Title: Test and Trace Paper – NPHET

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Testing and Tracing Paper, 25th of February 2021

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

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

Referral Data and results

Community testing referral data from 15th – 21st of February shows that the group with the largest amount of all referrals is the 21-30 age group, which makes up 19.4% of all referrals. The detected rate for the 21-30 age group is c.17%.

The detected rate from tests taken in community test centres has decreased from last week, c.17% last week to, c.14.9% over the past 7 days. The overall detected rate is c.5.1% which is reduced with the inclusion of serial testing (less than 1% positivity) and acute testing (c.3% positivity). Positivity in Acute testing is trending downwards.

Sampling in the community and in acute settings.

Over the seven-day period, 17th – 23rd of February, there has been approximately 112,457 swabs taken for COVID-19 testing. Referrals for testing continue to decline week on week despite the recommencing of close contact testing.

A total of 42,790 swabs were taken in the community, the majority were performed at fixed testing sites and a portion as home visits. Approximately 42,640 swabs were taken in acute and private acute settings. The remainder 27,027 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 17th – 23rd of February, there has been 105,489 lab tests completed. A total of 59,673 of these tests were processed in community laboratories, 29,768 tests were processed in acute laboratories and 16,048 were processed in private labs. Over the past seven days, there were no tests processed by our offshore laboratory partner.

Contact Tracing

Contact tracing is carried out in contact tracing centres in Galway, Limerick, Cork and Dublin.

The gathering of enhanced Positive Patient Assessment data recommenced on Wednesday 10th February. On this date we also recommenced the Day 0 and Day 10 swabbing for close contacts. From 17th – 23rd of February, there was a total of 5,032 call 1s completed.

During the same period there was a total of 4,266 call 2s completed, completing contact tracing for this number of individuals. A number of individuals did not require contact tracing.

There was a total of 6,262 call 3s made to close contacts of a confirmed COVID 19 case.

On the 23rd February, of those tested with close contacts, the mean number of close contacts was 3.2.
2. Turnaround Times (17th – 23rd of 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 16th – 22nd of February;
- The median end-to-end turnaround time, from referral to SMS, for **not detected** tests in the **community** setting was **1.5 days**.
- The median turnaround time, from referral to communication of a **detected result** by SMS, in **community** setting was **1.7 days**.
- The median end-to-end turnaround time, from referral to contact tracing SMS sent, for **detected results** in the **community** 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 90.8% of community referrals are provided with a COVID-19 test appointment within 24 hours.

**Swab to lab result**
For swabs processed in a **community** lab, the median time for swab to lab result was 25 hours.
For swabs processed in an **acute** lab, the median time for swab to lab result was 21 hours.
The combined median time from swab to lab result was 22 hours.

**Overall Swab to laboratory result communicated – Medians**
- 26 hours in Acute.
- 25 hours in Serial Testing.
- 28 hours in Community.

**Contact Tracing**
The average time to complete all calls is 6.3 hours and the median time to complete all calls is 4 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 15th – Feb 21st) 356 queries have been received.
- This has decreased from last week where 369 queries were received. (↓3.5%).
- This has also decreased compared with last 30 days, when 892 weekly queries were received on average. (↓60%).
- A total of 99% 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 15th – Feb 21st) 15 queries have been received.
- This has increased from last week where 14 queries were received. (↑7%).
- This has also increased compared to last 30 days, when 13 queries were received weekly on average (↑15%).
- A total of 100% 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 15th – Feb 21st) 19 queries have been received.
- This has decreased from last week where 20 queries were received. (↓5%).
- This has also decreased compared to last 30 days, when 47 weekly queries were received on average. (↓60%).
- A total of 100% of queries received in the last seven days were fully resolved within the 24-hour target.
4. Testing Programmes

**Serial Testing in Nursing Homes**
Serial testing in Nursing Homes commenced on the 23rd of June. To date, the programme has completed 594,492 tests and identified 4,395 detected cases. This is a detected rate of 0.74%.

Cycle 8 of serial testing in RCFs commenced on the 1st of February. To date, the cycle has completed 63,540 tests, identified 305 detected cases. **This is a detected rate of 0.48%**.

**Serial Testing in Mental Health Facilities**
Testing in mental health facilities commenced on the 25th of January. Facilities taking part in this testing programme will feature as a mixture of once off and serial testing. In this current cycle to date, cycle 1, there has been a total of 1,825 swabs carried out and a total of 5 detected cases have been identified. **This is a detected rate of 0.27%**.

**Disability Facilities Testing Programme**
Testing in disability services commenced on the 25th of January. Facilities taking part in this testing programme will be included for a round of once off testing, which will be reviewed once a full cycle has been completed. In this current cycle to date, cycle 1, there has been a total of 4,733 swabs carried out and a total of 15 detected cases have been identified. **This is a detected rate of 0.32%**.

**Serial Testing in Food Production Facilities**
Serial testing in food production facilities commenced on the 21st of August. To date, the programme has completed 123,898 tests and identified 1,062 detected cases. This is a detected rate of 0.86%.

Cycle 6 of serial testing commenced on the 8th of February, and to date has completed 15,853 tests and 95 detected cases have been identified, **this is a detected rate of 0.60%**.

**Education and Childcare Testing Programme**
COVID-19 testing is ongoing in childcare facilities. In the last week 446 tests were completed in 39 facilities with a **9.6% detected rate**.

As of February 24th, a total of 1,702 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 47,605 tests have been carried out as part of this mass testing. From the 1,702 facilities that had mass tests, an additional 1,745 detected cases have been identified over and above original cases. This equates to a detected rate of 3.7%.
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 in-patients 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.

We are continuing to investigate solutions that will facilitate the accelerated provision of results to patients. With this in mind, a bot has been designed to rapidly identify key patient details for individuals that are awaiting delayed results. The tool is scheduled to enter the first round of testing this week.
6. Service model: Test and Trace

Test and Trace Service performance indicators continue to show an abatement in terms of average weekly referral activity c. 4,900 from 15th – 21st of February (down 71% from the peak week of 28th of December – 3rd of January), positivity rates currently c.5.3% over the last 7 days (down from a peak of 24.5% from 31st December – 6th January) and as of 22nd of February, of those tested with close contacts, the average number of close contacts per case was 3.1. Testing of close contacts has resumed. 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.

Work on the development of a medium-term view of the Test & Trace service is on-going. 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 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 23rd of February, a total of 752 swabbers have been hired and placed to support swabbing activity. As of 23rd of February, there is a total of 900 staff supporting contact tracing. Of these 900 staff, 828 have been hired and retained as part of the dedicated workforce to support the contact tracing function. The remaining 72 staff are deployed staff from the HSE and other public service roles.
7. Update on any key challenges/issues

1. Although levels of testing in the community are decreasing week on week, there remains high volumes of tests being completed by our lab network, well over 100,000 tests a week. As schools are likely to recommence in the coming weeks, the level of testing in school settings will increase. The wider test and trace system has the capacity to accommodate this forecast increased demand.

2. Although the positivity rate is continuing to decrease, c.5.1% this week, this decrease is beginning to slow. For the past three weeks, positivity rate has decreased by c.1% week on week. In community settings alone, the positivity rate is c.14.9%. The overall percentage rate is reduced due asymptomatic testing such as serial testing which is ongoing.