Title: Test and Trace Paper - NPHET

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

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Testing and Tracing Paper, 18th 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

Community testing referral data from 8th – 14th February shows that the group with the largest amount of all referrals is the 21-30 age group, which makes up 18.7% of all referrals. The detected rate for the 21-30 age group is 17%.

The detected rate from tests taken in community test centres is also high, c.17% over the past 7 days and in some counties in excess of 20%. The overall detected rate figure is c.5.4% which is reduced with the inclusion of serial testing (less than 1% positivity) and acute testing (c.3-4%). Positivity in Acute testing is trending downwards.

Sampling in the community and in acute settings.

Over the seven-day period, 10th – 16th February, there has been approximately 109,605 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 43,955 swabs were taken in the community, the majority were performed at fixed testing sites and a portion as home visits. Approximately 43,192 swabs were taken in acute and private acute settings. The remainder 22,458 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 10th – 16th February, there has been 110,462 lab tests completed. A total of 63,628 of these tests were processed in community laboratories, 29,781 tests were processed in acute laboratories and 17,053 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 10th – 16th February, a total of 5,685 calls were completed to individuals who received a confirmed COVID-19 detected test result. Over the last seven days contact tracing was completed for 4,537 cases, a small number of individuals did not require contact tracing. A total of 8,616 calls were made to close contacts of a confirmed COVID-19 case.

Of those tested with close contacts, the average number of close contacts per case was 3.

2. Turnaround Times (10th – 16th 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 10th – 16th of February:
- The median end-to-end turnaround time, from referral to SMS, for *not detected* tests in the community setting was **1.6 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 **2 days**.

**Referral to appointment**

In the community, the median time from referral to appointment was **0.3 days**.

A total of 91.6% 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**

- **25 hours** in Acute.
- **25 hours** in Serial Testing.
- **27 hours** in Community.

**Contact Tracing**

The average time to complete all calls is **6.7 hours** and the median time to complete all calls is **4.3 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 8th – Feb 14th) 369 queries have been received.
- This has decreased from last week where 629 queries were received. (↓41%).
- This has also decreased compared with last 30 days, when 1190 weekly queries were received on average. (↓68%).
- A total of 95% 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 8th – Feb 14th) 14 queries have been received.
- This has increased from last week where 9 queries were received. (↑55%).
- This has decreased compared to last 30 days, when 24 queries were received weekly on average (↓41%).
- A total of 57% 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 8th – Feb 14th) 20 queries have been received.
- This has decreased from last week where 25 queries were received. (↓20%).
- This has also decreased compared to last 30 days, when 60 weekly queries were received on average. (↓66%).
- A total of 95% 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 576,183 tests and identified 4,335 detected cases. This is a detected rate of 0.75%.

Cycle 8 of serial testing in RCFs commenced on the 1st of February. To date, the cycle has completed 45,344 tests, identified 246 detected cases. **This is a detected rate of 0.54%**.

**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 1,140 swabs carried out and a total of 3 detected cases have been identified. **This is a detected rate of 0.26%**.

**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 4,120 swabs carried out and a total of 14 detected cases have been identified. **This is a detected rate of 0.34%**.

**Serial Testing in Food Production Facilities**
Serial testing in food production facilities commenced on the 21st of August. To date, the programme has completed 116,791 tests and identified 1,040 detected cases. This is a detected rate of 0.89%.

Cycle 5 of serial testing commenced on 12th of January and concluded on the 5th of February. Cycle 5 has completed a total of 21,507 tests and 441 detected cases have been identified, **this is a detected rate of 2.05%**.

Cycle 6 of serial testing commenced on the 8th of February, and to date has completed 8,746 tests and 73 detected cases have been identified, **this is a detected rate of 0.83%**.

**Education and Childcare Testing Programme**
COVID-19 testing is ongoing in childcare facilities. In the last week 464 tests were completed in 41 facilities with a **7.5% positivity rate**.

As of February 16th, a total of 1,686 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 47,096 tests have been carried out as part of this mass testing. From the 1,686 facilities that had mass tests, an additional 1,680 detected cases have been identified over and above original cases. This equates to a detected rate of 3.6%.
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. 5250 from 8th of February to the 14th of February (down 69% from the peak week of 28th of December – 3rd of January, positivity rates currently c. 6.6% over the last 7 days (down from a peak of 24.5% from 31st December – 6th of January) and as of 15th of February, of those tested with close contacts, the average number of close contacts per case was 3.2. 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.

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 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 15th of February, a total of 749 swabbers have been hired and placed to support swabbing activity. As of 15th of February, there is a total of 901 staff supporting contact tracing. Of these 901 staff, 828 have been hired and retained as part of the dedicated workforce to support the contact tracing function. The remaining 73 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.5.4% this 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, serial testing programmes have recently extended to include both mental health facilities and disability facilities.