Title: Test and Trace Paper – NPHET

Author: Niamh O’Beirne

Organisation: HSE

Date: 27th July 2021

Action required:
☐ For noting
☑ For discussion
☐ For decision

Approved for future publication: YES/NO (remove as applicable)
Test and Trace: Covid-19 NPHET Update – 27 July 2021

1.0 Operations Monitoring

- The Testing and Tracing system is now in surge across the pathway. Demand has been strong, but in recent days appears to be leveling off.

- From the 19th – 25th July, there were c.108,912 community referrals. Overall, total referrals have increased by 2% in comparison to the same time-period last week.

- From 19th – 25th July there were:
  - 26,371 walk-in referrals (↓ 2% compared to last week)
  - 6,998 international travel portal referrals (↓ 12% compared to last week)
  - 32,470 self-referrals (↑ 15% compared to last week)

- From the 18th – 24th July, the group with the largest number of referrals were the 21-30 age group, making up 23.5% of all referrals. The detected rate for the 21-30 age group is 14%.

- Capacity for overall swabbing stands at 30,000. Importantly the Community sites can surge to 22,000 max. with support from NAS and Defense Forces. The remaining capacity is in acute hospitals and serial testing.

- Over the last 7 days, the total number of community swabs has increased by 2.5% (c. 97,080 from the 19th – 25th July, compared to c. 94,705 from the 12th – 18th July). The highest community swabbing day over the past week reached 16,000 swabs.

- Over the past week, c. 94% of people received a swabbing appointment in less than 24 hours. The median time to get access to swabbing is 0.2 day. The trend in respect of time to get a swabbing appointment in less than 24 hours has plateaued in the low mid-nineties since middle of January, exceeding the target of 90%.

- From the 19th – 25th July, there has been approximately 132,176 lab tests reported in community, private and acute labs. We are once again receiving data on volumes of lab tests completed by acute and private labs; however, this remains a partial view until both acute and private laboratories are fully reinstated.

- In the community, over the last 7 days (19th – 25th July), the median end-to-end turnaround time from referral to:
  - SMS for not detected and detected tests was 1.1 days
  - Communication of a detected result by call was 1.3 days
  - Contact tracing completed, for detected results was 2.0 days

- From the 19th – 25th July, the positivity rate was 9.6%. Of those tested with close contacts during the same 7-day period, the average number of close contacts was 3.9. On the 25th of July, the average number of close contacts per person was 3.6.

- From the 19th – 25th July, there were:
  - 7,980 call 1s (↑ 8% compared to last week)
  - 7,724 call 2s (↑ 7% compared to last week)
  - 20,986 call 3s (↑ 16% compared to last week)
Modelling shows us that demand will increase in the coming days as cases are expected to rise. We are tracking between the Central 1 and Optimistic, which is lower than last week. When the demand for testing exceeds 20,000 per day, we will deploy antigen testing for those over the age of 13.

Serial Testing Programmes:

- Serial testing of Staff in Nursing Homes commenced on 20th June 2020. To date, 844,438 swabs have been completed in 598 facilities, identifying 4,757 detected cases, resulting in a 0.56% detection rate.

- Cycle 14 of Serial Testing in Nursing Homes commenced on 19th of July 2021. To date, the cycle has completed 2,022 swabs and identified 2 detected cases. This results in a 0.10% detection rate.

- Serial Testing of Staff in Mental Health Facilities commenced on 21st of January 2021. To date, 7,815 swabs have been completed in 93 facilities, identifying 26 detected cases, resulting in a 0.33% detection rate.

- Cycle 6 of Serial Testing in Mental Health Facilities concluded on 11th of July 2021. In total, the cycle has completed 390 swabs and identified 0 detected cases. This results in 0.00% detection rate.

- Cycle 7 of Serial Testing in Mental Health Facilities commenced on the 23rd of July 2021. To date, the cycle has completed 95 swabs and identified 1 detected case. This results in a 1.05% detection rate.

- Serial Testing of Staff in Food Production Facilities commenced on 21st of August 2020. To date, 228,891 swabs have been completed in 91 facilities, identifying 1,452 detected cases, resulting in a 0.63% detection rate.
• **Cycle 11** of Serial Testing in Food Production Facilities commenced on 28th of June 2021. To date, the cycle has completed 13,941 swabs and identified 38 detected cases, resulting in a 0.27% detection rate.

![Swabs completed and detection rate per cycle in Food Production Facilities](image)

• The demand for testing in education and childcare facilities has decreased over the previous number of weeks. In the last week (18th – 24th July):
  ➢ 28 tests were completed in <5 primary schools (7.1% positivity rate)
  ➢ 495 tests were completed in 46 childcare facilities (3.2% positivity rate)
  ➢ There were no tests conducted in special education or post-primary school settings
  ➢ The median turnaround time from swab taken to result communicated in education and childcare facilities was 1 day.

