Title: NPHET Test and Trace Paper

Author: Niamh O'Beirne

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Testing and Tracing Paper, 11th of February 2021

Updates are provided below regarding the following aspects of Testing and Contact Tracing:

- 1) Activity levels across referrals, sampling, laboratory testing and contact tracing,
- 2) Turnaround Times,
- 3) Delayed Test Services,
- 4) Testing Programmes,
- 5) Process improvements,
- 6) Service Model: Testing and Tracing,
- 7) Update on key challenges and issues.

1. Activity levels across referrals, sampling, laboratory and contact tracing

Referral Data and results

From the 10th of February, close contacts of a confirmed case are receiving a referral for two COVID-19 tests. The first of these tests will occur on day 0 and the second on day 10 from the individuals last exposure with the confirmed COVID-19 case.

Referral data from $1^{st} - 7^{th}$ February shows that the group with the largest amount of all referrals is the 21-30 age group, which makes up 18.6% of all referrals. The detected rate for the 21-30 age group is c.16%.

While overall positivity is between 6 -7% most days, positivity in community testing sites is c.16% over the last 7 days and in some counties is in excess of 20%. The overall figure is lower due to serial testing and acute testing.

Sampling in the community and in acute settings.

Over the seven-day period, 3rd – 9th February, there has been approximately 119,523 swabs taken for COVID-19 testing. A total of 46,006 swabs were taken in the community, the majority were performed at fixed testing sites and a portion as home visits. Approximately 45,552 swabs were taken in acute and private acute settings. The remainder 27,965 swabs were taken as part of the Serial Testing Programmes of staff in Residential Care Facilities including mental health facilities and disability facilities that meet the agreed criteria and staff in Food Production Facilities.

Laboratory Testing

Over the seven-day period, 3rd – 9th February, there has been 121,123 lab tests completed. A total of 72,056 of these tests were processed in community laboratories, 32,000 tests were processed in acute laboratories and 17,067 were processed in private labs. There were no tests processed by our offshore laboratory partner in the last seven days.

Contact Tracing

Contact tracing is carried out in contact tracing centres in Galway, Limerick, Cork and Dublin. From 3rd – 9th February, contact tracing was completed for c.8,732 individuals that had a confirmed COVID-19 case and contact tracing is complete. In addition, c.12,735 calls were made to close contacts. Over this seven-day period, of those tested with close contacts, the average number of close contacts per case was 3.

2. Turnaround Times (3rd – 9th February)

End-to-end turnaround time

We continue to keep sharp focus on end-to-end turnaround times, highlighting any opportunity for improvement, while recognising that some cases are increasingly complex in nature.

Over the seven-day period 3rd – 9th February;

- The median end-to-end turnaround time, from referral to SMS, for **not detected** tests in the <u>community</u> setting was **1.3 days.**
- The median turnaround time, from referral to communication of a **detected result** by SMS, in <u>community</u> setting was **1.4 days.**
- The median end-to-end turnaround time, from referral to contact tracing SMS sent, for **detected results** in the <u>community</u> setting was **1.9 days.**

Referral to appointment

In the community, the median time from referral to appointment was 0.2 days.

A total of 93% of community referrals are provided with a COVID-19 test appointment within 24 hours.

Swab to lab result

For swabs processed in a <u>community</u> lab, the median time for swab to lab result was 25 hours. For swabs processed in an <u>acute</u> lab, the median time for swab to lab result was 22 hours. The combined median time from swab to lab result was 22 hours.

Overall Swab to laboratory result communicated – Medians

- 26 hours in Acute.
- 26 hours in Serial Testing.
- 28 hours in Community.

Contact Tracing

The average time to complete all calls is 6 hours and the median time to complete all calls is 3.9 hours.

3. Delayed Test Services

HSELive

If a member of the public has been waiting longer than two days for a test result, they can contact HSELive on 1850 24 1850. The HSELive team will take all the required details and will send this information to the Delayed Test Result Search Service. The Search Service will get back to the caller directly and aims to complete searches within 24 hours of the @HSELive call.

