DEPARTMENT OF THE PRIME MINISTER AND CABINET
TE TARI O TE PIRIMIA ME TE KOMITI MATUA

Briefing

COVID-19 INDEPENDENT CONTINUOUS REVIEW, IMPROVEMENT AND ADVICE GROUP: FEEDBACK ON MOH PAPERS

To: Hon Chris Hipkins
Minister for COVID-19 Response

Date	14/04/2021	**Priority**	Urgent
Deadline	N/A	**Briefing Number**	DPMC-2020/21-798

Purpose

You have requested that the COVID-19 Independent Continuous Review, Improvement and Advice Group (the Group) review two papers you have received from the Ministry of Health:

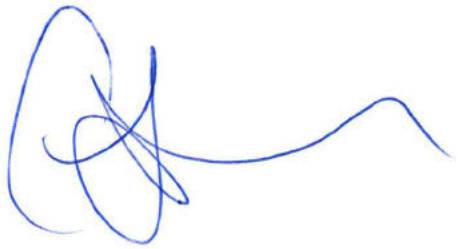
- Briefing: Update on current COVID-19 surveillance tests and tools [HR20210190]; and
- Memorandum: Swabbing for COVID-19 in Community Pharmacies [HR20210529].

The purpose of this briefing is to:

- provide you the Group's consolidated feedback on the above papers; and
- set out the proposed process for seeking and receiving feedback from the Group.

Recommendations

1. **Note** the feedback in this briefing is provided by the COVID-19 Independent Continuous Review, Improvement and Advice Group.
2. **Note** the proposed process as set out in Attachment A for seeking and receiving feedback from the Group.
3. **Note** that the opportunity for the Ministry of the Health to provide context to the Group on advice is conditional on the timeframes and requirements of the Minister.

 Chappie Te Kani **Head of System Assurance and Continuous Improvement, and Caring for Communities Lead, COVID-19 Group**	Hon Chris Hipkins **Minister for COVID-19 Response**
14/04/2021	...../...../2021

Contact for telephone discussion if required:

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Minister's office comments:

- ☐ Noted
- ☐ Seen
- ☐ Approved
- ☐ Needs change
- ☐ Withdrawn
- ☐ Not seen by Minister
- ☐ Overtaken by events
- ☐ Referred to

COVID-19 INDEPENDENT CONTINUOUS REVIEW, IMPROVEMENT AND ADVICE GROUP: FEEDBACK ON MOH PAPERS

Executive Summary

1. The briefing to update you on current COVID-19 surveillance tests and tools (the Briefing) highlights the need to understand the overall plan, New Zealand's elimination strategy and all related plans within the changing context of the transition to open borders and the vaccination programme.

2. There is a general concern about how nationally important documents such as the Surveillance Strategy are developed and updated, and the impact of these processes on quality. It is recommended that processes incorporate expert external peer review and that there is transparency on how recommendations are being adopted and implemented. Better performance monitoring is vital. The Group has suggested a more rigorous process to incorporate external expert peer view (refer to Attachment B).

3. It is important to address equity matters particularly in the areas of access to testing and vaccine efficacy. Equity matters are not covered in the Briefing.

4. There are some gaps in the Briefing in respect of frequency of testing (particularly at the border, and how testing will change as vaccinations are rolled out), detail of possible changes in pre-departure testing in the post-vaccine period, the approach to testing arrivals from high risk origins, and impacts on surveillance of other infectious diseases.

5. It is good that the briefing considers alternative testing platforms. It would likely be of benefit to have experts on hand to provide advice in this fast-moving field and it is suggested that Ministers consider establishing a small group of clinical microbiologists to provide advice in real time.

6. There are inconsistencies with the advice on saliva and Point-of-Care (PoC) testing and what is emerging in recent evidence. Based on scientific evidence, there is a strong case for adopting saliva testing as the main method for testing in New Zealand and there are situations such as pre-departure tests in high risk settings where PoC testing would make sense.

