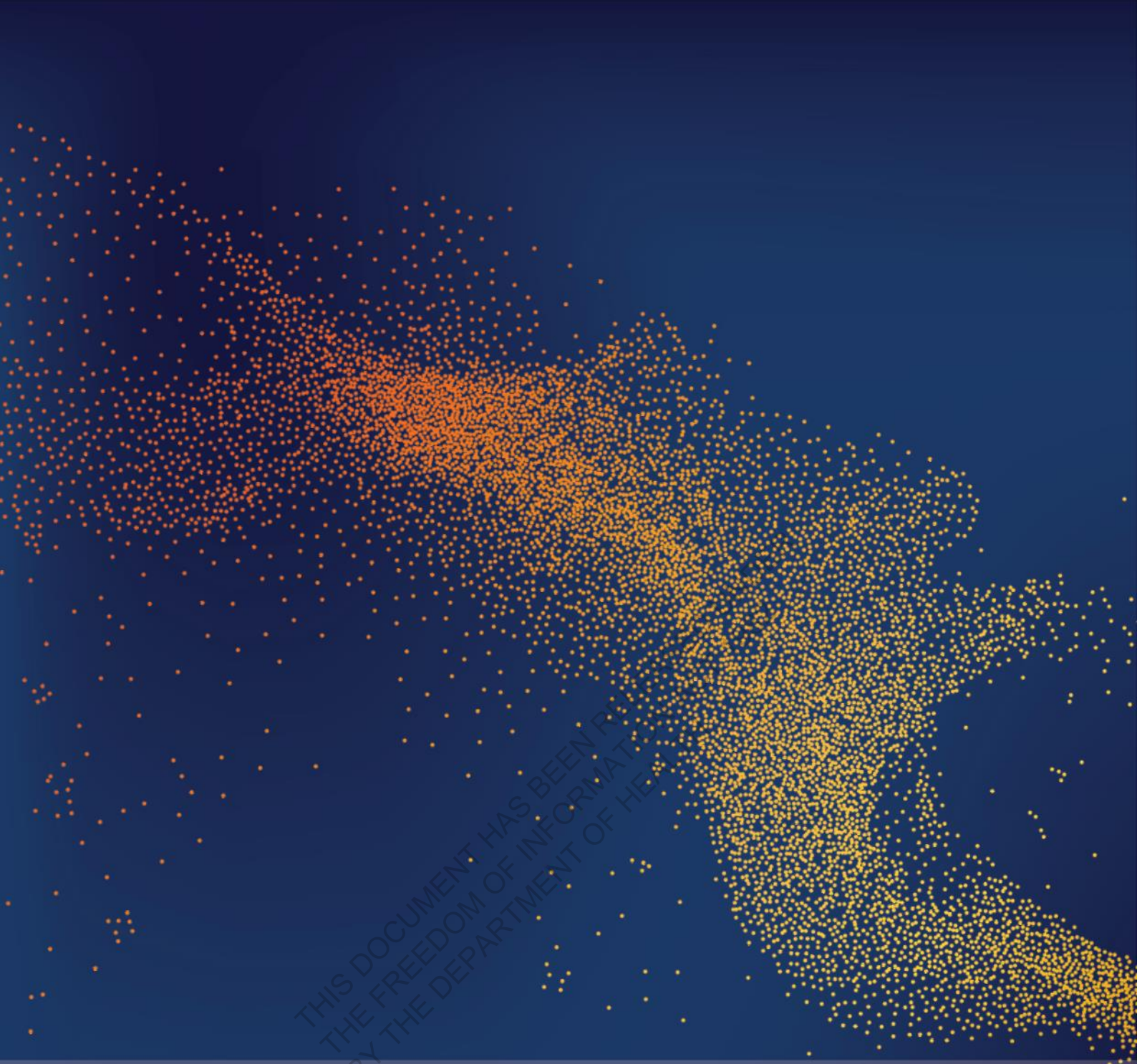

Evaluation of the rapid antigen testing pilot in residential aged care facilities: final report

Australian Government Department of Health

23 December 2021

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Contents

1 Executive summary

Rapid antigen testing has been used across the world to screen people who are potential sources of SARS-CoV-2 and subsequently to reduce COVID-19 outbreaks. The Australian Government Department of Health (the Department) launched a pilot of rapid antigen testing in aged care facilities in states with high levels of community COVID-19 transmission – New South Wales and Victoria.

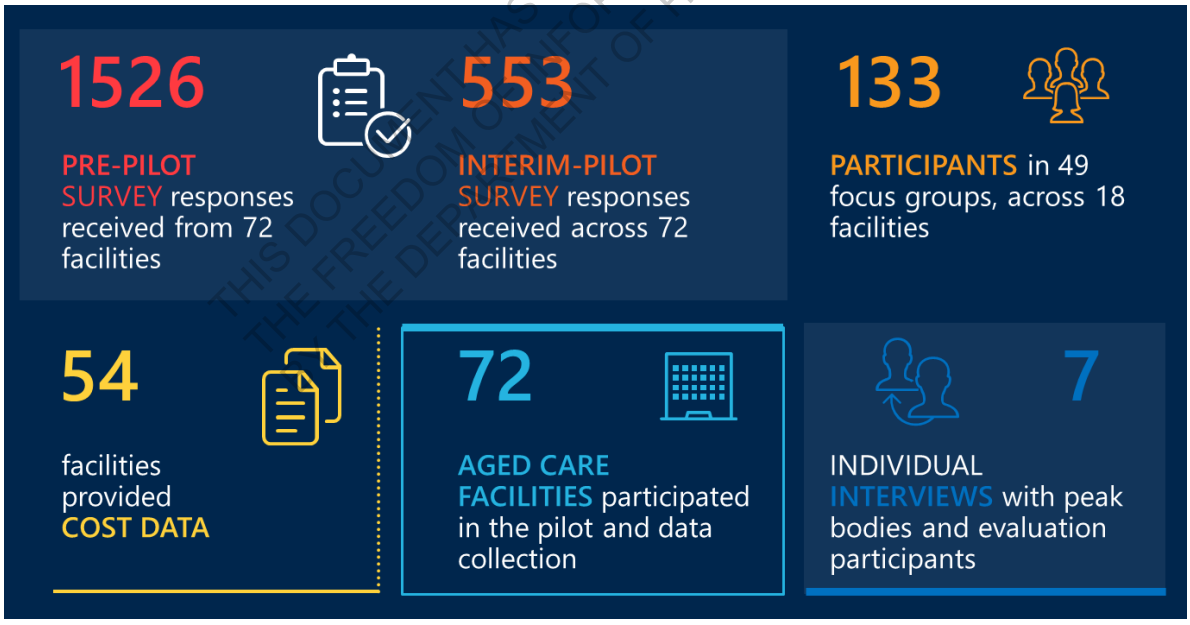
The pilot's objectives were:

- screening workers and visitors (rather than residents) in aged care facilities to help prevent outbreaks; and
- understanding rapid antigen testing's feasibility and acceptability in aged care facilities.

The pilot launched on 16 August and ended on 3 December 2021. 72 facilities participated. The Department provided training and support to facilities to adopt rapid antigen testing as soon as possible. The Department purchased and distributed testing kits to facilities, paid a subsidy per test completed, and engaged a third-party provider, Respond Global, to induct, train and support facilities. Facilities were responsible for providing the infrastructure and resources needed to support the testing.

The Department engaged Nous Group (Nous) to conduct a rapid, agile, independent evaluation of the pilot's implementation and effectiveness. Nous worked closely with the Department, Respond Global and the facilities to establish evaluation mechanisms. Interim findings were continuously shared with the Department, Respond Global and facilities to enable the ongoing improvement of the pilot's design and implementation. Nous used a mix of data collection tools to explore four key evaluation questions, as illustrated in Figure 1.

Figure 1 | Summary of data inputs to this report



The purpose of this report is to share the pilot evaluation findings and to help the Department and others to learn from the experiences of implementing rapid antigen testing. This report includes the evaluation's key findings, detailed sub-findings with supporting data from the pilot, and options for improvement. It also includes a high-level cost and efficiency analysis of the use of testing under pilot conditions.

The pilot was broadly successful, preventing at least 17 possible outbreaks and making aged care staff more willing to attend work

The pilot was broadly successful and prevented at least 17 possible COVID-19 outbreaks in residential aged are facilities. 130,324 tests were conducted up to the pilot's conclusion on 3 December 2021. Testing data shows that 36 tests (0.03%) returned a positive result, of which 17 were later confirmed as true positives and 19 as false positives. Of the total 130,324 test conducted, there were 6,354 (4.65%) tests declined by staff or visitors. The number of false negatives was not captured given the complexity of identifying and recording false negatives.

The evaluation showed that 90 per cent of staff were more willing to attend work once rapid antigen testing was available. Before the pilot commenced **50 per cent** of residential aged care facility (RACF) staff said they would not attend work because of concerns of contracting COVID-19 or exposing others to COVID-19. After several weeks experience of rapid antigen testing, 90 per cent of staff were more willing to attend their shift than before testing was available. Several weeks after the start of testing **90 per cent** of RACF executives and managers and **73 per cent of** testing supervisors believed it had been easy to encourage staff to participate in testing.

The eleven key findings outlined in Table 1 were identified through analysis of the data captured during the evaluation. Each key finding is supported by several sub-findings that are described in Section 3.

Table 1 | Our key findings

Key finding	
	Key evaluation question 1: How effective has the implementation of the pilot been to date, and can it be improved?
1	Respond Global's training, protocols and implementation advice supported RACF management, testing supervisors and staff effectively to conduct rapid antigen testing. Some opportunities were identified for improvement.
2	For RACFs there were change management, cultural and logistical challenges. The RACFs that most effectively mitigated these challenges used a mix of careful planning, a dedicated internal project implementation team and proactive staff communications throughout the testing process.
3	RACFs were uncertain about the future intent for rapid antigen testing within facilities and under what conditions the use of rapid antigen testing would be appropriate. They felt this uncertainty made it difficult to plan future internal processes and operations within their facilities and to provide reassurance to their staff and visitors.
4	The supervision requirements for testing were burdensome to RACFs. This was especially the case when clinicians registered by the Australian Health Practitioner Regulation Agency (Ahpra) were required to take on the testing supervision responsibilities, on top of their existing responsibilities, as per the now-outdated Therapeutic Goods Administration (TGA) guidelines.
5	Many RACF staff have not been adequately remunerated for the time it took to undertake testing outside of their existing shift times despite, in many cases, being required to attend their shifts earlier.
	Key evaluation question 2: Is rapid antigen testing identifying people with COVID-19 before they enter RACFs, thereby improving the safety of residents, staff and the broader community?
6	Rapid antigen testing in pilot facilities identified 17 true positive cases of COVID-19 and, as a result, has reduced the chance of COVID-19 spreading between staff, residents and the broader community of these facilities. However, the exact contribution of rapid antigen

	testing to improving the safety of residents, staff and broader community against COVID-19 is difficult to isolate given the number of external variables.
7	A universal system to record and verify rapid antigen tests does not yet exist. Such a system would support facilities to improve the effectiveness of the testing process, increase the uptake of testing, spare participants from unnecessary repeat testing, and allow smoother and more reliable collection and collation of testing data.
8	The type of test used affects the experience and willingness of participants to test. The test types vary by time taken to wait for test result, type of swab used (nasopharyngeal (deep nasal) or shallow nasal) and the clarity of instructions.
	Key evaluation question 3: Is rapid antigen testing improving staff perception of safety?
9	The introduction of rapid antigen testing improved the perception of safety of staff against the risks of COVID-19 within the RACF. This has had a positive impact on rostering and workforce management.
	Key evaluation question 4: Is rapid antigen testing cost-effective?
10	An analysis of the financial costs and benefits of establishing and running a 12-week rapid antigen testing pilot in RACFs shows that testing is a cost-effective intervention, relative to the potential costs of managing a COVID-19 outbreak in the facility.
11	Facility executives and managers have advised that they may not be able to afford to cover the ongoing costs of rapid antigen testing without government support.

The key findings inform recommendations for any broader rollout of rapid antigen testing

Based on the above pilot findings, we have identified recommendations that the Department may choose to consider for future rapid antigen testing programs. These options for improvement are tagged against the relevant key findings and sub-findings listed in later sections of this report.

