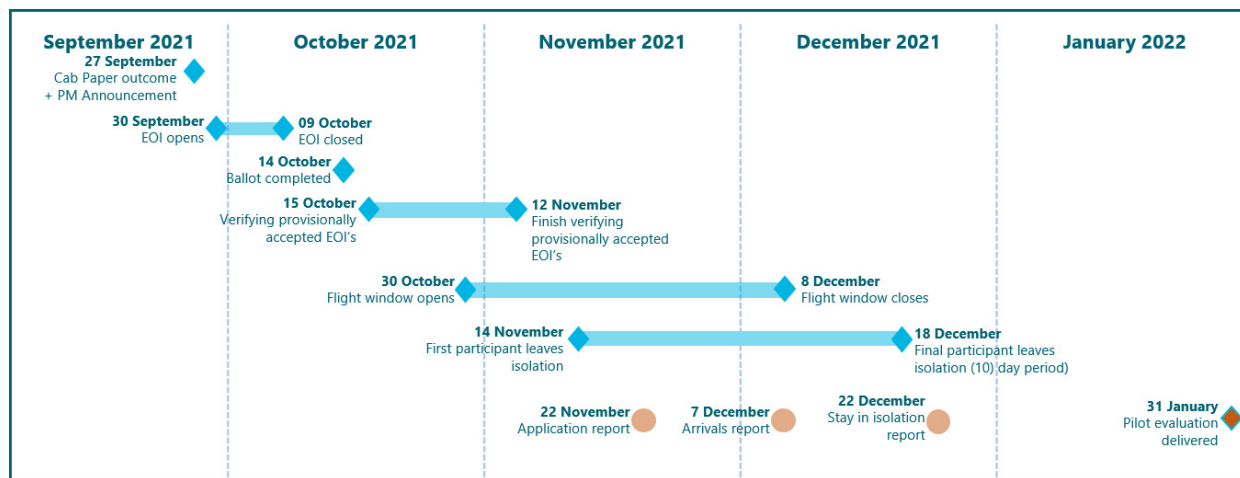
- › The requirements to be met for self-isolation (e.g., plans and accommodation)
- › The process for applying for and approving self-isolation
- › Management of self-isolation at the border and transport to self-isolation
- › Testing and the identification of COVID positive cases at any point.
- › Monitoring of adherence to Self-Isolation protocols by returnees.
- › Response to health and other critical needs during self-isolation.
- › Safe provision of essential services during self-isolation.

## Approach

The evaluation draws on monitoring and administrative data, as well as feedback from the staff implementing the pilot at the airports, and pilot project staff. Participant responses to a survey at day two and day nine of their self-isolation period provide insights into the participant experience.

This summary report is organised in three sections, which cover the three main stages of the pilot: the applications process, arriving and transferring to Self-Isolation, and staying in Self-Isolation. Data collection and sharing and communications are dealt with separately as the themes relate to all three stages.

### TIMELINE AND OUTLINE OF PROCESSES



Detailed process maps are provided in the appendices.

### COVID-19 Response settings were changing throughout the pilot

During the period of planning and implementation of the pilot the public health settings for managing COVID-19 at the border and the community were changing (see Table 1). For the pilot this meant Auckland and Christchurch were operating at different alert levels, with much tighter constraints in Auckland than in Christchurch. A visit to Christchurch airport aided the project team’s understanding of the operating environment for managing arriving pilot participants, and the constraints about space within the terminal for on-site testing.

Due to the risk profile relating to COVID-19 at the time Cabinet agreed to the pilot conditions, the pilot was set up to mirror the MIQ experience in as many respects as possible. This meant that travellers spent a similar length of time in self-isolation, had regular health checks and COVID-19 tests and the requirement to isolate away from non-travellers. When the pilot was set up, the required time in self-isolation was 14 days, in line with the length of stay in MIQ. Changes to the public health settings shortened the required time in self-isolation to 10 days, in line with changes to the border settings that came into effect on 14 November to require 7 days for returnees in MIQ and 3 days in home isolation.

The first pilot arrivals were therefore required to complete up to 14 days in isolation, and later arrivals to complete 10 days.



**TABLE 1: KEY CHANGES TO COVID RESPONSE SETTINGS BEFORE AND DURING THE SELF-ISOLATION PILOT AFFECTING AUCKLAND AND CHRISTCHURCH.**

Date	COVID response setting change
17 August 11.59 pm	COVID-19 Alert level raised to level 4 - nationwide
31 August 11.59 pm	Auckland and Northland remain at Alert Level 4, rest of country moves to Alert Level 3.
7 September 11.59 pm	New Zealand (except Auckland) moves to Alert Level 2 at 11:59pm.
21 September 11.59 pm	Auckland and Upper Hauraki move to Alert Level 3
9 November 2021	Auckland moves to Alert Level 3 Step 2
1 November	1st Self-Isolation pilot participant arrives to do 14 days self-isolation.
14 November	Length of stay in MIQ changed from 14 days to 7 days with 3 days self-isolation.
3 December	Length of stay in self-isolation for pilot participants is reduced from 14 days to 10 days. All participants in SIP for at least 10 days can leave Self-Isolation.
3 December	Alert levels replaced by Covid Protection Framework (traffic lights). Northland, Auckland, and 10 other areas in the North Island moved to red settings. The rest of the country moved to orange, including all of the South Island.
18 December	Final participant leaves Self-Isolation.

## The participants

79 travellers undertook business-related travel and returned to self-isolate in New Zealand: 48 in Auckland and 31 in Christchurch. The last participant left self-isolation on 18 December 2021.

### **Who were our participants?**

Participants were travelling overseas for a variety of business or government-related purposes. They represented 67 organisations, primarily private sector companies.

The majority (80%) of participants were male, they were aged between 24 years and 72 years (65% aged 45 and over). Among those who responded to the participant survey (51 individuals) 63 % were New Zealand European, 6% Maori, with other ethnic groups making up 16% of participants.

The pilot was limited to New Zealand citizens or residence class visa holders. Sixty-five of the 79 participants were travelling on New Zealand passports, the remaining 14 were residence class visa holders.

### **Why were they travelling?**

Cabinet agreed that the primary participants of the pilot would be businesses with employees required to travel internationally for business purposes – including sole traders. To be eligible to participate their employer had to have submitted an Expression of Interest, for international travel with a direct and demonstrable business benefit. Cabinet also agreed that a small number of government officials, as selected by the Minister for COVID-19 Response, could participate.

Employers supplied their reason for travels with their EOI. Applicants could provide multiple reasons for their travel. The reasons given are shown below.