7. The utility value of wastewater and air sample testing may be overstated. Similarly, environmental swabbing of produce is likely to be operationally prohibitive particularly given likely the need to meet the requirements of the multiple countries we export to. In contrast, the use of serology tests to validate vaccine passports is a good idea.

8. There is not enough information on the recently launched mapping system to prioritise regions for testing and it is recommended that this is subjected to proper external peer review.

9. In respect of the memorandum on swabbing for COVID-19 in community pharmacies (the Memorandum), there is concern on the length of time it has taken on this matter, the lack of steps identified in November 2020 that have been followed and the limited benefit that continued conversations are likely to have.

Purpose

10. The purpose of this briefing is to provide you with feedback from the COVID-19 Independent Continuous Review, Improvement and Advice Group (the Group) on two papers you have received from the Ministry of Health (MoH):

    - Briefing: Update on current COVID-19 surveillance tests and tools [HR20210190]; and
    - Memorandum: Swabbing for COVID-19 in Community Pharmacies [HR20210529].

11. The briefing also sets out the proposed process on seeking and receiving feedback on Ministry of Health papers by the Group (refer to Attachment A). This process has been provisionally agreed to by your Office on the basis that it may be refined as needed.

Feedback on the briefing to update you on current COVID-19 surveillance tests and tools

General comment

12. The Group have provided feedback through the Secretariat hosted in DPMC to you as Minister COVID-19 Response. The feedback sets out high level issues as well as specific feedback on the detail of the paper.

13. Overall, the Briefing raises a number of questions and highlights the need to understand the overall plan in terms of New Zealand's elimination strategy and the transition to opening borders, and how COVID-19 will interact with a vaccinated population. The plan appears to be static and does not reflect how the Strategy should progress through the year. While the Briefing does note that testing strategies need to adapt, it does not clearly define how and when this should occur including trigger points for those changes.

14. There is a lack of references to supporting evidence and materials. It is difficult to decipher what is fact, projection, assumption or opinion.

15. The Briefing should be seen within the broader context of strategic surveillance documentation.

Approach to producing major documents

16. The Surveillance Strategy and Testing Plan report in 2020 identified that key documentation produced by MoH in the COVID response could and should be of higher quality. This was cited as a crucial component of the regime. The updated Surveillance Strategy (Strategy) published on the MoH website, however, is not at a level of quality that is needed for the response to COVID-19.

17. Furthermore, it appears that the recommended process around producing key documents has not been implemented to update the Strategy. This would have ensured expert peer review and proper consultation with operational parties. This has led to the Strategy being not easy to translate properly into an operational surveillance system.

18. More specifically, it is not clear how the system will operate, aspects of the whole public health response are included that should not be in the Strategy, it does not present a case

definition properly early in the main body or define key concepts, it includes surveillance system evaluation within what should be a strategy document, and it includes basic theoretical content that is not appropriate for inclusion in the level of document.

19. The Group puts forward that to introduce a level of rigour, you may consider drawing upon the process to produce high quality articles for publication in the health field and take advantage of the new ministerial advisory groups as part of this, after consultation with the group Chairs. A suggested approach to quality assurance is set out in Attachment B.

20. There is a need for a rigorous process given that New Zealand has now started COVID-19 vaccination rollout. Surveillance and testing strategies will need to tie in closely with an agreed overarching goal for the response and how the situation will evolve before and after maximum vaccination coverage is reached and border policies change. As well as lifting quality, expert input into both the planning phase and finalisation of major strategic documents will provide a good feedback loop for MoH staff.

21. It would be useful to incorporate a table with a summary of the Surveillance Strategy and Testing Plan report's recommendations and an update of progress on implementing these.

Monitoring of the Strategy

22. There is concern about the effectiveness of feedback loops. It is known that some people in current surveillance programmes are not receiving regular testing[1] and some parts of the testing strategy do not seem sufficiently effective (for example pre-departure testing required to enter New Zealand). There appears to be a gap in monitoring and performance monitoring planning related to the overall Strategy. This is critical to evaluate how effective the plan is and to be able to reflect on what is and is not working well. In particular, the effectiveness of surveillance testing processes to monitor coverage and regularity should be addressed.