- In the last seven days (Feb 1st Feb 7th) 629 queries have been received.
- This has decreased from last week where 1597 queries were received. (\downarrow 60%).
- This has also decreased compared with last 30 days, when 1381 weekly queries were received on average. (↓54%).
- A total of 97% of queries received in the last seven days were fully resolved within the 24-hour target.

GPs

In collaboration with the ICGP, there is now an established email service for GPs whereby GPs can submit their query using a password protected form in respect of a delayed test result. Results are communicated to both the GP and patient.

- In the last seven days (Feb 1^{st} Feb 7^{th}) 9 queries have been received.
- This has decreased from last week where 16 queries were received. ($\sqrt{43\%}$).
- This has also decreased compared to last 30 days, when 28 queries were received weekly on average (↓67%).
- A total of 78% of queries received in the last seven days were fully resolved within the 24-hour target.

Healthcare Workers & HSE Occupational Health

Staff can enquire about their delayed test result via the Healthcare Worker Covid-19 Helpline on 1850 420 420. Queries are directed to the Delayed Test Result Search Service. Occupational Health can also direct queries to the Search Service via the GP email address using a password protected form. Results are communicated to both occupational health physician and healthcare worker.

- In the last seven days (Feb 1st Feb 7th) 25 queries have been received.
- This has decreased from last week where 120 queries were received. (\downarrow 79%).
- This has also decreased compared to last 30 days, when 72 weekly queries were received on average. (↓65%).
- A total of 93% of queries received in the last seven days were fully resolved within the 24-hour target.

4. Testing Programmes

Serial Testing in Residential Care Facilities

Serial testing in Residential Care Facilities (RCF) commenced on the 23rd of June. The testing of RCFs includes nursing homes, disability facilities and mental health facilities. To date, the programme has completed 561,717 tests and identified 4,272 detected cases. This is a detected rate of 0.76%.

Cycle 8 of serial testing in RCFs commenced on the 1st of February. To date, the cycle has completed 28,469 tests, identified 174 detected cases. This is a detected rate of 0.61%.

Disability facilities and mental health facilities are currently being tested as of w/c 25th of January. The Disability RCFs are included for a round of once off testing, which will be reviewed once all facilities have completed one full sweep. The Mental Health RCFs are a mixture of once off and serial testing. The detected rate of these facilities continues to be monitored.

Serial Testing in Food Production Facilities

Serial testing in food production facilities commenced on the 21st of August. To date, the programme has completed 110,829 tests and identified 1,007 detected cases. This is a detected rate of 0.91%.

Cycle 5 of serial testing commenced on 12th of January and concluded on the 5th of February. Cycle 5 has completed a total of 21,494 swabs have been completed with 441 detected cases (detection rate: 2.05%).

Cycle 6 of serial testing commenced on the 8th of February, and to date has completed 2,797 tests and 40 detected cases have been identified, this is a detected rate of 1.43%.

Education and Childcare Testing Programme

COVID-19 testing is ongoing in childcare facilities. In the last week a total of 427 tests were completed in 35 facilities, this is a detected rate of 11.5%. This detected rate has reduced by 1% since this time last week.

As of February 10th, a total of 1,669 facilities (primary school, post primary school, special education and childcare facilities) have had/are having some testing completed based on a Public Health Risk Assessment. A total of 46,528 tests have been carried out as part of this mass testing. From the 1,669 facilities that had mass tests, an additional 1,641 detected cases have been identified over and above original cases. This equates to a detected rate of 3.5%.

5. Process Improvements

We continue to work to improve turnaround times, consistency and our end-to-end testing pathway in general. This section presents the latest set of enhancements.