Policy recommendations:

1. Continue to **provide funding and support for rapid antigen testing** in aged care facilities where testing is appropriate. *Key finding 11*
2. Partner with the aged care sector to **set an agreed industry approach to rapid antigen testing** to reduce both confusion for facility executives and managers and potential spread of COVID-19. *Key finding 3*
3. Review the **barriers for aged care facilities to implement rapid antigen testing** when they are experiencing outbreaks, and consider creating testing 'response teams' to operationally support facilities or communities with emergency outbreaks, which is a time when testing could be of great value. *Key finding 1*
4. Provide health advice to aged care facilities **on how best to complement rapid antigen testing with polymerase chain reaction (PCR) testing** to reduce the risk of an outbreak while minimising disruption to staff and residents. *Sub finding 2.3*
5. Explore less burdensome **models for on-the-ground supervision and administration of rapid antigen testing**, including sharing additional resources between aged care facilities, either through remote supervision or on-site resources that travel between facilities. *Key finding 4*

6. Explore opportunities to **align Department-led rapid antigen testing programs with the programs of other agencies, jurisdictions and industry**, including around the frequency of testing required. *Key finding 3*

Communications and awareness building recommendations:

7. Increase **public awareness of rapid antigen testing** to improve willingness to test amongst the general population, which will influence staff and visitors. *Sub finding 6.4*
8. Establish a **rapid antigen testing resource online hub** that includes accessible materials for people and organisations that are participating and deploying rapid antigen testing programs. This would include resources that support groups to effectively communicate the why and how of rapid antigen testing. *Key finding 1*
9. Develop and make materials available to facilities explaining the **purpose and benefits of rapid antigen testing**. *Sub finding 2.3*
10. Provide clarity to aged care facilities on the **evolving nature of Therapeutic Goods Administration (TGA) guidelines** on the use of rapid antigen testing and where to find the most up to date information. Ensure facilities know how this might impact their implementation and how they can best execute relevant changes. *Sub finding 4.6*

Operational recommendations:

11. Develop a **rapid antigen testing implementation playbook** that aged care facilities can use to support their implementation. This should include clear roles and responsibilities of key stakeholders, including facility management and supervisors, in the deployment of testing. *Key finding 1*
12. Ensure training, protocols and testing instructions are **accessible for all people**, including those with lower levels of English proficiency. *Sub finding 1.7*
13. Ensure the **number of testing kits provided to aged care facilities** accounts for testing of visitors and visiting staff as well as regular staff. *Sub finding 2.5*
14. Give aged care facilities appropriate instructions on how to **dispose of waste appropriately** – particularly within a clinical setting. *Key finding 1*
15. Identify and provide supports to aged care facilities who are **engaging external testing supervisors** on a contract basis (clinicians or otherwise). These supports could include extra guidance on how to best onboard supervisors who may not be familiar with the physical and or cultural environment at the facility. *Sub finding 4.4*
16. Work with aged care facilities to ensure that the **staff time required by the testing process is adequately remunerated and recognised**. *Key finding 5*
17. Establish a **digital system to record and verify rapid antigen tests** to support aged care facilities to improve the effectiveness of the testing process, increase the uptake of testing, spare participants from unnecessary repeat testing, and allow the collection of test data. *Key finding 7*
18. As identified and implemented during the pilot, ensure sufficient **availability of appropriate testing kits** to facilities that are implementing rapid antigen testing. Such testing kits should provide fast results, be easy and comfortable to use (saliva or shallow nasal), be appropriately packaged and include adequate instructions for diverse users. *Key finding 8*

Implementation recommendations:

19. **Monitor rapid antigen test results and testing rates** in aged care facilities to understand the success of testing and to identify and provide extra targeted support to facilities that have a low testing uptake. *Key finding 1 and 7*

20. Design the implementation of rapid antigen testing to **be easily embedded with existing COVID-19** protocols, rather than be seen as separate to internal processes. *Sub finding 6.2*
21. Work with aged care facilities to **explore barriers to implementing rapid antigen testing,** and identify ways to make implementation easier. *Sub finding 2.2*
22. Encourage aged care facilities to instruct and **allocate time for staff to watch the short instructional video** on how to self-administer the test. *Sub finding 1.4*
23. Work with aged care facilities to understand what **training approach is best for their circumstance**, whether training their staff directly or a train-the-trainer approach is more appropriate. *Sub finding 1.3*

2 Background

This section provides key background information to the pilot, the evaluation and this report.

2.1 Rapid antigen testing was piloted in NSW and Victorian aged care facilities to respond to community outbreaks

Rapid antigen testing (sometimes referred to as RAT or rapid lateral flow tests) is a screening tool used to identify potentially positive COVID-19 cases to help reduce the spread of the virus and prevent outbreaks.

The Department launched a pilot of rapid antigen testing in aged care facilities in states with high levels of community COVID-19 transmission. The pilot's objectives were to screen workers and visitors (rather than facility residents) in aged care environments to help prevent outbreaks, and to test rapid antigen testing's feasibility and acceptability in residential aged care facilities.

The Department conducted the pilot in two phases. Phase 1 launched rapid antigen testing in ten NSW aged care facilities on 16 August 2021, during the height of that state's community outbreak. Phase 1 continued to 22 October 2021. Phase 2 ran from 11 October to 3 December 2021 and expanded the pilot into Victoria in response to the state's growing Delta-outbreak. 62 facilities participated in Phase 2 (27 in NSW and 35 in Victoria), including six facilities which were continuing from Phase 1.

It was voluntary for staff and visitors to take part in the daily testing. Each facility encouraged participation to a different extent, at their discretion. The tests used were self-administered by the person taking the test. Three different rapid antigen test types were used: one nasopharyngeal (deep nasal) swabs (Roche) and twoshallow nasal swabs (CareStart and Abbott). The swabs were tested on-site, with results provided within 15 minutes.

A supervisor oversaw the self-administering of testing. In Phase 1, the TGA required that the supervisor was an Ahpra-registered health practitioner. In Phase 2, the TGA changed this requirement: the supervisor could be any person who had been trained with an Ahpra-registered clinician providing oversight and taking ultimate responsibility. .

The Department's intention was for rapid antigen testing to complement (but not replace) polymerase chain reaction (PCR) testing. Rapid antigen tests are a screening test that is used to potentially identify positive cases earlier to help reduce the spread of the virus and prevent outbreak. They detect most cases of COVID-19 but are less accurate than PCR tests. PCR is a diagnostic test and can confirm whether someone has COVID-19; but the results take longer than rapid antigen tests.

The Department provided training and support to facilities to adopt rapid antigen testing. The Department purchased and distributed testing kits to aged care facilities, paid a subsidy to facilities per test completed to cover administration costs, and engaged a third-party provider, Respond Global, to induct, train and support facilities. Respond Global aligned its training to state and territory health protocols and guidelines.

Aged care providers were responsible for providing the infrastructure and resources needed to support testing including arranging for staff to be available for testing prior to entering the facility and entering an arrangement with staff regarding payment for additional time. This included supervision for the tests and providing personal protective equipment (PPE) to support testing. The facilities were responsible for providing daily testing data to Respond Global, who collated it for the Department and the evaluator, and ensuring any staff members who tested positive to a rapid antigen test complied with state health guidelines. Facilities were encouraged to conduct testing outside their premises to prevent cross-contamination.

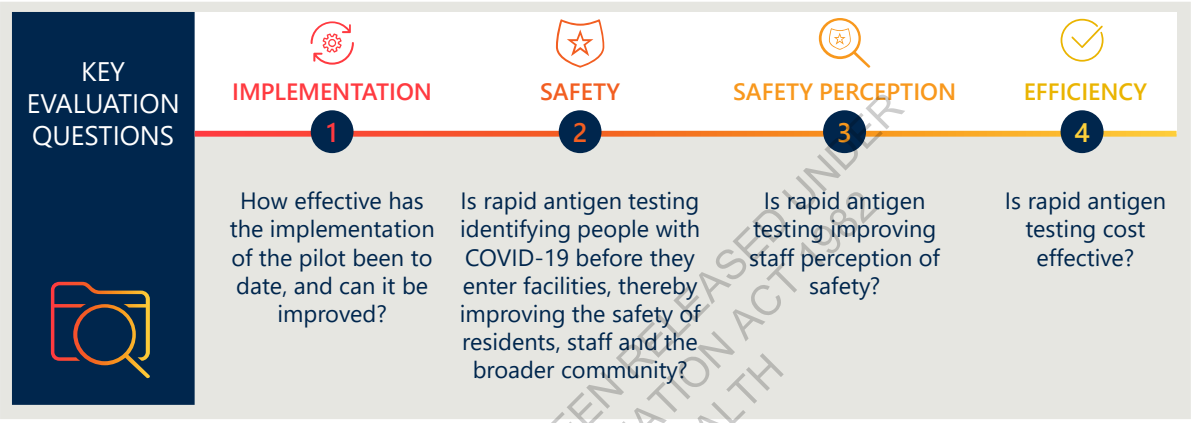
NSW Health concurrently conducted a similar pilot to understand the implications of rapid antigen testing in sectors including construction, food manufacturing and health and human services. The Australian Government Department of Health and NSW Health shared evaluation materials and insights.

2.2 The evaluation was designed to inform decisions about potential broader rollout of rapid antigen testing

The Department engaged Nous Group (Nous) to conduct a rapid, agile, independent evaluation to identify the learnings about the implementation and effectiveness of the pilot and to make recommendations to inform the broad rollout of rapid antigen testing in aged care and other settings. The evaluation's scope was facilities' experience with the pilot, rather than the Department's or Respond Global's experience.

Nous' evaluation was focused on the key evaluation questions illustrated in Figure 2.[1] This report is structured around these four key evaluation questions.

Figure 2 | The four key evaluation questions



These key evaluation questions were informed by a set of questions that were developed by the Department. Nous included the third key evaluation question to understand how the introduction and use of rapid antigen testing affected staff feelings of safety and anxiety in attending work. This was important to understand, as some staff had chosen to come to work less often during previous outbreaks in aged care facilities, affecting the continuity and quality of care for residents and the operating viability of facilities.

The evaluation's design was informed by a program logic of the pilot that was developed by the Department, which is provided in Appendix E. The program logic functions as a guide, outlining a set of informed assumptions to be tested rather than as a definitive model. The evaluation design was confirmed in an Evaluation Framework at the pilot's commencement.

The evaluation was rapidly established for the start of testing on 16 August and continued until the pilot's conclusion in December 2021.

The independent evaluation was designed to focus on both the implementation and effectiveness of the pilot, and to build evidence to inform decision-making on a broader rollout of rapid antigen testing and outcomes of the pilot; that is, it had both formative and summative elements. A formative evaluation is designed to improve program performance as it continues to operate, whereas a summative evaluation aims to identify conclusions about a program's effectiveness.

To share formative insights with the Department, Respond Global and aged care facilities, Nous:

[1] The third key evaluation question was initially "Is rapid antigen testing improving staff, residents and families' perception of safety?". Residents and families were removed from the evaluation's scope following advice from sector community representatives and peak bodies that contact with these groups should be avoided where possible during periods of high COVID-19 transmission.

- met the Department and Respond Global separately each week to share information about the pilot's rollout and insights about what was working and what was not
- participated in weekly communities of practice to provide insight to aged care facilities in the pilot and share information about the approaches of facilities to successfully implement testing
- shared survey results with Phase 1 facilities to provide them with information to learn from.

2.3 The evaluation used a mixed-method methodology

The methodology aimed to gather experience and perceptions from as many individuals and stakeholder groups as possible. The evaluation's focus has been on identifying the strategies that have facilitated a rapid and efficient rollout, the barriers encountered and how have they have been overcome, and perceptions of impact from stakeholder groups.

Nous used a range of analytic approaches to inform the evaluation findings and recommendations. Survey responses were analysed using qualitative techniques and thematic analysis of qualitative responses. Focus groups and interviews were themed from the notes taken by Nous facilitators.[2] Direct quotes from these sessions are used throughout this report. A correlational analysis was also conducted to identify whether there was a statistically significant difference in survey results based on facility size, location and type of test. Upon analysis of the pre and interim-pilot survey results, **the data showed no difference of significance to the responses across these four variables.**

The evaluation approach was designed to balance the desire for high participation rates and honest feedback with the consideration of potential distress or disruption that the data collection might cause. It was vital that the evaluation did not jeopardise anyone's employment or any resident's access to care.

