Title: Test and Trace Paper for NPHET

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

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NPHET Testing and Tracing Paper, 4th 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
The total number of community referrals has fallen by 23% since this time last week.

Referral data from 25th – 31st of January shows that the group with the largest amount of all referrals is the 31-40 age group, which makes up 19.2% of all referrals.

The detected rate for the 31-40 age group is 13.2%. This detected rate is circa 3% lower, for this same age group, then this time last week.

Sampling in the community and in acute settings.
Over the seven-day period, 27th January- 2nd February, there has been approximately 125,777 swabs taken for COVID-19 testing. A total of 47,997 swabs were taken in the community, the majority were performed at fixed testing sites and a portion as home visits. Approximately 45,603 swabs were taken in acute and private acute settings. The remainder 32,177 swabs were taken as part of the Serial Testing Programmes of staff in Residential Care Facilities and staff in Food Production Facilities. We commenced serial testing in Mental Health and Disability RCF settings on 25th January.

Laboratory Testing
Over the seven-day period, 27th January- 2nd February, there has been 132,537 lab tests completed. A total of 74,348 of these tests were processed in community laboratories, 33,161 tests were processed in acute laboratories, 17,337 were processed in private labs and 7,691 in offshore labs.

Contact Tracing
Contact tracing is carried out in contact tracing centres in Galway, Limerick, Cork and Dublin. From 27th of January – 2nd of February, contact tracing was completed for c.7,168 individuals that had a confirmed COVID-19 case. In addition, c.9,331 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 2.9.

Referrals for close contact testing is going well. On Monday c.1,000 close contacts were referred for their day 5 test and on Tuesday 2nd of February, this increased to c.1,200 close contacts referred for testing.

By 1pm on Wednesday 3rd of February there is already a 25% increase on the referral of close contacts from volumes reported on Tuesday 2nd of February, a total of 1,500 close contacts have been referred, which will further increase as the day ends.

We will consider whether the testing system has capacity for the re-introduction of two close contact tests at the end of this week.
2. Turnaround Times (27th January- 2nd 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 27th January- 2nd February;
- The median end-to-end turnaround time, from referral to SMS, for not detected tests in the community setting was 1.4 days.
- The median turnaround time, from referral to communication of a detected result by SMS, in community settings was 1.5 days.
- The median end-to-end turnaround time, from referral to the end of contact tracing, for detected results in the community setting was 2 days.

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

Referral to appointment
In the community, the median time from referral to appointment was 0.1 days.

A total of 95% of GP 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 24 hours.
For swabs processed in an acute lab, the median time for swab to lab result was 20 hours.
The combined median time from swab to lab result was 21 hours.

Contact Tracing
The average time to complete all calls is 6.9 hours and the median time to complete all calls is 4.6 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 (Jan 25th – Jan 31st) 1597 queries have been received.
- This has decreased from last week where 2016 queries were received. (↓20%).
- This has also decreased compared with last 30 days, when 1799 weekly queries were received on average. (↓11%).
- 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 (Jan 25th – Jan 31st) 16 queries have been received.
- This has decreased from last week where 38 queries were received. (↓57%).
- This has decreased compared to last 30 days, when 31 queries were received weekly on average (↓48%).
- 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 (Jan 25th – Jan 31st) 120 queries have been received.
- This has increased from last week where 85 queries were received. (↑41%).
- This has increased compared to last 30 days, when 77 weekly queries were received on average. (↑56%).
- A total of 98% 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 residential care facilities includes, nursing homes, disability facilities and mental health facilities. To date, the programme has completed 733,969 tests and identified 4,125 detected cases. This is a detected rate of 0.77%.

Cycle 7 of serial testing of RCF’s commenced on January 4th and completed on the 31st of January. Cycle 7 has completed a total of 115,332 tests, with 2,245 detected cases (detection rate: 1.95%). Of the 2,245 detected cases identified in Cycle 7, a total of 2,236 (99.6%) of these were associated with nursing home settings, 9 were associated with disability settings (0.4%) and there were no detected cases in mental health facilities.