**TABLE 2: REASON FOR TRAVEL, PROVIDED BY SUCCESSFUL TRAVELLERS THROUGH THE EOI PROCESS**

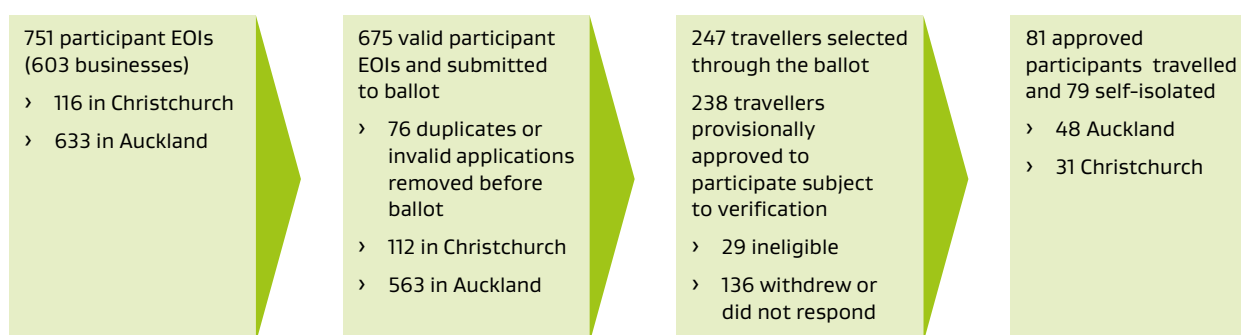
<b>Reason for travel (multiple categories possible for any Expression of Interest)</b>	<b>Count</b>
Carry out due diligence	8
Commission Machinery, equipment, technology	10
Do maintenance or training	10
Pitch in person for tender, contract, investment	29
Interviewing	5
Complete performance of contracts	20
Networking at conference, trade show, etc.	18
Business, Board, governance or client meetings	6

# Stage one: the application process

## A two-step application process was used to select participants for the pilot

Businesses were asked to submit expressions of interest (EOI) in the pilot via an online portal. Businesses self-declared that they met the eligibility criteria for the pilot before they were eligible to submit an EOI. EOIs were reviewed by project staff to remove ineligible and duplicate applications. The valid EOIs were submitted to a ballot. Successful EOIs were invited to submit a full application, with documentation for verification.

### FIGURE 1: OUTCOMES OF THE EXPRESSION OF INTEREST



603 businesses submitted Expressions of Interest, covering 749 participants - 116 in Christchurch and 633 in Auckland.

76 duplicate or invalid EOIs were identified by the project team, leaving 675 potential participants to be submitted to the ballot process.

247 travellers were balloted, and after further validation 188 business applications (238 travellers) were invited to participate and asked to supply additional information for verification. Two additional participants who had not submitted an EOI were selected by the Minister for COVID-19 Response to participate.

Of the balloted participants:

- > 81 travellers were approved and proceeded with their travel plans, with 31 (38%) returning to Christchurch and 50 returning to Auckland (62%). 2 Auckland returnees did not proceed to self-isolation.
- > 85 withdrew and 56 did not respond.
- > 29 were ineligible.

There was substantially more demand for places in Auckland (563 EOIs) than Christchurch (116 EOIs), but due to the need to spread participants between the two ports of arrival the proportion EOIs for returns to result in approval to travel was much higher in Christchurch (29%) than Auckland (9%). Although population size will have affected demand for places on the pilot, the difference in demand for places on the pilot is likely to have at least in part been due to the limited number of flights to Christchurch, with only four flights per week from Singapore.

Approved travellers were issued a voucher to enable them to travel to New Zealand. While it was not intended that they would enter MIQ, there was contingency for them to enter MIQ if necessary.

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### A high rate of withdrawal and non-progression

86 travellers withdrew from the pilot after being provisionally selected through the ballot while an additional 56 did not respond to requests for information to support their applications after being provisionally selected through the ballot.

Reasons for withdrawal were recorded for 64 businesses (95 people). The most common reasons given for withdrawal related to difficulties in aligning flights or business meetings within the constraints of the pilot; including being unable to fly directly to Christchurch (10 businesses/20 people) and being unable to align the timing of business meetings and flights to the period of the pilot (13 businesses/15 people).

Changed circumstances were given as the reason for withdrawal by 10 businesses (14 people) and difficulties complying with the conditions were cited by a further 10 businesses (14 people).

Five businesses (5 people) withdrew because they had successfully obtained a place in MIQ, suggesting the pilot was an opportunity for travel, rather than because self-isolation was preferred. The ability for people in MIQ to spend their last 3 days in home isolation with their families, rather than a full 10 days in complete isolation, may also have been a factor.

104 EOIs were selected through the ballot where participants planned to travel to Australia only, of these 24 were for Self-Isolation in Christchurch. None of the 24 proceeded - 3 submitted ineligible applications and 21 withdrew or did not respond to the invitation to proceed. This illustrates some participants agreed to the conditions in the EOI when in fact they could not comply with the conditions. It was at the point of needing to provide verification that these travellers dropped out of the process.

### ***Tight timeframes for organising travel limited participation in the pilot***

These reasons suggest that the tight timeframes to apply for the pilot and organise travel and business meetings meant some businesses submitted an EOI in advance of firming up either their travel plans or considering the practicalities of the self-isolation rules. This resulted in a high number of withdrawals and considerable additional administration, which introduced delays in confirming the final participants, and additional personnel resources due to the necessarily manual nature of the processes used.

The requirement that prevented participants travelling domestically to get to their place of self-isolation meant that businesses nominating to self-isolate in Christchurch were limited by the few international flights scheduled into Christchurch (none from Australia and only from Singapore).

### The EOI process did not prevent applications from non-eligible travellers

Information supplied at the time of submission of the EOI was used for initial assessment of whether the EOI met the requirements for participation in terms of, traveller identity, dates of travel, travel not to very high-risk countries, reasons for travel and location of proposed place of self-isolation on return. The traveller at this point was asked to make a declaration that they could meet the requirements for self-isolation and participation.

Only duplicate EOIs and EOIs with missing or clearly ineligible reasons for travel were removed before the ballot. If an application was provisionally selected in the ballot a manual eligibility check was attempted including a phone call, before the approved EOIs were emailed and invited to participate subject to verification of their eligibility and approval of their self-isolation plan.

Once a self-isolation plan was provided, the verification process included:

- › Cross checking the information supplied with the EOI – including who was travelling, countries visited, dates of travel and purpose of travel.
- › Confirmation of immigration status through passport or verification of visa status with Immigration NZ.