To minimise these risks, **Nous used three strategies to ensure an ethical process**:

1. Data was collected anonymously. No personal information was collected through the online surveys and responses could not be linked to respondents. In interviews, where this was not possible, interviewers maintained strict confidentiality of what was said.
2. Survey questions and interview guides were screened by an ethics expert to check that they avoided any potential distress to participants, in line with section 5.1.20 of the Human Research Ethics Committee (HREC) guidelines for research that is considered "low risk".[3]
3. An informed consent process was adopted: before participating each person was given information on the conduct and intention of the evaluation and how the information they gave would be treated. Nous told participants that their input was confidential, and in the case of the surveys, anonymous.

[2] The thematic analysis of interviews and focus groups was based on notes (rather than full transcription) due to the semi-structured nature of the conversations.

[3] National Health and Medical Research Council, National Statement on Ethical Conduct in Human Research (2007) - Updated 2018. Available at: https://www.nhmrc.gov.au/about-us/publications/national-statement-ethical-conduct-human-research-2007-updated-2018#toc_1539

2.4 The evaluation collected data from a range of sources

The evaluation's methodology drew on quantitative and qualitative data from a range of sources. Nous interviewed and collected information from a range of stakeholder groups involved in the pilot, including the Department, Respond Global, testing supervisors, RACF executives and managers and RACF staff participating in testing. Table 2 outlines the data that was collected and analysed. RACFs provided testing data to Respond Global, who cleaned and consolidated this and sent it to Nous. Data was collected and sourced from August to December 2021.

Table 2 | The evaluation's data collection techniques

Data input	Data collected	Data collection process
Pre-pilot survey (first week of testing)	1526 responses	Respondents were invited to complete a pre-pilot survey, and interim-pilot survey and an end-pilot survey. The surveys were voluntary and all staff and visitors that took rapid antigen tests were eligible to complete it. Because facilities did not collect information on the numbers of staff and visitors entering the facility each day, no information can be provided on the rate on non-response. The survey was promoted by facilities through marketing materials and during the facility induction sessions. The survey was accessible through a QR code poster positioned at testing station and completed on the respondent's personal devices.
Interim-pilot survey (third week of testing)	553 responses	
End-pilot survey (last week of pilot)	103 responses (Phase 1 only)	
Focus groups of RACFs	46 total conducted (30 in Phase 1, 16 in Phase 2). No. of attendees: • Staff: 55 • Testing supervisors: 37 • Executives and managers: 41	A semi-structured interview led by Nous and attended by one to five RACF participants, with the participants selected by the facility. Each session was 30 minutes. Separate focus groups were conducted for staff, testing supervisors and executives and managers, with different questions for each. • All ten Phase 1 sites were invited to participate, and all did. A selection of eight Phase 2 sites across varying geographies (NSW and Victoria), regionality (regional and metro), types of test used (Roche, Abbott, Carestart) and facility group types (private and not-for-profit) were invited to participate.
Individual interviews	7 interviews	Nous interviewed representatives of the following organisations: • NSW Agency for Clinical Innovation: to align evaluation approaches and instruments with the NSW Government pilot and share insights • Leading Age Services Australia: to understand RACF implementation issues and explore the sector's views on the future of rapid antigen testing in RACFs • Aged & Community Services Australia: to understand RACF implementation issues and explore the sector's views on the future of rapid antigen testing in RACFs • Council on the Ageing: to capture resident and family perspectives

Data input	Data collected	Data collection process
		• Older Persons Advocacy Network: to capture resident and family perspectives • Respond Global: to reflect on the pilot's successes, failures and opportunities for improvement • Australian Government Department of Health: to reflect on the pilot's successes, failures and opportunities for improvement.
Data request	11 documents reviewed, and 40 facilities responded to a survey on the costs they incurred during the pilot	Nous requested data and documents across the evaluation's conduct. This included: • facility cost, staffing and procedure data • Respond Global's training and testing protocols • information from the Department about the costs of the pilot and the benefits and costs of managing previous RACF outbreaks.
Administrative data	All 72 sites provided testing data	RACFs provided daily testing data to Respond Global, who cleaned and collated it for the Department and the evaluation.

The summary testing data is in Appendix A. Results of the pre- and interim-pilot survey questions are in Appendix B. The survey questions are in Appendix C and the interview guide questions in Appendix D.

2.5 Reflecting the pilot's nature and the Department's need for rapid findings, the evaluation has some limitations

The pilot was rapidly established as part of the Department's and the aged care sector's fast-moving and evolving response to the Delta-variant outbreak in NSW in winter 2021. Aged care facilities signed up to the pilot, trained and communicated with staff, established testing sites and began testing within days, during a period when they were navigating rapidly increasing community transmission and changing public health orders.

Concurrently, the evaluation was also rapidly established just before Phase 1 testing began to ensure that the data collection would start with the first morning of testing. As the pilot evolved, the evaluation evolved with it. The evaluation tracked changes in implementation strategy over time, always with the focus on what has worked and how can it be further improved.

Reflecting this context and the Department's intent for the evaluation, the evaluation was designed as a practice-focused review to improve pilot practice and to inform the Department's decision-making on a broader rollout. The Department did not seek an evaluation of the extent to which RAT did in fact reduce the spread COVID-19. The evaluation was not designed to demonstrate a cause-and-effect relationship between individual initiatives and the outcomes of the pilot.

To provide context for the findings and recommendations, it is important to note some of the evaluation's methodological limitations:

- There were multiple variables between the pilot facilities (see breakout box below).
- The pilot sites were not a random sample of RACFs: the participating facilities were identified by the Department and NSW and Victorian health departments and were invited into the pilot.

- There were no controls (that is, facilities similar to the pilot sites except that they were not participating in the pilot).
- The people that participated in the surveys and focus groups were more likely to be people who participated in rapid antigen testing, rather than those that declined testing. 4.65 per cent of offered tests were declined. This presents sampling bias.
- Individual respondents were not tracked across the three different surveys. That means that individual change in perceptions were not possible to measure due to the need to maintain anonymity and complex logistical challenges. As such, these surveys should be interpreted as independent data collection points.
- On average, participating facilities report **low** representation of Aboriginal Torres Strait Islander staff and residents, **moderate** representation of culturally and linguistically diverse residents and **high** representation of culturally and linguistically diverse staff when comparing to the representation of their local community. The Department did not specifically include under-represented groups in the pilot.

Since the pilot's commencement, several variables emerged that might differ between sites, which made for a complex evaluation. The significant variables included:

- facility type, including aged care homes and retirement homes
- size of facility – that is the number of places
- location of facility: there were facilities in NSW and Victoria, and metropolitan, regional and rural sites
- resident demographics, including numbers of Aboriginal and Torres Strait Islander residents and people from cultural and linguistically diverse backgrounds
- type of rapid antigen test used: three different types were used
- whether testing supervision was remote or in-person
- whether the facility mandated staff and visitors to take rapid antigen testing or not
- changing State public health order requirements for aged care staff to complete 72-hourly PCR test
- changing family and visitor entry and access requirements
- some facilities mandating single-site work arrangements.

Nous' approach was to track the variables and, where relevant, factor them into the methodology and analysis.

In addition, the effectiveness of testing is influenced by matters that go beyond the presence of testing itself. Multiple factors impact the likelihood of outbreaks, including resident, staff and community vaccination rates, the motivation and willingness of people to test, community transmission rates, public health restrictions, facility mandates on single-site employment, and the effective application and uptake of PPE. These factors changed over the duration of the pilot, including community prevalence rates of COVID-19 and vaccination rates.

These confounding variables have been considered in shaping the evaluation's findings recommendations. Nous has employed a rigorous approach to account for these limitations in a way that still meets the Department's needs to understand, in a rapid manner, the implications of rapid antigen testing under the pilot conditions.

3 The evaluation's findings

Eleven key findings have been identified across the four key evaluation questions. Where appropriate, sub-findings have been detailed for each key finding.

3.1 The pilot supported facilities to quickly and successfully implement rapid antigen testing, with some opportunities identified for improvement

This section reports on Nous' findings on the first key evaluation question: *How effective has the implementation of the pilot been to date, and can it be improved?*

Finding 1: Respond Global's training, protocols and implementation advice supported RACF management, testing supervisors and staff effectively to conduct rapid antigen testing. Some opportunities were identified for improvement.

1.1. Respond Global's training and protocols appropriately onboarded facility management and supervisors to launch rapid antigen testing.

1.2. RACF staff felt that they were onboarded effectively to self-administer rapid antigen testing through a variety of different approaches taken by facilities.

1.3. Some facililties choose to veer from the training method provided by Respond Global and adopt a "train-the-trainer" model, requesting that Respond Global train their internal education teams to deliver a competency in supervising and self-administering rapid antigen testing to their staff.

1.4. Staff were more willing to test in facilities where they received dedicated training time and access to education resources including the self-administration video.

1.5. The process for responding to positive results was not well understood by testing supervisors and facility management throughout the pilot.

1.6. Several facilities noted that a key area for improvement would be to have access to resources that would help them more effectively communicate the "what" "why" and "how" of rapid antigen testing to staff and visitors. This is expected to improve willingness to test.

1.7. Respond Global protocols are currently only available to RACFs in English. This may be a barrier for those with non-English speaking backgrounds.

Each participating staff group (RACF management, supervisors or staff) received a different onboarding and training experience:

- **RACF executives and managers** engaged in a group session by invitation with Respond Global (and the Department of Health as needed) to decide when and how to implement testing in their facility.
- Respond Global then invited prospective **testing supervisors** to a training session. This was initially held one-on-one with each facility, but as more sites were onboarded, it was completed in group sessions at set times with multiple facilities participating. These training sessions included an onboarding both to the testing process and to their role as testing supervisors. Training sessions were initially recorded for those who were unable to attend. A few sites opted to adopt a train-the-trainer approach, where the supervisors trained by Respond Global would then train other supervisors within the facility – this was unplanned and happened ad hoc.

- **RACF staff** were onboarded by their trained supervisors and management teams in a manner chosen by the facility.

For the most part, all staff groups felt well onboarded to the testing process. **94 per cent** of RACF staff respondents to the pre-pilot survey said that they understood the reason for rapid antigen testing, how they would be tested, and what happens with the results. In the same survey, **100 per cent** of facility executives and managers and testing supervisors understood their role in implementing rapid antigen testing, **95 per cent** felt prepared for their role in testing and **89 per cent** felt that they knew who to talk to should any issues arise (findings 1.1, 1.2 and 1.3).

Facilities adopted varying approaches to onboarding staff to rapid antigen testing. In most cases, staff were invited on their first test to read through a one-page explanatory document and watch a short instructional video at the testing station. Testing supervisors spent more time with staff if they were new to testing to support them in the self-administration process. One facility established rapid antigen testing self-administration as a "competency" and staff were required to pass this competency through watching the training video before being permitted to self-administer; until this time their testing was administered by a supervisor. This approach was well received by the staff in question (findings 1.5 and 1.6). Other facilities struggled to know how to best train their staff. One facility mentioned that they wished they had access to a "short how-to video" that they could share with staff – despite such a video being part of the protocols shared by Respond Global.

In the event of a positive rapid antigen test result, staff were able to rely on the protocols provided by Respond Global. Some facilities were not fully aware of the appropriate PPE requirements, for example, it wasn't until experiencing a positive test result that one facility was told, by NSW Health, that their personal protective equipment used at the testing station was not adequate to mitigate the risk of spread. In that case, the testing supervisor also needed to PCR test and isolate. Respond Global now reinforce the need for testing supervisors to be wearing appropriate face covering (eye protection and face mask) in the training provided to future testing supervisors (finding 1.5).

Facilities reported that the most reported feature of a successful rollout and high testing uptake from staff and visitors was proactive and informative communications to staff and visitors about the "what", "how" and "why" of rapid antigen testing. In sites with poor uptake of rapid antigen testing, staff reported that the testing process and purpose in their facility was unclear, and they wanted more support from management (finding 1.6). An executive from one facility with a high percentage of migrant-background staff stated that culturally appropriate and linguistically inclusive training resources would have made their rollout more successful (finding 1.7).