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.

Cycle 8 of serial testing in residential care facilities commenced on the 1st of February and has completed 5,421 swabs to date and identified 28 detected cases. This is a detected rate of 0.52%.

Serial Testing in Food Production Facilities
Serial testing in food production facilities commenced on the 21st of August. To date, the programme has completed 104,224 tests and identified 921 detected cases. This is a detected rate of 0.88%.

Cycle 5 of serial testing commenced on 12th of January and as of the 3rd of February, a total of 17,684 swabs have been completed with 395 detected cases (detection rate: 2.23%).

Education and Childcare Testing Programme
COVID-19 testing is ongoing in childcare facilities. In the last week 407 tests were completed in 40 facilities with a 12.5% positivity rate.

As of February 3rd, a total of 1,651 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 45,991 tests have been carried out as part of this mass testing. From the 1,651 facilities that had mass tests, an additional 1,574 detected cases have been identified over and above original cases. This equates to a detected rate of 3.4%.

Antigen Testing
Over 4,000 antigen tests have been completed as part of our validation study. 500,000 approved tests, from EU procurement process are in stock on shore.
Antigen tests have been delivered into the Acute Hospital network from Friday 29th. It is at their discretion whether to use Antigen or PCR. We have a weekly tracker to have visibility on usage.
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
Several major improvement initiatives have been identified to improve the test and trace process. When complete, these will 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.

A comprehensive review of Pending Patient Queue processes has been conducted and was finalised. This ensures that patients with a detected case of COVID-19 that have been identified as having a data quality issue, will be resolved and added to the call queue more expediently. The review contributed to placing a significant process change resulting in faster resolution for cases where data quality issues were delaying notification. The process for dealing with 'unknown' test results continues to work well, with active follow-up and solutions being iterated to deal with these scenarios.

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 that relate 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 & approved to prevent automated communication with 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, Covid Care 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. 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. This includes recruitment to enable the staffing of the service model for community swabbing, labs and contact tracing and estate development in terms of a permanent and sustainable testing centre and contact centre footprint.

Engagement between the Minister, the Department of Health and the HSE has continued in respect of testing volumes and associated costs. With respect to testing volumes, the service has now established an enduring model capable of delivering 25,000 tests a day. Several programmes of work are in place to sustain this and to ensure a stable, quality assured service continues at this scale. The next step is to finalise and agree the associated costs for the service with the Department of Health, which have been shared for review and input.

Performance indicators demonstrate 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 (down 67% from the peak week of 28.12 – 03.01), positivity rates (currently c.6.6% over the last 7 days, down from a peak of 24.5% (31.12 - 06.01) and as of 1st of February, of those tested with close contacts, the average number of close contacts per case was 2.9. Testing of close contacts has resumed. Demand planning scenarios are refreshed on an ongoing basis. Additionally, there is a medium-term planning exercise underway. Proactive demand and capacity planning activities are being used to support operational planning across the end-to-end pathway.

Recruitment of staff to support swabbing activity and contact tracing activity is ongoing. As of the 1st of February, a total of 730 swabbers have been hired and placed to support swabbing activity. As of 1st of February, there is a total of 882 staff supporting contact tracing. Of these 882 staff, 812 have been hired and retained as part of the dedicated workforce to support the contact tracing function. The remaining 70 staff are deployed staff from the HSE and other public service roles.
7. Update on any key challenges/issues

1. Over the past week, we have seen a decrease in demand for community testing as well as a decrease in positivity rate (c.6.7% this week, vs. 8.8% last week). Although we have seen a decrease in demand for community testing, the total tests that are completed each week remains high, well over 100,000 tests completed a week. This high figure 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 mental health facilities and disability facilities.

In response to this decrease in community demand, from Friday 29th of January close contacts are now once again receiving a call to inform them of their close contact status, as well as the SMS which has continuously been sent, in addition they are referred for a COVID-19 test on day 5, 5 days after their last contact with the index case.