- › If isolating in their own home, travellers were asked to confirm via email they would be isolating alone.
- › Verification of vaccination status was undertaken by the Ministry of Health, who were provided with the identity details of participants.
- › Checking that the place of isolation was within the geographical boundaries of the pilot – a manual check using Google Maps.
- › Checking that the place of isolation was a stand-alone building with separate entrance, and not an apartment building – this check was limited to an online assessment of the building. In cases where this was unclear email confirmation was requested.
- › Checking that the place of isolation had cell-phone coverage.
- › Participants were required to submit documentary evidence of their itinerary to show countries of travel and transit.

These checks were done manually; an application with complete documentation took approximately an hour of staff time to complete, however the minimum elapsed time was 24 hours due to the need to check vaccination status. Most applications took much longer to process because missing details needed to be followed up and/or information that was inconsistent with what was supplied in the EOI had to be clarified.

### ***A wider roll-out would require automated registration processes***

The pilot was implemented in an environment where self-isolation was an exception for travellers entering New Zealand, and the requirements for self-isolation were tightly specified by Cabinet. In a wider roll out with large volumes of travellers, if an application process was required it would be necessary to ensure a timely process that provides certainty to applicants planning their travel.

A manual two-stage process such as that used in the pilot would be impractical because it is resource intensive and delays in decisions are likely to be unacceptable. Instead for most travellers, verifying essential information would need to occur at the point of registering for self-isolation if application is a requirement. This would require automation of necessary verification checks with manual processes only for non-standard applications.

The wider settings for MIQ and self-isolation will affect the need for verification of information when registering for self-isolation. The table below compares the details requiring verification in the pilot and those that may require verification in a wider roll out of self-isolation.

**TABLE 3: VERIFICATION REQUIREMENTS FOR SELF-ISOLATION PILOT COMPARED TO A WIDER ROLL-OUT.**

Details requiring verification for Self-Isolation pilot	Verification requirements for wider Self-Isolation roll out
Identity, citizenship and visa information – to confirm who was travelling and provide documentation that would unambiguously identify the traveller so they can cross the border without an MIQ voucher, and to link to vaccination record.	Identity Information is needed to: <ul style="list-style-type: none"> <li>› flag self-isolating travellers at the border so they can be separated from those going to MIQ, and</li> <li>› To support verification of details such as vaccination status or visa status that may be relevant to whether a person can self-isolate</li> <li>› for follow up of self-isolating travellers if they are to be monitored in any way.</li> </ul>
Vaccination status – a requirement for participation in the pilot. Done manually by the Ministry of Health.	Vaccination status would only be required for New Zealanders as other visa holders need to be vaccinated to come to New Zealand. Vaccination status will only be required if it is a factor that determines whether a New Zealander able to self-isolate or if it affects monitoring or other checks during self-isolation.
Travel information – to confirm eligibility for pilot, based on places visited and dates of travel	Travel information (flights and countries visited in recent weeks) – may be needed to manage arrival numbers and to confirm eligibility for self-isolation if this is a criterion for eligibility for self-isolation.
Address of place of self-isolation – to check place fits criteria for pilot, and to provide monitoring, covid tests and other supports if required	Address of place of self-isolation, a valid address may be needed depending on the requirements for monitoring.
Contact information – a valid email and phone number required to administer pilot.	Contact information - a valid email and phone number required for communication and administration purposes.

# Stage two: arriving and transferring to self-isolation

## Arriving in New Zealand and transferring to self-isolation

The goal of the arrival process was to identify and manage self-isolating pilot participants and ensure they complied with health checks and were delivered safely to their place of self-isolation. We wanted to understand the impacts on border and airport processes and to identify issues that would arise in scaling up self-isolation as a future pathway for low to medium risk travellers. Where possible the pilot is testing processes for responding to “incidents” that might arise during the arrival process.

At the airport, participants were required to undertake a health screen and testing and were provided with saliva testing kits.

Travellers into Auckland were required to return a negative Rapid Antigen Test before leaving the airport. This was not able to be implemented at Christchurch Airport due to space constraints.

When boarding the transport to their self-isolation accommodation, participants were given an Information Pack with guidance to support their stay, a supply of face masks, and signage to put on the external doors of their accommodation.

An overview of the process of arrival is provided in the appendix.

## Did systems and processes at the border work as intended?

### *Impacts on airport systems*

Airports put in place systems that would cater for the volumes of people expected to participate in the pilot. The pilot was planned to accommodate up to 150 participants over six weeks, with no more than 10 per flight. At the end of the applicant selection process, 82 participants were approved to participate. The highest number of arrivals was four on any flight. This limited the extent to which systems were tested.

The pilot did, however, create a focus for considering the issues of scaling up COVID-19 testing at the border and the implications of managing a dual arrival system where pathways vary for different categories of travellers crossing the border.

### *Christchurch and Auckland airports flex to accommodate the pilot*

Auckland and Christchurch airports both undertook a considerable amount of work to facilitate the pilot. This meant assessing options to create workable operational processes and spaces to accommodate the pilot requirements. These engagements were essential to the successful implementation of the pilot. The pilot team have acknowledged the ongoing efforts of the airports to ensure the success of the pilot, despite its smaller than planned numbers.

### *Identifying Self-Isolating returnees on arrival*

The Air Border Order in operation at the time of the pilot required all travellers to have a booking for MIQ before they boarded their flight to New Zealand. MIQ provides travellers with a voucher to prove they have a booking. To ensure that the self-isolation pilot participants could return to New Zealand they were given an MIQ voucher which was altered to note that they were participating in the pilot. No participants reported any issues with boarding flights to return to New Zealand.

Airports were provided with lists of participants arriving on each flight. Changes to flight schedules and other issues meant that these lists could change at short notice but the process for these updates worked well.

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The process for separating pilot participants from others going to MIQ was similar at each airport; participants were disembarked by border officials before the majority of people who were going to MIQ. This process was an extension of the process already in place to off-load others with special requirements, such as unaccompanied children and travellers exempt from MIQ for other reasons. Airport officials report that the small numbers meant this was able to be done with minimal delay to the off-loading of passengers overall. They noted that it would not be desirable to separate people before disembarkation if large numbers were involved, because of the delays caused to other passengers.

Early disembarkation meant that participants were able to be processed separately through immigration, customs, and health screens, providing a more expedited experience than would otherwise be the case.

#### ***Health checks at the border***

At the airports participants were provided with saliva testing kits for their period in self-isolation.