It is important to address equity matters

23. The Briefing does not discuss equity matters, including equity of access to testing and any workstreams that exist around this[2]. A clear response to Māori and Pacific needs should be included in particular and it would be helpful to have an equity prioritisation map embedded in the plans.

24. Any existing assumptions that underpin interventions need to be unpacked. For example, understanding the differences in social connectivity between population groups that impacts on the spread of disease such as ethnicity, age distribution, family household composition, poverty, housing types and condition, numbers in institutions, cultural practices and disparities in health access.

Discussion on testing frequency is needed

25. The Briefing does not discuss the frequency of testing, which is specifically key at the border. It is not clear what the current thinking is about how testing will change as

[1] This is pointed to by some of the recently publicised cases not having received timely surveillance testing, for example Case B of the current small cluster. Furthermore, the Northern Region Health Coordination Centre have provided analysis of data that shows from 3550 people working in MIQ in Auckland since February 22, 3216 can be NHI matched. Of these 3216 it can be seen that only 3097 have had at least one COVID test recorded in their laboratory system (it is noted that frequency of testing cannot be seen). It is noted that conclusions should not be drawn from this data but that more research should be done to look at the potential issue.

[2] For example, active provision of community-based testing facilities in South Auckland.

vaccination is rolled out, although this is alluded to and will presumably be addressed with subsequent documents. The Group are unclear on the peer review process for these technical documents.

There is an assumption that testing will change as vaccinations are rolled out

26. It is unclear what the approach is (including what is currently in place) to testing arrivals from places with high rates of COVID-19 infection, particularly where that is translating to high rates of positive cases in New Zealand (for example, India). There is also the question of what the testing regime was for the arrivals who tested positive in New Zealand after they had been vaccinated in their country of origin. The discussion of possible changes in pre-departure testing in the post-vaccine period seems simplistic.

27. Given that border worker rollout of vaccination is underway, how will testing be managed if there are new cases?[3] It would have been optimal that changes to the border worker testing regime were already worked through and completed.

28. While there is likely to be work in development on how testing will change as vaccination is rolled out, assumptions that are being made about vaccine efficacy should be checked and considered within the frame of equity. More explicitly, vaccine (and many medication trials) are conducted in 'WEIRD' populations, i.e. 'Western Educated Industrialised Rich Democratic Individuals' and we should be asking how this relates to the New Zealand context and our populations[4]. The question of whether we need to maintain a higher level of surveillance, testing and surge capacity post-vaccination in South Auckland and other border points should be explored.

29. There needs to be a clear link between scientific evidence and changes in testing approach.

Impacts of COVID-19 focus on system capacity

30. Alongside the above points, thought needs to be given to how the focus on COVID-19 testing impacts surveillance for other infectious diseases, especially post quarantine-free travel, particularly for diseases such as influenza and measles, where there is lack of progress in addressing remaining immunity gaps[5] and increases in pressure on an already stretched public health system.

Testing platforms in a fast-moving field

31. It is good that the Briefing includes alternative testing platforms. This is a very fast-moving field and New Zealand needs to keep up to date in this area. We have world class clinical microbiologists and there is a strong case to be made for a small group of such people to be appointed to provide Ministers, and MoH, with the very best advice in real time. The Group recommends that Ministers consider establishing such a group and that they have a designated level of authority.

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[3] In Auckland, for example, will the Auckland Regional Public Health Service (ARPHS) have ready access to information about who has been vaccinated (and what is the status of the COVID-19 Immunisation Register)? In the review of the measles outbreak it was found that ARPHS did not have ready access to the National Immunisation Register and this affected the outbreak response.

[4] For example, we should be looking at vaccine uptake by region, ethnicity, age groups, socioeconomic status, and prevalence of long-term conditions, as well as vaccine efficacy against symptoms and transmissibility.

[5] Refer to comments made by Associate Professor Nikki Turner reported by Radio NZ: https://www.rnz.co.nz/news/national/438455/measles-vaccination-campaign-way-off-target.