> *"Staff should be trained in doing the test and knowing why it is important and not to pretend to do the test and have the attitude of I'm not sick therefore it doesn't apply to me."*
>
> - RACF staff member

Key finding 2: For RACFs there were change management, cultural and logistical challenges. The RACFs that most effectively mitigated these challenges used a mix of careful planning, a dedicated internal project implementation team and proactive staff communications throughout the testing process.

2.1. Substantial time and effort was needed from RACF executives and managers to establish and communicate new routines, manage staff questions and concerns, and manage logistical challenges (for example to prepare a suitable testing site, including a wet-weather alternative).

2.2. In some cases, facilities took up to three weeks to launch testing after receiving their kits, reflecting a concern that the implementation of testing might result in considerable disruption to facility operations.

2.3. Some RACF staff questioned the purpose and accuracy of testing; the difference between PCR and rapid antigen testing; whether rapid antigen testing would replace PCR; and, when advised that this will not be the case, why they are required to do both.

2.4. The presence of rapid antigen testing has not significantly changed staff culture or morale.

2.5. The stock of testing kits provided to RACFs was not initially calculated to account for visitors and visiting staff, and this resulted in RACFs depleting stock more quickly than expected – particularly when public health orders eased and visiting rates increased.

2.6. Effective management and communication of testing procedures from facility executives and managers was a critical factor in the success of testing.

2.7. Many facilities noted that establishing an internal facility project team early to manage the introduction of rapid antigen testing made for a smooth implementation.

2.8. The absence of careful planning and preparation from facility management and testing supervisors in some facilities led to a challenging implementation of testing for these facilities.

2.9. An increase in visitors and families following the easing of public health orders increased testing uptake and placed stress on existing testing processes and test kit availability.

Implementing a rapid antigen testing process requires substantial initial up-front logistical support and decision-making, which executives and managers usually led. These decisions included selecting a testing venue; making wet weather plans if the testing location was outside; changing car parking and access routes if testing was being conducted in the car park; how to best communicate to staff and residents on rostering changes (typically for RNs); and merging the state-led COVID check-in process with testing station administration (finding 2.1).

"The first few days were hard. I would advise other facilities to prepare early and expect long days."

- RACF executive

The quantum of anticipated process changes to facilities, in some cases, meant that facilities delayed implementation by up to three weeks from receiving test kits to beginning testing (finding 2.2). Over the first few weeks of testing, the logistical burden on facility management plateaued. Many facility executives and managers stated that a key to their success was investing time in early communication and establishing the testing process. **96 per cent** of facility executives and managers and testing supervisors found that it was easy to access assistance from the Department and Respond Global.

Within NSW, a point of common confusion was the public health order requiring RACF staff travelling from local government areas of concern to undertake a PCR test every 72 hours. Beyond the public health order, most pilot facilities also encouraged and supported their staff to undertake PCR on-site every 72 hours. In focus groups the combination of the two testing procedures was identified as a point of confusion for RACF staff: **one in five** testing supervisors believed that staff didn't completely understand the difference between rapid antigen testing and PCR testing and why both were required (finding 2.3).

Facility executives and managers needed more support initially in communicating to their teams the "what", "why" and "how" of rapid antigen testing (finding 2.3). In many cases, RACF staff had questions about the validity of rapid antigen testing, whether this would replace their existing PCR testing requirements and what this would mean for their daily routine and workload. Each facility took their own approach to reassuring their staff. They would have appreciated supporting collateral, whether in the form of fact sheets or posters, to assist with this. Facilities who took it on themselves to provide extra supports to their staff and to communicate proactively had the most success with implementation (finding 2.7 and 2.8).

All focus groups noted that there had been no significant culture or morale change within their facilities because of the presence of testing (finding 2.4). When asked to elaborate further, staff mentioned that the working environment continued to be one that was challenging and continuously changing in the face of COVID-19 community outbreaks. In saying this, via the interim-pilot surveys, **80 per cent** of RACF staff, **54 per cent** of facility executives and managers and **60 per cent** of testing supervisors believed that rapid antigen testing is contributing to a greater sense of team togetherness.

Initial rapid antigen test stocks were calculated to account for four weeks of testing for the staff at the facility plus an extra 10% contingency (finding 2.5). After the easing of public health restrictions across both NSW and Victoria, visitor numbers increased. Most facilities introduced mandates that all visitors undertake rapid antigen testing. In some instances, a negative rapid antigen test meant that they were not expected to wear full PPE when entering the facilities. The increased testing placed an additional burden on the testing supervisors and proved to be challenging for RACF management, who had to deal with concerns from visitors about the purpose of testing (finding 2.9).

Key finding 3: RACFs were uncertain about the future intent for rapid antigen testing within facilities and under what conditions the use of rapid antigen testing would be appropriate. They felt this uncertainty made it difficult to plan future internal processes and operations within their facilities and to provide reassurance to their staff and visitors.

Throughout the pilot, facility executives and managers found it challenging to navigate the continually changing policy landscape and public health advice regarding the use of rapid antigen testing. Significant variability was seen across sites for a number of aspects of testing implementation. Such variabilities include:

- whether testing was mandated for staff and visitors
- what PPE visitors were required to wear if they received a negative test result
- whether visiting clinicians could access the facility if they declined to undertake the test
- the frequency of testing
- the processes by which supervision was provided to staff and visitors
- the requirements for testing staff or visitors from local government areas or areas of concern amidst the NSW and Victorian outbreaks
- The PCR testing requirements of staff and visitors parallel to their rapid antigen tests.

This confusion speaks to a broader challenge within the sector in the absence of a unified, national consensus on how to appropriately respond to the continued COVID-19 pandemic within an aged care setting. An example of a potential solution to this is a national industry code that has been developed independently to the pilot in consultation with several industry bodies, aged care facilities and government departments. As of 9 November 2021, the code was out for public consultation and, in this version, includes specific reference to how rapid antigen testing might be used universally across the aged care sector.

Key finding 4: The supervision requirements for testing were burdensome to RACFs. This was especially the case when clinicians registered by the Australian Health Practitioner Regulation Agency (Ahpra) were required to take on the testing supervision responsibilities, on top of their existing responsibilities, as per the now-outdated Therapeutic Goods Administration (TGA) guidelines.

4.1. Testing supervisors spent between thirty minutes to four hours per shift supervising testing. When a clinical supervisor from the facility was used to supervise testing, this reduced the clinical hours available to residents of the facility.

4.2. In several cases, staff and visitors were delayed from entering the facility due to the unavailability of testing supervisors outside of regular shift start times.

4.3. Testing supervisors experienced administrative burden in manually tracking testing numbers and results.

4.4. Where clinical supervisors were externally contracted in by facilities, they needed extra support in being onboarded to facility processes and practices. They would have benefitted from on-the-ground facility management support in the first few days of testing.

4.5. The requirement for supervisors to have received training before supervising meant that short-term agency staff were unable to supervise testing, and this placed greater stress, as a single point of failure, on those who had received Respond Global training.

4.6. The TGA requirements for supervision of testing were unclear and could have been more effectively communicated to the facilities by Respond Global and the Department.

At many pilot sites, supervisors were expected to add testing supervision responsibilities to their existing responsibilities. All staff believed this model was not sustainable and, if continued, would compromise the quality of care residents receive. Supervisors spent between thirty minutes to four hours per shift supervising testing, which is time that detracted from their routine duties. In particular, some RACFs reported that shift handovers were being disrupted and not completed to usual standards, potentially compromising patient safety. Facility executives and managers believed this supervision model is not sustainable from a workload perspective and is not professionally rewarding, presenting risks to workforce retention and recruitment (finding 4.1).

"Testing has been impacting our daily work in the ward heavily as we have to attend and spend our time waiting for results instead of providing care to our residents."

"As an RN it's hard for us to work on floor and to go and do testing so pls do something before we break down already RNs has started dropping down shift."

"The need for an RN to supervise the test resulted in a more work for them and a large cost for us. It would be ideal if we could train other staff to supervise to take the unnecessary load off the RN."

- Testing supervisors

The experience of participants with testing depended on whether the testing station was being actively supervised at that time (that is, at common shift handover times). When a supervisor was not present at the station, testing participants reported waits of up to 45 minutes to begin testing (finding 4.2). This was particularly the case when facilities were using a clinician to supervise testing in addition to their other responsibilities (finding 3.2).

"[We] should have a designated person in charge supervising the RAT because it disrupts the work of the staff who are also performing a different role at the same time" RACF staff member"

"As a visitor, often there is no clinical staff member available & the wait is long."

- RACF staff members

Beyond the 'supervision-of-testing' responsibilities of supervisors, there were administrative tasks that could be streamlined through a digital solution. Pilot facilities were required to report testing data, including the test result and vaccination status of participants, in a process chosen by the facility (finding 4.3). The opportunity for the Department to consider a digital solution alternative is discussed further in finding 7.

Several pilot facilities chose to contract supervisors into their facility to take on the supervisor role. Facility executives and managers and testing supervisors expressed that this presented several challenges. For the management teams, this was a costly exercise, and the supervisors were not familiar with facility processes and culture, leading to confusion at the testing station and participants choosing not to test. For contracted supervisors it was challenging as they didn't know where to direct questions and they were at times unsure where or how to set up the testing station because this hadn't been effectively communicated (finding 4.4).

Facilities with few testing supervisors found it difficult to staff the testing station on days when testing supervisors were away, either on sick leave, to isolate or on days off. Agency registered nurses were unable to supervise testing if they had not undertaken Respond Global training (finding 4.5).

A common question received from pilot sites was clarification of the Therapeutic Goods Association (TGA) supervision requirements for testing. It was unclear whether an Ahpra-registered clinician was required to always be at the testing station or only if a trained supervisor needed to ask questions or confirm a positive test result. This was a point of stress for facilities given the already limited availability of clinical staff within RACFs and broader workforce shortages across the sector. One pilot site that did not have regular registered nurses (RNs) on shift sought support from a third-party service that provided them with a telehealth clinician trained to supervise testing if they required assistance or had a test return positive. This site had trained their non-clinical staff to supervise the testing process in person. This option was not known to many other pilot facilities (finding 4.6).

Key finding 5: Many RACF staff have not been adequately remunerated for the time it took to undertake testing outside of their existing shift times despite, in many cases, being required to attend their shifts earlier.

5.1. Over time, as public knowledge of rapid antigen testing has increased and success stories of testing have been communicated across facilities, staff and visitors have become more willing to undertake testing and have developed greater understanding of the value of testing in keeping staff, residents and broader community safe.

5.2. Most participating staff undertook testing outside regular work hours and were not remunerated for this time. Staff, facility executives and managers, and industry and consumer representatives expressed concern at this.

Facility management chose their own rapid antigen testing requirements for those entering their facilities. These requirements spanned from requiring anyone who enters the building to receive a negative test result, to encouraging anyone who enters the facility to take a test, inviting anyone who enters the facility to take a test or simply having testing only available at times when a supervisor is rostered on. **80 per cent** of RACF staff declare that they do not feel pressured to undertake testing and **70 per cent** of testing supervisors believe that staff are willing to participate in testing.

"Not many staff want to come half hour early without pay."

- RACF staff member

"We should be paid extra to do the extra 15 minutes. Within catering it is difficult to finish 15 minutes early, as management suggested. Also, if care staff are finishing early does that compromise the care of our residents?"

- RACF staff member

To complete their test, staff are encouraged (either explicitly or implicitly) to attend their shift up to thirty minutes earlier without remuneration for this time. One facility chose to reimburse staff $3 each time they undertake a test; a calculation based on the financial compensation provided to the facility from the Department as a pilot facility (finding 5.2 and 5.3).

RACF staff and testing supervisors have reported that there are often cultural consequences and divides between staff choosing to come in early for their shift to be tested and those arriving right on their expected shift start time and, as a result, are delayed in starting their shift. Anecdotally, several staff members do not feel safe to decline the test and are concerned for the security of their job if they were to voice this. Representatives from sector peak bodies Leading Age Services Australia (LASA) and Aged & Community Services Australia (ACSA) expressed particular concern at the notion that some facilities may not be reimbursing staff for the time it takes them to test.