In Auckland, participants also underwent both a Rapid Antigen Test, and a PCR nasal swab on arrival. These tests added an additional 14 to 15 minutes to the time to transfer each participant through the airport as they waited for their test results. These timeframes have remained consistent throughout the pilot and are a fair estimate of the minimum time for undertaking the tests in a situation where there are no queues for testing. Queuing times would extend the delays created by the testing regime.

The Health team at Auckland Airport report that the tests worked as expected. Participants expected the tests and were, in general, happy to adhere to the requirement. However, the team experienced delays in registering participants on the digital systems for recording the tests. They developed a system to avoid extending the time for participants by pre-registering expected arrivals. Feedback from the Health team was that the process is too resource-intensive and cumbersome to be implemented at scale. Issues were also experienced because personalised labels for the testing kits were not received on time. One incident was cited where a team member ended up delivering the testing kit, a two-hour round trip, after the participant had left due to the labels not being available.

Airports are of the view that implementing these tests at scale would not be possible due to operational constraints. Auckland Airport representatives have expressed the view that they would not be able to safely accommodate large numbers of people being tested on-site within existing structures. This view is supported by modelling which suggests that operational capacity would be reduced significantly by the introduction of point of arrival COVID-19 testing within the airport environs. The constraints arise due to space requirements and limitations on the number of travellers in the arrival halls to maintain safe distancing. They identified risks of delays to disembarking flights, due to the processing delays on the ground. They suggest that these issues would reduce the number of flights that could be accommodated if processing times are extended.

The pilot team was not able to physically observe operations at Auckland airport due to the COVID-19 alert levels.

Rapid Antigen testing was not done at Christchurch airport. It was not possible within the tight implementation timeframes to find a workable solution to implement testing within the constraints of the airport environs.

#### ***Transferring to self-isolation***

Transport was arranged by the project team. Participants were met at the airport by a shuttle driver and transferred to their place of self-isolation. Once onboard they received an Information Pack with guidance on self-isolation and signage to display on the external doors of their accommodation.

Overall, the use of commercial transport providers was highly successful with few incidents.

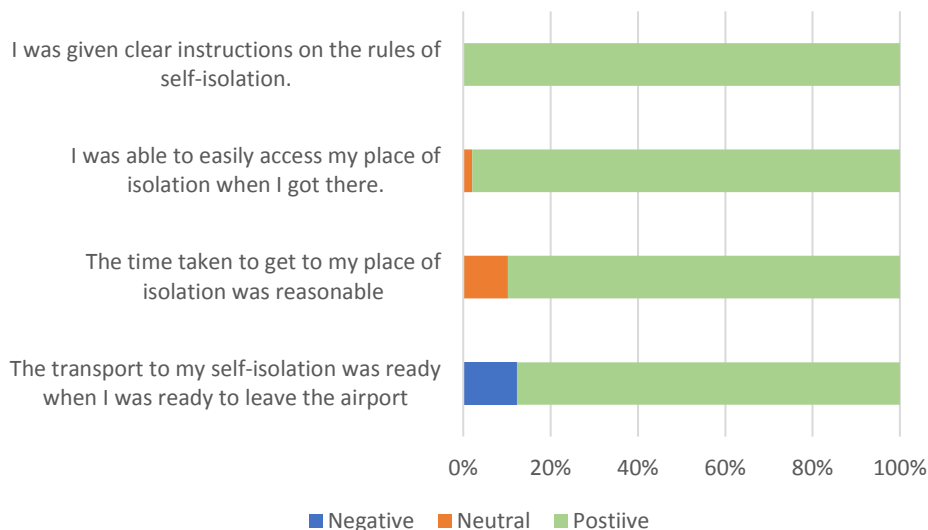
A similar service would be challenging to roll out at scale but was a necessary feature of the restrictive conditions agreed to by Cabinet. The few travellers arriving on each flight meant that transport was generally not shared and that the time to get the place of self-isolation was generally reasonable.



Limits on the place of self-isolation being within 50km of the arrival airport could not be transferred to a wider roll-out of self-isolation.

Overall, participants were positive that the experience of transfer to Self-Isolation worked well (Figure 2).

**FIGURE 2: PARTICIPANT SENTIMENT ABOUT THE EXPERIENCE OF TRANSFER TO SELF-ISOLATION**



### ***Incident Management***

Standard operating procedures were developed to address anticipated exceptions to the usual processes. There were only three occasions during the pilot where incident management escalations were employed, for situations occurring at the border, enabling only limited testing of the procedures. These were:

- › Traveller returns a positive Rapid Antigen Test
- › Withdrawal from pilot on arrival at the airport
- › Delayed arrival due to positive pre-departure test

All worked as intended. In scenarios 1 and 2 the travellers were transported to a Managed Isolation Facility, and in scenario 3 the traveller returned a second negative test so was able to travel on a slightly later flight which the project team accommodated.

# Stage three: the self-isolation experience

## Staying in Self-Isolation

Most participants were in self-isolation for 10 days. However, some participants in the early days of the pilot were required to stay for up to 14 days. This change was made to mirror the reduction of the required time in managed isolation and quarantine from 14 days to 10 days (Table 4).

**TABLE 4: LENGTH OF SELF-ISOLATION**

Required period of self-isolation	Number of travellers
14 days	1
11-13 days	6
10 days	72

While in self-isolation, most of the travellers were remote-working at their accommodation. To participate in the pilot they needed to confirm they had cellular coverage (minimum 3G). They were responsible for their own technology requirements and for arranging their own food and other services, which could be delivered by contactless delivery. Health checks were undertaken by completing a daily email survey and monitoring of compliance through regular phone calls and a phone app (Zyte) described below.

## The self-isolation experience

Self-isolating away from family for 10-14 days on their return to New Zealand was not an insignificant undertaking. We wanted to get some insight into how participants found their time in self-isolation.

We asked participants about their overall level of satisfaction of self-isolation after 2 days and then again after 9 days. Most participants were satisfied or very satisfied with their self-isolation experience. There was however a shift in sentiment ( $\text{chitest} = 0.004$ ) between the 2 surveys, towards a less positive response.

**TABLE 5: THINKING ABOUT YOUR OVERALL EXPERIENCE OF SELF-ISOLATION, FROM WHEN YOU WERE FIRST PLANNING YOUR TRIP AND ARRANGING YOUR VOUCHER AND PLACE TO SELF-ISOLATE, HOW SATISFIED ARE YOU WITH THIS EXPERIENCE?**

	Day 2	Day 9
satisfied or very satisfied	76%	58%
neither satisfied nor dissatisfied	12%	20%
dissatisfied or very dissatisfied	10%	18%

A similar shift in sentiment was observed when participants were asked whether they had found the experience an easy experience. Although the majority were positive there was a shift towards a less positive response by day 9 ( $\text{chitest} = 0.003$ ). Similar results were observed when participants were asked if they thought the requirements of self-isolation were reasonable ( $\text{chitest} = 0.031$ ).