Saliva and point-of-care testing

32. The information provided on saliva testing is not consistent with the most recent reviews of the evidence, which show that it is has performance characteristics very similar to nasopharyngeal testing[6]. It is unclear where the references are to support the conclusions in the Briefing. The recommendation of the Surveillance Strategy and Testing Plan report is strongly supported by the scientific evidence. A strong case can be made for saliva testing to become the main method for testing in New Zealand.

33. The Briefing sets out to create the perception that PoC tests are inferior. There appears, however, to be some high performance PoC testing emerging[7]. The Group suggests that the Briefing should highlight the opportunity these tests may present and the need to apply the resources to ensure we understand the latest science and performance in this space.

34. Based on emerging evidence to date on the poor efficacy of the pre-departure testing approach, it would make sense to shift to PoC pre-departure testing in high risk settings, where this could be administered at an airport by an appropriately certified individual. While this will not pick up all infections, it would provide an additional valuable data point.

35. It is put forward that the demand for less invasive testing is likely to enhance participation, independent of whether people are vaccinated or not. This alone should be a driver to invest significant resources in exploring less invasive testing opportunities, rather than remaining in the status quo.

Asymptomatic testing

36. The Briefing seems to suggest cost is a reason not to use more asymptomatic surveillance testing. However, using a risk adjusted approach focused on high risk communities intuitively feels economic when weighed against the counterfactual of the cost of a lock down, particularly given the new risks created by the Trans-Tasman bubble and the new variants (and especially if we use saliva or lower cost PoC).

Wastewater testing

37. It is not clear whether the utility and application of wastewater testing has been properly worked through. For example, as stated in Annex One of the Briefing it appears to have limited sensitivity, so this should be compared with the 'sensitivity' at level 1 of passive case detection through routine testing. Furthermore, it has poor specificity as it cannot distinguish viable organism from unviable viral fragments. Therefore, it has very little utility in an outbreak in the areas where there have been known cases found already. It is not clear if the utility with respect to variants is adequate to address the issues raised in the annexure and the statements about its 'vital' role appear to be over-optimistic.

Testing of air samples, environmental swabbing and serology testing

38. The testing of air-samples for COVID-19, most likely 'after the transmission period' appears to be very optimistic and potentially unrealistic with respect to its utility[8]. Similarly,

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[6] For example: *The Sensitivity and Costs of Testing for SARS-CoV-2 Infection With Saliva Versus Nasopharyngeal Swabs: A Systematic Review and Meta-analysis* (Ann Intern Med. 2021 Jan 12:M20-6569. doi: 10.7326/M20-6569. PMID: 33428446).

[7] For example, Sir Peter Gluckman has recently peer reviewed a paper for the Irish Government on this subject titled *Safe Sustainable Re-opening: The Role of the Rapid SARS-CoV2 Testing Report of the COVID-19 Testing Group.*

[8] Identifying pathogens in aerosols is very difficult and often not standardised. It is likely that aerosols related to a specific exposure are specific to the point in time when there was transmission. It is therefore often too late to do air sampling for aerosols related

environmental testing of produce leaving New Zealand may be logistically prohibitive and would need to meet the requirements of multiple countries that we export to.

39. The use of serology testing to validate vaccine passports seems like a good idea to explore.

Mapping system to prioritise regions for testing

40. There is not enough information presented about this modelling approach to provide any opinion. It is suggested that this is subjected to external peer review and for it to be placed in the context of the recommendations of the Surveillance Strategy and Testing Plan report and the need to monitor equity in access to testing.

Feedback on Table 1: Key points on test settings

Setting	Comment
Managed isolation testing	It is unclear what is being done in managed isolation testing in respect of regular testing of facility staff and saliva tests being integrated. It should be clarified what is meant by integration and what goals there are in terms of percentages by when.
Pre-departure testing	The question should be asked of what the analysis and genome sequencing of the data from pre- and post-implementation of this strategy is telling us about the effectiveness of this approach and where we need to improve.
Asymptomatic testing	Suggest that this should be explored more actively with the implementation of bubbles, at least as a second layer of reassurance in the early stages.