• Recruitment of staff to support swabbing and contact tracing is ongoing. As of the 19th of July 2021, 861 swabbers and 923 contact tracing staff have been hired and places. Of the 923 contact tracing staff, 883 have been hired and retained as part of the dedicated workforce supporting contact tracing function whilst the 40 remaining are deployed staff from the HSE and other public service roles.

### 2.0 Update on Testing initiatives

1. **Source Investigation/Backwards Tracing** - Enhanced Contact Tracing was stepped down and effective as of Tuesday 13th July. In effect, cases with a travel history in the past 14 days are no longer required to enter the Specialised Queue (with the exception of those staying in Mandatory Hotel Quarantine). This suspension has freed up Contact Tracing capacity within our Cork and UCD CTCs.

2. **Alternative referral pathway for testing** - The self-referral online booking system continues to operate as ‘Business as usual’, with an average of c. 4,600 referrals per day for the past 7 days. The international on-line booking system has been updated to allow retrospective booking up to 4 days after arrival to the country and will also capture the country from which the person travelled. The day 10 testing option is not currently required, but the functionality remains disabled in the background should it be needed for specified countries at some point in the future. Activity through the travel portal is currently c.1,000 tests per day.

3. **Approach to Antigen testing pilot in schools/third level** - The pilot has commenced on some 3rd level sites with the remainder to commence in the next few days. The number of participants across 3rd level institutions is lower than originally anticipated due to peak holiday season. Early childcare sites have been selected and are working on their local preparations and registering and consenting staff who are willing to participate. The aim is that all sites will have started testing by 9th August.
4. **Testing at Quarantine sites** – As decided by the Department of Health, all passengers arriving into Ireland from designated states are now required to pre-book accommodation in a designated quarantine facility. Testing resources have been made available in Quarantine Facilities since 26th March 2021 and are available at the on a daily basis to accommodate the testing of all new arrivals. The scope of testing includes the below:

- Testing of passengers arriving into Ireland from Category 2 Countries on Day 0 and Day 10
- Testing of Passengers arriving into Ireland from Category 1 countries that have not been able to produce a negative test result
- Testing of Quarantine Hotel Staff on a weekly basis
- Unaccompanied Minors arrive into Ireland from a Category 2 country

Data as of 10:00am -23rd July 2021

- 8 x Quarantine Facilities Tested (6 currently in operation)
- 46 x Unaccompanied Minors Tested
- 24,775 x Referrals for Mandatory Quarantine Testing
- 20,217 x Swabs
- 456 x Covid-19 Detected Tests (1.9% Detection Rate)
- 418 x Covid-19 Detected Cases

5. **Self-isolation and Restricted Movement Support**  
   Since Tuesday July 13th, Check-in Calls to Close Contacts were temporarily suspended. Check-in calls to Index Patients were later suspended on Saturday, July 17th. This allows our workforce to expedite notifying Close Contacts of their potential exposure to the virus.
APPENDIX

1.1 Continued Surge Planning

Modelling shows a significant rise in case levels and demands on the Testing and Tracing system. We propose to take actions that will both increase capacity and control demand across each of the four pillars of the Testing and Tracing pathway (referrals, swabbing, laboratory testing and contact tracing).

Testing and Tracing will endeavour to respond in a way that is deemed most appropriate from a public health perspective, taking care to case find and contact trace when most appropriate to do so. The initial weeks are important while we are still in containment phase.

1.2 Context

On the 28th June 2021, NPHET outlined four modelling scenarios (Optimistic, Central 1, Central 2 and Pessimistic). The HSE Health Intelligence Unit commenced an early assessment of the impact of the daily COVID-19 cases aligned to the four recently available IEMAG scenarios, which incorporate the impact of the Delta variant. The demand profile that has been developed for the period is based on the scenarios provided by IEMAG for COVID-19 outlook, which, together with the number of close contacts per day, and other proactive testing activities are key variables in driving demand for the end-to-end service.

The modelling demonstrates that standing system capacity will be significantly exceeded in the coming weeks. In the latest scenarios (produced 21/07/2021), standing community swabbing capacity is projected to be exceeded before the end of July in all four scenarios. Community swabbing demand, depending on the scenario, ranges between 27,000 and 100,000 per day at the peak.

1.3 Standing capacity and surge capacity levels

National standing capacity for swabbing is 25,000 per day. This is broken down into 15,000 in Community testing centres, 5,000 in Acute hospitals and 5,000 in Serial Testing. **Surge capacity now stands at 30,000.** This includes:

- 18,000 in Community testing centres (on a short-term basis)
- 4,000 in National Ambulance Service (full tilt on 12 pop up teams)
- 2,000 in Serial Testing (if self-swabbed i.e. Nursing Homes, Prisons, Mental Health facilities)
- 6,000 in Acute hospitals.

Current standing capacity for laboratory testing is 25,000 tests (20,000 community and 5,000 acute hospitals). A surge plan is in place to increase to 30,000 (24,000 community and 6,000 acute).