**TABLE 6: AGREEMENT WITH STATEMENT “I AM FINDING SELF-ISOLATION AN EASY EXPERIENCE**

	Day 2	Day 9
agree or strongly agree	73%	60%
Neither agree nor disagree	16%	23%
disagree or strongly disagree	10%	18%

**TABLE 7: AGREEMENT WITH STATEMENT “THE RULES OF SELF-ISOLATION WERE REASONABLE**

	Day 2	Day 9
agree or strongly agree	78%	68%
Neither agree nor disagree	12%	8%
disagree or strongly disagree	10%	25%

At Day 2, participants had recently arrived, and their reflections are likely to relate primarily to the recent arrival experience. At Day 9, the impacts of being in self-isolation are likely to be the dominant driver of the sentiment. A weariness with the process is reflected in comments from survey participants, where a recurring theme was that the number of tests, the length of the required self-isolation was excessive, and that the challenges became harder after the first few days, including being bored and lonely and separated from loved ones. This was exacerbated by the changes in MIQ which meant that those who had been in MIQ for seven days were able to isolate at home with family for a further three days.

*To understand why my husband couldn't isolate with me - if he had agreed to the same rules and to the risk that I might have had covid and he might have gotten sick, it would have been just as easy to monitor two people at the same time. . . I would have loved to be given the option - after 5 weeks apart it would have been nice to have the option to enjoy his company.*

*Being alone with no personal contact is difficult. The mid way point is the hardest, after that it gets better.*

*[the biggest challenge was] Believing I need the whole ten days when I have had 5 negative tests so far, have not had any symptoms, and have not been in any environment or near people that could jeopardize my health.*

There were many people who were grateful for the opportunity to travel for their businesses. There was a sense that the challenge of self-isolation had been worth it because the travel had been important. Many commented that the people they dealt with throughout the pilot were warm and friendly.

*Having the opportunity to travel to our location and get in front of our people and customer after 18 months was a blessing. Video conferencing as it turns out is very second best. Being able to isolate within a home environment and not the MIQ lottery is an extra privilege that international businesses require.*

*I think all the people that have made contact with me every day were friendly, pleasant and really it has been a warm experience. I liked when they started using their cameras so I could see their faces, as these are the only outside faces I have (other than my family through facetime). The driver who picked me up was also very pleasant. Honestly the people that you have involved in the whole process have been excellent.*

# SELF-ISOLATION

## PILOT

### ***Monitoring health and wellbeing of pilot participants***

The Ministry of Health (Health) worked with Whakarongorau to monitor the health and well-being of pilot participants. This was managed through three requirements:

- › Day 1 initial health assessment with a Whakarongorau clinician via phone
- › Daily health and well-being checks via email survey
- › Exit health assessment with a Whakarongorau clinician via phone

### ***Day 1 initial health assessment***

Participants were required to complete an initial health assessment on day 1 of their isolation period to help identify any participants who were unable to complete their self-isolation period safely and receive a baseline understanding of any underlying health issues and allergies. While many participants self-declared pre-existing conditions to the clinicians, none were deemed unable to safely complete their self-isolation.

This component of the pilot worked well but due to clinical capacity, is not scalable to expected medium-risk pathway numbers in their current form. Work could be undertaken to see if these initial health assessments could be completed via email. Where resources are constrained the value of these checks, which require clinical oversight, would need to be weighed against the priority of delivering checks for cases in the community.

### ***Daily health and well-being checks via email survey***

Participants were required to complete a daily health and well-being email survey by 12pm. The survey contained a mix of questions relating to symptoms and wellness, as well as any welfare needs.

If the participant reported a new or worsening symptom, a clinician would call the participant for confirmation and escalate accordingly. Escalation pathways could vary from referring participant to external resources (if non-COVID related), and/or referring the participant for an additional nasopharyngeal test. Non-COVID related health issues or concerns reported in surveys or to the clinician were minimal and handled appropriately.

If the participant did not respond to their survey by 12pm, this was escalated by Health to MBIE to follow up with the participant on the grounds of non-compliance.

At the time the pilot was being implemented Health was working at pace to implement automation of emails for 3-day post MIQ Self isolation period, while at the same time Whakarongorau was undertaking increased health checks for community cases due to the current outbreak of COVID-19. This had unintended consequences for the Pilot. The automation of daily emails to pilot participants was disrupted due to a focus on the implementation of 3-day post MIQ self-Isolation period, resulting in the daily health surveys being sent later than the target time (8 am). The downstream impact of this delay was that participants could not respond by the 12 pm deadline, resulting in follow-up calls and emails to participants.

Technical issues aside the health check emails did not identify any significant health issues – therefore the pilot did not have the opportunity to test the response to health issues identified through these tests.

### ***Exit health assessment***

Participants were required to complete a final health assessment prior to their exit which including checking that they were not symptomatic. Following the health assessment call from a clinician, the clinician would confirm their recommendation to MBIE if the participant was at low-risk of having or transmitting COVID-19. All participants were recommended as low-risk of having or transmitting COVID-19.

The exit health assessment calls were only completed once the participant's negative day 8 test-result was available to the clinicians doing the health assessment. Due to pressures on the health testing system, some results were not received until close to or after the earliest possible release time. As a result, some participants' final health assessments were not within the expected 12hrs prior to the earliest possible release time.

### ***Covid testing during self-isolation***

Covid tests were carried out at day one, three, six and eight. In Auckland participants were tested at the airport on arrival, using a nasopharyngeal swab and a Rapid Antigen Test. In Christchurch participants were only tested using a nasopharyngeal swab due to logistical limitation at the airport. All participants were provided with test kits for Saliva PCR testing for days three and six, while the final test was a nasopharyngeal test on day eight. Participants were transported to a testing centre close to their place of isolation for their final test by a contracted transport provider.

### ***Rapid Antigen Tests***

One participant tested positive for COVID-19 during the Pilot. This occurred on arrival at the airport after returning a positive result from a rapid antigen test. The participant was removed from the Pilot and placed in an MIQ facility in accordance with the agreed process. The process worked well and as expected.

### ***Saliva Tests***

Auckland and Christchurch followed slightly different processes for saliva collection.