"Management are mandating that staff arrive for work 15 minutes early which is essentially 1- and 1/4-hours unpaid overtime every week."

- RACF staff member

3.2 Rapid antigen testing successfully identified 17 people with COVID-19 before entering participating pilot facilities, potentially preventing 17 outbreaks

This section addresses the evaluation's findings on the second key evaluation question: *Is rapid antigen testing identifying people with COVID-19 before they enter facilities, thereby improving the safety of residents, staff and the broader community?*

Key finding 6: Rapid antigen testing in pilot facilities identified 17 true positive cases of COVID-19 and, as a result, has reduced the chance of COVID-19 spreading between staff, residents and the broader community of these facilities. However, the exact contribution of rapid antigen testing to improving the safety of residents, staff and broader community against COVID-19 is difficult to isolate given the number of external variables.

6.1. Rapid antigen testing successfully identified 17 positive cases of COVID-19, preventing potential outbreaks in RACFs.

6.2. The probability of rapid antigen testing improving the safety of residents, staff and the broader community depends on the compliance, willingness to test and uptake of testing in participating facilities.

6.3. As of 3 December 2021, of the 136,678 staff and visitors at pilot sites invited to undertake testing, 6,354 (4.65%) declined. Their reasons included discomfort, recently having undertaken PCR or no reason provided.

6.4. Visitors, as opposed to RACF staff, showed greater unwillingness to test for reasons including the unexpected time required to test, poor understanding of the efficacy of rapid antigen tests test, unwillingness to use nasopharangeal tests and to self-test and unwillingness to test again after, in most cases, having received a recent negative PCR test.

6.5. Facilities are seeking guidance on the saftey of multi-site working for staff where rapid antigen testing is used. Currently the public health advice from the Commonwealth is unclear.

6.6. Poor management of the testing process results in poor compliance and low willingness / uptake of testing. This has a direct impact on the probability that rapid antigen testing will improve the safety of residents, staff and the broader community.

6.7. Sharing of success stories across pilot sites was annecdotally seen to be a helpful tool in improving willingness to test for staff and visitors of other facilities.

6.8. Rapid antigen testing allowed RACFs to more quickly approve urgent end-of-life care visits or specialists for routine appointments.

Within the pilot, 36 positive test results were recorded. 17 of these were later confirmed through PCR as true cases of COVID-19. The remaining 19 returning a negative PCR test. In the case of the 17 true cases, potential RACF outbreaks were prevented (finding 6.1).

Fundamentally, the likelihood that rapid antigen testing will improve the safety of residents, staff and community against the spread of COVID-19 depends on the compliance and engagement in testing practices at the site. If participants are not tested or not tested correctly, the process is compromised. **90 per cent** of RACF executives and managers and **73 per cent of** testing supervisors believe it has been easy to encourage staff to participate in testing (finding 6.2).

Common responses for declining to take a test include:

- the discomfort experienced from daily use of nasopharyngeal swabs
- having received a negative PCR or rapid antigen test within the past 24 hours
- no reason provided.

Anecdotally, in a facility where testing is voluntary RACF staff noted that reasons to not complete testing were not related to the test itself, but were that staff did not want to get to work earlier or wanted to get started with their work without having to wait around (finding 6.3).

Testing supervisors and facility management teams noted that visitors were less willing to undertake testing than staff. The factors that may influence this are explained in more detail in Finding 2. Facilities lack the resources and time required to help visitors understand the value of rapid antigen testing (finding 6.4).

Facility executives and managers are generally struggling to clarify public health advice around multi-site working where rapid antigen testing is being used at the facilities. Given the variability in testing regimes across the sector, facilities are reluctant to enable staff to be working across multiple sites. This continues to be a challenge for RACF staff, particularly those who rely on the income of multi-site working and those who may not qualify for government subsidies due to their visa status where their employment has been impacted by COVID-19 (finding 6.5).

The benefits of rapid antigen testing depend on the quality of implementation in the facility. Where there has been poor management and a poorly considered approach to change management, facilities have reported less willingness to test and less uptake of testing (finding 6.6). A valuable tool to improve willingness to test has been the sharing of testing success stories. Word has spread rapidly about facilities that have identified positive cases of COVID-19, in some cases where participants were asymptomatic and vaccinated. Story telling is noted by RACF executives and managers as an effective tool to affect change and mobilise staff around a shared purpose across the sector (finding 6.7).

The value of testing extends beyond reducing the transmission risk from essential staff to also reducing the risk of transmission from visitors and, in many cases, increasing the number of visitors who can be safely permitted to enter the facility. Facility management reported feeling safer allowing visitors given the added security provided by rapid antigen testing (finding 6.8).

Key finding 7: A universal system to record and verify rapid antigen tests does not yet exist. Such a system would support facilities to improve the effectiveness of the testing process, increase the uptake of testing, spare participants from unnecessary repeat testing, and allow smoother and more reliable collection and collation of testing data.

7.1. There was no mechanism that allowed people who have taken a rapid antigen test that day or in the previous 72 hours to have a verified "proof" that they could share with other facilities. This often resulted in repeat testing and a poorer experience for participants.

7.2. There was no mechanism to digitally collect testing information from participating facilities, resulting in significant administrative burden and poor data quality.

7.3. There was no mechanism to allow the Department to understand the available levels of testing kits at participating facilities in real time.

There was no mechanism that allowed facilities to record and verify tests and for the Department to collect testing data. This resulted in four problems:

1. Staff were not able to prove that they had had a rapid antigen test with a negative result that day or within the previous 72 hours.

2. Health professionals, facility staff and tradespeople who regularly enter multiple RACFs (and other worksites) each day therefore had to repeat tests at each facility. This repeat testing led to significant time expenditure to administer the tests, the expense of repeat testing kits, and user fatigue.
3. There was an administrative burden for RACF executives and managers in tracking and recording rapid antigen tests conducted each day.
4. The Department was not able to centrally collect information on the number of tests being taken and the results of these tests.

In focus groups and surveys, RACF executives, testing supervisors and staff expressed frustration at the lack of a recording and verification mechanism, and called for such a system to be created. This may improve long-term testing uptake and adherence among staff, reducing the likelihood of future outbreaks, avoiding unnecessary repeat testing, saving staff time and testing kits, and giving RACFs and other institutions confidence in the rapid antigen testing procedures of other facilities. It could also future-proof the rapid antigen testing system for the introduction of at-home testing (finding 7.2).

A real-time digital solution would also help the Department in making procurement decisions and forecasting demand for testing kits. Currently there is no reliable way for facilities to report their stocks, and it is unclear to some facilities where to go for clarification on how to access more kits (finding 7.3).

Key finding 8: The type of test used affects the experience and willingness of participants to test. The test types vary by time taken to wait for test result, type of swab used (nasopharyngeal (deep nasal) or shallow nasal) and the clarity of instructions.

The Phase 1 pilot sites used Roche nasopharyngeal testing kits, and Phase 2 sites used either Roche, Carestart or Abbott. Both Carestart and Abbott tests are shallow nasal swabs. The allocation of test type was unplanned, according to the availability of stock in the Australian Government's National Medical Stockpile.

RACF staff found the Roche nasopharyngeal swabs were uncomfortable for daily use and impacted their experience and willingness to test. Anecdotal remarks from RACF staff suggested that repeated use of nasopharyngeal swab had led to nasal irritation and in some cases nasal bleeding. This is particularly concerning in environments where staff do not feel safe to decline undertaking the test.

The kits themselves were deemed easy to use by **95 per cent** of RACF staff several weeks into the pilot; however, testing supervisors are required to prepare the kits by grouping each of the individual elements together for the staff because the packages arrive with the kits disassembled. Facility staff were not able to adequately socially distance while doing this (noting they were living and working in areas of high community transmission) and risked cross-contaminating stock by taking individual elements from piles of stock.

RACF staff's experience of testing in the pilot was sometimes influenced by any prior exposure to rapid antigen testing. This was evident in two facilities. One facility had previously experienced a rapid antigen test that, though nasopharyngeal as well, had a more complex process that involved more steps. This facility found the pilot tests to be a relief since they were easier to use. Another facility had the opposite experience, in that they had previously used a type of test that had a shorter wait time for a result, which meant that waiting 15 minutes for the Roche tests made the transition difficult for staff. This facility noted that the wait time required for the test is the one thing they wished they could change.

3.3 The presence of rapid antigen testing increased the willingness of facility staff to attend work

This section addresses the evaluation's findings on the third key evaluation question: *Is rapid antigen testing improving staff perception of safety?*

Key finding 9: The introduction of rapid antigen testing improved the perception of safety of staff against the risks of COVID-19 within the RACF. This has had a positive impact on rostering and workforce management.

9.1. The introduction of rapid antigen testing made RACF staff and visiting clinicians feel more confident that they are less likely to transmit COVID-19 and that the facility is less likely to experience a COVID-19 outbreak.

9.2. RACF staff declare that the presence of rapid antigen testing made them feel safer at work and, as a result, more willing to attend their shifts.

9.3. The introduction of rapid antigen testing has had both negative and positive impacts on rostering in facilities: while it has increased staff's willingness to attend their shifts, in some cases it created disruptions to rostering times and staff availability.

All staff groups strongly shared the view that rapid antigen testing improves staff's perception of safety. When the pilot was launched, **91 per cent** of RACF staff believed that the introduction of testing would make them safer at work. Several weeks into the pilot, **92 per cent** of staff reported feeling safer at work, **82 per cent** of RACF staff state that residents and their families have been less concerned about COVID-19 since testing has started, and **96 per cent** of testing supervisors believe that testing is a good way to keep residents and staff safe (finding 9.1).

"I am thankful to the management for implementing RAT. It provides the staff a secure and healthy environment to work in."

"I am very grateful to be part of this pilot and feel confident to come to work daily."

"This gives us a feeling of being safe at work"

- RACF staff members

Through focus groups, RACF staff, supervisors and management reported a strong sense of relief and comfort in knowing that they are keeping their workplace and broader communities safe from COVID-19. Staff members who are required to travel long distances to work were relieved in knowing they were not transmitting the disease between suburbs and to their home environments.

One pilot facility reported that clinicians increased their number of visits to the facility because of the presence of rapid antigen testing. These clinicians felt with greater confidence that they are not transmitting COVID throughout the community and to other sites that they are visiting.

Testing has had an impact on rostering in many facilities. Some facilities changed the roster so that testing supervisor shifts began earlier and included the time required to prepare for testing. In this case, the change to rostering was welcomed by the staff affected and it helped them better undertake their testing supervision responsibilities, despite reducing the hours they had later in the day to undertake their usual responsibilities. Of the RACF managements responding to the interim-pilot survey, **47 per cent** believed that testing had impacted rostering and **21 per cent** believed that testing would increase rostering certainty because staff are more likely to attend their shifts (finding 9.2).

Beyond rostering, the willingness of staff to attend work was impacted by the availability of testing at their workplace while COVID-19 is present in the community. Prior to pilot commencement, **50 per cent** of RACF staff respondents to the pre-pilot survey said they would not attend work because of concerns of contracting or exposing others to COVID-19. Since the launch of testing, **90 per cent** of staff respondents to the interim-pilot survey are more willing to attend their shift (finding 9.3). The two surveys are based on

responses from two different respondent groups and, as a result, cannot be compared directly against each other. The interim-pilot survey received significantly fewer responses from testing participants.

3.4 Rapid antigen testing is a cost-effective screening tool for facilities with government funding, but a comprehensive analysis was not possible

This section addresses the fourth key evaluation question: *Is rapid antigen testing cost-effective?*

Key finding 10: An analysis of the financial costs and benefits of establishing and running a 12-week rapid antigen testing pilot in RACFs shows that testing is a cost-effective intervention, relative to the potential costs of managing a COVID-19 outbreak in the facility.

10.1. An analysis of the rapid antigen testing pilot, using data captured from 61 Phase 1 and Phase 2 sites, resulted in a net benefit of $77,680.79 per facility over the duration of a 12-week testing period. This is a benefit-cost ratio of 1.54:1.