Data Quality improvements

Continuous improvement is paramount to the ongoing success of the test and trace process. These improvements aim to deliver faster results to the public, accelerate issue resolution, and enhance overall operational management and effectiveness. Immediate priority improvement initiatives include investigation to ensure facilities that are part of serial testing are receiving an overview of their results as quickly as possible. Ensuring accurate data is submitted when the test is being scheduled will generate faster and more accurate reports.

Additional initiatives are being considered with acute labs to identify more significant efficiency opportunities following the initial data capture point. Specific pathways are being explored relating to identifying hospital inpatients with a 'not-detected' result that have undergone a COVID-19 PCR test and the prevention of further communication being provided. An overview has been developed to indicate expected timings and to consider critical aspects of an automated solution. A solution has been identified and approved to prevent automated communication to patients who have swabs collected post-mortem. Once developed, this will enable the sensitive handling of contact tracing in such instances. The trial in an acute hospital to test improvements for more targeted communication is ongoing. Upon successful completion of the development, improvements can be rolled out to a broader number of acute hospitals.

Ongoing investigation and results monitoring analysis are underway to identify the source of insufficient data entering the CRM system, COVIDCare Tracker. Continued contact is made with labs and with those creating referrals to ensure data is of a high enough quality to enable automated communication with patients, preventing unnecessary delays for patients receiving their results. Where required, appropriate guidelines and next steps are communicated to ensure processes are improved and continuous data quality improvements. Work is also underway on system integration to ensure referral to contact tracing is seamless and developed with the patient at the core.

6. Service model: Test and Trace

The implementation of the service model for Test and Trace is well progressed with performance indicators demonstrating a service that responded exceptionally well over the surge period across December and January. Recent trends continue to show an abatement in terms of average weekly referral activity from the 1st – 7th of February down 67% from the peak week of 28th of December to the 3rd of January. Positivity rates are currently c.6% over the last 7 days, which are down from a peak of 24.5% from 21st of December to the 6th of January. In addition, of those tested with close contacts over the past seven days, the average number of close contacts over a seven-day period was 3. The testing of close contacts has resumed and will increase to two tests for each close contact of a confirmed case form the 10th of January.

Demand planning scenarios are refreshed on an ongoing basis and proactive demand and capacity planning activities are being used to support operational planning across the end-to-end pathway.

The next step is to develop a medium-term view of the Test & Trace service. The intention is to understand what the potential medium-term profile of demand and activity may be across various scenarios. A number of assumptions will be made regarding restrictions, serial testing, the impact of vaccination, among other items which will inform the process. Many unknowns will remain, and as such the need for proactive monitoring and agile planning will also remain. This activity will support the development of enhanced operational planning to ensure continued resilience and agility of the service as the Pandemic response evolves. Once outputs are developed stakeholder engagement will be undertaken to ensure alignment on the service priorities and limits over the period.

Recruitment of staff to support swabbing activity and contact tracing activity is ongoing. As of the 8th of February, a total of 742 swabbers have been hired and placed to support swabbing activity. As of 8th of February, there is a total of 891 staff supporting contact tracing. Of these 891 staff, 823 have been hired and retained as part of the dedicated workforce to support the contact tracing function. The remaining 68 staff are deployed staff from the HSE and other public service roles.

7. Update on any key challenges/issues

1. Over the past week, although we have seen a slight decrease in positivity rate (c.6% this week, vs. 6.7% last week), the total tests completed by our lab network each week remains high, well over 100,000 tests completed a week.

This high volume is reflective of the high number of tests which are being carried out in acute settings and the serial testing programmes. Furthermore, the criteria for those to be included in the serial testing programme of RCFs has recently extended to include both metal health facilities and disability facilities. From Wednesday 10th of January, close contacts of a confirmed COVID-19 case are now referred for two tests. The first is on day 0 and the second is on day 10 from their last exposure with the confirmed case.

2. There are poor weather conditions expected for the East of the country and surrounding counties at the end of this current week (week commencing 8th of February). Emergency planning for any actions which need to take place is underway, this relates to any effects that the poor weather conditions may have on community swabbing capacity and the serial testing programmes.