In Christchurch, saliva collection was run by the lab. Health staff would pick up the saliva sample from the participant's accommodation after supervising the sample being taken and return it to the lab. Supervising the sample eliminated the need for retest. Zero tests came back as insufficient in this location, and all came back negative.

In Auckland, saliva collection was run by a specialised courier company. The courier would pick up the already produced saliva sample and drop it off at the lab. If a sample was insufficient, this would not be picked up until the lab had processed the sample. The lab would inform Health, who informed the participant and the courier that a new sample needed to be produced/collected. In Auckland, a total of 6 saliva samples came back as insufficient. All saliva results came back negative.

Both models raise issues of scalability. In Christchurch the use of a skilled health worker to supervise the tests almost certainly contributed to zero insufficient tests. However, this approach is unlikely to be scalable due to workforce constraints. Consideration would need to be given to alternative approaches such as sending returnees to existing testing centres to scale-up an approach with supervised tests or the use of different types of tests.

We did not investigate specifically the impact on participants of issues with the tests – 83% of survey respondents reported that their saliva tests had been picked up every day at the expected time (*Table 8 Thinking about your saliva tests, which of these is correct?*)

**TABLE 8: THINKING ABOUT YOUR SALIVA TESTS, WHICH OF THESE IS CORRECT?**

My tests have been picked up every day at the expected time	83%
My tests have sometimes been picked up at the expected time, but sometimes later/earlier or not at all	17%

Delays in collection of tests are likely to escalate with greater volumes of tests, should this approach be used more broadly.

# SELF-ISOLATION

## PILOT

### **Day 8 Nasopharyngeal Tests**

Participants were automatically sent a QR code the morning of their day 8 test. This QR was scanned at the Covid Testing Centre (CTC) which would easily link their test to their record. Initially as some CTCs were unfamiliar with the QR code there were isolated instances of confusion for the participant and the tester.

On two occasions, the QR code not getting scanned resulted in a “lost” test. Due to the volume of tests, the process to find a test not showing in the system was described as a “needle in the haystack”. Communications to participants and the transport company were strengthened and we were able to intercept any confusion that occurred while at the CTC to avoid a lost test by having the transport company call a Ministry of Health representative to resolve the issue before they left the CTC.

The main reported issue for the day 8 test was the turnaround time for results. Some participants were unable to leave their isolation at the earliest possible time (i.e. 240 hours since their arrival in New Zealand) because they were still waiting for a result of their day 8 test. The majority of participants received their negative results within 48 hours.

### **Monitoring compliance with self-isolation**

#### ***Telephone checks and geolocation of pilot participants***

Once travellers were at their place of self-isolation, they were monitored three times a day to check that they were at their place of isolation.

The Self-Isolation Pilot used technology supplied by Zyte, a New Zealand company, to conduct phone-based location monitoring checks on participants. These checks (conducted by First Security) require participants to share their geolocation and turn on their video to verify their address and identity. Participants were only monitored at the time of the call.

Over the period of the pilot First Security completed 2209 calls to the 79 participants. Each participant was called three times per day, with additional calls when the participant did not respond. On average approximately three additional calls have been made per participant (on top of 3 x daily calls) during their 10-day self-isolation period. Non-responses have been due to participants variously being in meetings, showering, sleeping, undertaking COVID-19 testing at a Community Testing Centre (CTC), or exercising outside. 31 instances of technical issues were recorded, primarily due to either the geolocation function or the camera video not working. These were all one-off issues with a participant, not ongoing problems. During the first two weeks of the pilot First Security completed ‘spot checks’ when participants did not respond to monitoring calls. Six spot checks were made during the first two weeks of the Pilot, before operational processes were revised such that spot checks required MBIE approval. After these no further spot checks were required as MBIE completed further follow up via phone call to ensure the participant completed their next monitoring call.

There was only one instance of ‘non-compliance’ in the Pilot and that was due to confusion caused by the misinterpretation of a communication from MOH, where a participant drove themselves to a CTC. This incident was not picked up by location monitoring (as it took place outside of the 3 x daily checks), but by the participant’s disclosure.

#### ***The participant’s views on the monitoring were variable***

We asked participants how we could have better monitored them to be confident they were sticking to the self-isolation rules. The monitoring was also commonly raised when we asked what aspects of the survey could be improved.

Many participants were very happy with the monitoring which provided them with a break in the day and contact with the outside world. Several participants commented on the pleasantness of the monitoring team.

*Phone monitoring was a welcome change to the daily routine. It worked for me. Monitoring teams seemed to [go] beyond what is expected of them and communicated a certain level of care*

*The team who checked my location 3 times a day were very good, and the technology being used to check my identity and location was innovative and effective*

However, the calls were not welcome by everyone, with some being frustrated by the interruptions to their work schedules.

*...random phone calls when you're trying to have remote meetings with clients/staff/management are far from ideal.*

Some felt it would be easy enough to evade the monitoring if you really wanted to because the timing was predictable. Although those making these comments also emphasised that this is not something that they had actually done.

*I think the current approach relies on honesty and that is where some people will bend the rules. The checks were during the daytime only and it would be easy enough to leave at say 7pm-8pm and then be back at 7-8am in the morning.*

*[The monitoring calls were].. too predictable, 3 calls each day. I can leave after the 3rd one and have a pint at the local. You not going to call me again until next morning.*

*I figured I would have at least a couple of hours to pop out for a run - or go meet someone for a coffee. A combination of the ZYTE application, which is impressive for what it does, with something like a Jupl wrist tracker that delivers my location every 2 minutes would be a more reliable method.*

There were comments from some participants for more automated methods for tracking, using GPS tracking devices and other technologies.

*GPS based bracelet would be a far better mechanism to ensure compliance. Semi Random phone calls are fine - but obviously don't check locality in the evening/night.*

### **The monitoring service view of the self-monitoring**

The monitoring service (First Security) was experienced in monitoring the location of people for legislated purposes, including much more stringent and active geo-location monitoring for much greater volumes of people.

They felt that the pilot had worked well overall with few issues. This success was attributed to good communications from the pilot team, the valuable communications materials, staff experience and training, and a relatively compliant participant group. The approach was seen by First Security as a relatively high trust, but intrusive model, which relied on establishing a good rapport between monitoring staff and pilot participants. This was necessary because the pilot was using only the basic functionality of the Zyte technology to check the location of participants at three points during the day. Other technologies would allow more automated checking of location, without the frequent need for phone calls. Poor cellular signals in some areas also limited the accuracy of the information from the Zyte technology (as implemented in this pilot).

There is clearly a balance to be found between the privacy concerns of constant automated monitoring and the potential intrusiveness of frequent phone monitoring which would require a large workforce to implement multiple calls a day.