Nous conducted an analysis of the financial costs and benefits of a 12-week rapid antigen testing program in the pilot RACFs to understand how cost effective the pilot. The analysis:

- captures the direct financial cost and benefits to facilities only i.e. the analysis is at the facility-level
- does not capture benefits and costs relating to residents or staff, or health, social and emotional and economic benefits and costs
- makes significant assumptions about the probability of a COVID-19 outbreak in an RACF, given the complexity of these hypothetical events and the absence of control data in the pilot
- assumes that no deaths were prevented from the pilot, due to the nature of the pilot design and the pilot context.

Further analysis would be required to provide a more complete picture of the costs and benefits incurred by rapid antigen testing outside the pilot context. The results of the present analysis should not be used outside the context of this evaluation.

The costs of the pilot are calculated as the costs of establishing the pilot (both facility and Departmental costs) added to the cost of weekly operations (including staff time to administer the tests, testing kits and PPE). The benefits are calculated as the cost of an outbreak (using figures from the Department's previous grants to RACFs for managing outbreaks), multiplied by the probability of an outbreak, multiplied by the probability of rapid antigen testing preventing an outbreak. It is important to note that included within the costs to the facility were the costs for staff to both participate in and supervise testing. Average time required and salary information for staff, supervisors and management were calculated across facilities using information from 54 pilot sites to calculate the costs.

The model has not been publicly released due to the confidential nature of the data.

Cost-benefit analysis key results	
Total cost per facility / 12-weeks	$144,194.30
Total benefit per facility / 12-weeks	$221,875.09
Total cost / test	$24.55
Benefit Cost Ratio / 12-weeks	1.54:1
NET BENEFIT PER FACILITY	$77,680.79

The analysis finds that the rapid antigen testing pilot, using data captured from 61 Phase 1 and Phase 2 sites, resulted in **a net benefit of $77,680.79 over the 12-week testing period**. This is a **benefit-cost ratio of 1.54:1**. **This finding makes rapid antigen testing a cost-effective intervention**, relative to the cost of managing a COVID-19 outbreak in a RACF under the circumstances of Phase 1 and Phase 2 of the pilot. According to the analysis, the net cost, per test conducted in the pilot, is equal to $24.55.

Key finding 11: Facility executives and managers have advised that they may not be able to afford to cover the ongoing costs of rapid antigen testing without government support.

11.1. One participating Phase 1 site withdrew from the pilot given their costs of operating rapid antigen testing.

11.2. The most common reason RACF executives and managers declared they would choose to discontinue rapid antigen testing is because of the financial costs to the facility.

11.3. There is high variability in the costs incurred by facilities to undertake rapid antigen testing depending on the chosen approach of the facility.

While pilot facilities appreciated the Australian Government's financial support to undertake rapid antigen testing, most RACF executives stated that costs of delivering testing are high and they will not be able to continue their testing programs in the long term without government funding. They listed the high cost of testing as the main reason they would not continue rapid antigen testing beyond the pilot (finding 11.1 and 11.2).

The key costs of concern were wages for extra testing supervision resourcing (as they believed the pilot's resourcing model was unsustainable), testing kits, and the additional PPE required.

A Phase 1 pilot facility that chose not continue with the pilot cited the cost of rapid antigen testing as a key driver in their choice to discontinue testing. This facility also had poor testing uptake and felt that the incurred costs on the facility of the pilot outweighed the benefits. The main cost for this particular facility was contracting clinical supervisors to monitor the testing stations as, they did not have available suitable staff to take on this role (finding 11.2).

This speaks to a broader point that costs incurred by facilities are variable among pilot sites – with estimated weekly costs of PPE ranging from $150 to $4,700. The drivers of costs for PPE include the baseline PPE recommendations of the Department of Health, additional PPE that the facility chooses to use to decrease risk of COVID-19 transmission, and the number of staff at the facility (finding 11.3).

"There has been an impact to the rostering of RN staff and our PPE costs have increased substantially."

"I don't think we can afford this going forward."

"I hope this becomes a permanent feature of entry to aged care, that is funded"

- RACF executive

4 Advice for future rapid antigen testing programs

Based on the evaluation's findings, we have identified a series of recommendations for improvement that the Department may choose to consider for future rapid antigen testing programs.

This include the broader rollout of rapid antigen test kits to aged care facilities that the Department is running in addition to the pilot. As of early December 2021, over 650 aged care facilities across Victoria, New South Wales and Australian Capital Territory have received free supplies and training. The broader rollout is currently planned to continue to 30 June 2022 and may expand to other settings. The Department and participating facilities may be able to learn from the experiences of the pilot in implementing this program.

Nous' recommendations are tagged against the sub-findings listed in other sections of this report.

Policy recommendations:

1. Continue to **provide funding and support for rapid antigen testing** in aged care facilities where testing is appropriate. Key f*inding 11*
2. Partner with the aged care sector to **set an agreed industry approach to rapid antigen testing** to reduce both confusion for facility executives and managers and potential spread of COVID-19. *Key finding 3*
3. Review the **barriers for aged care facilities to implement rapid antigen testing** when they are experiencing outbreaks, and consider creating testing 'response teams' to operationally support facilities or communities with emergency outbreaks, which is a time when testing could be of great value. *Key finding 1*
4. Provide health advice to aged care facilities **on how best to complement rapid antigen testing with polymerase chain reaction (PCR) testing** to reduce the risk of an outbreak while minimising disruption to staff and residents. *Sub finding 2.3*
5. Explore less burdensome **models for on-the-ground supervision and administration of rapid antigen testing**, including sharing additional resources between aged care facilities, either through remote supervision or on-site resources that travel between facilities. Key f*inding 4*
6. Explore opportunities to **align Department-led rapid antigen testing programs with the programs of other agencies, jurisdictions and industry**, including around the frequency of testing required. *Key finding 3*

Communications and awareness building recommendations:

7. Increase **public awareness of rapid antigen testing** to improve willingness to test amongst the general population, which will influence staff and visitors. *Sub finding 6.4*
8. Establish a **rapid antigen testing resource online hub** that includes accessible materials for people and organisations that are participating and deploying rapid antigen testing programs. This would include resources that support groups to effectively communicate the why and how of rapid antigen testing. *Key finding 1*
9. Develop and make materials available to facilities explaining the **purpose and benefits of rapid antigen testing**. *Sub finding 2.3*
10. Provide clarity to aged care facilities on the **evolving nature of Therapeutic Goods Administration (TGA) guidelines** on the use of rapid antigen testing and where to find the most up to date information. Ensure facilities know how this might impact their implementation and how they can best execute relevant changes. *Sub finding 4.6*

Operational recommendations:

11. Develop a **rapid antigen testing implementation playbook** that aged care facilities can use to support their implementation. This should include clear roles and responsibilities of key stakeholders, including facility management and supervisors, in the deployment of testing. *Key finding 1*
12. Ensure training, protocols and testing instructions are **accessible for all people**, including those with lower levels of English proficiency. *Sub finding 1.7*
13. Ensure the **number of testing kits provided to aged care facilities** accounts for testing of visitors and visiting staff as well as regular staff. *Sub finding 2.5*
14. Give aged care facilities appropriate instructions on how to **dispose of waste appropriately** – particularly within a clinical setting. *Key finding 1*
15. Identify and provide supports to aged care facilities who are **engaging external testing supervisors** on a contract basis (clinicians or otherwise). These supports could include extra guidance on how to best onboard supervisors who may not be familiar with the physical and or cultural environment at the facility. *Sub finding 4.4*
16. Work with aged care facilities to ensure that the **staff time required by the testing process is adequately remunerated and recognised**. *Key finding 5*
17. Establish a **digital system to record and verify rapid antigen tests** to support aged care facilities to improve the effectiveness of the testing process, increase the uptake of testing, spare participants from unnecessary repeat testing, and allow the collection of test data. *Key finding 7*
18. As identified and implemented during the pilot, ensure sufficient **availability of appropriate testing kits** to facilities that are implementing rapid antigen testing. Such testing kits should provide fast results, be easy and comfortable to use (saliva or shallow nasal), be appropriately packaged and include adequate instructions for diverse users. *Key finding 8*

Implementation recommendations:

19. **Monitor rapid antigen test results and testing rates** in aged care facilities to understand the success of testing and to identify and provide extra targeted support to facilities that have a low testing uptake. *Key finding 1 and 7*
20. Design the implementation of rapid antigen testing to **be easily embedded with existing COVID-19** protocols, rather than be seen as separate to internal processes. *Sub finding 6.2*
21. Work with aged care facilities to **explore barriers to implementing rapid antigen testing,** and identify ways to make implementation easier. *Sub finding 2.2*
22. Encourage aged care facilities to instruct and **allocate time for staff to watch the short instructional video** on how to self-administer the test. *Sub finding 1.4*
23. Work with aged care facilities to understand what **training approach is best for their circumstance**, whether training their staff directly or a train-the-trainer approach is more appropriate. *Sub finding 1.3*

Appendix A Response rates for evaluation data

This appendix provides that summary testing data. This data was collected by facilities, who provided this each day to Respond Global, who then cleaned and consolidated this and sent this to the Department and Nous. Data were collected and sourced from August to December 2021.Table 3 | Total response/participant numbers across Phase 1 and Phase 2 RACFs

	RACF staff	RACF executives and managers	Testing supervisors
Focus group participants	55	37	41
Pre-pilot survey (n = 1526)	1420	69	37
Phase 1	341	27	14
Phase 2	1079	42	23
Interim-pilot survey (n = 553)	501	31	21
Phase 1	150	16	11
Phase 2	351	15	10

Table 4 | Survey response rates per Phase 2 cohort

Phase 2 cohort	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Pre-pilot survey																		
RACF staff	23	0	34	18	24	125	35	52	413	169	118	1	6	61	0	0	0	
RACF executives and managers	1	0	2	0	4	3	1	1	5	13	7	0	1	4	0	0	0	
Testing supervisors	3	0	0	2	1	0	3	0	2	10	1	0	0	1	0	0	0	
Interim-pilot survey																		
RACF staff	14	55	17	0	17	39	49	0	87	10	0	0	0	30	33	0	0	

RACF executives and managers	1	2	0	0	4	2	2	0	2	0	0	0	0	1	1	0	0
Testing supervisors	0	0	0	0	1	1	1	0	1	3	0	0	0	3	0	0	0

Table 5 | Phase 2 cohort grouping rationale

Cohort	Test type used	Location	Facility size	# of facilities
1	Roche	Greater Melbourne	< 80 beds	3
2	Roche	Greater Melbourne	>= 80 beds	2
3	Carestart	Greater Sydney	< 80 beds	1
4	Carestart	Victoria regional	>= 80 beds	1
5	Roche	Greater Sydney	< 80 beds	5
6	Roche	Greater Sydney	>= 80 beds	6
7	Roche	NSW regional	< 80 beds	3
8	Roche	NSW regional	>= 80 beds	4
9	Abbott	Greater Melbourne	< 80 beds	2
10	Abbott	Greater Melbourne	>= 80 beds	8
11	Carestart	Greater Melbourne	< 80 beds	4
12	Abbott	Victoria regional	>= 80 beds	4
13	Abbott	Greater Sydney	< 80 beds	2
14	Abbott	Greater Sydney	>= 80 beds	3
15	Carestart	Greater Melbourne	>=80 beds	11
16	Carestart	Greater Sydney	>=80 beds	1
17	Carestart	NSW regional	<80 beds	1
18	Carestart	NSW regional	>=80 beds	1

Appendix B Summary of results from pre- and interim-pilot surveys

This appendix summarises the results from the pre-pilot and interim-pilot surveys that Nous conducted. Information about the surveys can be found in Section 2.

Summary of pre-pilot data as at 2nd December, 2021

All questions are asked on a scale of strongly agree (5) to strongly disagree (1) and the number provided in the right-most column is the average of all respondents. The sample size (n) is included in the header for each stakeholder group.