Standing capacity for full contact tracing can be conducted up to a limit of c.1,600 positive cases with 6,000 close contacts. In this capacity all detected case patients get a 60-minute call and all close contacts are texted and called. Surge contact tracing processes enable short calls (20-25 minutes) to be made to positive cases (up to c.6,000) and close contacts to be managed through digital mechanisms (texting and portal).

1.4 Procedures in place to increase capacity and manage demand

A number of procedures are available to increase capacity and control demand within the Testing and Tracing Operating Model. Some of these procedures have already been activated due to the recent increase in
demand. Additional analysis is being conducted to agree the trigger points and projected impact of each procedure, based on updated modelling. The surge procedures are outlined below.

**Referrals and Swabbing**

- Expand testing centre opening hours (commenced)
- Redirect members of the public to book tests online vs attending a walk-in to reduce administrative burden and enhance management of swabbing (commenced)
- Arrangements via existing third party to access extra facilities/admin resources (commenced)
- Arrangements with Defence Forces to draw on extra trained resources for swabbing (commenced)
- Targeting NAS pop-up teams to areas with highest demand to ensure optimal utilisation of resources
- Redirect capacity from testing for international travel and serial testing to release further community testing capacity
- Assess additional redeployment opportunities to manage rostering most efficiently
- Scale back walk ins with preference for online self-referral and GP referral
- **Antigen testing for close contacts** – Close contacts to be provided with antigen test kits to conduct self-swabbing in order to reduce demand on test centres, to be triggered when cases exceed a defined limit. There are a number of considerations under review relating to distributing tests to close contacts, tracking of the tests, and reporting of test results. A trigger has been set for this at 20,000 community referrals
- Scale back of self-referral capacity to protect capacity for GP referrals – A trigger has been set for this at 18,000 after walks in has been ceased, and close contacts PCR testing ceased
- **Final step (if needed) - Prioritising of PCR testing capacity** – controlling demand by applying prioritised access to swabbing, based on clinical guidelines. A trigger has been set for this at 18,000 (after close contacts have been removed first and referrals are back up to 18,000)
- This proposal includes the following measures:
  - Symptomatic people prioritised over asymptomatic
  - Those over 50 or with a serious medical condition who are not fully vaccinated prioritised
  - Over 50s - regardless of vaccination status - prioritised
  - Screening programmes & mandatory hotel quarantine prioritised
  - GP referral prioritised over self-referral
  - Walk-ins deprioritised
  - Under 40s who are asymptomatic deprioritised
  - Fully vaccinated individuals directed to their GP to determine if a test is required

**Laboratory Testing**

- Activation of additional onshore capacity (increase of 2,000 tests)
- Activation of additional offshore capacity (increase of 2,000 tests). Note: offshore laboratories require 10-day notice, while charter services require 72 hours’ notice. (commenced)
- Activation of additional capacity in acute hospital laboratories (increase of 1,000 tests). Note: this may necessitate re-prioritisation of existing commitments within acute hospital labs if delivering surge capacity for a sustained period

**Contact Tracing**

- Arrangements in place to roll out an automation of step 1 and 2 of the contact tracing process, increasing contact tracing capacity. This gathers close contact details on electronic forms rather than by call.
- Offer part time workers increased hours
• First stage in reducing data gathered from positive patients and removal of source investigation questions - this reduces call times. A trigger has been set for this at 1,400 detected cases per day
• Arrangements with key partners (e.g. Third parties, EHOs) to provide additional contact tracing resources
• Arrangements with Defence Forces to provide additional resources within 48 hours where it is sanctioned by the Joint Task Force (triggered, started on 22 July)
• Roll our technology to automate elements on contact tracing – A trigger has been set for this at >5,000 close contacts per day
• Further reduction in data gathered from patients - A call time of maximum 25 minutes. A trigger has been set for this at <1,800 detected cases per day
• Use of technology to communicate with individuals who have tested positive and close contacts in lieu of phone calls. A trigger has been set at >6,000 detected cases per day

1.5 Additional strategies under review to manage demand and increase capacity

In addition to the surge procedures outlined above, the following service enhancements are being considered:
- **PCR self-swabbing** in swabbing sites in order to reduce demand on swabbers and increase capacity of swabbing (up to laboratory capacity)
- **QR codes in public locations** to trace close contacts, reducing demand on contact tracers

1.6 Communications

Any changes to the Testing and Tracing strategy and operational plan has implications for communications and information sharing to ensure that the service is fully understood by relevant stakeholders. There is a critical need to ensure that any change in testing criteria or process is clearly communicated to all stakeholders.

1.7 Next Steps

The demand and capacity model will be updated with the latest available data and assumptions on an ongoing basis. The model will continue to be refined and updated as data becomes available to increase the level of confidence and awareness in respect of the projections across all stakeholder groups. Continued implementation of the tiered escalation options will be carried out at agreed trigger points in response to increasing demand. Work is ongoing to identify and implement additional service enhancements to continue to increase capacity and control demand. We will be consulting and engaging to ensure that operational and escalation plans are documented and well understood to ensure that all available contingency and support is accessed for the service to remain robust and resilient.

End