One benefit of the phone monitoring was that it provided an additional point of contact for participants to ask questions - which occurred frequently. Monitoring staff were familiar with the welcome pack and were able to direct participants to where to find the information in that pack, or direct them to the Healthline number for health-related queries. Many participants were not familiar with the Welcome Pack even though they had been provided with a copy and directed to it in other communications.

## SELF-ISOLATION

### PILOT

First Security also reported that a few participants were unhappy with the signage provided for the pilot. Participants were required to show the signage on the door to prove they were at their site of self-isolation, so there was opportunity during the video check on their presence for this to be a focus of conversation. The concerns were about being made to feel conspicuous and about potentially being targeted. Smaller signage with a tamper proof GPS tag were suggested as an alternative option.

### Access to other services during self-isolation

We asked participants what services they had accessed during self-isolation. Sixty-two percent had accessed food and beverage deliveries, 8 % IT or communication services and 10% delivery of other goods. Most (81%) ordered online or by phone with physical delivery to the place of isolation, and the remainder ordered and received services on-line without requiring physical delivery. Some participants were supported by family and businesses who had set up their location prior to their arrival and so had no need to access services directly.

### The cost of self-isolation

Participants were a select group. They needed to have the resources or be funded by their employers to undertake business travel during a time of heightened disruption to travel and business.

Participants' employers were charged \$1000 towards the costs of transport and other pilot services.

Participants reported costs of self-isolation that ranged from zero to \$6000, including costs of food, accommodation, and other services. Higher costs were incurred when accommodation needed to be rented for either the participant or their family. When the participant was isolating at home costs for the entire period were generally less than \$1000. The isolation requirements created an additional imposition on people who could not isolate in their own property (e.g., because they did not live within the required boundaries for the pilot).



# Data Collection and Information Sharing

The pilot required information sharing across multiple agencies for successful implementation. This was enabled by participants providing consent for their data to be shared for the purposes of the pilot and its evaluation. Data sharing was primarily done manually through exchange of files. Processes were put in place to ensure personal data was securely held. A privacy impact assessment was reviewed by the Privacy Commissioner and updated regularly to document issues and decisions.

The pilot has revealed the extensive need for information sharing to administer a closely monitored self-isolation pilot. Given the small scale of the pilot the processes used were mostly manual.

The following data collection and sharing of personal information occurred during the application processes:

## **During the application process**

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- › Applicants provided personal details to the MIQ project team during the EOI processes
- › Balloted individuals provided documentation to the MIQ project team to verify key details of their applications (Images of passports, copies of itineraries, details of places of self-isolation)
- › MIQ project team provided the Ministry of Health with the list of applicants to check vaccination status. Ministry of Health provided confirmation of vaccination status to the MIQ project team.
- › MIQ project team searched INZ data to confirm visa status of non-New Zealand citizens.

## **To support the border arrival processes and health checks at the airport and the transfer of participants to their place of isolation**

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- › Airports, Customs, INZ and MIQ Allocations were provided with lists of participants and their flight details by the project team to determine who needed to be identified and processed through the self-isolation pathways.
- › The transport provider was given the names and self-isolation addresses of participants requiring transport.
- › The RIQCC was provided with details of people requiring transfer to managed isolation and quarantine (MIQ).
- › RAT and PCR tests were recorded using the existing health systems used for people going to MIQ.

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## SELF-ISOLATION

### PILOT

Ensuring that agencies were provided with accurate and timely data to support planning and implementation was resource intensive. Changes to the list of participants created rework and challenges for staff planning during into the first weeks of the pilot. This occurred because of changes in flight schedules, (between EOI submission and schedules being finalised), changes to travel plans (e.g. business meetings), and changing COVID-19 situations in countries being visited etc. The flow-on effect of changing travel plans is that information must be refreshed in a timely way to enable co-ordination of all the various services. Agencies worked together to solve the issues as they arose.

A wider roll-out of self-isolation will require automation of data collection and sharing processes to ensure a seamless experience for travellers and for agency staff supporting self-isolation. This was not possible in the very limited time available to design and set up this pilot. Automated application and verification would introduce system requirements, which are outside the scope of this report. The model of self-isolation will determine the extent of information collection and sharing required, but to handle large volumes of travellers it will not be feasible to use manual processes. Manual processes are not only resource intensive but also introduce privacy and security risks as it is not possible to track and monitor all data access and use.

Overall, while manual in nature, the information sharing processes put in place for the pilot worked well to ensure that all participating agencies received the information required for their part in the process.

# Communications

The Self-Isolation pilot is part of the overarching Reconnecting New Zealanders plan announced by the Prime Minister in August 2021. The pilot team connected with several government agencies in the Reconnecting New Zealanders forum and regular progress updates were shared.

Iwi engagement was initiated during the pilot scoping work. This focused regionally on Auckland and Christchurch via phone calls and online meetings as the decisions were being made by the pilot team. This engagement was essential to ensuring iwi were aware of the pilot and were given equal opportunities to apply to participate in the pilot. The pilot team were able to provide iwi with information on the plans for regular COVID-19 testing and location monitoring for participants self-isolating in the community.

A range of digital and printed communications collateral helped make the participants' journeys as smooth as possible. The resources were developed by the pilot team in collaboration with agencies such as the Ministry of Health and airport companies. An example is the pre-departure emails for participants which included information from agencies to prepare travellers for the airport processes and COVID-19 testing and health checks on arrival.