RACF staff (n = 1079)		Average	Min	Max	Median	% SA	%A	
Pr.RS1	I understand the reason for Rapid Antigen Testing, how I will be tested and what happens with the test results	4.61	1.00	5.00	5.00	67%	29%	
Pr.RS2	I understand how Rapid Antigen Testing is different from PCR testing and why both are important at different times in keeping safe against COVID-19	4.55	1.00	5.00	5.00	63%	31%	
Pr.RS3	I am grateful that my workplace is providing Rapid Antigen Testing services	4.52	1.00	5.00	5.00	64%	27%	
Pr.RS4	I believe that anyone who enters the facility should take a Rapid Antigen Test	4.52	1.00	5.00	5.00	64%	27%	
Pr.RS5	I believe the introduction of Rapid Antigen Testing will make me feel safer at work	4.51	1.00	5.00	5.00	63%	28%	
Pr.RS6	I sometimes do not attend work because of concerns of contracting or exposing others to COVID-19	3.36	1.00	5.00	4.00	27%	23%	
Pr.RS7	I believe that I will be more willing to attend my shift once we start the Rapid Antigen Testing	4.04	1.00	5.00	4.00	43%	29%	
Pr.RS8	I am worried that the Rapid Antigen Testing process will mean I have to spend more time at work	3.21	1.00	5.00	3.00	21%	22%	
Pr.RS9	I believe Rapid Antigen Testing in our workplace is contributing to a greater sense of team togetherness	4.05	1.00	5.00	4.00	40%	33%	
Pr.RS10	The management here are good at looking after staff in dealing with their worries about COVID-19	4.28	1.00	5.00	4.00	47%	38%	
RACF Managers (n = 42)		Average	Min	Max	Median	% SA	%A	
Pr.RM1	I understand my role in implementing the Rapid Antigen Testing	4.74	4.00	5.00	5.00	74%	26%	
Pr.RM2	I feel prepared for my role in implementing the Rapid Antigen Testing	4.52	3.00	5.00	5.00	57%	38%	
Pr.RM3	I feel confident that I can encourage our staff to undertake Rapid Antigen Testing	4.63	4.00	5.00	5.00	63%	37%	
Pr.RM4	I understand who to talk with should any issues arise	4.48	2.00	5.00	5.00	67%	19%	
Pr.RM5	The staff here have been confident to attend their shifts throughout COVID	4.43	3.00	5.00	4.00	48%	48%	
Pr.RM6	I believe that Rapid Antigen Testing will make staff feel safer about coming to work	4.50	3.00	5.00	5.00	60%	30%	
Pr.RM7	I believe Rapid Antigen Testing in our workplace will contribute to a greater sense of team togetherness	4.28	2.00	5.00	4.00	48%	35%	
Pr.RM8	I believe the Rapid Antigen Testing process will make rostering easier	3.48	2.00	5.00	3.00	23%	23%	
Pr.RM9	I believe that anyone who enters the facility should take a Rapid Antigen Test	4.51	2.00	5.00	5.00	61%	32%	
Pr.RM10	I believe that undertaking Rapid Antigen Testing is a good use of our staff members' time	3.93	1.00	5.00	4.00	33%	38%	
RACF Supervisors (n = 23)		Average	Min	Max	Median	% SA	%A	
Pr.CS1	I understand my role in implementing the Rapid Antigen Testing	4.73	4.00	5.00	5.00	73%	27%	
Pr.CS2	I feel prepared for my role in implementing the Rapid Antigen Testing	4.55	3.00	5.00	5.00	59%	36%	
Pr.CS3	I feel confident that I can encourage our staff to undertake Rapid Antigen Testing	4.52	2.00	5.00	5.00	61%	35%	
Pr.CS4	I understand who to talk with should any issues arise	4.52	3.00	5.00	5.00	57%	39%	
Pr.CS5	I believe Rapid Antigen Testing in our workplace will contribute to a greater sense of team togetherness	3.91	1.00	5.00	4.00	26%	57%	
Pr.CS6	I believe testing is a good way to keep our residents and staff safe	4.61	1.00	5.00	5.00	74%	22%	
Pr.CS7	The management here are good at supporting staff in dealing with the worries about COVID-19	4.13	1.00	5.00	4.00	48%	35%	
Pr.CS8	I believe that anyone who enters the facility should take a Rapid Antigen Test	4.74	3.00	5.00	5.00	78%	17%	
Pr.CS9	I am concerned that the time I spend supervising testing will take me away from my other responsibilities	3.32	1.00	5.00	3.00	23%	23%	

Summary of interim-pilot data as at 2nd December, 2021

All questions are asked on a scale of strongly agree (5) to strongly disagree (1) and the number provided in the right-most column is the average of all respondents. The sample size (n) is included in the header for each stakeholder group.

RACF Staff or Visitor (n = 351)		Average	Min	Max	%SA	%A	%N
Po.RS1	I understand the reason for Rapid Antigen Testing, how I will be tested and what happens with the test results	4.65	100	5.00	69%	28%	3%
Po.RS2	I understand how Rapid Antigen Testing is different from PCR testing and why both are important at different times in keeping safe against COVID-19	4.58	100	5.00	66%	28%	4%
Po.RS3	I am grateful that my workplace is providing Rapid Antigen Testing services	4.58	100	5.00	65%	29%	5%
Po.RS4	I believe that anyone who enters the facility should take a Rapid Antigen Test	4.54	100	5.00	64%	29%	5%
Po.RS5	I believe the introduction of Rapid Antigen Testing makes me feel safer at work	4.54	100	5.00	63%	30%	7%
Po.RS6	I am more willing to attend my shift knowing that we are using Rapid Antigen Testing	4.50	100	5.00	61%	29%	9%
Po.RS7	I find it easy to use the Rapid Antigen Tests	4.53	100	5.00	60%	35%	4%
Po.RS8	I believe the testing kits provided are comfortable and safe for daily use	4.50	100	5.00	58%	35%	6%
Po.RS9	I do not feel pressured to take the Rapid Antigen Test	4.16	100	5.00	50%	29%	11%
Po.RS10	I believe that Residents and their families have been less stressed about COVID-19 since Rapid Antigen Testing began	4.28	100	5.00	49%	33%	15%
Po.RS11	Rapid Antigen Testing makes no difference to the time I am required to spend at work	3.93	100	5.00	39%	33%	13%
Po.RS12	I believe Rapid Antigen Testing in our workplace has contributed to a greater sense of us all working together as a team	4.21	100	5.00	46%	35%	16%
Po.RS13	The management here are good at looking after staff in dealing with worries about COVID-19	4.32	100	5.00	51%	33%	12%
RACF Managers (n = 15)		Average	Min	Max	%SA	%A	%N
Po.RM1	The Rapid Antigen Testing induction and training process covered all the information our facility needed to know	4.27	2.00	5.00	47%	40%	7%
Po.RM2	I have found it easy to access assistance when I have needed support about our facility's role and responsibilities	4.47	4.00	5.00	47%	53%	0%
Po.RM3	The Rapid Antigen Testing regime has had no negative impact on the relationship between management and staff	4.00	2.00	5.00	40%	33%	13%
Po.RM4	It has been easy to encourage our staff to participate in Rapid Antigen Testing	4.13	3.00	5.00	40%	33%	27%
Po.RM5	While voluntary, my facility expects that all staff will undergo Rapid Antigen Testing	4.57	4.00	5.00	57%	43%	0%
Po.RM6	I believe that anyone who enters the facility should take a Rapid Antigen Test	4.73	3.00	5.00	80%	13%	7%
Po.RM7	Accommodating the Rapid Antigen Testing at the start of shifts has not impacted rostering	3.20	100	5.00	27%	20%	7%
Po.RM8	Staff, residents and their families have been less stressed about COVID-19 since the Rapid Antigen Testing started	4.13	3.00	5.00	33%	47%	20%
Po.RM9	Rapid Antigen Testing has made staff feel safer about coming to work	4.27	3.00	5.00	47%	33%	20%
Po.RM10	Rapid Antigen Testing has increased rostering certainty because staff are more likely to attend to their shifts	3.29	2.00	5.00	14%	7%	71%
Po.RM11	Rapid Antigen Testing in our workplace has contributed to a greater sense of us all working together as a team	3.77	3.00	5.00	23%	31%	46%
Po.RM12	The Rapid Antigen Testing has not impacted our ability to deliver our usual quality of care to our residents	4.13	2.00	5.00	33%	53%	7%
RACF Supervisor (n = 10)		Average	Min	Max	%SA	%A	%N
Po.CS1	The training I received about how to supervise the Rapid Antigen Testing covered all the information I needed to know	4.60	3.00	5.00	70%	20%	10%
Po.CS2	I have found it easy to access assistance when I have needed support about my role and responsibilities, and I know what to do if there is a positive result	4.50	3.00	5.00	60%	30%	10%
Po.CS3	It has been easy to educate staff about why Rapid Antigen Testing is important	4.40	3.00	5.00	50%	40%	10%
Po.CS4	It has been easy to encourage our staff to participate in Rapid Antigen Testing	4.20	2.00	5.00	50%	30%	10%
Po.CS5	Staff understand the difference between the Rapid Antigen Testing and PCR (laboratory-processed) tests and why they need to do both	4.40	2.00	5.00	70%	10%	10%
Po.CS6	Staff have been willing to participate and increase our Rapid Antigen Testing rates across the facility	4.00	100	5.00	50%	20%	20%
Po.CS7	The Rapid Antigen Testing process has been smooth and easy to implement	4.30	2.00	5.00	60%	20%	10%
Po.CS8	The time I have spent supervising the Rapid Antigen Testing process has taken me away from my other clinical activities	4.33	2.00	5.00	67%	11%	11%
Po.CS10	We have had enough supply of Rapid Antigen Testing kits	4.70	4.00	5.00	70%	30%	0%
Po.CS11	Wastage of testing kits has been minimal	3.60	100	5.00	30%	40%	10%
Po.CS12	Staff have found it easier to self-administer the tests over time	4.00	2.00	5.00	40%	40%	0%
Po.CS13	The value of Rapid Antigen Testing has been recognised by staff at my facility	4.20	2.00	5.00	50%	30%	10%
Po.CS14	Staff, residents and their families have been less stressed about COVID-19 since the Rapid Antigen Testing started	3.90	2.00	5.00	50%	10%	20%
Po.CS15	Rapid Antigen Testing in our workplace is contributing to a greater sense of us all working together as a team	3.80	100	5.00	50%	10%	20%
Po.CS16	Staff have had more confidence to come to work since the Rapid Antigen Testing started	4.30	3.00	5.00	60%	10%	30%

Appendix C Survey questions

Pre-pilot survey questions

RACF staff

1. I understand the reason for rapid antigen testing, how I will be tested and what happens with the test results
2. I understand how rapid antigen testing is different from PCR testing and why both are important at different times in keeping safe against COVID-19
3. I am grateful that my workplace is providing rapid antigen testing services
4. I believe that anyone who enters the facility should take a rapid antigen test
5. I believe the introduction of rapid antigen testing will make me feel safer at work
6. I sometimes do not attend work because of concerns of contracting or exposing others to COVID-19
7. I believe that I will be more willing to attend my shift once we start the rapid antigen testing
8. I am worried that the rapid antigen testing process will mean I have to spend more time at work
9. I believe rapid antigen testing in our workplace is contributing to a greater sense of team togetherness
10. The management here are good at looking after staff in dealing with their worries about COVID-19
11. Are there any comments you would like to make? (comment optional)

RACF executives and managers

12. I understand my role in implementing the rapid antigen testing I feel prepared for my role in implementing the rapid antigen testing
13. I feel confident that I can encourage our staff to undertake rapid antigen testing
14. I understand who to talk with should any issues arise
15. The staff here have been confident to attend their shifts throughout COVID
16. I believe that rapid antigen testing will make staff feel safer about coming to work
17. I believe rapid antigen testing in our workplace will contribute to a greater sense of team togetherness
18. I believe the rapid antigen testing process will make rostering easier
19. I believe that anyone who enters the facility should take a rapid antigen test
20. I believe that undertaking rapid antigen testing is a good use of our staff members' time
21. What do you believe would make your staff more willing to participate in rapid antigen testing? (comment optional)
22. Are there any comments you would like to make? (comment optional)

Testing supervisors

23. I understand my role in implementing the rapid antigen testing
1. I feel prepared for my role in implementing the rapid antigen testing
2. I feel confident that I can encourage our staff to undertake rapid antigen testing

3. I understand who to talk with should any issues arise
4. I beieve rapid antigen testing in our workplace will contribute to a greater sense of team togetherness
5. I believe testing is a good way to keep our residents and staff safe
6. The management here are good at supporting staff in dealing with the worries about COVID-19
7. I believe that anyone who enters the facility should take a rapid antigen test
8. I am concerned that the time I spend supervising testing will take me away from my other responsibilities
9. What do you believe would make staff more willing to participate in rapid antigen testing? (comment optional)
10. Are there any comments you would like to make? (comment optional)

Interim-pilot survey questions

RACF staff

1. I understand the reason for rapid antigen testing and what happens with the test results
2. I understand how rapid antigen testing is different from PCR COVID-19 testing and why both are important at different times in keeping safe against COVID-19
3. I am grateful that my workplace is providing rapid antigen testing services
4. I believe that anyone who enters the facility should take a rapid antigen test
5. The introduction of rapid antigen testing has made me feel safer at work
6. I am more willing to attend my shift knowing that we are using rapid antigen testing
7. I find it easy to use the rapid antigen tests
8. I believe the testing kits provided are comfortable and safe for daily use
9. I do not feel pressured to take the rapid antigen test
10. I believe that Residents and their families have been less stressed about COVID-19 since rapid antigen testing began
11. Rapid antigen testing makes no difference to the time I am required to spend at work
12. I believe rapid antigen testing in our workplace has contributed to a greater sense of us all working together as a team
13. The management here are good at looking after staff in dealing with worries about COVID-19
14. Are there any comments you would like to make or lessons you have learnt that can help other facilities to implement the testing?