Feedback on Table 2: Key points on test technologies

Technology	Comment
PCR testing - Saliva	Not convinced that the assertions here are accurate.
Symptomatic testing	We should be using the best tests available rather than be necessarily locked into one technology (nasal swab PCR). We should not assume that will always be the gold standard and it would be good to see a demonstration that we are open-minded to the evolving science and technology.

to specific cases, and as such it could be very low yield between these rare transmission events. Setting basic standards for ventilation and enforcing them, would seem more sensible.

Feedback on Table 3: Prioritisation of populations for testing in different epidemiological contexts

41. It needs to be asked what options are available to supplement testing when capacity is insufficient. For example, using a PoC test to provide extra capacity? The Briefing should propose solutions to resolve issues of capacity constraints that will arise in certain scenarios in addition to accepting these exist. The level at which we set our testing capacity is also not clear. Clarity about testing capacity is needed.

Feedback on the memorandum on swabbing for COVID-19 in community pharmacies

General feedback

42. There is not a clear description of follow through on the next steps that were identified in November 2020. For example, the engagement clearly occurred, and they have now reached a view to not continue at a national level apart from three small District Health Boards (DHBs). However, there is no evidence of any scoping and review of operational issues that might exist, or a proposal for a trial in accordance with the steps following engagement.

43. This conversation has been ongoing for some time given discussions with stakeholders were held in December 2020. The passage of time coupled with the lack of a decision in this space highlights the risks of a centralised decision-making model where certain responsibilities would better sit within the operational agencies. For example, MoH could set protocols and process guidelines and let the DHBs determine how to best provision and deliver the capability within their regions.

44. It is unclear what the plan is for outreach to Māori pharmacies including the scope of Ngā Kaitiaki o te Puna Rongoā o Aotearoa (MPA) or how this would work in practice.

Attachments:		
Attachment A:		Process for seeking and receiving feedback on agency papers
Attachment B:		Proposed process to incorporate external expert peer review

ATTACHMENT A

Process for seeking and receiving feedback on agency papers

The Secretariat has agreed the following process with the Chair of the Group and the Office of COVID-19 Response Minister. The process will be tested and refined as needed.

1	Papers for feedback from the Group are sent to the Secretariat with an indication of urgency and required timeframe (the timeframe will not be less than two working days).
2	The Secretariat will notify the paper's home agency and will send the papers to the Chair.
3	The Secretariat and Chair will discuss members of the Group to nominate to provide feedback.
4	The agency will be given the opportunity to brief the nominated members of the Group. This is conditional on the timeframes and requirements of the Minister.
5	Nominated members review, discuss and provide feedback to the Secretariat.
6	The Secretariat will provide the feedback to the Office of the COVID-19 Response Minister.

It is at the discretion of the Minister whether the Group's feedback is provided to the agency.

ATTACHMENT B

Proposed process to incorporate external expert peer review

The Group has recommended that the ministerial advisory groups can be leveraged to ensure external expert peer review is included in the development and update of key COVID-19 documents. They have proposed a practical process as set out in Table 1.

Table 1: Proposed external expert peer review process

1	Decision is made to produce or update a key COVID-19 document and date is set for its publication.
2	Secretariat is notified and liaises with the Chairs of the two ministerial advisory groups[9].
3	One member of the two ministerial advisory groups is assigned as the 'chief peer reviewer'. Who is assigned as the 'chief peer reviewer' will be agreed by the Chairs of the advisory groups.
4	An outline plan for the document is produced by MoH and signed off within MoH and by the 'chief peer reviewer'.
5	MoH completes the document following a stepwise approach consistent with the bullet-points above and submits it to the 'chief peer reviewer'.
6	The 'chief peer reviewer' arranges expert rapid peer review of the document.
7	MoH adjusts the document according to the peer reviewers' recommendations and submits for sign-off internally and by the 'chief peer reviewer'.

[9] The two groups are the COVID-19 Independent Continuous Review, Improvement, and Advice Group and the Strategic COVID-19 Public Health Advisory Group.