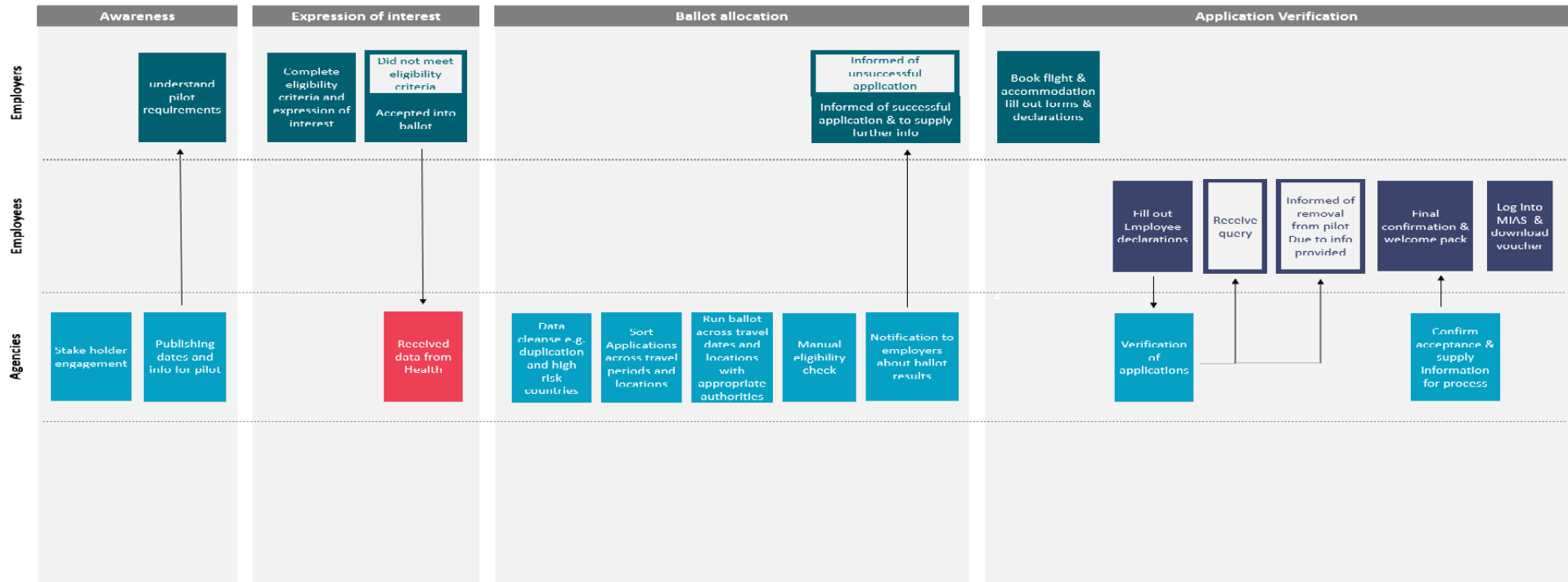
As the pilot progressed, the messaging became focused on the self-isolation stay and communicating the shorter stay requirements and testing schedule changes. The MIQ website was regularly updated, and pilot participants received direct emails with updates from the Client Service Advisors.

An Information Pack also provided guidance for participants on what to expect during their self-isolation stay, including testing requirements, daily health checks, and wellbeing resources. This was included in the pre-departure email as a PDF attachment and provided in printed format on board the transport to their accommodation. The pack was updated a few times during the course of the pilot, as more information was added on the daily health checks and COVID-19 testing, to ensure participants completed their stay safely.

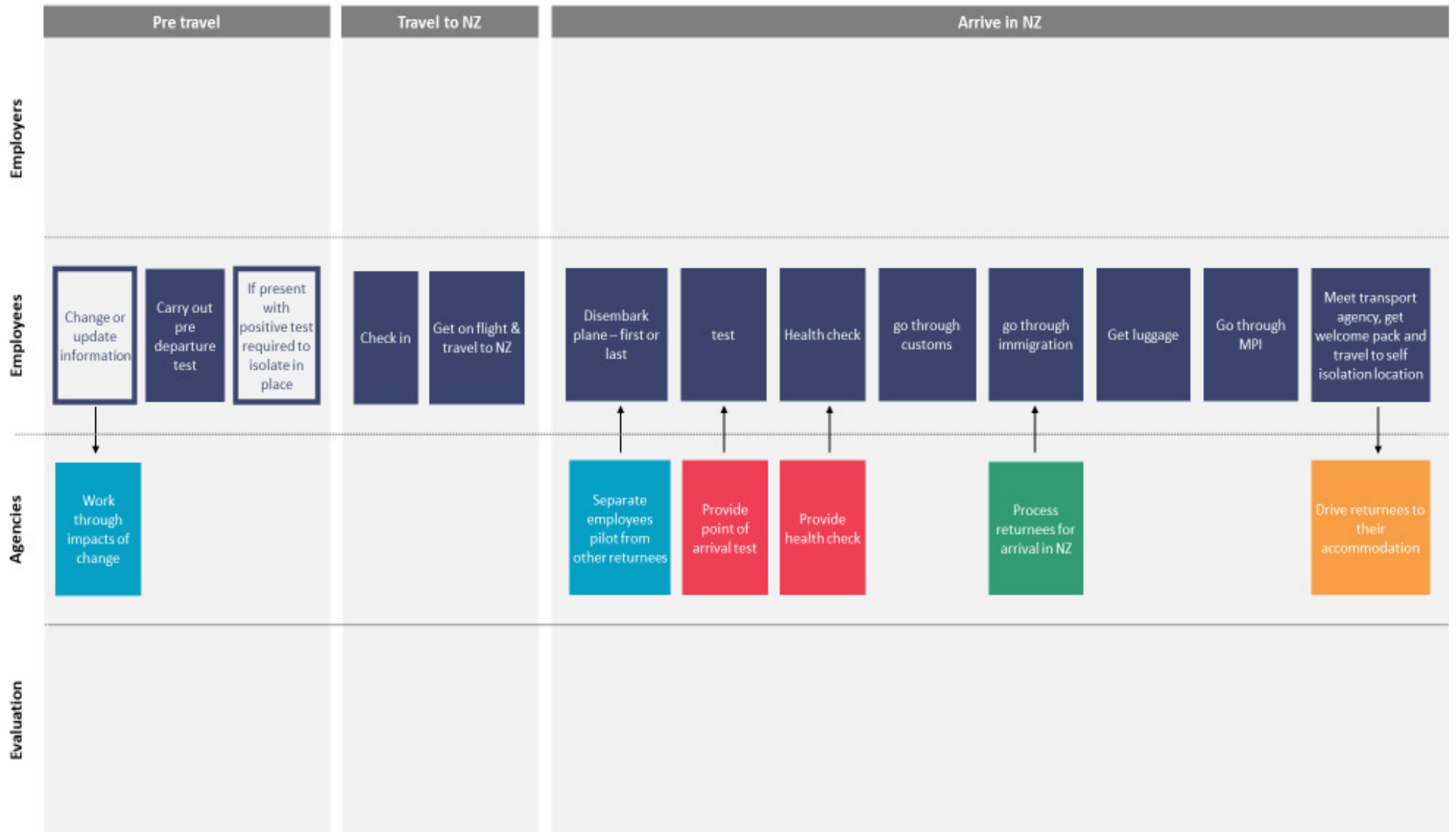
# Appendices

## Process maps for stages of Self-Isolation Pilot

### APPLICATION PROCESS



## RETURN TO NEW ZEALAND



# SELF-ISOLATION

## PILOT

### STAY IN SELF-ISOLATION