RACF executives and managers

1. The rapid antigen testing induction and training process covered all the information our facility needed to know
2. I have found it easy to access assistance when I have needed support about our facility's role and responsibilities

3. The rapid antigen testing regime has had no negative impact on the relationship between management and staff
4. It has been easy to encourage our staff to participate in rapid antigen testing
5. While voluntary, my facility expects that all staff will undergo rapid antigen testing
6. I believe that anyone who enters the facility should take a rapid antigen test
7. Accommodating the rapid antigen testing at the start of shifts has not impacted rostering
8. Staff, residents and their families have been less stressed about COVID-19 since the rapid antigen testing started
9. Rapid antigen testing has made staff feel safer about coming to work
10. Rapid antigen testing has increased rostering certainty because staff are more likely to attend to their shifts
11. Rapid antigen testing in our workplace has contributed to a greater sense of us all working together as a team
12. The rapid antigen testing has not impacted our ability to deliver our usual quality of care to our residents
13. What do you believe would make your staff more willing to participate in Rapid Antigen Testing? (comment optional)
14. Are there any comments you would like to make or lessons you have learnt that can help other facilities to implement the rapid antigen testing?

Testing supervisors

1. The training I received about how to supervise the rapid antigen testing covered all the information I needed to know
2. I have found it easy to access assistance when I have needed support about my role and responsibilities, and I know what to do if there is a positive result
3. It has been easy to educate staff about why rapid antigen testing is important
4. It has been easy to encourage our staff to participate in rapid antigen testing
5. Staff understand the difference between the rapid antigen testing and PCR (laboratory-processed) tests and why they need to do both
6. Staff have been willing to participate and increase our rapid antigen testing rates across the facility
7. The Rapid Antigen Testing process has been smooth and easy to implement
8. The time I have spent supervising the rapid antigen testing process has taken me away from my other clinical activities
9. On average, the time I have spent each shift supervising rapid antigen testing has been:
    a. 0 to 30 minutes
    b. 30 to 60 minutes
    c. 60 to 90 minutes
    d. 90 to 120 minutes
    e. Over 120 minutes.

10. We have had enough supply of rapid antigen testing kits
11. Wastage of testing kits has been minimal
12. Staff have found it easier to self-administer the tests over time
13. The value of rapid antigen testing has been recognised by staff at my facility
14. Staff, residents and their families have been less stressed about COVID-19 since the rapid antigen testing started
15. Rapid antigen testing in our workplace is contributing to a greater sense of us all working together as a team
16. Staff have had more confidence to come to work since the rapid antigen testing started
17. What do you believe would make your staff more willing to participate in rapid antigen testing? (comment optional)
18. Are there any comments you would like to make or lessons you have learnt that can help other facilities to implement the testing?

Appendix D Interview guide questions

RACF staff

1. When did you first hear about t rapid antigen testing? How did you hear about it? How did you feel about the idea?
2. Was the information you were given easy to understand? Did you have any questions and were they answered? By whom?
3. Has the availability of rapid antigen testing at your workplace changed how safe you feel to attend your shifts? If so, how? Would this be the case if your city/ region/ state was not currently experiencing a significant COVID-19 outbreak?
4. How has the rapid antigen testing process been when you arrive at work? Can you think of any way it could be improved?
5. Did you feel pressure to get tested? Who from? (other staff, management, residents and their families) What was your motivation to participate in the rapid antigen testing (i.e. not decline)?
6. Has the testing become easier to self-administer over time? Do you feel like people have got used to it? Do you feel that the testing kits you are using are safe and comfortable for daily use?
7. Does it change the amount of time you spend at work, or the care that the residents get?
8. Do you think the testing has made any difference to the atmosphere at work? What? How? For whom?
9. What advice would you give to other aged care facilities that are thinking about rapid antigen testing?
10. How has your experience been with the evaluation components of the evaluation – including the pre-pilot survey and interim-pilot survey (if relevant)? Do you think anything could have been improved?

RACF executives and managers

1. Have you felt well supported during the implementation? Have you been clear on where to go to ask for help? Are there any improvements you would make? What did you need e.g., skills, equipment, business processes?
2. What proportion of your day was taken up with managing the testing process when it first started? Has it got less over time? How much does it take up now?
3. What have been the key challenges in managing the process? Staff availability? Covering time taken by testing? Relationships? Availability of tests? Cost?
4. What factors do you believe contribute to willingness of staff to undertake testing? Is there anything that you think your facility, or the Department could do to make staff more willing to test?
5. What do you think you have done really well during implementation? Is there any way you'd improve it further with hindsight?
6. Has rapid antigen testing been worth it? Is the implementation process and cost outweighed by its benefits?
7. Do you feel that the testing has changed the quality of care that the residents receive? How?
8. What advice would you give to other aged care facilities that are thinking about Rapid Antigen Testing?
9. Do you think the testing has had any impact on staff behaviour? What? On the relationship between management and staff? What?

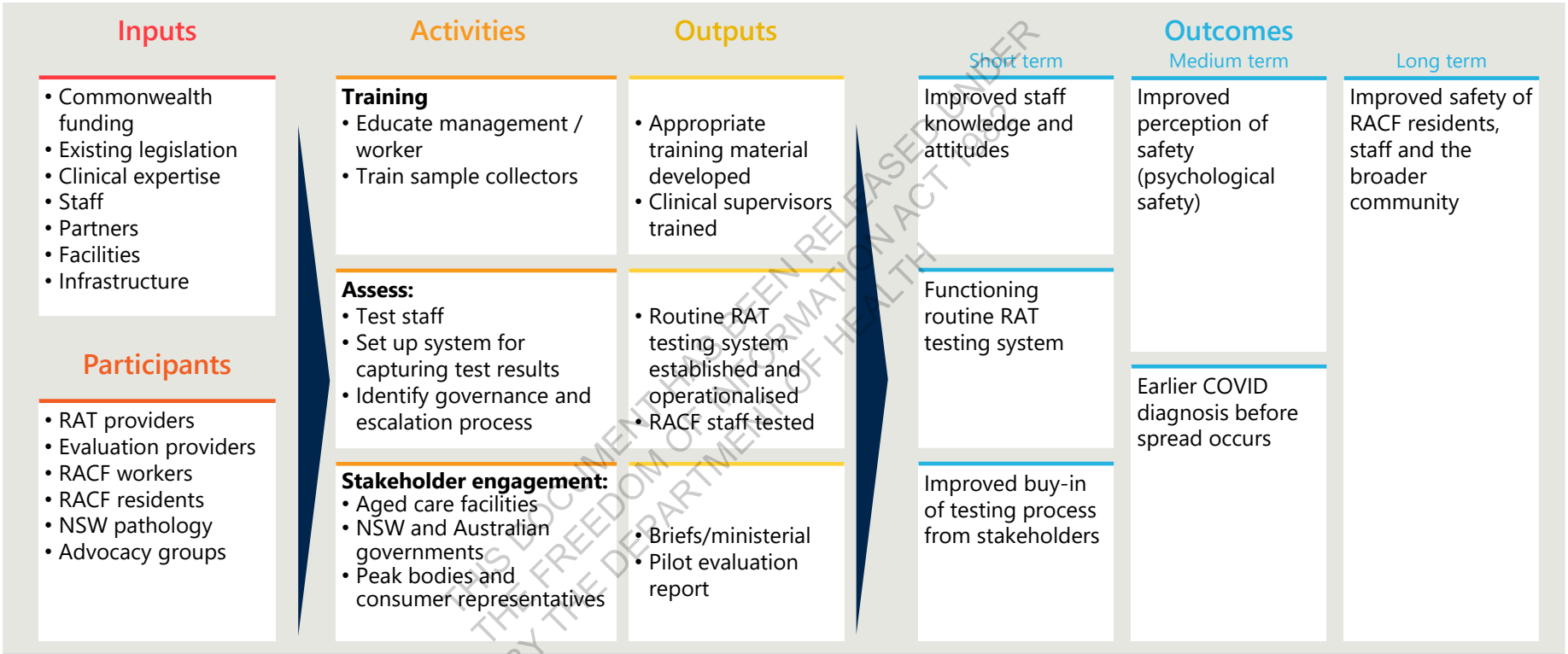
10. What difference do you think the testing has made to the atmosphere at the facility? Are there different impacts for different groups? What are the differences? Do you have thoughts about what has driven those differences?
11. Do you believe that rapid antigen testing will become a part of the new normal in residential aged care facilities? Why / why not?
12. How has your experience been with the evaluation components of the pilot including our communications and provision of QR code posters for surveys – has this all been clear? Is there anything that could have been improved?

Testing supervisors

1. Can you tell us about the training you received to do the testing? Did you feel sufficiently prepared? What did it do really well? What could have been improved?
2. Have you felt well supported with your responsibilities? Has it been clear where to go to ask for help? For support with staff declining to take the test? With the procedure for a positive result?
3. What proportion of your day was taken up with managing the testing process when it first started? Has it got less over time? How much does it take up now?
4. To what extent do you think your team has done it efficiently? Availability of tests? Wastage? Efficient process for the actual testing?
5. What factors do you believe contribute to willingness of staff to undertake testing? Is there anything that you think your facility, or the Department could do to make staff more willing to test?
6. What have been the key challenges in managing the process? (e.g., ensuring enough supply of tests, maintaining staff compliance, the time that testing takes away from other parts of your role)
7. With hindsight, what improvements would you make?
8. What difference do you think the testing has made to the atmosphere at the facility? Are there different impacts for different groups? What are the differences? Do you have thoughts about what has driven those differences?
9. Do you think it had any impact on your relationship with management? What?
10. Do you feel that the testing has compromised the quality of care the residents receive?
11. Has it been worth it? Has the implementation process and cost been outweighed by the benefits?
12. Do you believe that rapid antigen testing will become a part of the new normal in residential aged care facilities? Why / why not?
13. What advice would you give to other aged care facilities that start up testing?
14. How has your experience been with the evaluation components of the pilot including our communications and provision of QR code posters for surveys – has this all been clear? Is there anything that could have been improved?

Appendix E The evaluation's program logic

This program logic was developed by the Australian Government Department of Health. It functioned as a guide for the evaluation's design. It outlines a set of informed assumptions to be tested rather than being a definitive model.



nous

ABOUT NOUS

Nous Group is an international management consultancy operating across Australia and New Zealand, the UK, Ireland and Canada. For over 20 years we have been partnering with leaders to shape world-class businesses, effective governments and empowered communities.

bold performance & influence engaging

450 PEOPLE

50 PRINCIPALS

5 COUNTRIES

+82.5 **2020 NET PROMOTER SCORE**
– global consulting average: **+70.1**

Australia | New Zealand | UK | Ireland | Canada